

# **Applied Economics for Development**

Empirical Approaches to Selected Social  
and Economic Issues in Transition Economies

**Mahmut Zortuk**

Dumlupınar University, Turkey

(Editor)

**Vernon Series in  
Economic Development**



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# Introduction

The twentieth century has been the scene of intense and quick changes with relatively increasing life standards and welfare status' in addition to rapid growth in population rates compared to previous centuries. Advances in technology and results of social and economic events of this century caused significant changes in personal lives of individuals as well as economic and political preferences of countries.

In this context, the comprehensive and rapid transition of some countries to a market economy from the socialist economy has been the most important economic event of the twentieth century. Accordingly, it has been one of the most important factors that shaped world economy and politics.

As Stern mentions, the transition from central planning to market economy has started with market reforms in Poland with the leadership of Balcerowitz at the end of the 1980s in a radical and accelerated way (shock therapy or big-bang), while this process followed a gradual course in Hungary. This is followed by the Soviet Bloc coming to an end as an integrated economic union along with the declaration of management of the trade with a strong currency based on world prices in the historic meeting of Council for Mutual Economic Assistance (CMEA or COMECON) in January 1990 which was held in Sofia. Following an unsuccessful coup in August 1991, the Union of Soviet Socialist Republics (USSR) has collapsed and a radical economic reform package has been put into practice. Thereby, these years have brought the end of an empire lasted more than 70 years and the beginning of the transition and a change in the political system as heading towards to democracy.

Apart from the distribution of macroeconomic magnitudes of all countries during the transition process, some radical changes also have been experienced about economic structures of societies and preferences in manufacturing and consuming behaviors. For almost 30 years, this changing process of regulations and institutions has been identified with the concept of *transition economies* which include the variations of economic and political structures of related countries. In accordance with this concept, former socialist countries have been through the process of shifting to market economy, in addition to the changes in their economic and political regulations and structures in the name of integration with world economies. However, the success of the outcomes of this process has varied with regard to the geographical, economic and historical aspects of transition countries, in addition to the stability of the governments during the implementation of the related policies.

There are three dimensions of the changes in the transition countries: the first one can be counted as the integration of market rules which was carried out by governments via structural and institutional reforms. The second one is the changes in economic behaviors and establishments. Lastly, the psychological effects of the transition process in the social aspect in which the roles of governments and non-governmental organizations have a significant importance in its management. Therefore, evaluating the transition process only by economic regulations can be misleading.

The transition phase has been less costly and took shorter time periods for the countries that were ready to adopt this process. In this context, falling behind the schedule of regulations in concepts such as democracy, justice and security would prevent being a part of international organizations. Also, these will obstacle the formation of institutions and application of the necessary economic reforms that will put the market in action. Thereby, distinct differences appear among the transition countries.

Countries that are experiencing the transition process can be evaluated in three categories: First category includes the Central and Eastern European countries – which mostly have been the focal point of the empirical approaches that were performed in this book. The governments of these countries can be considered as steady and stable because of the common support of the public. Hence, these countries seem more successful in a general perspective. Interrelations with trading partners, geographical closeness to developed countries, having financial and technical support of international institutions because of political motivations can be counted as other factors that bring about the success of the Central and Eastern European countries.

The second group consists of the Commonwealth of the Independent States, which mostly dealt with regional problems and relatively remained inadequate with regard to the aspect of democracy. These countries' unsuccessful appearances also depend on their relatively poor economy and underdeveloped sectors.

Although not having a political transition intention, Asian countries, which liberalize their economic policies such as China, Vietnam, have also performed progressions in economic growth.

In the literature, faced challenges, advances and radical moves that had to be performed during the transition process can be summarized as follows:

Primary concerns, which have been the common grounds for all transition countries, can be seen as poverty, underdeveloped infrastructure and problems caused by a constantly growing and clumsy public sector with powerful and strict command systems. In addition, main characteristics of these countries present following problems:

- Insufficient industrialization and technological lag,
- Low productivity despite high agricultural population,
- Burdens caused by the regulations,
- Limited financing opportunities,
- Flaws in organizational structure,
- Challenges in majoritarian democracy practices, populism, statism and distribution of unearned incomes,
- Problems in the rule of law practices,
- Lack of sufficient data that will provide a basis for decision-making processes – which is also a constraint in the empirical applications that are performed in this book.

The increase in corruption and bribery can also be regarded as important issues in the transition economies since the beginning of the transition process. In accordance with the Shleifer and Vishny's evaluations, public institutions and political processes determine the levels of corruption; thereby it can be stated that weak governments and flaws in sub-levels of state governance in some transition countries lead to high levels of corruption.

In the new world order, all countries experience the challenges during major changes however, the level of difficulties that countries have gone through differs from one another. For instance, Toeffler who discusses democratization and need for change from the perspective of globalized corporations of the United States of America expresses that this political struggle cannot stay at the nation-level; on the contrary, the whole world order including the United Nations and local parliaments needs to be restructured. To achieve this transformation, all problems that were being encountered during the transition to market economy should be overcome.

As a result, the main feature of transition economies can be stated as a shift from central planned economic activity to market economy by handing over the means of production to private ownership. In this context, the main purpose of the transition can be defined as to increase economic efficiency and maintain a sustainable economic growth. Main components of the transition process can be mentioned as macroeconomic stability, market liberalization that includes prices and international trade, redefining the activity of the state in social life by restructuring and privatizing the state enterprises.

In this book, the reactions of transition economies to the above-mentioned social and economic facts during the transition process have been evaluated from different perspectives. It covers up-to-date data sets of Central and Eastern European countries in general but also includes various transition countries from Cambodia to Georgia, from Moldova to Laos. Topics vary from foreign direct investments to the quality of life, from economic growth to female labor force

indicators, from privatization practices to middle-income trap, urbanization, tourism development and shadow economy. The main concentration of this book is to provide new perspectives for policy makers in these countries, as well as to academics and researchers from all around the world in a multidimensional spectrum.

Prof. Dr. Mahmut ZORTUK  
Editor

## Chapter 1

# Tourism Development – Economic Growth Nexus, an Empirical Application on Transition Countries

Mahmut ZORTUK<sup>1</sup>

Semih KARACAN<sup>2</sup>

### 1. Introduction

Recently, the tourism industry has emerged as a robustly growing service sector. Since 2010, international arrivals are growing more than 4% every year and tourist arrivals reached to 1.184 billion as of 2015, even against the unusual exchange rate and oil price fluctuations. Today, economic contributions of the industry become a key factor in the global economy and for developing countries a vital tool for sustainable development. Generating more than 9.1% of direct, indirect and induced jobs globally and contributing 1.5 trillion dollars to export earnings, the positive effects of the tourism industry on the world economy is undeniable. Taking these facts into consideration, possible contributions of the tourism sector to socio-economical areas are widely investigated over the past decades. Especially, the industry's possible effects on economic growth have become a popular research area recently, and several different hypotheses are brought forward to explain tourism and economic growth nexus. Although the development of tourism industry has generally been considered as a positive contribution to economic growth (e.g. Dritsakis, 2004; Lee & Chang, 2008; Oh, 2005; Sequira & Nunes, 2008; Arslanturk, et al., 2011), there are several studies arguing that the tourism specialisation can actually have no positive effects on economic growth or that even has negative effects. For example, Chao et al. (2006) argue that tourism specialisation has possible indirect negative effects on labor employment and welfare. Furthermore, the study reports, fostering the tourism

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<sup>1</sup> Department of Econometrics, Dumlupinar University, Turkey, mahmut.zortuk@dpu.edu.tr

<sup>2</sup> Department of Econometrics, Dumlupinar University, Turkey, semih.karacan@dpu.edu.tr

sector by investing in the industry and political regulations, can bring countries up against the danger of Dutch Disease.

Up until Chou (2013), empirical studies on tourism and economic growth nexus were on developing or already developed countries and there were not any notable findings in transition countries. Starting their liberalization just before Soviet Block's fall in early 90's, these economies are still recovering from statist policies. Hence, we believe that the tourism - growth literature on transition countries must be widened.

On this study, our major aim is to shed light onto the tourism and growth nexus for a wide sample of transition countries for 1995 – 2013 period. The study differs from Chou (2013) in some ways. First we consider possible endogeneity between economic growth and tourism development, thus estimated an augmented Solow growth model with GMM estimators which are robust against endogeneity problem. Possible endogeneity issues in this study are a minor motivation for us. Therefore, as a side research, we run Dumitrescu & Hurlin (2012) causality test, in order to show the possible effect of endogeneity. Second, estimating a regression model give us an opportunity to have an insight on estimated elasticities. Lastly, GMM estimation is possible for  $N > T$ , while bootstrap causality test used by Chou (2013) is possible for  $T > N$ , as it uses SUR framework. Since the data for transition countries can be obtainable as of 1995 and have several gaps or missing values for many countries, GMM estimation is clearly advantageous.

The rest of the study is organized as follows: literature review gives brief information about selected literature. As literature about transition countries was scarce, we focused on the results from all over the world with a goal to give a general idea about the condition of the relationship. In the Methodology section, information about the data, economic model specifications and theoretical backgrounds of Cross-section dependence tests, Pesaran CADF test, Hansen J test, Dumitrescu & Hurlin (2012) causality test and Arellano – Bond system GMM estimator are given. Empirical results show our test and estimation results, and finally the last part reveals the conclusion.

## 2. Literature review

Potential economic impact of tourism on foreign exchange earnings, exports and employment; especially in small countries; attracted policymakers to foster tourism industry. Governments, which have engaged in tourism development, grow faster than others (Holzner, 2011; Seetanah, 2011), therefore tourism-led growth hypothesis has become a popular topic and attracted researchers. Over the last decades, a number of studies investigated the relationship, yet results are still inconsistent even for two separated time series study for the same country and period. This could be due to different econometric methods or even to different theoretical backgrounds the debate is built on.

## 2.1. Theoretical studies

Copeland (1991) asserts that income from tradable goods, which is consumed, by tourists and taxation of them are alone not enough to effectively benefit from the tourism industry. Thus governments should develop different strategies to maximize their benefits. Copeland (1991) further argues that without these strategies (e.g. extracting some additional rent from unpriced natural amenities attracted tourists), tourism's benefit to an economy will be scarce, since it will only be an exchange of export and import goods. So, inconsistent results mentioned earlier could be due to different countries' policies on tourism development, researcher's point of view or even the dataset chosen since the widely accepted tourist arrivals data is only a good proxy when it is assumed that the individual country is effectively benefiting from the tourism industry.

Later on, Lanza & Pigliaru (2000), run an exercise on *tourism countries* and found evidence of tourism-led growth hypothesis. In the study, this evidence is used as a basis for two assumptions: (i) economic growth is faster in countries specialized in tourism, (ii) small countries have specialized in tourism. In the study, they have tested these two assumptions with a two-sector endogenous growth model. They asserted that the first assumption is true, and argue that tourism specialization is not harmful to growth in the long run due to Dutch Disease. Their findings on the second assumption are more remarkable. Lanza & Pigliaru (2000) find that, while explaining a country's specialization in tourism relative endowment of natural resources are more important than the size of that country. However, as they suggest, their study excludes the possibility of non-optimal use of natural resources or long run sustainability. Therefore, alone it is not enough to conclude that the tourism specialization ensures faster and sustainable economic growth in the long run.

Chao et al. (2006), which investigate the danger of Dutch Disease for tourism specialization of countries, is another notable study with strong theoretical framework and simulations. The study, using a dynamic framework examined the effects of tourism on capital accumulation, domestic income and sectorial output for a multi-sector open economy. Ultimately, Chao et al. (2006) argue that a decline in the capital stock negatively affects the manufacturing sector, and thus causes de-industrialization.

Schubert & Brida (2009) investigate the topic for small tourism driven island economies. A dynamic framework for one sector is used in the study. According to their findings, tourism demand in specialized countries will gradually increase and to keep the tourism demand in line with the supply, service prices will increase over time. Hence, investing in tourism industry will become more lucrative and this will speed up economic growth relatively.

To investigate the general view on tourism-led growth hypothesis in the long run and the danger of Dutch Disease on tourism-specialized countries, here on

the study continues with some of the empirical studies published on the topic in 2000's.

## **2.2. Country-specific studies**

Country-specific studies mostly employ time-series methods to investigate the relationship between tourism development and economic growth. Balaguer & Cantavella-Jorda (2002) is one such. The study examines the role of tourism in the long run for Spain in 1975: Q1 – 1997: Q1 period and employs Johansen VAR methodology. Analysis results show that there is a long-run stable relationship between tourism development and economic growth. Dritsakis (2004) investigate another South European country, Greece for the period 1960: Q1 – 2000: Q4 with the same method in addition to a causality test. According to results, variables are cointegrated and there is bi-directional causality running between tourism development and economic growth. Dritsakis (2008) also investigates the seasonality issue on tourism revenues and argues that seasonal fluctuations in Greece's tourism revenues harm both tourism development and economic growth.

Gunduz & Hatemi-J (2005), Ongan & Demiroz (2005) and Arslanturk et al. (2011) examined the topic for Turkey. Using annual data between 1963 and 2002, Gunduz & Hatemi-J (2005) run the leveraged bootstrap causality test and found that there is a one-way causality running from tourism to economic growth. Thus the study asserts that the tourism-led growth hypothesis is valid for Turkey. On the other hand, Ongan & Demiroz (2005) argue that there is bidirectional causality between tourism development and economic growth, using quarterly data for 1980: Q1 – 2004: Q2 period. The difference between two studies can be due to seasonality issue, which is investigated in Dritsakis (2008) for Greece case. Lastly, Arslanturk et al. (2011) investigated the relationship, using state-space time varying coefficients and rolling window estimation methods for the annual data from 1963 – 2006 period, considering the political implications on liberalization and full convertibility. The study reveals that tourism development has a positive impact on Turkey following the early 80's. It is noteworthy to mention that findings proposed in Arslanturk et al. (2011) also show that such economic changes like liberalization and full convertibility have a positive impact on economic growth.

Oh (2005), Kim et al. (2006) and Chen & Chiou-Wei (2009) studied the topic for developing Asian economies. Using quarterly data for 1975: Q1 – 2001: Q1 period and applying Engle – Granger two-stage approach and estimating a bivariate VAR model, Oh (2005) investigated the causal relations between tourism development and economic growth for South Korea. Results reveal that there is no cointegration between tourism development and economic growth for Korea, and thus no long-run equilibrium relation. In addition, Oh (2005) further argues that



there is no short-run support for tourism-led growth hypothesis too. Later, Kim et al. (2006) investigated the Taiwanese case with Granger causality approach, using the annual series between 1956 and 2002. Even though the Korean and Taiwanese economies are similar in many ways, Kim et al. (2006) conclude adversely and argue that there is a bidirectional relationship between tourism development and economic growth. Chen & Chiou-Wei (2009), investigating Taiwan and South Korea together with an EGARCH-M model, are contributed the debate with conflictive results. Employing uncertainty factors in the model, the study argues that there is a unidirectional causality running from tourism development to economic growth for Taiwan and there is a bidirectional relationship for South Korea for 1975: Q1 – 2007: Q1 period. Beyond any doubt, different approaches come up with different results.

Tang & Jang (2009) adopted a different approach for American case. The study investigates the relationship between performances of tourism related sectors and economic growth, using quarterly data collected from traveling, gambling, hospitality and food and beverage industries for 1981: Q1 – 2005: Q4 period. In the study, cointegration results show that, other than traveling industry, there is no cointegration between performances of tourism related sectors and economic growth. In addition, Granger causality results represent only a weak unidirectional short-run causality running from economic growth to performances of tourism related sectors.

### **2.3. Cross-country studies**

More recently, panel data applications have become popular and the literature is widened by productive and consistent studies. One of the pioneering cross-country studies, Lanza et al. (2003) is studied 13 OECD economies for 1975 – 1992 period, although it is not a real panel data study. Separate results from Johansen cointegration tests and ECM show that tourism-led growth hypothesis is valid for these countries. Moreover, considering the unit root test employed Lanza et al. (2003) state that socio-economic events have an influence on tourist flows. Later, Lee & Chang (2008) re-investigated a broader sample of OECD countries in addition to non-OECD countries for 1990 – 2002 period. Results obtained from Pedroni panel cointegration test indicate that tourism-led growth hypothesis is valid for OECD members and there is a bidirectional relationship between tourism development and economic growth in non-OECD countries.

Brau et al. (2007), Seetanah et al. (2011) and Seetanah (2011) investigated the topic for small countries and Africa. Earlier work of Brau et al. (2007) is used country size as a control variable and estimated panel data regression models of OECD members, major oil suppliers, least developed countries, small countries and small tourism specialized countries. The study argues that small tourism specialized countries grow faster than other country groups. Furthermore, a sub-study in Brau et al. (2007) indicates that higher the ratio of specialization in

tourism, faster the economy grows. Seetanah et al. (2011) is another noteworthy study, which investigates 40 African countries for the period 1990 – 2006. Estimating the VAR model with GMM and considering the potential endogeneity problem, the study reveals the bidirectional causal relationship between tourism development and economic growth. Employing GMM estimators, Seetanah (2011) estimated a Solow model to investigate the effect of tourism development on economic growth. Seetanah (2011) further applied the same model to OECD and non-OECD subsamples and pointed that tourism development is not only a positive determinant for small island countries, it also causes small countries to grow faster than OECD and non-OECD countries.

Literature also offers a large number of broad sample studies. These studies generally work towards finding a general diagnosis for tourism development and economic growth nexus. Sequeira & Campos (2007) is one such study. Arguing that tourism-led growth hypothesis is inconsistent with the growth theory, they applied OLS, FE and RE estimators to a broad sample of countries, in addition to several sub-groups. The study concluded that tourism, by itself, is not the reason for higher growth rates. Interestingly, inconsistent with all the literature, their findings of small country and island sub-groups did not show significant and did not support tourism as a significant determinant of economic growth. Figini & Vici (2010) is another study, which rejects the tourism-led growth hypothesis. Using data from 150 country and different time spans between 1980 and 2005, they estimated a regular growth model to inspect the effect of tourism on economic growth and found out the tourism is not the whole reason behind the economic growth for 1990 – 2005 and 1995 - 2005 periods, which have relatively reliable data on tourism revenues. Figini & Vici (2010) is noteworthy since the study improved two prior studies (which are Brau et al. 2007; Sequeira & Nunes 2008) in several ways. First, Figini & Vici (2010) checked the data collection problems stemming from World Tourism Organization database. Second, the study handled the endogeneity problem and third, considered omitted variable bias. Holzner (2011) empirically analyzed the danger of Dutch Disease in the long run. Using data for 134 countries over the period 1970 – 2007, Holzner (2011) asserted that there is no danger of Dutch Disease for tourism-specialised countries and they do not face real exchange rate distortions and de-industrialization. However, as Figini & Vici (2010) argued, reliable data on tourism development is only available for after 1995 and dataset used in Holzner (2011) is supposedly unreliable. A more recent study, Ekanayake & Long (2012) is another supporter of neutrality between tourism development and economic growth. The research claimed that for 140 developing countries over the period 1995 – 2009, tourism development is not a significant determinant of economic growth.

Save for the broad sample studies, there are a few studies focusing on transition countries case. By investigating ten transition countries for the time span between 1988 and 2011, Chou (2013) made an important attempt to investigate the topic for transition economies. As results from the study show, there is no causality

between half of the sampled group, and several individuals have negative causality running from tourism revenues to economic growth since bootstrap panel causality approach developed by Konya (2006) can show the sign of the relationship.

Ultimately, the results are inconclusive. Even though the tourism-led growth hypothesis is supported by many studies, there is a considerable amount of studies arguing otherwise. Unreliable tourism data prior to 1995, endogeneity, omitted variables, country specific effects, endowment of natural resources and other minor issues have a great role on this inconclusiveness.

### 3. Data and methodology

Tourism – growth literature has a consensus on the endogeneity of tourism development and economic growth. Famous Solow – Swan model counts physical capital, human capital and technology as main determinants of economic growth and these clearly have a huge effect on tourism development as well. Physical capital allocation directly affects touristic facilities, transportation and infrastructure, and human capital affects the quality of the sector since tourism industry is a service sector and the quality of labor directly affects the sustainability. Furthermore, on panel data applications country specific effects have a vital role. As country size (Brau et al., 2007), geographical location, socio-economic events (Lanza et al., 2003), and natural sources which are attracting tourists (Lanza & Pigliaru, 2000) are all determinants of touristic success. Therefore, while investigating the tourism development and economic growth nexus, it is crucial to deal with these issues. The methods chosen for the empirical analyses in this study serve this purpose.

#### 3.1. The model and data specifications

In this study an augmented Solow – Swan growth model is employed in order to analyse the effect of tourism development on economic growth. Equation (1) shows the functional form of the theoretical model.

$$Y = f(GCF, SEC, TRADE, ARR, FI) \quad (1)$$

Where  $Y$  is economic growth,  $GCF$  is gross capital formation as a percent share of  $GDP$ ,  $SEC$  is net secondary school enrolment ratio,  $TRADE$  is exports plus imports to proxy openness,  $ARR$  is tourist arrivals, and finally  $FI$  is freedom index estimated by Heritage Foundation. All data except  $FI$  is collected from World Bank Database,  $FI$  is collected from Heritage Foundation Database.

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