The Development Effect of Tourism on Saudi Economic Diversification

Mohammed Al Yousif, A.B.D and Ahmed Al Bakr

Key Points

- Investment in the tourism sector is a promising solution for two essential Saudi economic problems; less diversified economy and higher rate of unemployment.

- To estimate the effect of the tourism sector on output, income, and employment, Leontief's input-output analysis (I-O) of the Saudi economy is carried out.

- The tourism industry can have positive direct and indirect economic effects. The direct effect mostly comes from tourism activities. Other sectors of production such as services, construction, and manufacturing bring about the indirect economic effect.

- Increasing investment in the tourism sector as an approach to enhancing Saudi economic diversification is entirely in line with the Vision 2030 objectives.

Introduction

Over the last 70 years, oil prices have increased by almost 900 per cent while those of metals and minerals increased only by 68 per cent. [1] Oil is a scarce source of energy, but scarcity was not the main reason for this massive increase in price, which was, in fact, due to political forces. In a recent book *"The Price of Oil"*, the authors ((Aguilera & Radetzki, 2016) believed that the recent collapse in global oil prices is going to need more time to recover due to the current revolution in US shale oil resources and environmental

---

[1] United Nations Conference on Trade and Development (UNCTAD) and United Nations Statistics Commission (UNSTAT).

regulations. Since the major producers of oil, through OPEC, have lost, to some extent, their ability to control the oil market, fluctuations in oil prices is expected to increase. Thus, oil exporting countries are seriously considering a new economic diversification strategy. Diversified economies are mainly characterized by less economic volatility/uncertainty and higher efficiency/productivity of the private sector (Callen, Time, *et al.*, 2014).

The World Tourism Organization (UNWTO) defines tourism as "a set of activities carried out by a person traveling to a place outside his/her usual environment for at least one night, but less than a year, and whose main purpose of travel is other than the exercise of an activity remunerated from within the place visited". Moving from a permanent geographical place to a different one for at least one night and not more than a year and doing non–economic activities are the two features that differentiate tourism from immigration in which a person travels to another country for work purposes. There are two kinds of tourism (domestic and inbound) as classified by UNWTO. Domestic tourism is when a resident of one country domestically travels to visit another part of the same country for tourism purposes. Inbound tourism is when a resident of one country visits other countries for tourism purposes.

With regard to the effect of tourism sector on Saudi Arabia's economic growth and employment, the Leontief Input-Output method is used as a tracker for economic activities of different Saudi sectors of production. This method estimates the influence of any sector such as tourism on the economy under study and can be used to calculate tourism's contribution to the Saudi economy and the Saudi labour market. Therefore, the scope of this paper is to investigate the tourism industry's ability to generate new income and impact on the labour market using Saudi Arabia as a case study.

Literature Review

The World Tourism Organization (UNWTO) records that tourism has recorded a significant expansion during the last decade. Tourism is not a random activity nowadays; it has become big business and a primary source of income for many countries, including advanced countries (Callen, Time,

et al., 2014). Creating jobs and increasing income are main features of tourism because it – directly and indirectly– influences a wide range of other activities such as industry, services, education, transportation, infrastructure, culture, communications, and health. The Canadian National Task Force on Tourism Data (1985) simplified the tourism sector by dividing its activities into two tiers. All economic activities that cannot exist without tourism are under tier 1, such as cruise ships and travel agents. The type of economic activities that can exist independently of tourism, including restaurants, car rental agencies, gift shops, and attractions and events, falls under tier *2*.

In the literature, there have been long discussions about the nature of the relationship that exists between economic growth and increasing investment in the tourism sector. The main question was "Does raising investment in the tourism sector have a positive relationship with economic growth in both the short and long run?" Empirical work by has found that there have been positive short term and long term multiplier effects between economic growth and expanding investment in the tourism sector experienced across a large range of developing and developed countries (Akanm, Arslan, & Isik, 2008). In comparison with many sectors of production, investment in the tourism sector has higher multiplier effects due to its wide involvement in other economic activities. One study found that there was a significant relationship between the development of tourism and economic growth (Abdel-Rahman, 2001).

The tourism sector is a solution for broadening economic diversification and as a means of increasing stability (Sherbini, Ayman, et al., 2016). Investment in the tourism sector is also very environment-friendly since service activities, which do not intensively involve carbon dioxide emissions, account for most of the industry. Thus, investment in tourism can produce promising results by generating jobs, enhancing economic diversification, and protecting the environment. In short, creating a balance among the social, economic and environmental sectors is possible through investment in tourism.

Moreover, the demand for tourism fluctuates less than some sectors because of two main reasons; tourism involves a large number of different economic activities producing a wide variety of goods and services. In

addition, foreign tourists constitute an important factor for stabilizing the tourism demand level against domestic shocks (Butler, 2001). Tourism has to be more dynamic in terms of innovating a different/new range of products to maintain the attractiveness and competitiveness of the sector in addition to organizing new events and activities over the year. With regard to the labour market, tourism is a job generator, especially for local citizens, low-skilled workers, and for students and women who seek part-time jobs. Thus, this sector's outputs are non-traded goods and services that usually generate an immense number of direct or indirect jobs through retail, construction, manufacturing and telecommunications (Sherbini, Ayman, *et al.*, 2016)

Boosting tourism requires some efforts by decision makers. For instance, governments should build the required infrastructure such as hotels, services and roads. They can also increase the usefulness of the existing infrastructure. In foreign policies, governments should be eager to have suitable trade agreements with major trade partners (Krapf, 1961). The accumulation of hard currency from tourist businesses is an important advantage for developing countries so these economies seek to make their countries more attractive to tourists from advanced economies (Debbage and Ioannides, 1998). On the other hand, countries depending on the tourism industry have to maintain their relationships with other countries as lacking good political relations may pose a great hindrance to investment in the tourism sector (Timothy, 2002).

Research Methodology

Estimates of the economic changes (in output "X," and in employment "L") that are expected to result from increasing investment in the tourism sector can be made using the Saudi Arabia input-output table. The Input-Output model calculates interaction coefficients between different Saudi production sectors. The Input-Output method of analysis built by Leontief (1985) for the American economy is appropriate for evaluating the impact of new policies such as increased government spending on the economic system (Chemingui & Lofgren, 2004; Haji, 1993; Hawwas, 2010).

The Leontief Input-Output model can be emphasized in the following four equations:

(1) $X_i = a_{i1}X_1 + a_{i2}X_2 + ... + a_{ij}X_j + FD_i$
(2) $X = AX + FD$
(3) $(I - A)X = FD$
(4) $X = (I - A)^{-1}FD$

Xi in equation (1) is the total output of production sector while *a_{i1}*X_j is the amount of X_j's output that is required to be input from the X_j sector, and a_{ij} is a percentage from this equation (*x_{iJ}*/X_i). FD_i refers to final demand users of good i such as in household consumption, investment, government expenditure, and from exportation (foreign demand).

Equation (2) is a matrix-vector of equation (1) where A indicates a i by j matrix containg all elements of a_{ij}.

Equation (3) adds X's in the left side and uses the notation I that refers to the identity matrix.

Equation (4) is the final step needed to calculate X using the (I-A) inverse matrix. The Leontief Input-Output model is also used as a tool to analyze the economy at both the national and regional levels.

The Input-Ouput model is based on aggregate identities; the total output of any production sector is entirely consumed by other sectors of production and by final demand, internally as inputs to production sectors and directly by final demand users. The Input-Output analysis provides more information about the interaction between internal sectors of production and final demand. Any changes in the final demand, such as increasing demand on the tourism sector, will not only cause expansion in the tourism sector, but in all economic sectors that provide such input to the tourism sector, whether directly or indirectly. By estimating and using an Input-Output model for any economy, policymakers can estimate the level of expansion in the related

production sectors—such as construction, manufacturing, services, training centers, museums, and small/local businesses (Michael, 2010; Economics L., 2014) caused by an increase in demand.

There are two additional equations that calculate the effect resulting from changes in final demand, such as increasing investment in the tourism sector.

Equation (5) - calculates the amount of changes in output ($\triangle Xi$) resulting from investment of a certain amount of money in the tourism sector:

$$(5)\ \triangle Xi = (I - A)\text{-}1 \triangle TSt$$

where:

TSt: is the direct demand in the tourism sector.

Equation (6) - calculates the amount of changes in employment (Ei):

$$(6)\ \triangle Ei = L\ (I - A)\text{-}1 \triangle TSt$$

Where L is the output-labour ratios (Xi/Li).

The empirical analysis for this paper involves five tables; the first one Table (1) is the input-output table for Saudi Arabia (2011). The Saudi Input-Output table was disaggregated into nine major sectors: agriculture, mining and quarrying, manufacturing, utilities, construction, wholesale & restaurants, transportation, storage & telecommunications, finance & insurance services, and other services. The primary data was calculated from different sources, including the Organization for Economic Co-operation and Development (OECD) website, Ministry of Economy and Planning, General Authority for Statistics and Information (GSTAT), and the Saudi Arabian Monetary Authority (SAMA).

Table (1) shows the Saudi Input-Output system for 2011. It has two parts; inputs and outputs. The vertical side of the table presents the flow of inputs. For instance, column (1) has the total value of agriculture input to the agriculture sector and other entities of production. The horizontal side of the table presents the total output of each production entity. Finally, column (10) shows the total output of each sector of production.

This Table includes nine production sectors: agriculture, mining & quarrying, manufacturing, utility, construction, wholesale & restaurants, transportation, storage & telecommunications, finance & insurance services, and other services. Columns (1 to 9) show the distribution of output of each sector consumed by domestic sectors, while column 10 gives the sum of total output for the closed economy.

Table (1): Saudi Arabia Input & Output Table for 2011

Saudi Arabia Original (Input-Output Table) Producers As Consumers

Saudi Riyal (mill)		1	2	3	4	5	6	7	8	9	10
		Agriculture	Mining and Quarrying	Manufacturing	Utility	Construction	Wholesale & restaurants	Transport, storage	Financial intermediation	Services	Sum of Total Output
1	Agriculture	5118.7	4.2	25022.9	0.1	1695.8	5316.7	106.7	4.2	1652.2	38922
2	Mining and Quarrying	349.2	3451	114777.3	12075.1	27288.7	694.5	722	13.2	1677.2	161048
3	Manufacturing	4699.5	2465.6	44260.8	604.2	23202.1	9199.7	7611.3	453.3	20161.8	112659
4	Utility	486.3	940.5	2967.4	1034	321.3	3232	1411.2	182.3	8233.2	18808
5	Construction	153	26.8	528.8	48.9	40844	1873.6	956.1	2425.9	4530.6	51388
6	Wholesale & restaurants	4043.5	2328.3	32122.2	497.3	13028.9	20613.1	6142.4	634.6	22118.5	101529
7	Transport, storage, Telecommunication	1179.4	677.2	12145.8	515.8	3948	13038.9	44123.3	2259	41705.8	119593
8	Finance & insurance services	1960.9	833.2	7012.6	324.6	8102.4	27881.9	6010.1	29065.2	22950.6	104142
9	Other services	3663	4326.8	18680.5	659.1	5868.9	37779.8	16189.7	3684.1	86236.2	177088

Source: Organization for Economic Co-operation and Development (OECD)

Table (1) also evaluates trade–offs among different entities of production in millions of Riyals as the amount of output from entity A goes to entity B and vice versa. It is clear from Table (1) that the Saudi economy suffers from less diversification since petrochemical activities are (directly/indirectly) involved in most of Saudi economic activities. In other words, the non-oil sector is largely dependent on the oil sector.

Table (2): Matrix (A) = *aij* = *Xij* / *Xj*

A Matrix

2011	Sectors	1	2	3	4	5	6	7	8	9
		Agriculture	Mining and Quarrying	Manufacturing	Utility	Construction	Wholesale & restaurants	Transport, storage	Financial intermediation	Services
1	Agriculture	0.13158	2.58E-05	0.22218	7.18E-06	0.03303	0.05237	0.00089	4.04E-05	0.00933
2	Mining and Quarrying	0.00897	0.02143	1.0188	0.64201	0.53103	0.00684	0.00604	0.00013	0.00947
3	Manufacturing	0.12074	0.01531	0.39288	0.03213	0.4515	0.0906	0.06364	0.00435	0.11385
4	Utility	0.01249	0.00584	0.02634	0.05497	0.00625	0.03183	0.0118	0.00175	0.04649
5	Construction	0.00393	0.00017	0.00469	0.0026	0.79482	0.01845	0.00799	0.02329	0.02558
6	Wholesale & restaurants	0.10389	0.01446	0.28513	0.02644	0.25354	0.20303	0.05136	0.00609	0.1249
7	Transport, storage, Telecommunications	0.0303	0.00421	0.10781	0.02742	0.07683	0.12843	0.36894	0.02169	0.23551
8	Finance and insurance services	0.05038	0.00517	0.06225	0.01726	0.15767	0.27462	0.05025	0.27909	0.13
9	Other services	0.09411	0.02687	0.16582	0.03505	0.11421	0.37211	0.13537	0.03538	0.487

Source: Organization for Economic Co-operation and Development (OECD)

1 2011 is the Input-Output table for Saudi Arabia from OECD.

The Saudi I-O table is 33 by 33 (Row x column), we reshape the original Saudi I-O table to one that has 9 sector for the purpose of clarification. Hence, Our calculations have been done in the original table.

Table (2) calculates the A matrix entities represented as aij, where (aij = Xij / Xj). In short, A matrix calculates the input coefficients of all production sectors. This Table calculates the coefficients of different production sectors as a percentage of total output of each sector. Let us say sector X2 consumes 10% of total production of

X1, a12 is the percentage of X1 used as input to X2. In the Leontief's model, this step is "A matrix". The kind of relationship among different sectors of production is summarized in Table (2) : (A) = aij = Xij / Xj. Thus, Table (2) provides the distribution of output by one sector of production among all other sectors of production.

Table (3) calculates the matrix (I-A); (I) is the identity matrix and A is the coefficient matrix. This Table has one condition, which is that diagonal values have to be positive and off–diagonal values have to be negative.

Table (3): (I-A) Matrix

2011	Sectors	1	2	3	4	5	6	7	8	9
		Agriculture	Mining and Quarrying	Manufacturing	Utility	Construction	Wholesale & Restaurant	Transport, Storage	Financial Intermediation	Services
1	Agriculture	0.86849	-2.58E-05	-0.22211	-7.18E-06	-0.033	-0.05237	-0.00089	-4.04E-05	-0.00933
2	Mining & Quarrying	-0.00897	0.97857	-1.0188	-0.64201	-0.53103	-0.00684	-0.006	-0.00013	-0.00947
3	Manufacturing	-0.12074	-0.01531	0.60712	-0.03213	-0.45151	-0.09061	-0.06364	-0.00435	-0.11385
4	Utility	-0.01249	-0.00584	-0.02634	0.94503	-0.00625	-0.03183	-0.0118	-0.00175	-0.04649
5	Construction	-0.00393	-0.00017	-0.00469	-0.0026	0.20518	-0.01845	-0.008	-0.02329	-0.02558
6	Wholesale & restaurants	-0.10389	-0.01446	-0.28513	-0.0264	-0.25354	0.79697	-0.05136	-0.00609	-0.1249
7	Transport, storage, telecommunications	-0.0303	-0.0042	-0.10781	-0.02742	-0.07683	-0.12843	0.63106	-0.02169	-0.23551
8	Finance & insurance services	-0.05038	-0.00517	-0.06225	-0.01726	-0.15767	-0.27462	-0.05025	0.72091	-0.13
9	Other services	-0.09411	-0.02687	-0.16582	-0.035	-0.11421	-0.37211	-0.13537	-0.03538	0.51303

Source: Organization for Economic Co-operation and Development (OECD)
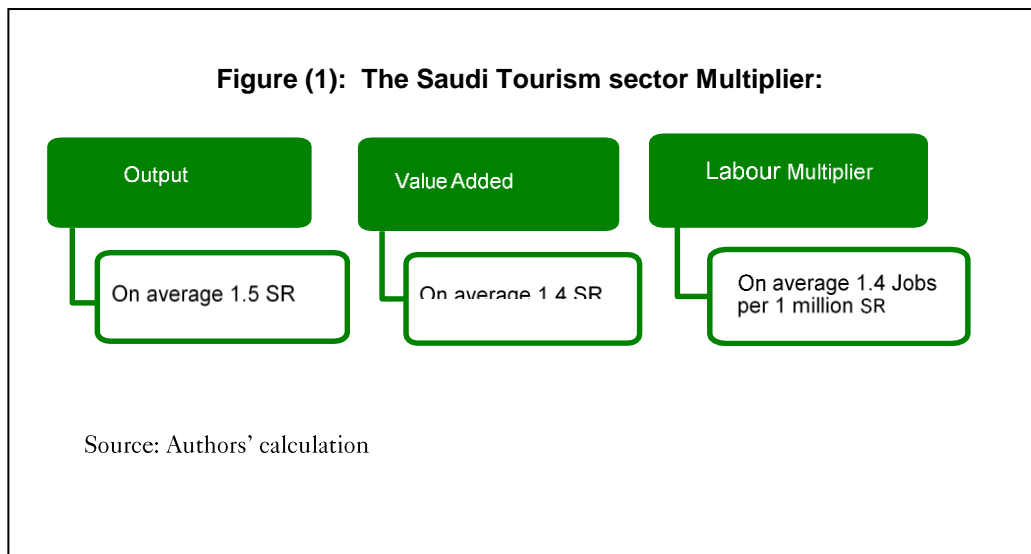
Table (4): Inverse Matrix (I-A)-1

A Inverse (I-A) ^-1 Matrix

2011	Sectors	1	2	3	4	5	6	7	8	9
		Agriculture	Mining and Quarrying	Manufacturing	Utility	Construction	Wholesale & restaurants	Transport, storage	Financial intermediation	Services
1	Agriculture	0.07769	1.16E-02	0.20293	3.18E-02	0.86	0.16387	0.0882	4.21E-02	0.18348
2	Mining and Quarrying	0.32146	0.04789	0.83969	0.13178	3.55858	0.67801	0.36507	0.17437	0.75919
3	Manufacturing	0.22487	0.0335	0.58739	0.09219	2.48934	0.47432	0.25538	0.122	0.53108
4	Utility	0.0375	0.00559	0.09806	0.01539	0.41559	0.07919	0.0426	0.02036	0.08866
5	Construction	0.10257	0.01528	0.26793	0.04205	1.13548	0.21635	0.11649	0.05564	0.24224
6	Wholesale & restaurants	0.20266	0.03019	0.52936	0.08308	2.24342	0.42746	0.23015	0.10993	0.47861
7	Transport, storage, telecommunications	0.23872	0.03556	0.62355	0.09786	2.64257	0.50351	0.2711	0.12949	0.56377
8	Finance and insurance services	0.20787	0.031	0.543	0.08522	2.30115	0.43846	0.23607	0.11276	0.49093
9	Other services	0.35348	0.05266	0.92332	0.14491	3.913	0.74558	0.40144	0.19174	0.835

Source: Organization for Economic Co-operation and Development (OECD)

Table (4) shows the inverse matrix (I-A)-1 for 2011. The inverse matrix calculates coefficient vectors among different sectors of production. Agriculture and the Utilities sector made the lowest contribution to Saudi total output; their coefficients with other sectors of production are very small compared to mining, quarrying and manufacturing which had the highest coefficients with all sectors of production.

By producing all the tables required for applying the Leontief's I-O model to Saudi Arabia, the effect of increasing investment in the Saudi tourism sector is examined through calculating output, value added and the labour multiplier. In Figure (1), we show our estimates of the output multiplier for increasing investment in the tourism sector is around (1.5) and that (1.4) is the value added multiplier. In addition, we find that there is an average of 1.4 new jobs generated for each one million Saudi riyals spent on the tourism sector in Saudi Arabia.

Figure (1): The Saudi Tourism sector Multiplier:

Output	Value Added	Labour Multiplier
On average 1.5 SR	On average 1.4 SR	On average 1.4 Jobs per 1 million SR

Source: Authors' calculation

Scenarios of investment in the Saudi tourism Sector

In this section, we use these multipliers (output, value added, and labour) to build different scenarios of investment in the tourism sector of Saudi Arabia. We estimate three investment scenarios (SR 100, 150, 200 billion) over 4 years (2017-2020). We distribute this amount of investment over four years so as to avoid inflationary pressures, reduce remittances, and control possible leakages.

As shown in Figure (2), scenario (1) has an initial total investment of SR 100 billion in the tourism sector divided into SR 25 billion each year for 4 years. We found that the total value added would reach around SR 37.5 billion for investment of SR 25 billion in the first year and that it would be around SR 66.8 billion by the end of 2020. The tourism sector's contribution to the total Saudi GDP would be 4.9 percent by the end of the first year and 5.6 percent by the end of 2020.
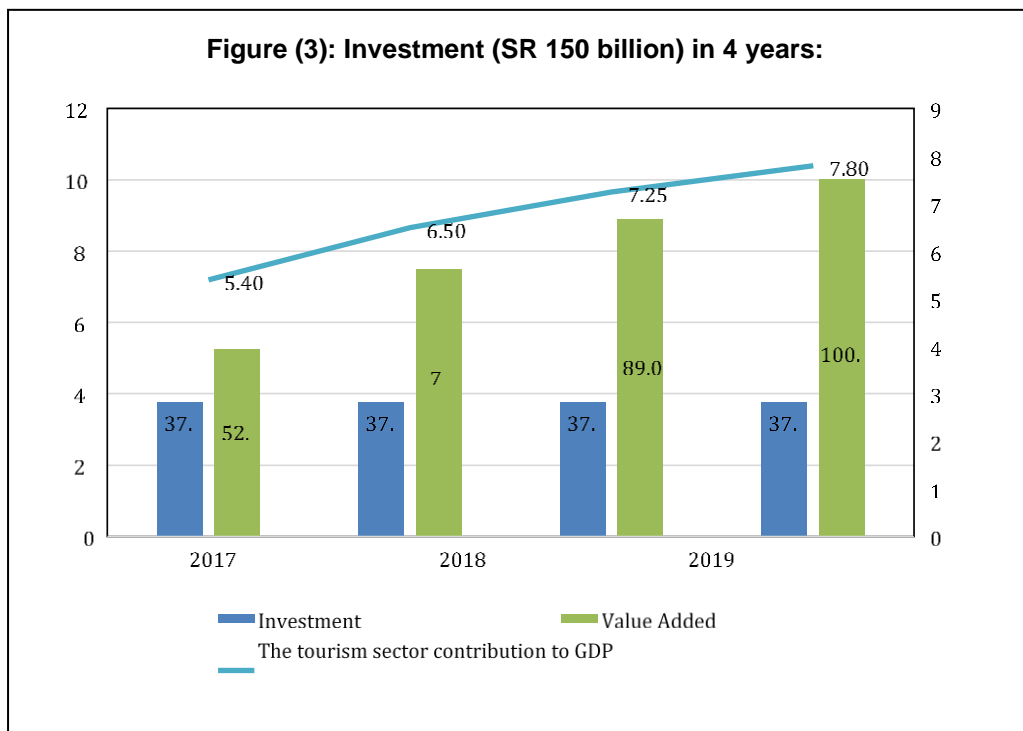
Figure (2): Investment (SR 100 billion) in 4 years:

The tourism sector contribution to GDP

Source: Authors' calculation
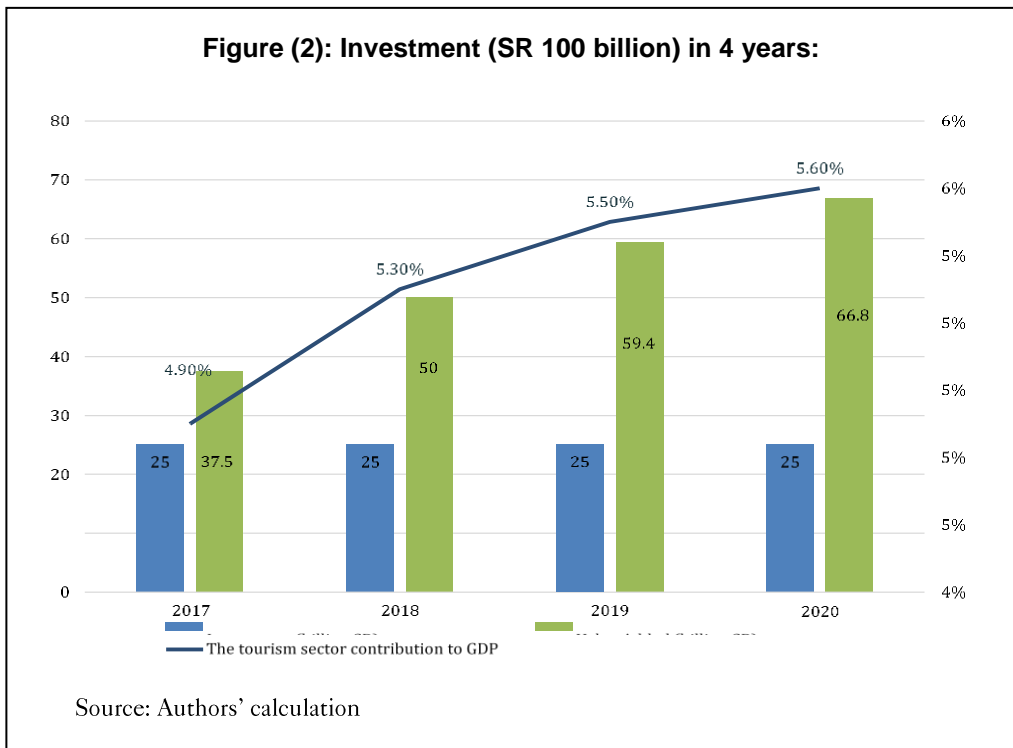
In Figure (3), scenario (2) has an initial total investment of SR 150 billion in the tourism sector divided into SR 37.5 billion each year for 4 years. We found that the total value added would be around SR 52.5 billion for investment of SR37.5 billion in the first year and around SR 100.3 billion by the end of 2020. The tourism sector's contribution to total Saudi GDP would be 5.4 percent by the end of the first year and 7.8 percent by the end of 2020.

**Figure (3): Investment (SR 150 billion) in 4 years:**

Figure (4) shows that scenario (3) has an initial total investment of SR 200 billion in the tourism sector divided into SR 50 billion each year for 4 years. We concluded that the total value added would be around SR 70 billion for investment of SR 50 billion in the first year and SR 133.75 billion by the end

of 2020. The tourism sector's contribution to the total Saudi GDP would be 6.10 percent by the end of the first year and 9.3 percent by the end of 2020

Figure (4): Investment (SR 200 billion) in 4 years:

Source: Authors' calculation
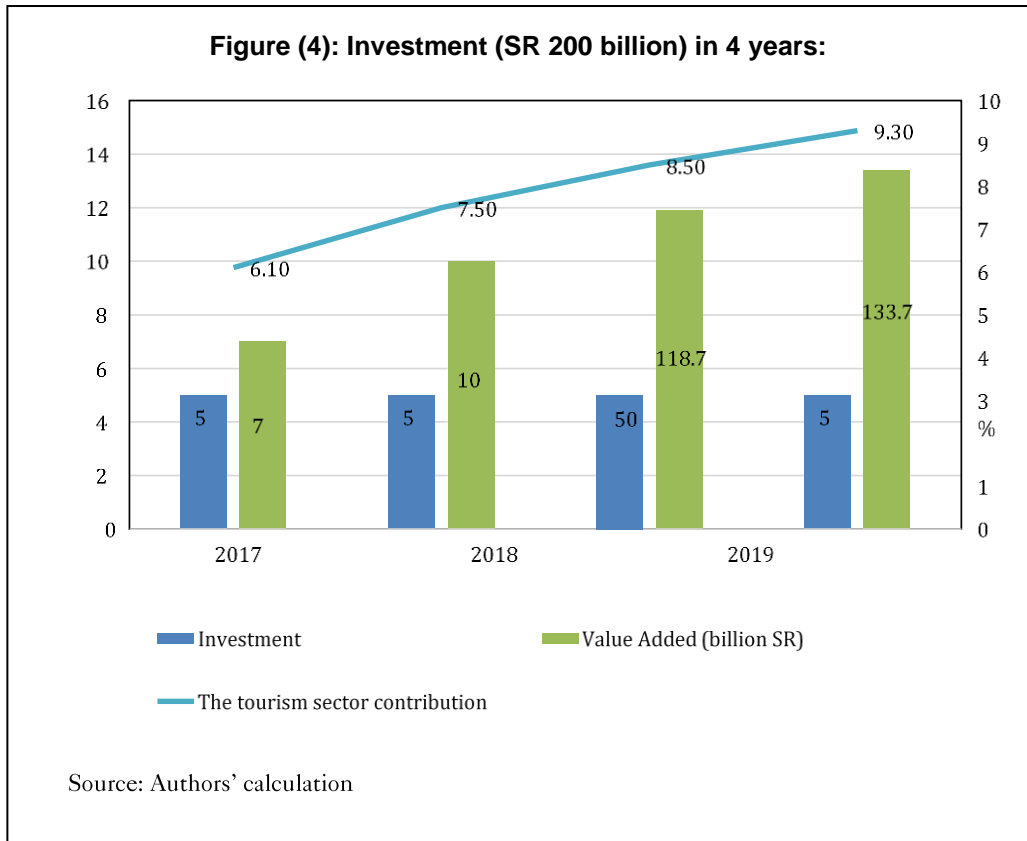
Comparing Our Scenarios with the National Transformation Plan (NTP 2020)

The purpose of Table (8) is to compare our results calculated through these three scenarios with the NTP 2020's objectives. The NTP 2020 aims to invest a total of SR 171.5 billion in the tourism sector by the end of 2020. In our empirical work, we created three scenarios involving investment in the tourism sector with SR 100, 150, and 200 billion by the end of 2020. The value added calculated by NTP 2020 was around SR 118.8 billion, and we found that the value added would be, on average, around SR 67 billion for the first scenario, SR100 billion for the second scenario, and SR134 billion for the third scenario.

The NTP 2020 expected the total contribution of the tourism sector to the Saudi GDP to be no more than 3.1 percent by the end of 2020. However, we found that the tourism sector's contribution to Saudi GDP would be around 5.6 percent for the first scenario, 7.8 percent for the second scenario, and 9.3 percent for the third scenario.

In terms of contribution to GDP, there is a significant difference between the NTP 2020 and our calculations. However, it is worth mentioning that the contribution of the tourism sector to Saudi GDP in 2015 was around 3.5% according to the Tourism Information and Research Centre (MAS). Therefore, it is more likely that the Saudi tourism sector's contribution to the Saudi GDP would be higher as compared with the contribution in 2015.

Finally, the NTP 2020 estimated that there would be more than 206 thousand direct new jobs generated in the tourism sector by the end of 2020 or 1.2 new jobs for each million spent on the tourism sector in Saudi Arabia. In our calculations, we found that the labour multiplier is 1.4 for each million, and based on this multiplier, 140, 210, 280 thousand direct new jobs would be generated for these three scenarios.

Table (8): Comparing Results of NTP and Our Scenarios:

Key Performance Indicators	2020 Target	SCEN (1)	SCEN (2)	SCEN (3)
Total New Tourism Investment (SAR BN)	171.5	100	150	200
Value Added (SAR BN)	118.8	67	100	134
% contribution to GDP	3.10%	5.60%	7.80%	9.30%
Number of New Jobs (Thousand jobs)	206	140	210	280

Source: Authors' calculation

Conclusion

Investment in the tourism industry is an important strategy to boost the non-oil sector in Saudi Arabia. Saudi Arabia has been considering investment in the tourism industry very seriously as one of the primary methods for economic diversification. However, the Saudi tourism sector suffers from some structural issues that are slowing down its development. For instance, foreign workers intensively engage in construction and service activities that account for a significant part of the tourism industry. Furthermore, since cheap foreign workers largely exist already in the Saudi labour market, the private sector refuses to employ Saudi workers.

There are two suggested solutions for these problems: increasing Saudi workers' productivity and encouraging small and medium sized enterprises (SMEs). Additionally, many researchers now believe that Saudi women should have a chance to play an essential role in the tourism sector, such as working in call centres, preparing traditional crafts, and in coordinating tourism activities.

References

Abdel-Rahman, AMM. (2001). Economic diversification in the kingdom of Saudi Arabia, UN.

Aguilera, R. F. and Radetzki, M. (2015). The price of oil, Cambridge University Press.

Akan, Y., İbrahim A. and Işık, C. (2008). The impact of tourism on economic growth: The case of Turkey. *Journal of Tourism* 9 (2): 47-69.

Albqami, R. (2004). Economic impact of tourism sector on Saudi Arabian economy. Paper presented at Brussels, International Conference on Input-output and General Equilibrium, discussion paper (www. ecomod. net/conferences/iioa2004/).

Butler, R.W. (2001). Seasonality in tourism: Issues and implications. Seasonality in Tourism: 5-21.

Callen, T. Reda C., Hasanov F., Hegazy A., and Khandelwal, P. (2014). Economic diversification in the GCC: Past, present, and future. International Monetary Fund.

Chatziantoniou, I., Filis, G., Eeckels, B., and Apostolakis, A. (2013). Oil prices, tourism income and economic growth: A structural VAR approach for European Mediterranean countries, *Tourism Management* 36: 331-41.

Chemingui, M. A., & Lofgren, H. (2004). *Tax policy reform in Saudi Arabia: A general equilibrium analysis.* Proceedings of the 11th Annual Conference of the Economic Research Forum. September.

Debbage, K., Ioannides, D. (1998). The economic geography of the tourist industry, Routledge.

Dwyer, L., & Forsyth, P.1993. Assessing the benefits and costs of inbound tourism.

Annals of Tourism Research, 20(4), 751-768.

Eadington, W. R., & Redman, M. (1991). Economics and tourism. *Annals of Tourism Research*, 18(1), 41-56.

Haji, J. A. (1993). The construction of the social accounting matrix (SAM) for Saudi Arabia. *Margin*, 25(3), 293-305.

Hawwas, A. (2010). *Policy experiments for the Saudi's economy using a Computable General Equilibrium model (CGE): Oil demand and tariff liberalisation effects on the Saudi economy, University of Dundee, PhD thesis*:

Katircioglu, S. (2009). Tourism, trade and growth: The case of Cyprus. *Applied Economics*, 41(21), 2741-2750.

Krapf, K. (1961). Les pays en voie de dévelopement face au tourisme: Introduction méthodologique. *The Tourist Review* 16 (3): 82-9.

Malik, S., Chaudhry, I.S., Ramzan Sheikh, M. and Farooqi, F.S. (2010). Tourism, economic growth and current account deficit in Pakistan: Evidence from co-integration and causal analysis. *European Journal of Economics, Finance and Administrative Sciences* 22: 21-31.

Mazumder, M. N. H., Al-Mamun, A., Al-Amin, A. Q., & Mohiuddin, M. (2012). *Economic impact of tourism-A review of literatures on methodologies and their uses:* 1969-2011 INTECH Open Access Publisher.

Sherbini, A., Yuhanis A. A., Sidin, S.Md. and Yusof, R.N.R. (2016) Income diversification for a future stable economy in Saudi Arabia: an over view of tourism industry. International Journal of Economics, Commerce and Management United Vol. IV, Issue 11, November.

Timothy, D J. (2002). Tourism and political boundaries Routledge.

Williams, Allan M., and C. Michael Hall.2000. Tourism and migration: New relationships between production and consumption. *Tourism Geographies* 2 (1): 5-27.

Zortuk, Mahmut.2009. Economic impact of tourism on Turkey's economy: Evidence from cointegration tests. *International Research Journal of Finance and Economics* 25 (3): 231-9.