TOURISM IMPACT ON THE ECONOMY OF ARMENIA

Lena A. Hovhannisyan
Yerevan State University
Yerevan , Armenia
e-mail: lena.hovhannissyan@gmail.com

Abstract

The importance of tourism in economic developments of many countries is well documented, and the contribution of tourism to economic growth has long been a subject of great interest from a policy perspective. Although tourism is a strategic direction in Armenia, there is no research on its economic impacts. This paper has for objective to allocate principal indicators of sector and apply some tourism economic impact models to Armenian Economy. It attempts to draw some approaches for future impact studies of Armenia tourism.

Key Words: *Tourism multiplier, statistical analysis, economic impact*.

1. Introduction

Viewed as an export industry of three Gs _ "get them in, get their money, and get them out" – tourism has assisted many developing countries to move away from a dependency on agriculture and manufacturing (Tooman, 1997)

Tourism has burgeoned in the last two decades worldwide and become one of the world's largest and fastest growing economic activities. Its growth has had large impact on employment, foreign exchange earnings, balance of payments and the economy in general. According to the World Tourism Organization (UNWTO),international arrivals worldwide have more than doubled since 1990, rising from 435 million to 675 million in 2000, and to 940 million in 2010. And these figures do not take account of domestic tourism which, by all accounts, generates up to ten times more arrivals than international tourism.

According to the estimates from the World Travel and Tourism Council (WTTC) The impacts of Travel & Tourism run deep into our economies. It is not just about the money visitors spend on travel, accommodation, activities and souvenirs – visitor exports – which, in 2011, is expected to exceed US$1.2 trillion around the world. But, by its very nature, the industry stimulates the engagement and collaboration of communities, tourists, governments, local suppliers and businesses throughout the supply chain.

Travel & Tourism achieved healthy growth levels by most macro-economic measures between 2000 and 2010. (Table 1)

Table 1: Travel & Tourism's global economic contribution, 2000-2010

	Growth(%)
Travel & Tourism's direct contribution to GDP	9.7
Travel & Tourism's total contribution to GDP	16.6
Travel & Tourism's direct contribution to employment	8.3
Travel & Tourism's total contribution to employment	3.0
Capital investment	41.8
Visitor exports	20.1

Source: WTTC/Oxford Economics

Can tourism be a suitable tool for economic development in Republic of Armenia. Nowadays economic structure of Armenia is a result of recovery process without a depth control and planning by government but a not organized transition to market economy after the dissolution of the Soviet Union. Now Armenian government is planning to direct the natural path of structural changes in order to restructure and move the economy from the interior of aggregate production possibility set towards its frontier. Are government expenditures serving their goal.

Although tourism industry is one of Armenian economy's strategic directions , there is no quantitative analysis of tourism economic impact. Almost all researches are about political steps, that the government has to undertake. The paper is one of the first studies trying to calculate tourism multiplier effects impact on the economy of Armenia. The remainder of the paper is structured as follows; The goal of section 2 is to outline and assess Armenia's tourism resources, development trends and perspectives, Section 3 introduces some concepts of

tourism economic impact analysis, and their applications at Armenian economy. Concluding remarks are drawn in the final section.

## 2.CURRENT STATE OF TOURISM IN ARMENIA

Armenia as a country rich in historical-cultural and natural resources has the potential to offer various competitive tourism products and high quality services to the global tourism market.

Tourism in Armenia has grown strongly in the past 10 years, (Table 2) in terms of income and arrivals with the following indicators identified for the industry (Acording Wordbank , WTTC, Armenian Statistic Sevice)

1.Armenia welcomed 575000 international tourists in 2009
2. Visitor exports is 336.5 mln $ Us
3. Domestic expenditure 109 mln $ Us
4. Internal tourism consumption 451.3 mln $ Us
5.Direct contribution of Travel & Tourism to GDP 161.5 mln $ Us
6.Total contribution of Travel &Tourism to GDP 647.6 mln $ Us
7.Direct contribution of Travel &Tourism to employment 17100
8.Total contribution of Travel &Tourism to employment 70000

However the growth of sector the principal part of tourists is Armenian diaspora . It currently represents 62% of all tourist arrivals. Diaspora travelers stay longer than the average tourist (25 days) and are more likely to come to visit friends and relatives. Repeat visitation is high. Currently only 8.3% of all Diaspora tourists are visiting Armenia for the first time.

Table 2 Total Contribution of Travel & Tourism to GDP
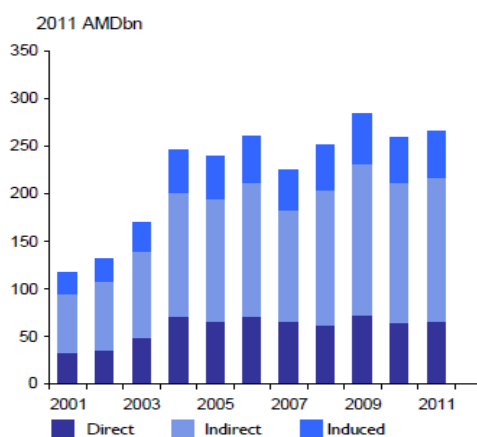
Source:WTTC/Oxford Economics

Armenian potential touristic resources :

	Uniqueness/ Significance	Scale/ Quan tity	Diversity / Richness of Choice	Quality
Cultural Heritage	**High** over 4,000 years of rich history, unique culture architec-ture, literature, art of singing, dance, applied art, as well as cultural-historical monuments.	**High.** Over 24000 cultural-historical monuments.	**High** Historical monu-ments represent several distinctive cultures: Uru-artu, Hellenic, Christian, Muslim, Soviet.	**High**. Three of cul-tural-historical and nature monuments are among global cultural treasures (UNESCO): Haghpat – Sanahin, Geghardavank and the valley of Azat river, Egmiadzin together with its Zvartnots temple
Religion	**Very High** Armenia is the first Christian state in the world and the home of the	**High** Armenia's churches and monasteries count for over 15% of	**Medium** Armenia's religious culture is exclusively Christian. 1 paganism Garni	**High** The majority of the most famous monuments is rather well-preserved and/or

	indigenous Armenian Apostolic Church	Armenia's historical-cultural monuments.	temple and 7 Muslim monuments	reasonably well-restored
Nature	**High** Armenia has typical nature. This mountainous country has various climatic zones. Sometimes you can ex-perience all four seasons of the year at a time in Armenia	**High** Currently there are 3 state reserves in Armenia .Armenia has more than 260 nature monuments.	**High** There are seven cli-matic zones on the com-pact territory of Armenia. Many of the animals, like Bezoarian goats are typical of Arme-nia only.	**Medium** Armenia's nature suffers from pollution and damage
Wellness	**Above Medium** Armenia is apparently endowed with some unique spa resources (like diverse and compactly located radon water sources), with healing power .	**Above Medium** Armenia's spa tourism has significant poten-tial. There are many spa zones .	**Above Medium** Existing Armenian resorts and spas have the potential to offer various services	**High**. Mineral water can be used for treatment of cardio-vascular, gastroin-testinal systems, liver, gallbladder central nerv-ous system, muscu-loskeletal system and other illnesses.
Adventure	**Medium** Armenia has significant potential to offer unique adventure tourism products given its natural and human resources, as well as its distinc-tive traditions.	**Medium** Armenia has enough resources for the development of adventure tourism.	**Medium**: hiking, climbing, horseback riding, mountain climbing, windsurfing, geo-logical explorations,	**Medium** The quality of adventure experience can be considered average
Winter tourism	**High** Armenia has considerable resources to offer specific win-ter tourism products – Tsaghkadzor, Jermuk, Aragats, Agh-veran.	**High** Tsaghkadzor, Jer-muk, Aragats, Agh-veran	**Medium** Armenia is not prominent for offering variety of winter tourism services yet.	**Above Medium** Currently there are two winter tour-ism centers in Armenia – Tsaghkadzor and Jermuk, which are equipped with rope-ways on a par with international standards

Source: Armenia 2020. Armenia's Tourism Industry, 2008

3.WHAT IS TOURISM IMPACT ANALISYS

Impact analysis estimates the impact of dollars from outside the country(new dollar) on the country economy. (Frechtling 2004) .

A variety of methods, ranging from pure guesswork to complex mathematical models, are used to estimate tourism's economic impacts.

A lot of researcher took into consideration following principal methods

1 *Input-Output* (I-O) *analysis* (Frechtling 1994a) *,* (Zhou *et al.* 1997)., Fletcher (1989) applies this method to the Republic of Palau, the Solomon Islands and Western Samoa and concludes that in

large economies with strong intersectoral links.

    2.Computable General Equilibrium (CGE)(Jay 2005) which has his historical origins in the IO methodology, but has been developed to overcome many shortcomings of I-O models, Over the last couple of years, however, there have been initial applications of CGE models to the tourism field in many countries such as Australia (Adams and Parmenter 1995), Hawaii (Zhou *et al.* 1997), Spain (Blake 2000), the UK (Blake *et al.* 2001) and the US (Blake and Sinclair 2002).

   3. *Tourism Satellite Account:* As Smith (1997) points out, the term "satellite" refers to the fact that the TSA is developed as an extension or satellite of the I-O framework of the SNA. The TSA is built on information from existing national accounts and also allows for new information to be incorporated. It takes information from the SNA about what industries produce and what inputs they use (I-O tables). (Jay 2005)

    Tourism is not a single industry but rather comprises businesses from numerous industrial classifications (Tooman 1997). The initial expenditure by visitors can have significant additional effects throughout the rest of the economy, resulting in increased income and expenditure by a wide range of household groups not necessarily directly connected with tourism. This process of spending and re-spending is commonly described as the "*multiplier*" effect. As pointed out in Archer (1982), the term of multiplier is used to describe the final change in output in an economy relative to the initial change in visitor expenditure and is central to any measure of the economic impact of tourism.

    Formally economists distinguish **direct**, **indirect**, and **induced** economic effects. Indirect and induced effects are sometimes collectively called **secondary effects.** The **total economic impact** of tourism is the sum of direct, indirect, and induced effects within a region. As in our study we are serving WTTC data, we use WTTC's definition of these effects as well.(Glossary)

WHAT IS THE ROLE OF TOURISM IN ARMENIA

  The overall goal of state policy in Armenia's tourism industry is to increase its contribution to the national economy and ensure equal regional economic growth while at the same time alleviating poverty. This will be achieved by sustaining high levels of growth in the number of incoming and internal tourists, meanwhile increasing tourism generated income through offering higher value products and services, and creating new job opportunities in the sector. But here everything is related to the magnitude of economic answer _ tourism multiplier.

   In our analysis we are using the approach suggested by Stynes (2007)

Sales multiplier = (direct sales + indirect sales+ and induced sales)/direct sales.
Employment multiplier = direct, indirect, and induced employment/direct employment /direct sales.

According WTTC data we can calculate following multipliers in Armenia
The dynamic of these multipliers is presented in the graph1

Graph 1 GDP and employment multiplier
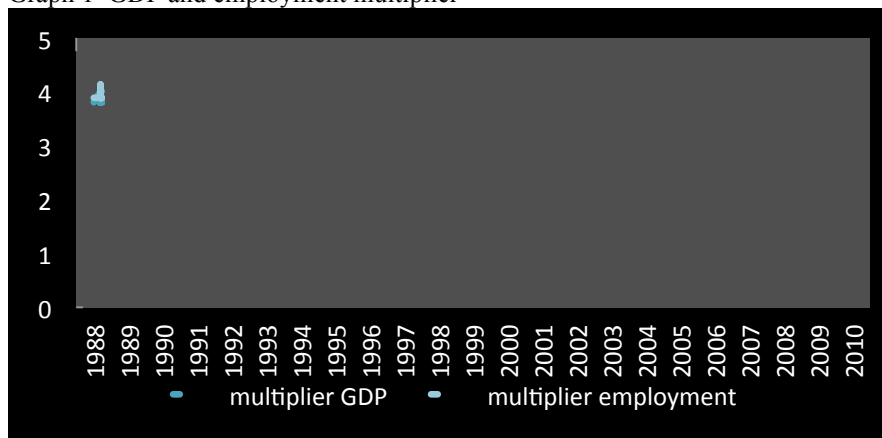
We can notice that both employment and GDP multipliers are near 4 at 1995-2010, so 1 "new" foreign $ create 4 $ inside of country and 4 additional workplaces.
 In this section regression analysis are done using SPSS program package, for 1992-2010 period data.

Although government tourism spending impact on both of multipliers is not significant we found a positive impact of total government expenditure on GDP multiplier in 5% confidence interval with R^2=0.345(Table 3)

Table 3: SPSS output Coefficients :Public spending impact on tourism GDP multiplier

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3,523	,059		59,890	,000
	PublicExp	2,688E-10	,000	,586	2,605	,022

a. Dependent Variable: multiplierGDP

We have no tourism government spending impact on direct sales of tourism, but positive impact of total government expenditure on this indicator. It means 1 $ of government expenditure will bring 129$ more direct sales of tourism industry, even in 1% confidence interval and 0.943 R^2(Table 5)

Table4 SPSS output Coefficients ;The impact of gov. expenditure on Direct tourism omtribution [a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2,868	8,128		,353	,728
	GovEX	129,601	7,510	,971	17,257	,000

a. Dependent Variable: Direct Contribution

That kind of result we receive checking tourism Capital investment influence on tourists arrival number. R^2=0.941 and we have positive significant impact.(table6) inspite of this result the correlation between Tourism arrivals and GDP growth is negative _ -0.127.

Table 5 SPSS output Coefficients; Capital investment impact on tourist arrivals

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-21616,289	21393,720		-1,010	,331
	capitalinvest	24856,263	1727,007	,970	14,393	,000

a. Dependent Variable: TouristArrivals

These results are speaking about the importance of Capital investment and Government spending on the improvement of infrastructures which has a big influence on tourism industry flows.
Armenia as a country that offers stable and safe conditions for entrepreneurship and investments and is attractive for tourists supported by its effective presentation and promotion in the global market; improve accessibility, transportation, and infrastructure through targeted investments and legal framework improvement provide higher quality and greater number of accommodation and other infrastructures, sustained investments in research and work-force development, while continuously tracking the effects and monitoring impacts of tourism development.

Summary

Although tourism is one of strategic directions   in Armenia , there is no studies about measuring its economic impact. Even during the study we found a significant differences between Government expectation and international research organisation's forecasting of Armenian tourism industry growth. This paper was an attempt to provide some fundamental concepts for estimating the impacts of tourism on the economy of the Republic of Armenia. The starting point to do research on this topic we consider to measure tourism multipliers. We can notice that both employment and GDP multipliers are   near 4 at 1995-2010, so 1 "new" foreign $ create 4 $ inside of country and 4 additional workplaces The results speak about effective government spendings in general, but there is no positive impact of tourism government expenditures on number of arrivals. Although tourism seems to be adding substantially to the economic growth of many regions, many developing countries are not reaping full benefits from tourism. We realized the great need for further research into the role of tourism as an economic tool for development of Armenia.

REFERENCES

Adams, P.D. and B.P. Parmenter (1995). An Applied General Equilibrium Analysis of the Economic Effects of Tourism in a Quite Small, Quite Open Economy. Applied Economics, Vol. 27, No. 10, 985-994.

Archer, B.H. & Fletcher, J.E. (1990). Tourism: Its economic significance. In M. Quest (ed.), Horwath Book of   Tourism (pp. 10-25). London: The MacMillan Press.

Archer, B. H. 1973. The impact of domestic tourism. Bangor: University of Wales Press.

Archer, B. H. 1982. The value of multipliers and their policy implications. Tourism ManagementDecember: 236-241.

Blake, A. (2000), "The Economic Effects of Tourism in Spain," Tourism and Travel Research Institute Discussion Papers, No. 2.

Blake, A., M.T. Sinclair and G. Sugitarto (2001).The Economy-wide Effects of Foot and Mouth Disease in the UK Economy, Tourism and Travel Research Institute Discussion Papers, No. 3.

Blake, A. and M.T. Sinclair (2002). Tourism Crisis Management: Responding to September 11. Tourism and Travel Research Institute Discussion Papers, No. 7

Daniel J. Stynes. Economic Impacts of Tourism
    https://www.msu.edu/course/prr/840/econimpact/pdf/ecimpvol1.pdf

Fletcher, J.E. (1989).Input-Output Analysis and Tourism Impact Analysis. Annalsof Tourism Research, Vol. 16, No. 3, 514-529.

Frechtling, Douglas C. 1994. Assessing the economic impacts of travel and tourism – Introduction to travel economic impact estimation. In. Travel, Tourism and Hospitality Research, second edition. J.R. Brent Ritchie and Charles R. Goeldner (eds). New York: John Wiley and Sons Inc. Economic impacts of Tourism

Frechtling, Douglas C. 1994. Assessing the economic impacts of travel and tourism – Measuring economic benefits. In. Travel, Tourism and Hospitality Research, second edition. J.R. Brent Ritchie and Charles R.Goeldner (eds). New York: John Wiley and Sons Inc.

Frechtling, Douglas C. 1994. Assessing the economic impacts of travel and tourism Measuring economic costs.In. Travel, Tourism and Hospitality Research, second edition. J.R. Brent Ritchie and Charles R Goeldner(eds). New York: John Wiley and Sons Inc..

Smith, S.L.J. (1997), TSAs and the WTTC/WEFA Methodology: Different Satellites or Different Planets? Tourism Economics, Vol. 3, No. 3, 249-263

Tooman, A.L. (1997). Tourism and development. *Journal of Travel Research*. , v. 35 p.33-4

Zhou, D., J.F. Yanagida, U. Chakravorty, and P.S. Leung (1997), "Estimating Economic Impacts from Tourism" Annals of Tourism Research, Vol. 24, No. 1, 76-89.

WWW. Worldbank.org database

World tourism & travel council World travel impact report 2011

World tourism & travel council Armenia travel impact report 2011

Glossary

Direct contribution to GDP – GDP generated by industries that deal directly with tourists, including hotels, travel agents, airlines and other passenger transport services, as well as the activities of restaurant and leisure industries that deal directly with tourists. It is equivalent to total internal Travel & Tourism spending within a country less the purchases made by those industries (including imports)..

Direct contribution to employment – the number of direct jobs within the Travel & Tourism industry

Total contribution to GDP – GDP generated directlyby the Travel & Tourism industry plus its indirect and induced impacts

Total contribution to employment – the number of jobs generated directly in the Travel & Tourism industry plus the indirect and induced contributions

Indirect contribution – the contribution to GDP and

jobs of the following three factors: 1. Capital investment – includes capital investmentspending by all sectors directly involved in the Travel& Tourism industry. This also constitutes investmenspending by other industries on specific tourism assets such as new visitor accommodation and passengertransport equipment, as well as restaurants and leisure facilities for specific tourism use. 2 Government collective spending – general government spending in support of general tourism activity. This can include national as well as regional and local government spending. For example, it includes tourism promotion, visitor information services, administrative services and other public services. 3Supply-chain effects – purchases of domestic goods and services directly by different sectors of the Travel &Tourism industry as inputs to their final tourism output.

Induced contribution – the broader contribution to GDP and employment of spending by those who are directly or indirectly employed by Travel & Tourism.

Multipliers represent the economic interdependencies between sectors within a particular region's economy.