QATAR UNIVERSITY

COLLEGE OF ARTS AND SCIENCES

THE ASSESSMENT OF THE ROLE OF QATAR AIRWAYS

IN

THE ECONOMIC DEVELOPMENT OF QATAR

BY

CATALINA GABRIELA PETCU

A Thesis Submitted to the Faculty of the

College of Arts and Sciences

in Partial Fulfillment of

the Requirements for the

Degree of

Masters of Arts in

Gulf Studies

June 2017

© 2017 Catalina Gabriela Petcu. All Rights Reserved.

COMMITTEE PAGE

The members of the Committee approve the Thesis of Catalina Gabriela Petcu defended on 18/05/2017.

| | Dr. Steven Wright |
|--|--------------------------------|
| | Thesis/Dissertation Supervisor |
| | Dr. Abdullah Baabood |
| | Committee Member |
| | Dr. Ashraf Mishrif |
| | Committee Member |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| Approved: | |
| | |
| Doshid Al Vuyyari Doon Callage of Callage of Arts | and Saiomana |
| Rashid Al-Kuwari, Dean, College of College of Arts | and sciences |

ABSTRACT

Petcu, Catalina, G., Masters: June: 2017, Gulf Studies

Title: The Assessment of the Role of Qatar Airways in the Economic Development of Qatar

Supervisor of Thesis: Dr. Steven Wright

The aviation industry in the Arabian Gulf is growing at a fast pace, attracting the global

attention upon the region. The Gulf airlines have entered the international aviation market as

state-owned entities, having embedded in their interests as commercial airlines, the visions of

their countries. In light of such developments, the research aimed at assessing a particular Gulf

airline, namely Qatar Airways, and its role in the planned economic development of Qatar. The

study has been structured around two main themes: the assessment of Qatar Airways'

performance using the neoliberal theory and developmental theory. Such perspectives allowed

not only the examination of the state-owned airline's evolution within the context of free markets

and within the context of national economic development, but also the recognition of the impact

of air transport on the economic development.

iii

ACKNOWLEDGMENTS

I offer my special thanks to my Supervisor, Dr. Steven Wright, who has accepted to guide me throughout the writing of my thesis with an infinite kindness and academic support. I am grateful to my committee members, Dr. Abdullah Baabood and Dr. Ashraf Mishrif, for their help. My appreciation goes to all the members of faculty, staff and students of Gulf Studies Program, who have created a thrilling environment for study and intercultural interaction.

TABLE OF CONTENTS

| ACKNOWLEDGMENTS | iv |
|---|------|
| LIST OF TABLES | vii |
| LIST OF FIGURES | viii |
| Chapter 1: Introduction | 1 |
| Introduction | 1 |
| Problem Statement | 2 |
| Literature Review | 4 |
| Purpose Statement | 12 |
| Research Question | 13 |
| Research Design | 14 |
| Chapter 2: Theoretical Framework | 15 |
| Introduction | 15 |
| The Neoliberal Theory | 20 |
| The Developmental State Theory | 22 |
| Knowledge-Based Economy | 25 |
| Foreign Direct Investments, Knowledge Transfer, Innovation | 28 |
| Chapter 3: The Characteristics of GCC Aviation Industry | 33 |
| Introduction | 33 |
| The GCC Aviation | 34 |
| Qatar Airways – Company Profile | 41 |
| Conclusion | 50 |
| Chapter 4: The Assessment of Qatar Airways from a Neoliberal Perspective | 51 |
| Introduction | 51 |
| Qatar's Investments in Aviation Infrastructure and Qatar Airways' Fleet | 56 |
| Taxation System in Qatar | 62 |
| Competition | 66 |
| Conclusion | 73 |
| Chapter 5: The Assessment of Qatar Airways from a Developmental State Perspective | 75 |
| Introduction | 75 |
| Qatar Airways and Knowledge-Based Economy | 79 |

| Qatar Airways' Innovative Processes | 83 |
|-------------------------------------|----|
| Connectivity | 85 |
| Qatar Airways' Economic Impact | 88 |
| Conclusion | 91 |
| Chapter 6: Conclusion | 93 |
| Limitations | 95 |
| Future Contribution | 95 |
| References | 96 |
| | |

LIST OF TABLES

| Table 1. Qatar Airways Group – General Business Information | 45 |
|---|-------|
| Table 2. Qatar Airways Historical Highlights 2014 – 2016 | 47 |
| Table 3. Qatar Airways Fleet | 61 |
| Table 4. Qatar Airways Income from Infrastructure Facilities | 63 |
| Table 5. The Accusations of US Airlines and Qatar Airways Commen | its71 |
| Table 6. Estimates of Value Added by Main Economic Activity 2015. | 91 |

LIST OF FIGURES

| Figure 1. The World Bank Knowledge Economy Index | 28 |
|--|----|
| Figure 2. Passenger Traffic at Key Airports in the GCC 2012 | 37 |
| Figure 3. Share of Middle East Airlines | 38 |
| Figure 4. Fleet Size across the GCC. | 39 |
| Figure 5. MRO Expenditure by Key Gulf Airlines | 39 |
| Figure 6. Airports in the GCC. | 41 |
| Figure 7. Net Value of Projects in Pre-Execution in GCC by Sectors | 58 |
| Figure 8. Comparison of Science and Technology Indicators 2012 | 83 |
| Figure 9. Qatar Airways Route Map. | 88 |

Chapter 1: Introduction

Introduction

The aviation sector started to shape the evolution of the Arab Gulf States since the beginning of the 20th century, when the British Empire and other major powers (Italy, United States) acknowledged the strategic position of the region in its communications sphere (Williams, 1957; Peterson, 2000). The Gulf's geographical position has ascertained the region's pivotal point on the global aviation map and its natural resources provided the necessary means to support the growth of air transportation. It is not a coincidence the fact that the oil was first discovered in 1931 in Bahrain and one year later, the same Gulf state has established the first Arabian international airport (Haji, 2016).

Having Dubai International Airport announced as the busiest airport in the world for international passengers traffic (Ulrichsen, 2015) and Doha and Abu Dhabi regarded as global super connectors (The Economist, 2010), the aviation sector in the Gulf region has known a meteoric rise. The factors encouraging the rapid development of the Gulf's aviation industry are the strategic location, high disposable income, low operating costs, global market liberalization, the absence of railway network in the Gulf Cooperation Council (GCC) countries (Singh, 2010) and the access to cheap capital (Scourse, 2013). Cash reserves from oil and gas assets enabled the governments of the Gulf States to highly invest in infrastructure and airport development and to fund high rates of airline capacity growth. For instance, Qatar Airways, Emirates and Etihad have benefited from the governmental support via lower fuel costs and lower labor costs (Scourse, 2013) and via the construction of highly technologized infrastructure: Hamad International Airport in

Doha, Al Maktoum International Airport in Dubai and Midfield Terminal Complex in Abu Dhabi (Ulrichsen, 2015).

While the governmental subsidies have been the essential drivers of the aviation industry in the GCC, the region's states are designing national visions to encourage the growth of the non-oil sector and to strengthen the process of economic diversification. However, the Gulf States have encountered difficulties in turning their economies away from hydrocarbons sector which presents unsustainability due to its volatility, its status as a major source of revenues and its future depletion of resources. Despite the fact that many scholars suggest that the private sector is the best option to diversify the economy, most of the GCC governments are not giving up on their leading role in economy, given the weakness of the GCC private sector. Therefore, the Gulf States seem to utilize state-owned enterprises (SOE) as instruments for economic development.

The present study is restricting the research on a specific Gulf country, namely Qatar, and it is examining whether the state-owned company Qatar Airways, in the aviation industry, has the potential to facilitate the process of economic development in Qatar. Hertog (2010) defined the SOEs in the GCC as being lucrative and efficient, therefore, an in-depth assessment of a state-owned airline and its role in the process of economic diversification can contribute to further evaluations of the GCC approach in diversifying the economy.

Problem Statement

Having oil as the main source of government revenues and export earnings (The Economist Intelligence Unit, 2010), the GCC economies are exposed to volatility and uncertainty in the international oil market. Despite the fact that non-hydrocarbons' output in gross domestic product (GDP) has increased, it is highly linked to oil prices, thus constraining the diversification process. The government spending in Qatar, financed by oil revenues, has been directed toward improving and supporting the public sector which offers a secure financial outlook for the nationals. Therefore, the growth of private sector has been hindered as entrepreneurship and employment in private companies are not strongly pursued by the locals. Moreover, the government's dominant position in the economy has not been questioned by the population which has been satisfied by the subsidies and welfare policies.

As the prices of hydrocarbons represent the origin of macroeconomic volatility, SOEs were established in order to develop different sectors of economy and to lead the non-oil exports. The alternative does not restrict the government involvement in the economy and it's intended to strengthen the diversification. However, without an appropriate regulations system, SOEs may prevent competition and a healthy business environment as they tend to dominate entire sectors.

Diversification policies include infrastructure investments, air transport infrastructure being heavily financed by the Qatari government. In the literature, there is a limited amount of studies investigating the role of state-owned airlines in the process of economic development. Most of the studies focus on GCC's aviation sector and its role in branding strategies, its position in the global airline industry, its business model. As Qatar's

national vision encompasses diversification strategies, it is essential to examine the function of growing aviation industry led by state-owned airline in the economy.

Literature Review

The literature review in this section is centralized on three main concepts of the research: state-owned company, economic diversification and aviation industry. Other key concepts (knowledge economy, innovation, entrepreneurship) and theories utilized in the research will be presented in the theoretical framework and throughout the research.

The resource-dependent or rentier states of the GCC have invested a large part of their rents in market oriented public companies (Hertog, 2010). Prodromidis and Frangos (1995) identified two main types of public enterprises: the South-East Asia type and the rest-of-world (bureaucratic) type. While the South-East Asian public enterprises (which can be found in South Korea, Taiwan, Singapore, Hong Hong) function as private companies, having financial autonomy, operating independence, employee monitored performance and competitiveness basis, the bureaucratic enterprises (Latin America, Africa, Indian Peninsula, Greece) are dependent on national budget, have incompetent management and do not respect the competitive principles (Prodromidis & Frangos, 1995). Based on Hertog's (2010) evaluation of GCC state-owned companies, who characterized them as being competitive in liberalized domestic settings and in international markets despite the subsidies and local monopolies, the Gulf public enterprises can be integrated in the South-East Asian model. Nevertheless, the South-East Asian model includes variations of development approaches, differences being noticed when comparing the development processes of South Korea and Singapore, for instance.

Nevertheless, in the Western developing countries, SOEs are considered to be inefficient and a fiscal liability, as they have negatively affected the public budget (Hertog, 2010). Moreover, in a regulated environment, private firms proved to be more efficient than public enterprises (Prodromidis & Frangos, 1995). The lack of monitoring and competition, the soft budget and potential political interference are the major accusations brought to state-owned enterprises (Waterbury, 1993). In examining the challenges of a competitive business supported by the government, it is important to identify the level of governmental support provided to the company, what is the company's access to credit, including the banks and sovereign wealth funds, and how competitive are the company's products or services (Lemco & MacDonald, 2015). However, the market oriented SOEs have a better performance than public enterprises which operate according to the bureaucratic model (Prodromidis & Frangos, 1995). This is the case of Gulf SOEs, which operate with clear mandates, are protected from politics, adopted Western corporate practices and are incorporated as companies (Hertog, 2012). Successful SOEs as Saudi Arabia's Basic Industries Corporations (SABIC), Industries Qatar and Etisalat in UAE have been granted governmental protection. Treated as privileged pockets of efficiency, the public enterprises are exempted from bureaucratic interference in their affairs, enjoying managerial autonomy (Hertog, 2010). The bureaucratic history of the Gulf States starts after the World War II, thus the creation of SOEs is not based on a strong administration system. In order to implement state's policies the country requires a bureaucratic autonomy of the state and a public-private cooperation designed by the state. The modernization strategies are well embedded in the publicly owned companies which carry the role of pouring wealth into society and of strongly linking the state with a variety of social actors (Kamrava, 2013).

With almost all of the Gulf states gaining independence in 1971, one of the rationale behind strong government involvement in the economy is the "exercise of direct control over vital, highly visible industries" (Bowen & Leinbach, 1995) which previously had been influenced by external powers (e.g. the British in aviation). The substantial change in the balance of power between the state and the market determined the emergence of state capitalism, a new model developed in China and appropriated by countries in Latin America and the Middle East (Bremmer, 2010). The Gulf states have shifted toward new state capitalism, in which the government assumed an essential role in developing strategic aims and visions in order to build new mechanisms to attract investment and to implement late-late-development plans (Gray, 2011). Market-driven capitalism is a new formula developed by totalitarian states in order to compete on international markets. In this new formula, the economic growth is not dominated by the market forces as they might pose risks to the political power, rather it is orchestrated by the government, phenomenon described as "state capitalism" (Bremmer, 2010). In Qatar, the state involvement in the development of the country has manifested through different aspects: from the establishment of a sound welfare system to shaping the physical landscape. The government remains the vital player in the infrastructure sector by building Doha International Airport, Energy City, Dohaland, etc. (Kamrava, 2013).

According to Gray (2011), state capitalism manifests in the Gulf states through the following aspects: oil and gas companies are state-owned, but they are efficiently run; the hydrocarbons represent not only an economic asset, but also a political one; other sectors

of economy (aviation, telecommunications, banks, defense industries) are state-owned; the important companies in the private sector are usually owned by royals and merchant families in order to support the state capitalist structure. Thus, in such an environment, the risk of operating a business is that the rule of law can offer privilege to certain actors, while neglecting the others (Lemco & MacDonald, 2015).

As the Gulf SOEs acquired corporate finance in global markets via bank loans and corporate bonds, when the private investment collapsed in 2008-2009, the SOE investment helped the GCC states to face the financial crisis (Hertog, 2012). The Gulf governments have strived to invest in high growth sectors such as tourism, real estate, aviation, hospitality and SOEs have been established in order to sustain the development of non-oil sectors. Aviation industry in Qatar, led by the state-owned airline Qatar Airways, is one of the examples displaying the government's heavy investments directed at generating synergies with international markets by accessing different business centers through air power, pursuing patterns of economic diversification.

Economic diversification represents a process of developing new sources of revenues for countries which rely on natural resources as primary generators of income. In the GCC, "oil revenues from oil exports account for about two-thirds of government revenues and expenditures, 90% of foreign exchange earnings, and about 80% of gross domestic products of most energy-exporting-reliant countries in the region" (Al-Roubaie, Al-Ameen, 2015, p. 9). In Qatar, although the gas sector has known a rapid growth, oil is still the main contributor to exports and to fiscal revenues (Ibrahim & Harrigan, 2012). Qatar's GDP dependency on hydrocarbons is up to 44% (Almutairi, 2016). In the Ease of

Doing Business Index, Qatar ranked 83, while Saudi Arabia ranked 94, UAE, 26 and Bahrain, 63 (World Bank, 2017).

As reliance on oil revenues intensify the exposure to macroeconomic volatility and the employment of nationals in the public sector becomes more expensive, economic diversification is vital in reducing risks, creating jobs, preparing for the post-oil era, acquiring prestige in the international arena, (The Economist Intelligence Unit, 2010) and in increasing productivity and sustainable growth (Callen, Cherif, Hasanov, Hegazy & Khandelwal, 2014). Qatar National Vision 2030, Saudi Vision 2030, Omani Vision 2020, Vision 2021 in UAE, Vision 2030 in Bahrain are strategies designed to reduce the reliance on oil, develop the job creation in private sector and to support sustainable development. However, the visions are facing challenges in terms of implementation of the strategies as activity in non-government and non-oil sectors is dependent on oil since "the main sources of manufacturing value-added in Arab oil exporters tend to include refinery, chemical and other mining/extractive industries" (IMF, 2016, p. 7). However, financial diversification has been improved by the oil revenues invested overseas. The total of international reserves reached USD906 billion by 2014 (55% of the region's GDP) and the total of assets of GCC Sovereign Funds were evaluated at USD2.4 trillion in 2014 (Callen et al., 2014). Qatar was able to become more active in the international arena due to energy resources and large capital generated by the 2002-2008 oil price boom. Through sovereign wealth investments, Qatar integrated itself in the networks of emerging and industrialized economies, increasing the foreign direct investments (FDI) and technology transfers (Ulrichsen, 2014). For instance, Qatar Investment Authority "is fostering technology transfer to Qatar through encouraging the companies it acquires to set up branches or subsidiaries in the country" (Kamrava, 2013, p. 97).

Openness to trade and FDI, combined with a state central planning defines the modern state capitalism. State capitalism is defined by contexts in which governments control minimum one-third of the biggest corporations in a country. According to Kurlantzick (2016), in Singapore, China and Vietnam, the governments supported the infant industries, while Brazil, India and Indonesia (democratic state capitalists) combined economic statism with political freedom. In Russia, the state capitalism displays disadvantages, while in Thailand, Turkey and Malaysia state capitalism could negatively affect democratic institutions. New state capitalism incorporates the export-led growth and investment policies and it has the capacity to facilitate the access of developing countries to sectors such as telecommunications, energy and banking (Kurlantzick, 2016).

Sustainable development implies growth through innovation, knowledge creation, high-value-added services exports, development of small and medium enterprises (SME). However, according to Al-Roubaie and Al-Ameen (2015) the stage of development in the GCC is characterized by scarcity of water, low level of public awareness, inadequate investment in science and technology, and high consumption of energy. On the other side, Callen et al. (2014) stated that GCC countries have strived to diversify their industrial base and service sectors: Bahrain financed an offshore financial sector; the UAE and Qatar have developed airlines which transformed the two countries in major trade and services hubs; Saudi Arabia and Qatar are developing industrial and economic cities. There are major similarities between the diversification strategies of the Gulf countries. The phenomenon has been labeled "the GCC domino effect" or the "cookie cutter" approach as the Gulf

states follow each other's strategies, increasing regional competition in the same areas - aviation, petrochemicals, metals (The Economist Unit Intelligence, 2010). For instance, Dubai aviation model has been replicated in the Gulf region as governments invest in airport infrastructure and the development of a "flag carrier" (Derudder, Bassens & Witlox, 2013).

As part of their economic diversification strategies, turning the GCC into a hub of global aviation was possible via large investments in airport infrastructure. Subsidies for developing the aviation sector in the Gulf surpassed the amount of USD300 billion (Oman Arab Bank, 2016). The availability of less populated desert zones for new airports, the absence of curfews during the night, the creation of subsidiaries in the aviation, travel, tourism and retail sectors (Smith, 2010), the increasing population, the high per capita income and subsidies supported the growth of aviation sector in GCC. The dependency of modern economies on air transport infrastructures can be evaluated by examining the governmental expenditure on airports. Therefore, Hamad International Airport was constructed at a cost of USD16 billion and it is able to handle 50 million passengers per year, Al Maktoum International Airport will be expanded at a cost of USD32 billion and it will accommodate over 220 million passengers per annum, following Kuwait Airport's expansion of USD4.35 billion, it will accommodate 10 million passengers each year (Oman Arab Bank, 2016) and Saudi Arabia launched a USD20 billion plan to improve the current airports by 2020 (Smith, 2010). The aggressive air transport investments define the status of cities in the global economy, becoming "entrepots and destinations for globalized capital" (Derudder et al., 2013). The strategic location of GCC, positioned at an eight hours flying distance from other major agglomeration on the globe, makes the region a key link

between the East and West. The integration into the global air transport networks offers a variety of opportunities for GCC economies. Oxford Economics report (2010) explored these opportunities for Saudi Arabia's economy: opening up foreign markets to Saudi Arabian exports, potential of increasing competition, increasing the flexibility of labor supply, encouraging investments and specialization of Saudi businesses, adoption of new business practices, raising productivity.

The net profit of the global aviation industry has grown at a pace standing at USD17.3 billion, while the profit of airlines in the Middle East grew at a compound annual growth rate (CAGR) of 16.2% to USD0.9 billion in 2014 (Oman Arab Bank, 2016). Emirates has increased its net profits in 2010 by 416% to USD964 million (Smith, 2010) while the aviation sector contributed in 2010 by SAR30.2 billion to Saudi Arabian GDP (Oxford Economics, 2011). In terms of purchasing power parity, expenditure on travel and tourism in the Gulf grew from a mere USD24 billion in 1990 to over USD75 billion in 2007, expected at USD180 billion by 2016 (Gulf One Investment Bank, 2008). The rise can be supported by region's airlines as the easy access to global aircraft equipment facilitates the competition for traffic on transcontinental routes (Hooper, Walker, Moore & Zubaidi, 2011).

The above data found in the literature review confirms the given role of public airlines in the process of economic diversification, augmenting the necessity of a research which combines the three concepts in a case study on Gulf state-owned airline and its contribution to economy. The literature offers a variety of sources on the topics of business and management theories, aviation industry, state-owned companies, economic diversification. Most theories prescribe an economy free of governmental control, where

the private sector can flourish. However, Qatar has implemented new methods in diversifying its economy, opting for a unique modus operandi. The formula empowers the state over country's economy, nevertheless, it opens new doors of diversification through its state-owned companies, managed as private international corporations.

In the literature, there is no systematic analysis of a state-owned airline, operating in an idiosyncratic political environment, which uses new techniques of management to generate internal and external investments. The degree of complexity of Qatar Airways becomes higher when the company is embedding national strategies in its evolution. Therefore, the intended economic diversification is orchestrated according to governmental vision. The research will fill the gap in the literature by offering a clear and in-depth assessment, from both neoliberal and developmental state perspectives, of the development of Qatar Airways as a state-owned company with goals of introducing elements of private sector in the Qatari economy.

Purpose Statement

As the future of the State of Qatar is envisioned on economic growth independent of oil revenues, the scope of the research is to determine whether a state-owned company in the airline industry plays a role in the process of economic diversification. The airline's position in the development of non-oil sector will be assessed by using the neoliberal and developmental state approaches. The evolution of Qatar Airways will be examined within the context of national strategies. The theoretical framework will give the proper understanding of tools associated to economic diversification. State's efforts to support the growth of the airline have intensified in 2013, when the airline has become fully state-owned, however, the airline acts as a private company where the management adopts the

international corporate practice. This formula has given complexity to Qatar Airways, its skyrocketed growth being strongly interconnected to state's interference in its development. Therefore, the analysis of Qatar Airways from two different approaches will offer a holistic image upon both negative and positive aspects of functioning as a public enterprise with possible aspirations of diversifying the economy.

Research Question

Despite the fact that many studies have examined the patterns of economic diversification in the Gulf, the growth of GCC industry aviation and the implications of state-owned company in the economy, most of the researches address the three phenomena in an individual manner. There are a few studies which combine all the concepts, however, there is no research which aligns all the phenomena under an in-depth assessment for the State of Qatar. As the dominant role of the government in economy manifests through the establishment of state-owned enterprises and the aviation sector is growing at a fast pace, the following questions will be utilized in addressing the gap in the literature:

<u>Research Question</u>: What is the role of Qatar Airways as a state-owned airline in the process of economic development in Qatar?

<u>Sub-questions</u>: Does aviation enhance the country's economic performance? Do the net profits of Qatar Airways equal or surpass the governmental investments in the airline? Does Qatar Airways contribute to the creation of knowledge economy in Qatar and if it does, how? Which are the ways employed by the airline to support innovation and entrepreneurship? How do the airline's policies integrate in the national vision? How can Qatar Airways enable the long-term economic growth? Which is the impact of aviation

sector on the Qatari economy? How is Qatar Airways improving the connectivity with global markets and which are the economic results?

Research Design

The epistemological approach which will be utilized for this research is the pragmatic worldview, considered to be suitable for this study as it is concerned with understanding the problem by using multiple methods, different assumptions, a variety of data collection and analysis and as it concentrates on actions, circumstances and results (Creswell, 2014). As this study focuses on whether a state-owned airline can induce methods of economic diversification or not, the pragmatic worldview allows to use different theories, such as neo-liberal and developmental state, in order to fit the requirements of an in-depth assessment based on mixed approaches.

The research design is qualitative, the type of approach being a case study. As the aim of the research is to develop an in-depth assessment of Qatar Airways role in diversifying the economy in Qatar, information will be collected through various data collection methods. Data will be selected from Qatar Airways official statements, the airline's economic reports, country's reports on economic issues, reports and articles related to economy and aviation industry from international organizations, etc. A holistic account will be adopted in order to generate an elaborate vision on the role of Qatar Airways in the economy. Neoliberal and developmental state theories will be both used to define the concepts of state-owned company, economic diversification, innovation, knowledge based economy in context of Qatar Airways as a potential vehicle for the economic growth.

Chapter 2: Theoretical Framework

Introduction

The economic diversification in Qatar is a process which faces the heavy state involvement in the economy. Qatar's public sector is still characterized by rigidness and controls the economy. Moreover, previous governmental focus on the development of oil sector has inhibited a healthy evolution of the private sector, considered to be the main driver for economic diversification. The role of the government, as Barry (2011) noted, should be to create active consumers and active entrepreneurs and a dynamic environment

where entrepreneurialism is enforced. However, in Qatar, the governmental control upon the economy is applied even when taking initiatives to explore the non-oil sector, which materialized with the creation of Al Jazeera, Qatar Airways, Science Technology Park, ICT Qatar and Qatar Financial Centre Authority.

The present study aims to determine the role of the state-owned airline Qatar Airways, in the development process of Qatari economy. As the political and economic characteristics of the country impose a customized approach of the topic, the framework relevant to this research was selected in order to offer two distinct interpretations of the Qatari vision on economic growth and to understand the adopted model of diversification via SOEs. The assessment of Qatar Airways from neoliberal and developmental state perspectives will address the complexity of the envisioned national economic growth. The neoliberal and the developmental state perspectives have been selected as they can offer a stretched interpretation from one extreme (minimal state intervention, laissez-faire economy) to another (state involvement in the economy). In the performance of Qatar Airways, several features from both theories are embedded in a hybrid manner, developing a complex evolution of the company on the domestic and global markets. These two theories have been preferred over the rentier and neo-extractivism concepts as they include a broader vision upon economic performance, without focusing only on the exploitation of natural resources.

The rentier state theory explains the dynamics of a state which receives external income from rents and distributes it to citizens, without imposing taxation, meaning that "it does not have to offer concessions to society such as a democratic bargain or development strategy" (Gray, 2011, p. 1). The rentier state theory investigates the nature

of the political economy of oil exporting states and tries to explain why there is a lack of democracy in the system of those respective countries (Iran, the Gulf Arab States, Jordan, Egypt, states of North Africa, etc.). The rentier theory appeared after scholars started to explore the political impacts of the oil embargo in 1973 (Saudi Arabia and other Arab oil states placed an oil embargo to the United States other countries which supported Israel in the Arab-Israeli war) and of the oil boom launched by the 1979 Iranian Revolution and 1980-1988 Iran-Iraq War (Gray, 2011).

In the rentier theory it is advocated that natural resources tend to hinder rather than promote economic development (Singh & Bourgouin, 2013). Moreover, the rentier nature of state is predicated to be the cause of the resource curse, assuming that good things come together (democracy, development) and bad things as well (rentier state, authoritarianism, lack of development) (Luciani, 2012). The discourses on the resource curse and rentier states focus on the lack of political processes that facilitate trust, representation and accountability among resource-rich nations and on the assumption that state leaders have predatory and not developmental aims (Singh & Bourgouin, 2013). Moreover, theorists of resource curse focused on "how commodity booms led to the appreciation of the exchange rate, thereby hurting other exporting sectors, in an effect called the 'Dutch disease'" (Bourgouin & Haarstad, 2013). Another argument proliferated by the rentier state theory is that a state which does not impose income taxes, will not develop a fiscal tool, thus preventing the implementation of a successful diversification strategy (Luciani, 2012).

There are three stages of the rentier theory. According to Gray (2011), Hussein Mahdavy is considered to be the first scholar who coined the term of "rentierism" and defined its conceptual pillars in 1970. This represented the first phase of rentier state theory

(1980-1990), in which is stipulated that a rentier state is autonomous from society, managing the wealth remaining after ensuring subsidies for society according to its own governmental interests, not allowing democratic processes. The studies that emerged in the 1990s and 2000s, constitute the second phase of rentierism, a phase which included a refined and more sophisticated development of the rentier theory via two varieties. The first variety is the "specialized rentier state theory" which includes historical dynamics in its analysis (e.g. Foley, 2010) and the second one is the "conditional rentier state theory" which claims that a state cannot be autonomous from society (Gray, 2011). The third stage of rentier state theory is represented by the late rentierism which retains the characteristics of the first displays a change in the governmental approach to rents and regime survival due to new factors such as globalization, development policies and population (Gray, 2011). Qatar has adopted a unique vision and approach to globalization, by investing in various economic sectors (Gray, 2013). According to Gray (2013), the nature of the main challenge of Gulf states might not be economic, but rather the traditional basis of power might disintegrate as the late rentier system concentrates power within a closed small group of people. However, in terms of economy, one of the constraints on the Qatari state arises from the consequences of rentierism, meaning that between the private capital is dependent on the state for state-generated or state-supported contracts and commercial advantages (Kamrava, 2013). Rentierism generated a particular mentality among the national population, mentality which advocates that wealth can be achieved via minimal efforts.

The neo-extractivism concept is based on the intensive and extensive exploitation of raw materials as exports (Castillo-Ospina, 2013). The neo-extractivism presents the following features: the export of primary goods is the basis of national economy, the

national economy is tied to the exports of raw materials because developing countries do not have the required technology, the economy is affected by the Dutch disease, there are pseudo improvements in the economic development which will give legitimacy to the government to continue expanding extractive processes (Acosta, 2011). Although the Qatari economy displays characteristics of rentier and neo-extractivism theories by still having a large percentage of revenues of oil exports, both perspectives are not suitable in defining the more complex economic context of Qatar. Despite the fact that Qatar is still relying on oil bonanza, the country has not a significant level of corruption (in the Global Competitiveness Report 2010-2011, the level of corruption in Qatar was 0.0), the Dutch disease did not proliferate, a system without taxes does not necessarily affect the process of economic diversification and the government has developed a National Vision aiming at economic diversification. Thus, such theories would not be able to provide a sound foundation for generating a holistic perspective upon the aviation industry and its role in the economic development, as they mainly focus on negative aspects of rentierism and neo-extractivism.

This chapter will define both the neoliberal and developmental state theories, setting the basis for a brief understanding of the concepts as in the following chapters the performance of Qatar Airways will be examined within state's response to the neoliberal and developmental conjunctures, according to its specific national context. Concepts related to the economic diversification process will be defined in this chapter as they will be integrated in the analysis of Qatar Airways. Therefore, knowledge based economy, foreign direct investments, innovation and knowledge transfer are the main processes analyzed in the context of economic growth.

The Neoliberal Theory

The Vietnam War, the collapse of Bretton Woods monetary system (1971), the oil shock (1973) were events which triggered the adoption of neoliberal ideas in the political systems of the United Kingdom and the United States, the neoliberal concepts replacing the New Deal and Great Society liberalism (Jones, 2012). Neoliberalism followed what was considered as a long period of ineffective state interference, damaging the society and economy and moving toward versions of totalitarian state (Palma, 2009). The public choice theory explains the effects of state interventionism. Lemieux (2015) brought into discussion Anthony de Jasay's (1985) book called "The State", in which the public choice theory focuses on the state as a monolithic entity which pursues its interests by, for instance, increasing redistributive activities to state-owned enterprises and minimizing political competition. The standard public choice theory sees the state as a complex entity which is constituted of different actors such as politicians, bureaucrats and voters, thus, having a mixture of various interests.

Friedrich Hayek, Ludwig von Mises, Milton Friedman, George Stigler, James Buchanan were the most prominent thinkers who developed the ideas of monetarism, deregulation and market based reforms. Thus, neoliberalism is considered to be the "free market ideology based on individual liberty and limited government that connected human freedom to the actions of the rational, self-interested actor in the competitive marketplace" (Jones, 2012, p. 15). Milton Friedman's (1951) definition of neoliberalism was stated in the following manner:

"Neo-liberalism would accept the nineteenth century liberal emphasis on the fundamental importance of the individual, but it would substitute for the

nineteenth century goal of laissez-faire as a means to this end, the goal of the competitive order. It would seek to use competition among producers to protect consumers from exploitation, competition among employers to protect workers and owners of property, and competition among consumers to protect the enterprises themselves. The state would police the system, establish conditions favorable to competition and prevent monopoly, provide a stable monetary framework, and relieve acute misery and distress. The citizens would be protected against the state by the existence of a free private market, and against one another by the preservation of competition" (p. 3).

Milton Friedman, the central figure of the second Chicago school, approached a middle way in his new theory, trying to avoid the failures of collectivism and laissez-faire approaches (Jones, 2012). Therefore, the state interference in individual activities should be limited, however, the state should function as a regulator and provider of monetary stability (Friedman, 1951). The effects of neoliberalism in resource extraction are: low taxes, however the development of a wider tax base that moves beyond resource industry, the lack of state's interference in firms' rights to lease and develop mineral blocs and the reduction of the nationalization of resources (Singh & Bourgouin, 2013).

Several critiques were brought to the neoliberal thought. Marxists considered the neoliberal theories as an ideological façade for the instauration of the capitalist class power as neoliberalism's aim was to return the power to capital (Palma, 2009). At the core of neoliberal reforms is the thought that the private capital is the new source of economic dynamism via foreign direct investment and technology transfer (Singh & Bourgouin, 2013). Lawrence (2013) considered that the valorization of free markets,

promoting the interests of powerful companies in the global economy represent "the context post-Keynesian and post-Bretton Woods monetarism which favored the neoliberal ideology and with it, the rise of corporations' pursuit of short-term profits on a global scale" (p. 42).

The Developmental State Theory

While the neoliberalists claim that a strong state involvement is an obstacle for economic growth, the developmental state theorists argue that the very absence of a governmental dominant role is the source of inadequate national progress. Economic stagnation in many developing countries was regarded as a consequence of an insufficient state control over social reforms and economic transformation (Myrdal, 1968). The theory of the developmental state is based upon the assumed state's function in "facilitating the transition from an agrarian/primitive society to a modern/manufacturing society" (United Nations, 2013). The developmental state thinkers consider that the neoliberal approach can lead to inefficient outcomes as it presents difficulties in defining the free market and in establishing institutional specifications for the free economy (Chang, 1999).

In the post-war period, post-colonialism period, the developmental theory proclaimed the states as agents of modernization in recently formed countries, capable of fixing prices of goods and services, regulating labour, foreign exchange and financial markets (United Nations, 2013). Chalmers Johnson is considered to be the thinker who coined the term "developmental state" in his book called "MITI and the Japanese miracle: The Growth of Industrial Policy, 1925-1975". The "developmental state" describes the "seamless web of political, bureaucratic and moneyed influences that

structures economic life in capitalist North Asia" (Woo-Cummings, 1999). Johnson's (1982) following assessment of the state's role in economy is valuable for the fourth chapter of this research, where the state-owned airline Qatar Airways will be examined using the developmental state lenses:

"[The Japanese model adopted] the creation of governmental financial institutions, whose influence is as much indicative as it is monetary; the extensive use, narrow targeting, and timely revision of tax incentives; the use of indicative plans to set goals and guidelines for the entire economy; the creation of numerous, formal, and continuously operating forums for exchanging views, revising policies, obtaining feedback, and resolving differences; the assignment of some governmental functions to various private and semiprivate associations; an extensive reliance on public corporations, particularly the mixed public-private variety, to implement policy in high risk or otherwise refractory areas; the creation and use by the government of an unconsolidated "investment budget" separate from and not founded by the general account budget; the orientation of antitrust policy to developmental and international competitive goals rather than strictly to the maintenance of domestic competition; government-conducted and government-sponsored research and development (the computer industry); and the use of the government's licensing and approval authority to achieve developmental goals. Perhaps the most important market conforming method of intervention is administrative guidance" (p. 317-18).

The developmental state, focusing on governmental guidance of the private sector and state control over the economy, benefited Japanese and South Korean economies,

thus it has been regarded as connecting interventionism with fast economic growth (Woo-Cummings, 1999). However, the relationship between bureaucracy and private enterprises was not a challenge-free one, but the Japanese efforts through self-control, state control and cooperation to minimize the public-private tension were considered preferable to laissez-faire and state socialism (Johnson, 1982). Japan's industrial structure policy had the following pillars: income elasticity of demand, comparative costs of production, labour absorptive power, environmental concerns, investment effects on related sectors and export prospects (Johnson, 1982). The Asian Developmental State prototype adopted two institutional pillars: the competent bureaucracy (an agency was dedicated to create and implement a strategic process of economic development) and the embedded economy, which required a social infrastructure to preserve an effective relationship with the local business sector (United Nations, 2013).

The successful performance of East Asian economies is more related to state's role rather than market forces' role, as the state has developed a competent bureaucracy, efficient state-business relations, good macroeconomic management and stability, publicly controlled investments in development (United Nations, 2013). The first-tier newly industrialized economies (NIEs) were Korea, Taiwan Province of China, Japan, Singapore and Hong Kong and their characteristics were the emergence of state-owned enterprises (SOEs) and a strong governmental control of financial sector (United Nations, 2013). Only Singapore has focused on economic openness and foreign direct investment. The second-tier NIEs appeared in South East Asia, represented by Indonesia, Malaysia and Thailand, states which have adopted a more modest role of the state as they have relied on their resource production and a more liberal trade in comparison to Japan and

Korea (United Nations, 2013). When applied to the Arab Gulf states, the developmental state model reveals that the GCC countries have a culture which does not rely on savings mentality and on high work ethic, the pillars of the Asian development.

Knowledge-Based Economy

Qatar's strategy to transform the country into a global service and knowledge hub gives a new interpretation to the governance, improving the status of a rentier state by adding the entrepreneurial sense (Wiedmann, Salama & Thierstein, 2012). Until now, several projects were launched in order to transform Doha into a global hub: Al Jazeera, Qatar Foundation, Qatar Airways (Conventz et al., 2015). The evolution of non-oil sector is mainly envisioned upon the development of knowledge economy which is connected to the neoliberal economic prescription that proposes competition as a driver for business and growth (Hvidt, 2014). Knowledge, skills and innovation are the key intangible assets which contribute to the creation of a knowledge economic structure. Considered as "latelate-late industrializers" (Hvidt, 2014), the Gulf States pursue knowledge as a driver for innovation, economic growth and spatial development (Conventz, Thierstein, Salama & Wiedmann, 2015), technology and skills being complements in the production of knowledge-based output (Kumar & Welsum, 2013). The main driver of knowledge economy is the demand for high-value-added services and goods from consumers, who gradually established what is called a "high demand society" (Brinkley, Hutton, Schneider & Ulrichsen, 2012).

Knowledge economy represents the latest stage of capitalist economy, characterized by technological innovations, competition in search for innovation with new products and processes developed through research (Hvidt, 2014). Thus, knowledge

is vital not only for businesses engaged in producer services and advanced manufacturing, but also for entities in traditional sectors in order to maintain a competitive advantage (Bathelt & Gluckler, 2011). However, the main pillars of knowledge based economy are the Advanced Producer Services (APS), the high-tech industries and knowledge-creating institutions: universities, research establishments (Thierstein, Kruse, Glansmann, Gabi & Grillon, 2006). The expansion of knowledge-based industries is supported by the evidence which shows that the people working in knowledge-intensive and technologically advanced industries in Organization for Economic Cooperation and Development (OECD) countries has increased from 50 million in 1970 to 150 million in 2005 (Brinkley et al., 2012).

According to Hvidt (2014), the Gulf States were not forced to innovate, rather they have based their growth on imitation and used their large financial resources to import technologies, know-how and human capital. However, Qatar's strategy to introduce the knowledge based economy poses certain queries when it comes to the steps and stages of reaching this goal. It seems that Rostow's (1960) theory of economic modernization represents a model not suitable for the Qatari vision. Rostow's model is essential in understanding the stages which a state has to follow in order to go beyond the domestic industries and reach the global markets. Qatar aims to reach that maturity instantly, going from the traditional society stage directly to high mass consumption stage. The second stage of economic growth through the development of industries is partially stridden with the development of the energy sector. However, the third stage – economic take-off with the increase of entrepreneurship and the fourth one – drive to maturity, are not embedded in the Qatari economic growth. Thus, Qatar intends to jump

from a "pearling/fishing/trading economy into a knowledge economy" (Hvidt, 2014, p. 24).

The challenge of a rapid shift to knowledge based economy relies in the possible incapacity of labour force to absorb the new technologies, as it takes time to learn and acquire the skills of using the new technologies (Kumar & Welsum, 2013). For instance, when assessing the development of Information and Communication Technology (ICT), Qatar ranks high in the ICT ranking access (position 22), but much lower in skills (position 92), thus meaning that Qatar does not have the know-how to exploit the available ICT infrastructure to generate knowledge and value in its economy (Kumar & Welsum, 2013). The lack of skills in taking advantage of the ICT infrastructure leads to deficiencies in connecting to global markets, as ICT facilitates "knowledge absorption, technology diffusion, information dissemination and innovation" (Al-Roubaie & Al-Ameen, p. 6). The gravity of the challenge increases as the path towards a knowledge-based economy involves the transformation of all sectors: low and high tech, knowledge-intensive and partial knowledge-intensive, large and small, private and public (Brinkley et al., 2012).

The World Bank Knowledge Economy framework examines the creation of knowledge in economic production and economic growth by employing four pillars, each having three indicators as the figure shows:

- 1. **Economic and institutional regime:** tariff and non-tariff barriers, regulatory quality, rule of law
- 2. **Education**: adult literacy rate, secondary enrollment, tertiary enrollment
 - 3. **Innovation:** royalty and license fees payments and receipts, patent applications granted by the U.S. Patent and Trademark Office, scientific and technical journal articles
 - 4. **ICT**: telephones per 1,000 people, computers per 1,000 people, Internet users per 1,000 people

Figure 1. The World's Bank Knowledge Economy Index

Having a Knowledge Economy Index value of 5.84, Qatar occupies the 45th position among 145 countries, being below Dubai which ranks 42nd, Bahrain (43th), Oman (47th) and Saudi Arabia (50th) (World Bank, 2013). In terms of Education, Qatar scores 3.41, which is below the World scores; on the Innovation pillar, Qatar is above MENA score (6.14) and in terms of Economic and institutional regime, the Gulf region scores better than the world and MENA region (Hvidt, 2014). It is expected that Qatar will continue its diversification process by focusing on implementing a knowledge-based economy, aiming at increasing the share of services to GDP and the spending on research and development (Conventz et al., 2015).

Foreign Direct Investments, Knowledge Transfer, Innovation

Qatar is trying to rapidly move away from unsustainable in order to reach the sustainable development. In order to move to a knowledge economy, Qatar has to focus

on efficiency and continuity productivity growth. The private sector shows a small contribution to Qatar's economy as its services have been replaced by the ones provided via state-owned enterprises. With the creation of Enterprise Qatar, a slight change of strategy is perceived. As a supporter of local business, Enterprise Qatar aims to provide a fruitful environment for small and medium enterprises (SME). This direction has also been adopted by Qatar Development Bank, which tends to increase its SME clients (Ibrahim & Harrigan, 2012).

As there is no perfect model for the transition from oil based economy to knowledge economy in the Gulf countries, a suitable pattern was constituted by the formation of state-owned enterprises (SOE) where the state relationship with the private sector is semi-experienced via the condition of SOE as an executioner of international corporate practices. As Qatar Airways makes investments, especially in the tourism sector, the notion of foreign direct investments (FDI) is worthy to be investigated in contrast with the knowledge flows it might generate. Looking also at the potential of attracting FDI, the FDI absorption is highly related to the country's capacity to utilize the incoming knowledge (Brinkley et. al, 2012). FDI, beyond its contribution to capital formation, has not been able to create technological spillovers for Oman and Saudi Arabia between 1980-1990 (Sadik & Bolbol, 2001). Nevertheless, the data show that FDI flows in the GCC are quite high: in 2015, FDI in Kuwait accounted for USD293 million, in Oman, USD822 million, in Qatar, USD1.071 million, in Saudi Arabia, USD8,141 million, in Bahrain, USD-1,463 million, and in UAE, USD10.976 million (United Nations, 2016).

Foreign sources of knowledge can be more influential on productivity than the internal ones (AlAzzawi, 2011). Moreover, AlAwazzi's (2011) study on FDI and

knowledge transfer pointed out that multinational corporations' subsidiaries attain gains in knowledge flows when locating close to the source of knowledge. In contrast, Keller and Yeaple (2013) found that multinational affiliates sell less the further away they are from their base. According to Conventz et al. (2015), value added is created by a combination of both in-house and external competencies. Driffield, Love and Menghinello (2010) do not stress on the financial performance of the outsourcing, but rather on the strategical vision of the parent company. Research and development affect the innovation and knowledge creation, enhancing the absorptive capacity for technology and knowledge. However, when a multinational decides to enter a foreign market it is important how its technology may spill over to other companies under different modes of entry (Balsvik, 2010). Qatar has experienced an increase in the number of knowledge-based firms, predominantly in the services sector, which are part of multi-branch and multi-location companies and which are linked to markets in Europe, Asia and the Americas (Conventz et al., 2015).

The creation of "cities-in-the-cities" (Khodr, 2015) assumed the role of enhancing the research and development process: in 1994, Qatar Foundation was established as an education and scientific research center; in 1998, Education City; in 2004, Qatar Science and Technology Park (technological innovation); in 2004, ICT Qatar; in 2005, Qatar Investment Authority overseeing the state financial investment; in 2005, Qatar Financial Centre Authority as an industry of financial services (Ibrahim & Harrigan, 2012). The scientific cities can generate synergies with the commercial sector and favor the technological development. According to Khodr (2015), "commercialized research is generated through the Qatar Science and Technology Park's alignment with the branch

universities and the Qatar Foundation's corporate-level approach to big companies, such as General Electric (GE), Rolls Royce, and Vodafone" (p. 165). Rolls Royce produces civil aero engines for the aircraft company Airbus, which delivers its aircrafts to Qatar Airways. Therefore, the linkage between technological development and commercial sector is a multilayered one, offering multiple benefits and opportunities for innovation.

As one way of economic diversification is to transfer knowledge into state wealth creation, the definition of knowledge transfer concept is vital. According to Barry (2011), the knowledge transfer represents the development of partnerships between research and businesses. The knowledge transfer can be within a single company, in alliances and joint ventures and between independent firms (Bresman, Birkinshaw & Nobel, 2010). The conversion of knowledge flows into technological outputs relies on the quality of human capital, access to finance and the business and macroeconomic environment (Brinkley et al., 2012). In terms of human capital, return migrants represent an important channel of knowledge transfer, taking into account increase in the number of GCC undergraduates applying for universities in UK (Brinkley et al., 2012). The benefits of knowledge transfer seem to have a higher impact within an economy with an active private sector. Additionally, an environment of entrepreneurship and business can attract the adjustment towards the markets as the markets' evolution will put pressure on the knowledge inputs. In the new economy, "the private sector, especially multinational enterprises, plays a pivotal role in the creation of knowledge, dissemination of technologies and promoting innovation" (Al-Roubaie, Al-Ameen, 2015, p. 9)

Innovation is a key concept in the national economic development as it leads to the creation of spin-off enterprises and generates profits from technology licensing

arrangements (Metcalfe, 2010). However, "innovation is an economic act in which the capacity to create a new product or service is only worthwhile if there is an adequate demand" (Brinkley et al., 2012, p. 24). Partnership between public and private sector is envisioned in Qatar's future as business enterprises are vehicles of transfer innovations. Strategy and communication between commercial and intellectual factors are important features of stimulating the innovation process. Specialized actors require a viable platform for the information flow. Therefore, in the case of a state-owned company as Qatar Airways, it is essential to look at it from Marshall's (1919) point of view: how the company can innovate via internal processes and how it facilitates the access to external knowledge through external bodies which complement the internal efforts. As Keller and Yeaple (2013) stated, multinationals largely contribute to the global research and development and they focus on efficiently endow their offshore affiliates with their knowledge.

The key concepts of the economic diversification: knowledge-based economy, FDI, innovation and knowledge transfer will be explored during the assessment of Qatar Airways using the two distinct theories of neoliberalism and developmental state. The further chapters will try to determine the role of the state-owned airline in Qatar's economic growth by integrating the collected data into the above theoretical framework.

Chapter 3: The Characteristics of GCC Aviation Industry

Introduction

The GCC aviation industry has rapidly grown over the recent decades, outpacing other regional markets. The fast ascendance of the Gulf airlines has propelled the region into the global attention. The region's strategic location, funding abundance and strong infrastructure represent the main motives behind such a meteoric growth. A peculiar characteristic of the GCC is that the aviation industry is largely state-controlled.

The International Air Transport Association (IATA) predicted that some of the fastest-growing regions in terms of annual international passengers will be Asia Pacific and the Middle East. Boeing's Market Outlook 2012-2031 forecasted a steady 5% air traffic growth each year over the next two decades and a 5.3% growth in air cargo (Oxford Analytica, 2013). Within this projected growth for the aviation industry, the Gulf region has changed the center of gravity of long-haul hubs as it has increased its share of

the profitable long-haul routes between Europe and Asia and between the Americas and Asia (Oxford Analytica, 2013).

Dubai, Doha and Abu Dhabi developed into hub cities, their airlines (Emirates, Qatar Airways and Etihad) being set to capture a greater share of the increasing demand for passenger and cargo travel. The phenomenon of the rapid ascension of the Gulf Airlines might threaten the productivity of other countries' aviation sectors, however, bringing benefits to air transport passengers. Understanding the characteristics of the region's aviation industry is essential in providing the regional context in which Qatar Airways is developing. Moreover, it serves as a background for further applying the neoliberal and developmental state theories to the performance of aviation sector in Qatar.

The characteristics of GCC aviation sector will be identified in the following section as it will help to comprehend the evolution of Qatar Airways in terms of global competitiveness, innovation and integration within national vision. These processes will be examined in the following chapters. After the overview on the GCC aviation sector, the corporate profile of Qatar Airways will be introduced in order to track the performance of the airline and to further utilize it in the assessment of its impact on global free markets and on economy of Qatar.

The GCC Aviation

The rise of the aviation industry can be easily identified via the assessment of global revenues which have increased from USD379 billion in 2004 to USD751 billion (1% of the global GDP) in 2014, with a passenger revenue increased at a compound annual growth rate (CAGR) of 7.4% to USD598 billion and a cargo revenue growing at a

CAGR of 2.8% (Al Masah Capital Research, 2015). The collective profit of airlines grew from USD6.1 billion in 2012 to USD19.9 billion in 2014. According to International Air Transport Association (IATA), aviation's global economic impact is around USD2.4 trillion (3.4% of the global GDP), supporting 60 million jobs worldwide. In 2014, airplanes transported 3.31 billion passengers and 51.3 million tonnes of cargo across 50,000 routes, facilitating 35% of global trade, equal to USD17 billion worth of goods by values, every day (Al Masah Capital Research, 2015).

Between 2004 and 2014, Middle East has registered the highest passenger traffic growth in terms of revenue passenger kilometers (RPK), according to Al Masah Capital (2015). The traffic growth in the Middle East has a CAGR of approximately 12% for the period between 2011-2015, compared to 6% globally (Seifman, Benjamin, Michael, & Badaya, 2016). The Middle East region carried in 2015, a 5% share of global passenger traffic (El Beyrouty & Tessler, 2015). A study released by Air Transport Action Group (ATAG) in 2014 shows that air transport in the Middle East supports 2 million jobs and contributes USD116 billion in GDP for the region.

There are 42 operating airlines in the GCC, including the ones of the governments and military. Only 11 airlines are commercial, seven of them being full-service carriers: Emirates, Etihad Airways, Qatar Airways, Saudia, Gulf Air, Oman Air and Kuwait Airways, and four of them being low-cost carriers: FlyDubai, Air Arabia, Flynas and Jazeera Airways (Al Masah Capital Research, 2015). The airlines of United Arab Emirates (UAE) recorded the fastest growth of passengers carried between 2004-2014, registering a CAGR of 19%, followed by Qatar Airways with 17% and Saudi Arabian carriers with 8% (Al Masah Capital, 2015). Passenger traffic at Dubai Airport increased

from 47 million in 2010 to 70 million in 2014, at Doha International Airport rose from 3.7 million passengers in 2006 to almost 10 million in 2014 and to almost 30 million in 2016, and at Abu Dhabi Airport, from 5.4 million passengers in 2006 to 16.5 million in 2013 (El Beyrouty & Tessler, 2015).

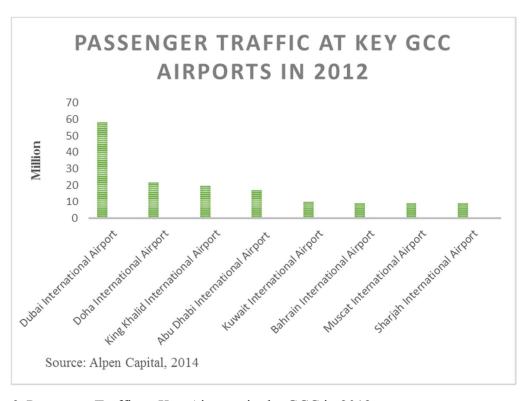


Figure 2. Passenger Traffic at Key Airports in the GCC in 2012

Emirates, Qatar Airways and Etihad are the Gulf airlines which dominate the Middle East market, accumulating 75% of its total traffic (Seifman, Benjamin, Michael, & Badaya, 2016). As shown in Figure 3, Emirates has more share than Qatar Airways

and Etihad together and on a global scale, Emirates transports more international traffic (measured by revenue passenger kilometers – RPK) than any other airline.

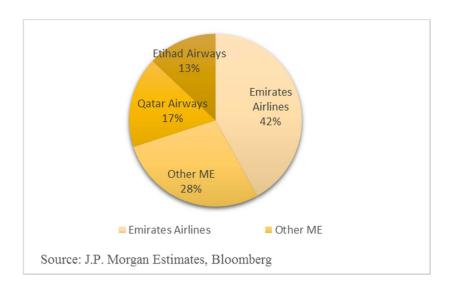


Figure 3. Share of Middle East Airlines (% RPK)

According to Al Masah Capital (2015), in terms of fleet size at a national level (including the commercial airlines, government and military aircraft), the UAE has the largest fleet size, followed by Saudi Arabia and Qatar (see Figure 4). Among the commercial airlines, Emirates has the largest fleet comprising 255 aircraft, followed by Qatar Airways with 194 aircraft, Saudia with 129 aircraft and Etihad with 125 aircraft (airfleets.com, qatarairways.com, saudia.com, etihad.com). The GCC-based airlines have the youngest fleet in the world, with a total size of more than 1000 aircraft (Al Masah Capital, 2015). The average fleet age of GCC-based carriers varies from 2.3 years in the case of FlyDubai to 19.2 years in the case of Kuwait Airways, in between having Etihad with an average fleet age of 4.9 years, Qatar Airways of 5.1 years and Emirates of 6.4 years (Alpen Capital, 2014).

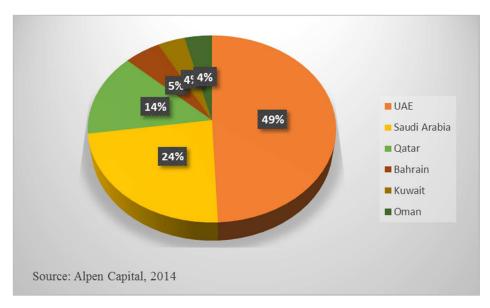


Figure 4. Fleet Size across the GCC

Having a fleet of this proportions, the Maintenance, Repair and Overhaul (MRO) industry in the GCC is evaluated at USD3.8 billion, representing 6% of the world's market. The Gulf airlines spent USD2.7 billion on MRO services such as engine overhaul (42% of the overall spend), airframe heavy maintenance (22%), component overhaul (19%) and line maintenance (17%) (Alpen Capital, 2014).

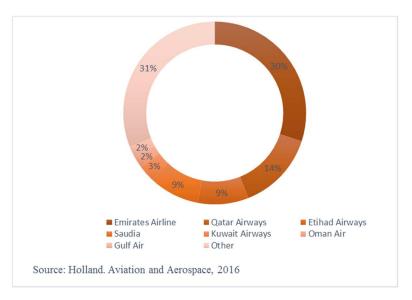


Figure 5. MRO Expenditure by Key Gulf Airlines

The aviation infrastructure has been highly developed in the Gulf region, a total of 58 airports being part of the aviation infrastructure. Saudi Arabia registered the highest number of airports – 33 airports, followed by Oman with 10 airports and the UAE with 9 airports (Al Masah Capital, 2015). The governments of the GCC countries have strongly supported the infrastructure industry by heavily investing in airports (see Figure 6). The focus on the infrastructure arises as a part of the plan to promote tourism in the region by attracting more inbound traffic. Overnight tourist arrivals increased by 27% across the region from 2007 to 2013 and a further 92% increase from 2013 to 2024 is expected (El Beyrouty & Tressler, 2015). Moreover, each Gulf country is focusing on its own airline. The Qatari government's commitment to stimulate the aviation sector is exemplified through the withdrawal in 2002 of its 25% share in Gulf Air, based in Bahrain (Ishutkina & Hansman, 2009). The State of Qatar decided to augment its focus on the development of the national airline and to direct its resources allocated for the aviation sector only to Qatar Airways. The withdrawal has negatively influenced the evolution of Gulf Air, the company experiencing the risk of collapse.

| Qatar | Hamad International Airport USD16 billion |
|--------------|---|
| UAE | Dubai World Central USD8 billion |
| UAE | Dubai International Airport (Phase 4 development) USD7.8 billion |
| UAE | Abu Dhabi International Airport USD6.8 billion |
| Oman | Expansion of Muscat International Airport and Salalah Airport; New Airports at: Sohar, Duqm, Ras Al Hadd, Adam USD6.1 billion |
| Kuwait | Kuwait International Airport USD2.1 billion |
| Saudi Arabia | King Abdulaziz International Airport USD1.5 billion |
| Bahrain | Bahrain International Airport USD0.3 billion |
| Total | • USD48.6 billion |

Source: Alpen Capital, 2014

Figure 6. Airports in the GCC

Each GCC country benefits of its own aviation authority which regulate the operating airlines within the specific state. Thus, in Saudi Arabia the aviation authority is the General Authority of Civil Aviation; in Dubai, Dubai Civil Aviation; in Abu Dhabi, General Aviation Authority; in Kuwait, Civil Aviation Authority; in Qatar, Civil Aviation Authority and in Oman, the Public Authority for Civil Aviation.

The growth of the aviation sector in the GCC has been supported by the strategic location of the region as it connects the Western world with Asia-Pacific, by the travel requirements of the large expatriate population (20 million) in the GCC, by the growing urbanization and high capita per income, at an average of USD33,000 for the whole GCC in 2013 (Al Masah Capital, 2015). Moreover, the demand for business and leisure travel

by air is expected to increase as the income levels became higher in the GCC (Alpen Capital, 2014). The governments have stimulated the aviation sector by investing around USD313 billion in developing airports, only in 2014 the infrastructure contracts being evaluated at USD45 billion (Al Masah Capital, 2015). The fuel supply which is provided at a lower cost than for the competitor airlines, has been another driver for aviation development in the Gulf (Alpen Capital, 2014). In 2015, the average aviation jet fuel price for operators in the GCC stood at USD65.5 per barrel, which was 5% lower than the global average (Al Masah Capital Research, 2014).

Another factor which has supported the aviation growth in the Gulf is the cheap foreign labor. The labor policy in the GCC adopted the "contract worker" model which allows companies to hire foreign employees for a certain period of time in different sectors where the expertise of locals is absent (Al-Waqfi & Al-Faki, 2015). The nationals of the GCC countries are concentrated as employees in the public sector due to its stability and high income. This led to the division of the labor market into public versus private and national versus non-national (Al-Waqfi & Al-Faki, 2015). In the UAE, 99.5% of the foreign workers are employed in the private sector (Goby, 2015). The acquisition of foreign labor is vital for the survival of many companies in the GCC.

Qatar Airways – Company Profile

Qatar Airways Company Q.C.S.C. is the national carrier of Qatar and a part of the Qatar Airways Group, which encompasses the airline and airport operations, aviation and catering services, retail outlets and hotels. The services offered by the airline are airline travel services, corporate travel, advance passenger information, transit accommodation,

online check-in, mobile services and in-flight entertainment services (ICD Research, 2016).

Qatar Airways has been founded in 1994 under the ownership of the Al Thani royal family, being relaunched as a full-service carrier in 1997 under a new management team, having Mr. Akbar Al Baker as Group Chief Executive until present day. The airline began as a 50% state owned company, the other 50% held by private investors (Ishutkina & Hansman, 2009), however, in 2013 the airline became 100% state owned. The company is not publicly listed, the only two Gulf carriers which are listed being Air Arabia and Jazeera Aiways, both low cost airlines (Al Masah Capital, 2015).

Between 2000-2008, Qatar Airways was one the fastest growing airlines in the world with a 35% year-on-year growth rate (Ishutkina & Hansman, 2009). The airline grew from 4 airplanes in 1997 (El Beyrouty & Tessler, 2015) to 194 aircrafts in 2017, both passengers and cargo aircrafts (qatarairways.com). By March 2016, Qatar Airways alone had 23,800 airline employees worldwide, 90% of them being based in Doha. However, Qatar Airways FactSheet released on March 2017 reveals a number of over 44,000 employees for the entire Qatar Airways Group, more than 30,000 being airline employees. Qatar Airways has four main offices in Doha: "Qatar Airways Towers; the Learning and Development Centre; the Integrated Training Centre; and the Cargo Technical Building, as well as the Qatar Airways Operational Control building and specially designed office space at Hamad International Airport" (qatarairways.com).

The divisions of the Qatar Airways Group are the following (the provided data is according to statistics revealed on qatarairways.com at the end of March 2016):

- 1. Qatar Airways the flag carrier which has reached 150 destinations, operates 165,288 passenger flights.
- 2. Qatar Airways Cargo the world's third largest international cargo carrier. It utilizes ultimate tracking technology and transports 954,191 tonnes of cargo.
- 3. Hamad International Airport introduced state-of-the-art facilities, its capacity being of 30 million passengers.
- 4. Qatar Aircraft Catering Company prepares catering and dining for Qatar Airways and other airlines using the airport. It utilizes 178 vehicles, has more than 350 chefs and prepared 33,611,000 meals.
- 5. Qatar Aviation Services provides ground handling for Qatar Airways and another 37 airlines. It utilizes 1,330 vehicles, handled a volume of 1,7 million cargo and 19,119,718 passenger bags.
- 6. Qatar Duty Free duty free retailer. It utilizes 16 vehicles, has 22 stores and 73 restaurants and has served 5,673,601 customers.
 - 7. Qatar Executive provides private jets for business and travel pleasure.
- 8. Qatar Distribution Company is Qatar's licensed retail distributor of beverages which can be purchased by licensed hotels and individuals.
- 9. Al Maha Services provide meet-and-greet services and expedited security services for customers utilizing Hamad International Airport.
- 10. Qatar Airways Internal Media Services is in charge with the portfolio of outof-home advertising opportunities at Hamad International Airport.

11. Dhiafatina Hotels – is Qatar Airways Group's hotel and spa management arm which operates Novotel Edinburgh Park, Sheraton Skyline London Heathrow, Oryx Rotana Doha, The Airport Hotel at Hamad Intentional Airport in Doha and Vitality Spa at Hamad International Airport.

Qatar Airways Group includes a variety of companies specially designed to sustain the expansion of the aviation industry within the country. The Group supports the economy by creating job opportunities (see Table 1) via outsourcing, however, most of the companies created (except Dhiafatina Hotels, Qatar Distribution Company, Qatar Executive) operate as service providers for Qatar Airways and Hamad International Airport, without extending towards other economies or other sectors within Qatar.

Table 1. Qatar Airways Group – General Business Information

| Company | Employees | Passengers | Passenger | Cargo | No. of |
|-----------------------------|-----------|------------|-----------|-----------|----------|
| (2015-2016) | | | Flights | Tonnes | Aircraft |
| Qatar Airways Group | 39,369 | | | | 190 |
| Qatar Airways | 23,802 | 26,654,000 | 165,228 | 954,191 | 180 |
| Qatar Executive | 113 | | | | 10 |
| Qatar Aircraft Catering | 1,867 | | | | |
| Qatar Duty Free | 2,011 | | | | |
| Qatar Distribution | 100 | | | | |
| Qatar Aviation Services | 7,478 | | | | |
| Hamad International Airport | 1,235 | | | 1,534,553 | |
| C | | | | | |

Source: Qatar Airways Group Sustainability Report 2015-2016.

Qatar Airways has the largest number of employees, followed by Qatar Aviation Services and Qatar Duty Free. The airline's growth is envisioned upon a diversified service mix which incorporates a workforce comprising 160 nationalities, highly technologized fleet with inflight entertainment, check-in facility up to 12 hours prior the flight at Hamad International Airport. Another strength is represented by strong

partnership agreements with airlines (Asiana Airlines, Virgin Atlantic, GOL, Middle East Airlines, etc.), hotels (Marriott, Hilton, Radisson Blu Hotels, Sheraton, Shangri-La, Kempinski, Anantara, Wyndham, etc.), car rentals (Sixt, Hertz, Avis, Europear, Budget and Rentalears), banks (Qatar National Bank, Qatar Islamic Bank, Burgan Bank, Housing Bank) and travel services (Ooredoo, Air Miles, My Rewards Points, Qatar Stars League, Qatar Airways Holidays, Joyalukkas Jewellers, Travelling Connect, Columbus Travel Insurance, Al Jaber watches, Chic Outlet Shopping, Booking.com) which enhances the global presence already established via more than 150 destinations. Table 2 reveals a part of the agreements, acquisitions, contracts, new services, new destinations between 2014 and 2016 which represent the strengths of the airline, some of them being interpreted as weaknesses under the neoliberal perspective, interpretation offered in the case of sought stake acquisitions in Meridiana airline and Indigo airline.

Another weakness identified by IDC Research (2016) is represented by delays in flight timing which result in huge costs which affect the profitability, the business operations and the image of the airline. Without improving the air traffic control, the delays are expected to cause a loss of USD300 million for passengers and \$180 million for Qatar Airways in 2025, while with the gross benefits of improved of air traffic control will stand at USD921 million for passengers and USD614 million for Qatar Airways during the period of 2015-2025 (El Beyrouty & Tessler, 2015). However, in the Qatar Airways Group Annual Report (2016) the status of on-time departure performance was 90.5% over the fiscal year of 2016, which is one of the best reported performance of any airline and it is a result of Qatar Airways' innovative system launched in 2015 to better schedule and manage flights, called Total Operations System (TOPS).

Table 2. Qatar Airways – Historical Highlights 2014-2016

| Year | Event Type | Brief Description |
|------|----------------------|---|
| 2016 | Contracts/Agreements | Qatar Airways signed a contract with ComAir |
| | | to provide services to three new African |
| | | destinations. |
| 2016 | Contracts/Agreements | Joint business agreement with British Airways. |
| 2016 | Acquisitions | The airline increased its shareholding in |
| | | International Airlines Group (IAG) to 20%. |
| 2016 | Acquisitions | Qatar Airways purchased 19 new aircraft. |
| 2016 | New Destinations | The airline introduced 14 new destinations. |
| 2016 | New Service | Qatar Airways launched Oryx International |
| | | School. |
| 2016 | Contracts/Agreements | Partnership with Beach Polo Cup Dubai as the |
| | | official airline sponsor for three years. |
| 2016 | New Service | Opened Premium Lounge at Dubai International |
| | | Airport. |
| 2016 | Acquisitions | The airline acquired additional 2% stake in |
| | | International Airlines Group. |
| 2016 | Agreements | Codeshare agreement with Sri Lankan Airlines. |
| | | |
| 2016 | Agreements | Codeshare partnership with Aer Lingus |
| 2016 | Acquisitions | The airline sets strategy to acquire 10% stake in |
| | | LATAM Airlines Group. |

| 2016 | Contracts | Qatar Airways entered into an agreement to |
|------|------------------|--|
| | | acquire 49% of Meridiana, Italy's second |
| | | biggest carrier. |
| 2016 | Agreements | Partnership with Malindo Air to provide |
| | | passengers greater connectivity when travelling |
| | | between ASEAM and Qatar Airways |
| | | destinations. |
| 2016 | Agreements | New agreement with Qatar Tourism Authority |
| | | to facilitate Qatar Tourist Visa application |
| | | process. |
| 2016 | Contracts | The company selected four Boeing 777 |
| | | Freighters, worth USD1,24 billion |
| 2015 | Plans/Strategy | Qatar Airways Cargo announced to launch a |
| | | new express airfreight service for door-to-door |
| | | and time-critical shipments. |
| 2015 | Acquisitions | The airline acquired 29 new aircraft. |
| 2015 | New Destinations | Qatar Airways introduced 8 new destinations. |
| 2015 | Corporate Awards | It was named the Best Airline of the Year by |
| | | Skytrax 2015. |
| 2015 | Corporate Awards | The airline ranked number 3 in the world airline |
| | | international cargo carrier ranking, recognition |
| | | offered by IATA. |
| | | |

| 2015 | Agreements | The company expanded its codeshare | | |
|-------|-----------------------|---|--|--|
| | | agreements with Cathay Pacific, Japan Airlines | | |
| | | and S7 Airlines. | | |
| 2015 | Contracts | Qatar Airways opted for United Technologies | | |
| | | Corporation (UTC) Aerospace System to | | |
| | | provide wheels and carbon brakes for its 43 | | |
| | | Airbus A350 aircraft. | | |
| 2015 | New Services | The airline introduced the Qatar Airways Visa | | |
| | | Signature Credit Card in partnership with Qatar | | |
| | | Islamic Bank. | | |
| 2015 | Contracts | Qatar Airways placed an order of USD1.24 | | |
| | | billion with Boeing for four two engine 777 | | |
| | | Freighters. | | |
| 2015 | Acquisitions/Mergers/ | The airline bought 9.99% stake in International | | |
| | Takeovers | Airlines Group. | | |
| 2014 | New Destinations | Introduction of 12 new destinations. | | |
| 2014 | Acquisitions | Acquisition of 4 Airbus A380. | | |
| 20014 | Acquisitions | Became Global Launch Customer of the first | | |
| | | Airbus 350. | | |
| 2014 | Corporate Awards | It was named the Best Business Class of the | | |
| | | Year by Skytrax 2014. | | |
| 2014 | Strategy | Announcement on plans to acquire stake in | | |
| | | Indigo Airlines (India). | | |
| | | | | |

2014 Agreements Partnership with Safaricom to launch a service

which enables customers to pay via M-Pesa.

2014 New Products The launch of co-branded MasterCard credit

card in partnership with Burgan Bank.

Source: IDC Research; qatarairways.com

The above information on agreements, contracts, strategies, acquisitions and mergers provides the evidence behind the rapid development of the airline, strongly enforced by the governmental support (Ishutkina & Hansman, 2009; Oman Arab Bank, 2016; Deloitte GCC Powers of Construction, 2006). On the other hand, Qatar Airways planned to acquire a 49% stake in the money-losing Italian airline Meridiana, the fourth largest airline in Italian domestic market. This goes against Qatar Airways strategy which focuses on investments in airlines which are profitable and do not require fundamental restructuring. However, the investment in Meridiana is driven by sovereign interests. By helping the airline, the ties between Qatar and Sardinia will strengthen, as Qatar already has numerous projects on the Italian ground: investments in an art museum in Venice and in Valentino fashion house, Qatar Holdings invested EUR1 billion in Sardinia's tourism, Qatar Foundation Endowment built the Mater Olbia Hospital in Sardinia, and Qatar Holding LCC purchased four hotels in Sardinia (CAPA Centre for Aviation, 2016).

As a state owned-airline, Qatar Airways defies the principles of a free market by incorporating political and economic national strategies in its performance. The challenge of investing in a restructuring airline consists in diverting Qatar Airways' focus on its global expansion in order to meet the needs of an unprofitable small airline and management bandwidth as a surplus of competent managers is required to conduct a

proper supervision of the consequences of this type of acquisition. Another sought acquisition driven by sovereign interests is in Indigo LCC India, Asia's third largest lowcost carrier. Qatar Airways planned to purchase shares in Indigo via Qatar Investment Authority (Kotoky & Kamel, 2016). Despite the fact that investing in Indigo would bring Qatar Airways economic benefits and exposure to one of the world's fastest growing travel markets, since Indigo is the only Indian airline which has had a profit each year during 2009-2016 (Kotoky & Kamel, 2016), it would also forward Qatar's interest in India, its third source market after UAE and Saudi Arabia (CAPA Centre for Aviation, 2016). In terms of exports, India is the third country of destination, cumulating 12% of Qatar's exports (Ministry of Development Planning and Statistics, 2016). Purchasing stakes in the most profitable Indian airline would encourage Qatar Airways involvement in the air transport activities of India. In October 2015, the Civil Aviation Ministry of India has proposed a civil aviation policy to have open skies policy with South Asian neighbours and countries beyond 5000 km and to auction additional traffic rights to airlines from countries within 5000 km (arabianbusiness.com, 2016). The CEO of Qatar Airways, Mr. Akbar al Baker, pointed out his disapproval on the decision of the Indian Civil Aviation Ministry, stating that air traffic rights are a sovereign property and should not be auctioned (economictimes.com, 2016). Having a national decision publicly criticized by a global airline reveals how strategically important India is for Qatar. Nevertheless, the open sky policies should be designed according to the needs of each country, respecting the principles of competition and free market.

Conclusion

The large expatriate population, high per capita income, increasing number of tourists and strategic location have been the factors behind GCC aviation growth and its recognition as a global aviation hub. Being largely state-controlled, another driver of the GCC aviation growth has been the governmental support. The governments of GCC countries developed their flag carriers as part of their strategies to increase the connectivity with other markets, to attract tourists, to expand sectors outside the hydrocarbon sector and to economically develop. In the case of Qatar, Qatar Airways' growth in terms of subsidiaries, employees, fleet, acquisitions, new partners and new destinations, has been envisioned upon national plans to strengthen the economy.

As the previous sections of this chapter have provided the data showing the rapid development of the aviation sector in the GCC region and the meteoric development of Qatar' national airline, the following chapter will address the impact of such developments on competitors by analyzing the main supporting governmental policies which have led to the flourishing of aviation sector in Qatar.

Chapter 4: The Assessment of Qatar Airways from a Neoliberal Perspective

Introduction

Neoliberalism claims that a strong governmental control prevents the social and economic development and advocates for deregulation, privatization and lowering taxation as the optimal instruments in achieving economic growth. The Washington Consensus represents the result of the world's leaders meeting in Washington in 1989, embodied in a set of neoliberal policies proposed by World Bank and International Monetary Fund (IMF). Williamson (2004) proposed ten policy reforms considered to be needed in the countries of Latin America as of 1989. The ten commandments are as follows:

- "1. Budget deficits... small enough to be financed without recourse to the inflation tax.
- 2. ...redirecting [public] expenditure from politically sensitive areas [that]... receive more resources that their economic return can justify...toward neglected fields with high economic returns and the potential to improve income distribution such as primary health and education, and infrastructure.
- 3. Tax reform... [so as to broaden] the tax base and cut... marginal tax rates.
- 4. Financial liberalization, [involving] an ultimate objective... of marketdetermined interest rates.
- 5. ... a unified ... exchanged rate... at a level sufficiently competitive to induce a rapid growth in nontraditional exports.
- 6. Quantitative trade restrictions should be rapidly replaced by tariffs, and this should be progressively reduced until a uniform low rate of 10 [to 20] per cent is achieved.

- 7. Barriers impeding the entry of foreign [direct investment] should be abolished.
- 8. Privatization of state-owned enterprises.
- 9. [Abolition of] regulations that impede the entry of new firms or restrict competition.
- 10. The legal system should provide secure property rights without excessive costs and make these available to the informal sector" (Williamson, 2004, p. 3-11).

According to Thompson (2015), the main neoliberal policies include: a) deregulation – reducing restrictions on businesses involved in world trade (e.g. reducing tax on corporate profits); b) fewer protections for employees and environment – companies can hire short-term workers, "flexible workers"; c) privatization – selling state owned companies to private companies; d) cutting taxes – in order to minimize the state control.

Emphasizing on the value of free market competition, neoliberalism promotes a flow of trade and capital with minimal state interference. For the neoliberalists, a capitalist economy provides stability. Their proposed policies aim at improving the economic performance by restricting the power of the government and of trade unions and implementing an active free market. By imposing lower taxes, the companies would have the opportunity to save and invest, while under financial deregulation, the market incentives would flourish (Kotz, 2015). The case of the GCC states is a peculiar one as the Gulf countries benefit from surplus capital, which is financial and resource-based, capital that has to be put into productive use. By necessity, the capital formation in Saudi Arabia has been under governmental control until 1980s (Hertog, 2012). Most of the Gulf countries decided that the development of new sectors should be done via public enterprises

which have been supported through large initial capital injections, continued concessionary loans and dedicated infrastructure (Hertog, 2012). The privileges offered to state-owned enterprises (SOEs) negatively affect the concept of free market competition proposed by the neoliberal school. Despite the fact that deregulation and lower taxes are applicable to public enterprises, these policies do not follow the neoliberal practices as they are not implemented for the entire market. This prevents private firms from competing on a level playing field, especially when SOEs tend to dominate entire sectors (Callen, Cherif, Hasanov, Hegazy & Khandelwal, 2014). The Gulf states treat the public and private sector by adopting different perspectives. There are certain sectors considered vital for the economy and which require large-scale state investment and the creation of SOEs, such as heavy industry, logistics and network-based industries, while real estate, commerce, distribution, light manufacturing the state allows the involvement of local merchant families (Hertog, 2012).

The biggest challenge faced by stated owned companies is that they will not be able to escape the infant industry circuit of protection, nor to generate a higher profit than the governmental injected capital (Kornai, 1979), nor to operate independently of their political leaders. In the case of Emirates airline, "it is argued that Dubai cross-subsidizes the carrier by covering its true financial performance as Emirates can reduce its borrowing costs below market rates by taking advantage of its government shareholders' sovereign borrower status (Derudder, Bassens & Witlox, 2013). As governments tend to protect certain industries, the investigation of the competition factor appears to be a duty for Western companies which are guided by neoliberal strategies. In the vision of Freiburg neoliberals, a "strong state" acquires power "through self-restraint, through its

ability to say 'no' to the demands of special interest groups, its ability to credibly commit itself to universal moral principles of the rule of law enshrined in a privilege free economic constitution" (Wohgelmuth, 2008, p. 73). Thus, in the neoliberal perspective, competition becomes the instrument to create benefits for consumers in an ethical and social manner. Qatar Airways, the flag carrier of Qatar, has been accused by several American airlines that it does not adhere to the principles of Open and Fair Skies Agreements, as it is heavily subsidized by the government, thus not being fairly competitive. In the late 1970s, the United States started to liberalize its commercial aviation sector by reducing the governmental control over market entry, fares and routes. Open sky agreements appeared as a tool of eliminating the governmental restrictions on international route rights, the type of aircrafts that can be operated on specific routes and the number of designated airlines (InterVISTAS, 2015).

This chapter will examine Qatar Airways from the neoliberal perspective, assessing its performance as a state-owned company. The company's skyrocketed advance in the global aviation sector has been questioned on competitiveness basis by European and American carriers, as well as alliances. The chapter will include an analysis of the airline's fleet, aviation infrastructure and taxation system in Qatar as they are important stimulants in Qatar Airways' development. As competition is a key component of the neoliberal policies, Qatar Airways will be examined by looking at the reports released by American airlines against the Qatari airline and at Qatar Airways documents as a reply to the accusations of not respecting the values of competition. Qatar Airways' financial statements will be intensively utilized in this section as they constitute the primary source of data with regards to the airlines' economic performance.

Qatar's Investments in Aviation Infrastructure and Qatar Airways' Fleet

Qatar's airport project value is the highest among the Gulf countries, with a governmental investment of USD16 billion, followed by Dubai World Centre (USD8 billion), Dubai International airport (USD7.8 billion) and Abu Dhabi International Airport (USD6.8 billion) (Alpen Capital, 2014).

Despite the fact that the oil price has dropped to USD35 a barrel in 2016, the Gulf governments continue to heavily invest in infrastructure. The real gross domestic product (GDP) growth in GCC has been affected, slowing down to 2.7% in 2016 (Deloitte GCC Powers of Construction, 2016). In the case of Qatar, the rating agency Moody projected that the real GDP will average at 3.6% until 2019, lower than the average growth of more than 6% between 2011 and 2015 (Moody's Investors Service, 2016). In the report of economic statistics in Qatar released by the Ministry of Development Planning and Statistics, the real GDP growth rate of Qatar stood in the second quarter of 2016 at 2% (Ministry of Development Planning and Statistics, 2016). With halved oil prices, the GCC governments continue their investment in various projects (see Figure 7) as an effort to diversify, the Gulf aviation benefitting from government investments of more than USD300 billion in developing airports (Oman Arab Bank, 2016). The rapid growth in government spending on infrastructure has led to a strong development of low-valueadded sectors such as construction, trade and retail, transport and restaurants (Callen, Cherif, Hasanov, Hegazy & Khandelwal, 2014).

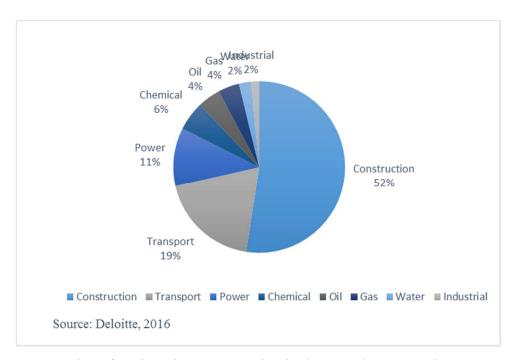


Figure 7. Net Value of Projects in Pre-Execution in the GCC by Sectors in 2016

The reduction of oil price has generated an estimated budget deficit for Qatar of QAR46.5 billion in 2016, stimulating the government to develop budgets aiming at achieving equilibrium between revenue and expenditure in order to augment financial stability and growth in the country (Global Research, 2015). However, the value of ongoing projects in Qatar reached QAR261 billion (excluding private and energy sector projects), out of which QAR87 billion has been allocated to the transportation industry, QAR54 billion to infrastructure, QAR4 billion to sports, QAR30 billion to water and electricity, QAR17billion to education and QAR7 billion to healthcare sector (Global Research, 2015). The transportation and storage sector's contribution to Qatar's economy in 2015 was of QAR17,109 million, at a growth rate of 7.2% (Ministry of Development Planning and Statistics, 2016). The contribution is average compared to the contribution of mining and quarrying sector (QAR231,311 million), of manufacturing sector (QAR58,059 million), of construction sector (QAR57,765 million) and of financial and

insurance sector (QAR49,118) ((Ministry of Development Planning and Statistics, 2016). Despite the average contribution to the transport and storage sector, the government continues its investment in it as it expected to support real growth over the next years (Moody's Investors Service, 2016), especially when the contribution of the total infrastructure to GDP was of 26,9% in 2012 (Qatar Statistics Authority, 2012). However, government large investment in infrastructure might pose certain challenges to private sector. The high investment in infrastructure has generated in some of the Gulf countries infrastructure bottlenecks which are one of the motives behind the stagnation of private sector capital formation and insufficient access to credit (International Monetary Fund, 2016).

Hamad International Airport (60% of the site has been constructed on reclaimed land from Arabian Gulf) commenced its operations in April 2014 with an initial capacity of 30 million passengers a year, and upon complete development, the airport capacity is expected to increase to 50 million passengers a year (qatarairways.com). Along the project of Hamad International Airport, the project of Aerospace City has been designed to include a business airport for general aviation and helicopters operated by Gulf Helicopters, a military area, an education and research area incorporating a university campus, a business and residential district with a marina, chalets and swimming pool, an aerospace museum and a theme park (Holland Aerospace and Aviation, 2016). The project was launched in 2012, having Qatar Foundation as a prime contractor, the technical assistance being provided by Qatar Petroleum (Holland Aerospace and Aviation, 2016). Moreover, the airport infrastructure will be complemented by a maintenance organization specially constructed for Qatar Airways, which will be the

largest in the world. Qatar Airways' fleet grew from only four aircraft in 1997 to 28 aircraft in 2003, reaching a number of 192 aircraft in 2017. In 2014 the airline became the global launch customer for Airbus A350 aircraft, it was one of launch customers for twindeck Airbus A380-800 and the Middle East launch customer of Boeing 787, "the Dreamliner" (qatarairways.com). Qatar Airways has the second largest fleet size among the Gulf airlines, after Emirates. Currently, Qatar Airways has more than 350 new aircraft worth more than USD90 billion pending delivery over the next years (see Table 3).

The massive expansion of airport infrastructure and fleet of Qatar Airways is a strategy which aims at facilitating trade, tourism, travel and logistics. Qatar Airways is embedded in the national plans for development, thus enabling the aviation industry as one of the vehicles utilized for this purpose. The American airlines have perceived this phenomenon as a threat to the growth of their own companies, to the competition in a free market and as a violation of the Open Skies Agreements. Delta Airlines, American Airlines and United Airlines (The Big Three) have released a report in 2015, named "Restoring Open Skies: The Need to Address Subsidized Competition from State-Owned Airlines in Qatar and in the UAE". The report makes public the financial statements of Qatar Airways and the UAE airlines (Emirates and Etihad), arguing that huge subsidies have supported the rapid growth of the three airlines and that these subsidies have an adverse distorting impact on the marketplace and on the profitability of the U.S. and third-country airlines. The report supports the idea according to which Qatar Airways, Etihad and Emirates do not operate as independent companies, rather they act as extensions of their governments (openandfairskies.com). Moreover, the three state-owned airlines, due to their huge advantage built on subsidies, are considered to intend to dominate the U.S. market share and to shift U.S. aviation jobs overseas.

Table 3. Qatar Airways' Fleet

| Qatar Airways | Count | Capacity Seats | Cargo | Count | Qatar C Executive | ount | On order | Count |
|--------------------------------|-------|-------------------|-----------|-------|----------------------|------|-------------|-------|
| Airbus A319 LR | 2 | 110 | Airbus | 8 | Bombardier | 3 | Airbus A320 | 2 |
| | _ | 40 | A330 | _ | Challenger 605 | | | _ |
| | | | Freighter | | O | | | |
| Airbus A320-200 | 39 | 144 | Boeing | 11 | Bombardier | 4 | Airbus A320 | 77 |
| | | 132 | 777 | | Global 5000 | | Neo | |
| | | | Freighter | | | | | |
| Airbus A321-200 | 8 | 196 | Boeing | 1 | Bombardier | 1 | Airbus A330 | 8 |
| | | 182 | 747 | | Global | | Freighter | |
| | | 177 | Freighter | | Express xRS | | | |
| Airbus A 330-200 | 13 | 232 | | | Gulfstream | 3 | Airbus A350 | 68 |
| | | 228 | | | G650WR | | | |
| | | 272 | | | | | | |
| | | 260 | | | | | | |
| Airbus A330-300 | 13 | 259 | | | | | Airbus | 7 |
| | | 305 | | | | | A380-800 | |
| Airbus A340-600 | 4 | 306 | | | | | Boeing 777 | 5 |
| Airbus A350 | 13 | 283 | | | | | Boeing 777X | 110 |
| Airbus A 380-800 | 6 | 517 | | | | | Boeing 787- | 30 |
| | | | | | | | 8 | |
| Boeing 777-200 | 9 | 259 | | | | | Gulfstream | 30 |
| | | | | | | | G500 and | |
| | | | | | | | G600 | |
| Boeing 777-300 | 34 | 358 | | | | | | |
| | | 412 | | | | | | |
| Boeing 787-8 | 30 | 254 | | | | | | |
| Source: qatarairways.com, 2017 | | | | | | | | |

Source: qatarairways.com, 2017

According to the "Restoring Open Skies" report (2015), the current fleet of the three Gulf airlines will soon be enhanced with the arrival of the large amount of ordered aircraft and they will have together a greater capacity of the entire U.S. commercial wide body fleet. The American airlines fear that once these aircraft will fly the U.S. routes, they will capture market share from other airlines, especially when the populations of

UAE and Qatar are very small. With regards to airport infrastructure, Qatar Airways is accused of receiving USD215 million in subsidies via the collection of revenues from airport operations, parking, facility rental income and management fees. In the consolidated financial statements at 31 March 2016, Qatar Airways reveals an infrastructure facility income of QAR107,835 million, an income from management fees of QAR56,774 million and from incentives and route subsidies of QAR31,640. The total of almost QAR200 million is substantially higher than the one reported for the fiscal year 2009 (see Table 4), this showing the rapid development of the airline, definitely supported by the benefits of improved infrastructure. While the Big Three regard these revenues as absconded forms of subsidies, Qatar Airways claims that not all the revenues represent a subsidy since the company hires staff and acquires equipment in order to perform the services which generate these types of revenues, thus Qatar Airways being entitled to benefit from them.

Table 4. Qatar Airways' Income from Infrastructure Facilities

| Income | 2009 QAR '000 | 2016 QAR '000 |
|--------------------------------|------------------|------------------|
| Infrastructure facility income | 33,243 | 107,835 |
| Management fees | 17,719 | 56,774 |

Total 50,962 164,609

Source: Qatar Airways Consolidated Financial Statements 2016; Restoring Open Skies, 2015

Another argument used by The Big Three against Qatar Airways is formulated around the airport fee exemptions which enhances the activities of Hamad International Airport and of Qatar Airways as "Qatar connects 83% of its passengers at DOH and accounts for 98% of all connecting traffic at the airport' (Restoring Open Skies, 2015). The flow of passengers carried by Qatar Airways stands at 26,654,000 (Qatar Airways Sustainability Report 2015-2016, 2016), thus confirming the impact of low fees on passenger traffic. This is regarded as a competitive advantage over U.S. and third country carriers. According to IATA, Qatar collects an airport fee type PC1, which means that it is payable by passengers departing on international flights from Hamad International Airport. The fee is of QAR40, exemptions being applied for infants under two years, transit passengers, involuntary rerouted passengers and airline crew (IATA List of Ticket and Airport Taxes and Fees, 2009). Qatar Airways' reply to the accusation that this type of tax represents a subsidy strongly asserts that this is not the case as similar charging system is applied at London's Heathrow Airport, Bangkok and Kuala Lumpur (Comments of Qatar Airways Q.C.S.C., 2015).

Taxation System in Qatar

Moving forward from the airport taxation, the corporate taxation is also important in understanding the evolution of Qatar Airways as a state-owned company and the privileges acquired through this position. The reduction of tax rates for certain actors in the Qatari market shows a strong involvement of the government in the economy by offering certain rights and protection to different entities. The differential treatment

created inequalities in the economy, this being visible at the prevalence of the public sector over the private sector.

The current tax rules in Qatar are governed by Law No. 21 of 2009 (came into force with effect from January 1, 2010). The Public Revenues and Taxes Department (PRTD) issues circulars from time to time to provide guidance on the interpretation of provisions in the Qatar tax law and its application in practice (oxfordbusinessgroup.com). Qatar has been rated as having the least demanding tax framework in the world (PwC, 2016). The 2017 Paying Taxes report supports the rating by basing its results on a test case company, however, the report drew the results based on a test case company which is 100% Qatari owned, therefore is exempted from paying corporate taxes (PwC, 2016). As specified in Law No. 21 of 2009, the corporate income tax applies to an entity which is fully or partially foreign owned and which derives income from sources in Qatar. The income tax is fixed at a flat rate of 10%, however, it may vary if the entity performs oil or gas operations or if it has an agreement with the government (PwC, 2016). Important to note are some of the parties identified by Oxford Business Group as being exempted from the application of corporate income tax in Qatar:

- "1. Interest and returns on public treasury bonds, development bonds and public corporation bonds;
- 2. Capital gains on the disposal of real estate and securities derived by natural persons, provided that the real estate and securities disposed of not part of the assets of a taxable activity;
- 3. Dividends and other income from shares, if the amounts distributed during a taxable year were taken from profits that were: i) Subject to the tax under Law No.

- 21 or other laws; or ii) Distributed by a firm, the income of which is exempt from tax by Law No. 21 or other laws.
- 4. Gross income of legal persons resident in the state and wholly owned by Qatari nationals. Under the GCC reciprocity agreement, this means that legal persons that are wholly owned by Qatari/GCC nationals are generally exempt from tax; however, they are still required to file a tax return and submit audited financial statements if the share capital is equal to or greater than QR2m (USD547,800) or the gross revenue is equal to or greater than QR10m (USD2.74m). Other tax exemptions may be provided for under special laws or international agreements or may be granted by the Tax Exemption Committee under provisions 51 to 56 of the tax law. TAX STATUS OF SUBSIDIARIES OF LISTED ENTITIES: Law No. 17 for the year 2014, which has effectively replaced Law No. 20 for the year 2008, continues to provide a tax exemption for profits of companies listed on the Qatar Stock Exchange. This exemption was historically interpreted as applying equally to wholly owned Qatari tax-resident subsidiaries of such listed companies. The PRTD issued, and then suspended, an order that subsidiaries of listed companies should be prima facie within the scope of Qatar tax law. As such, there continues to be uncertainty as to whether this tax exemption will continue to apply under Law No. 17 of 2014" (oxfordbusinessgroup.com).

The taxation system in Qatar certainly provides a different platform of development for the Qatari and GCC nationals owned companies, creating a perception of unfair market as it might support the creation of monopolies. A corporate income tax with a broader coverage, which can be achieved by including Qatari and GCC companies, would have a positive impact on foreign investors, who would perceive the business environment as being more equitable (International Monetary Fund, 2015). Such a taxation system, regarded from the neoliberal perspective, inhibits free competition. Despite the fact that reduced taxes are part of the neoliberal recommendations for a free market, in the case of

Qatar, only specific entities benefit from this policy, meaning that not all companies are playing at the same level.

In the case of Qatar Airways, its consolidated financial statements from 2009 show that the income tax expense was of QAR1,743 million, and it was related to the income of only two subsidiaries: Lambrini Holding Ltd, registered in the United Kingdom and Amadeus Qatar W.L.L., registered in the State of Qatar. Amadeus Qatar W.L.L. is in charge with marketing, distribution, installation and maintenance of the Amadeus reservation and travel agency system to various travel agencies in Qatar. In 2009, Amadeus was only 60% owned by Qatar Airways, the financial statements from 2016 showing that it became 100% owned by Qatar Airways. Despite the fact that Oryx Holdings Inc. (one of the subsidiaries mentioned in the 2009 financial reports), has been incorporated in the United States and it should pay taxes as per U.S. regulations, Qatar Airways does not include it in the income tax expense.

Reticence in revealing the distribution of the income tax expenses is exercised in Qatar Airways' 2016 financial statements. The total income tax expense for the fiscal year 2015-2016 stands at QAR2,922 million, an increase in tax expenditure being noticed as Qatar Airways added more subsidiaries. Amadeus Qatar W.L.L., Facilities Management and Maintenance Company L.L.C., Ferrovial Qatar W.L.L., Linc Facility Services L.L.C., Qatar Airways SSP L.L.C. and Qatar Aviation Lease Company Q.J.S.C. are mentioned as being under the Qatar Income Law Tax – Law No. 21 of 2009, meaning that the subsidiaries just file corporate income tax returns. Al Maha Aviation Company is subject of the 2004 Income Tax Law of the Kingdom of Saudi Arabia, Dhiafatina for Hotels S.P.C. comes under United Kingdom Corporation Tax Act 2010, Dutch Tax Law and Qatar's Law No.

21 as well, Lamrini Holdings Ltd. Is under UK Corporation Tax Act 2010, while Oryx Holdings Inc. falls under the Internal Revenue Code of the U.S. Qatar Airways does not provide details on the amount of tax income expenses of each of its subsidiaries. The justification provided to support the lack of detailed tax rates is that such details would "not be practical, given that the Group is subject to various tax jurisdictions and regulations" (Qatar Airways Q.C.S.C. Consolidated Financial Statements 31 March 2016).

With such lower income tax expenses, and only for a few subsidiaries, Qatar Airways can afford to save huge amounts and expand its projects. The government of the State of Qatar has facilitated the rapid development of the airline, by establishing a stable and protective environment, the taxation system being a significant stimulant for the airline's development. The order of 350 new aircrafts worth more than USD90 billion is a guarantee that the airline will benefit from this government-created stability for a long time. Thus, Qatar doesn't follow the neoliberal prescriptions as it is not engaged in establishing a privilege free economic environment. Moreover, despite analysts suggest that private sector is the pillar of economic stability and diversification, Qatar Airways plans to remain under governmental control for at least the next 10 years (Trenwith, 2015).

Competition

Despite the fact that the Middle East region carried in 2015 only a 5% share of global passenger traffic (El Beyrouty & Tessler, 2015), the region is considered to become one of the world's fastest growing air transport markets. The major airlines of the Gulf, Emirates, Qatar Airways and Etihad have followed policies of aggressive route expansion, their business model focusing on transporting passengers between Africa, Asia, Australia, Europe, the Middle East and the Americas via their hubs (Dresner,

Eroglu, Hofer, Mendez & Tan, 2015). Their expansion strategies also include strategies to attract passengers flying to second tier destinations such as Dallas, Boston, Chengdu, Guangzhou, Edinburgh. The Gulf carriers are well positioned to increase market share in the lucrative long-haul market as the average flight of Emirates is amongst the largest in the world – 2,816 miles, compared to the average length of a Lufthansa flight – 796 miles (Oxford Analytica, 2013). The rise of Gulf airlines as major players in the world air transport business seems to be at the expense of long-haul carriers in the U.S., Europe and Asia Pacific.

U.S. airlines claim that Gulf carriers have an unjust competitive advantage which harms their local markets, calling for the restriction of the Gulf airlines to access their markets (Dresner, Eroglu, Hofer, Mendez & Tan, 2015) as, according to Grimme (2011), "the market entry for Gulf carriers seems to be easier because they can obtain slots at attractive times" (p. 333). The advantages of Gulf airlines are constituted by: airline fleet, innovation in product development, low labour costs, investments in infrastructure, non-dependence on locally generated traffic (Oxford Analytica, 2014), tourism development, access to highly liquid sovereign wealth funds (Oxford Analytica, 2008), political and economic advantages, partnership-generated revenues (e.g. Oneworld alliance), stakes in other airlines (Qatar Airways owns 20% of IAG), operations from airports with lower fees (Oxford Analytica, 2015).

The traffic growth in the Gulf is envisioned upon long-haul international traffic, not on the regional one. Australian Qantas has broken a 15-year joint venture with British Airways for a global partnership with Emirates, this placing Dubai as Australia's gateway to Europe (Oxford Analytica, 2013). Qatar Airways flies to more than 150 destinations,

around 35 of them being located in the Middle East region (qatarairways.com). The rest of the destinations are in Europe, Africa, South Asia, Asia Pacific, North America and South America. This provides the evidence that Qatar Airways strategy is to serve mainly medium and long-haul destinations. The current cities served by Qatar Airways in North America are Atlanta, Boston, Miami, Chicago, Washington, New York, Houston, Philadelphia, Montreal, Los Angeles with plans of expansion to Las Vegas in 2017.

Compared with the aviation industries of the United States and Europe, which have faced bankruptcy, rising fuel costs, tightening credit conditions and fewer business passenger flights, the Gulf aviation industry has proven to be stable and strong (Oxford Analytica, 2008). The Gulf airlines' traffic flows that accompany the market have affected the European and the U.S. aviation industry. As an example of how new market entries affect the competitors, Grimme (2011) presented how the entrance of a low cost airline has led to a fall in market fares, this meaning that new entries pose challenges on the local market. European airports had the connectivity level falling by 5.7% in 2013 due to the emergence of Middle East hubs. Lufthansa and Air France KLM requested the European Commission to withdraw the traffic rights from Emirates, Qatar Airways and Etihad as they have received government subsidies, pursuing the limitation of Open Skies Agreements with the Gulf Airlines (Oxford Analytica, 2015). According to an analysis conducted by Oxford Analytica (2013), the major global airline alliances, Oneworld, SkyTeam and Star Alliance, have initially rejected the partnership with the Gulf airlines, considering that Qatar Airways, Emirates and Etihad do not meet their requirements due to heavy subsidies. Nevertheless, the global growth of the Gulf airlines has motivated the alliances to accept them as members (Oxford Analytica, 2013).

The three largest U.S. airlines – Delta, United and American, have taken their actions against the Gulf carriers a step further than the European airlines by initiating a campaign called Open and Fair Skies which asserts that Qatar Airways, Emirates and Etihad have received USD42 billion in form of different subsidies. Before proceeding with a detailed insight on this issue, it is necessary to see whether the entry of Gulf airlines on the U.S. and international markets has any impact on the American aviation industry. The findings of a study conducted by Dresner, Eroglu, Hofer, Mendez & Tan (2015) on the impact of Gulf carrier competition on American airlines provide evidence that the arrival of Gulf carriers to the U.S. has generated substantial expansion of direct passenger traffic between the U.S. and the Middle East. On this niche, Qatar Airways stated that no U.S. airline competes with Qatar Airways in any nonstop market as none of the American carriers offers a nonstop service (direct flight) to Doha (Comments of Qatar Airways Q.C.S.C., 2015). However, according to the study, there is a 1% increase in Gulf carrier traffic between the U.S. and Middle East, increase which is associated with less than 0.1% decrease in air fares and less than 0.1% drop in U.S. carriers' international passenger traffic (Dresner et al., 2015). Despite the fact that the effects are small, they are significant and they can increase as the Gulf airlines plan to open new destinations in the U.S. and around the globe. The increased competition may affect the profitability of certain airlines, however, the outcome of increased competition benefits the customers as they will enjoy lower fares, a variety of choices and direct flights to far away destinations.

Nevertheless, the U.S. airlines remain unsatisfied with the entry of Gulf airlines into their market. Their campaign pursues to convince the U.S. government and other

important players in the aviation industry that Qatar Airways, Emirates and Etihad are not adhering to the policies of open skies agreements as they are building competitive advantages on the grounds of massive capital injections from their governments. In the table below, provided are the accusations of the Big Three and Qatar Airways justifications on their financial reports disclosed by the American airlines.

Table 5. The Accusations of American Airlines, Delta, United and Qatar Airways Comments

| American Airlines, Delta, United | Qatar Airways |
|--|-------------------------------------|
| Accusations | Responses |
| Qatar Airways has received USD8.4 billion in | The loans have been converted to |
| subsidized loans and shareholder advances. | equity and are accounted for the |
| | increased value of the company. |
| Qatar Airways has received USD6.8 billion in | Qatar Airways has never defaulted |
| subsidies from government loan guarantees. | on a loan or had a lender exercise |
| | its guarantee. |
| Qatar Airways has received USD452 million | The state provided Qatar Airways |
| in subsidies from free land. | with land in 2011, however, in |
| | 2013, the State appropriated the |
| | land for public interest at it then |
| | market value. |

Qatar Airways has received USD616 million in subsidies from airport fee exemptions and rebates

All carriers that serve the airport benefit from these reduced charges.

Qatar Airways has received USD215 million in subsidies from assignment of airport revenues

In order to provide airport services, the company hires staff and operates equipment.

Qatar Airways has received USD22 million in subsidies from government grants (income for incentives and route subsidies)

This item in Qatar Airways
accounts refers to the incentives
paid by other airports than Doha for
new or expanded service.

Granting of monopoly rights to distribute alcohol via Qatar Distribution Company

No Reply.

Unquantifiable subsidies from Qatar Aviation
Lease Company (it is a Qatar Airways
affiliate, this meaning that Qatar is leasing
aircraft from itself).

Lease rentals being charged to

Qatar Airways by Qatar Aviation

Leasing Company are at

commercial rates.

Artificial advantage: Unions are illegal in the UAE and Qatar

The U.S. has open skies agreements with other nations that lack organized labor movements.

Foreign airlines in the Gulf must appoint a General Sale Agent in order to carry out commercial activities, requirement which increases ticket costs by 3%.

Any IATA-accredited airline can sell its tickets through the BSP Gulf Area without any necessity to

appoint an agent under a General Sale Agreement.

The Gulf carriers are not subject to corporate income tax or fuel tax.

Qatar Airways pays market prices for fuel at Doha.

Source: Restoring the Open Skies, 2015; Comments of Qatar Airways Q.C.S.C, 2015

The three U.S. airlines claim that the subsidies Qatar Airways benefited from has created an artificial advantage which will force U.S. carriers to reduce service on international routes, which displaces the American airlines on routes beyond the Gulf and which harms the employment in the U.S. Moreover, the U.S. carriers accused the Gulf carriers of taking share from their routes to South-East Asia (Vietnam, Thailand, Indonesia, Malaysia and Philippines) and that their huge aircraft acquisitions will increase Qatar Airways capacity of 57 billion Available Seat Miles (ASMs) in 2012 to 137 billion in 2020, the market being able to satisfy this capacity by taking passengers from U.S. and other carriers (Restoring Open Skies, 2015). Qatar Airways supports the idea according to which the airline is growing at a proportional level with growth in the region, which has a higher level of GDP growth than other regions. Although the American airlines see the open skies agreements with the Gulf carriers as supporting the Gulf subsidized competition and that the Gulf airlines are abusing the agreements, Qatar Airways claims that it contributes revenues to US carriers by giving the example of its codeshare with American Airlines which enables the transfer of traffic arriving at American airports to onward services operated by the American Airlines (Comments of Qatar Airways Q.C.S.C, 2015). Moreover, Qatar Airways claims that its presence in the

United States facilitates the inauguration of offices, thus creating jobs for the American population.

The fact that the aviation sector has been treated as an infant industry is indubitable. The status given by being a state-owned company has conferred Qatar Airways substantial privileges, partially quantified by the American Big Three. Qatar Airways claims that the Open Skies Agreement has partnerships with other state-owned companies, however, the Big Three did not address them. Moreover, the US and European carriers require for a greater transparency from the Gulf airlines without taking into consideration that they may be accused of double standards since the European airlines were sustained by their governments (Air France, Sabena, Lufthansa, TAP, Olympic) and the US airlines received aid to recover from the consequences of September 11 and have used Chapter 11 on protective bankruptcy to avoid collapse (Oxford Analytica, 2015). As studies show, the impact of the rise of Gulf airlines on US fares, routes to Middle East, Africa, Asia and Oceana, passengers carried has been negative. Nevertheless, the growth of GCC airlines is not based only on governmental aid, but also on their location and geographic proximity to high-growth regions such as South Asia (Dresner et al., 2015). Geopolitics acted as a powerful factor in their growth, enhanced by the large resources and capacity of governments to pour their capital into aviation industry.

Conclusion

Being a member of open skies agreements, which certainly perform under neoliberal policies, involves adopting the same set of operations in a free market. As Qatar Airways will not privatize in the next decade, the solution would be for its

government to stop treating aviation as an infant industry. According to Qatar Airways' financial statement for the fiscal year 2016, the company had a revenue of QAR36,640 million (Qatar Airways Consolidated Financial Statements 31 March 2016, 2016). Their revenues have substantially increased from QAR14,385 million in 2009 and QAR24,854 million in 2012, showing that the government has already built the foundation for Qatar Airways to operate competitively without further capital injections.

The airport infrastructure, young and numerous fleet, taxation system and easy access to state capital have been the premises of Qatar Airways' rapid entry on other markets. Such privileges have attracted the attention of competitor airlines from Europe and the US, which have claimed that Qatar Airways is not respecting the open skies agreements. Nevertheless, evidence that some European and American airlines have received governmental support at certain intervals of time, makes the debate on competition more difficult in reaching a consensus on who is strictly implementing the neoliberal policies and who is not. The assessment of the development and performance of Qatar Airways from the neoliberal perspective has highlighted the governmental support that the airline has received under different forms and its negative impact on competition. In the next chapter, the state's involvement in the economy will be analyzed from the developmental perspective, which considers the positive aspects of state intervention. Oatar Airways' impact on the economy in Oatar will be assessed by looking at its innovative processes, its potential contributions to the creation of knowledge-based economy and its improved connectivity.

Chapter 5: The Assessment of Qatar Airways from a Developmental State Perspective

Introduction

The assessment of Qatar Airways using the neoliberal perspective has confirmed the status of the company as a privileged entity, a public player which benefits from governmental support at various levels. As a state-owned airline, Qatar Airways is "not subject to effective competition regulation" (Hertog, 2012, p. 85), therefore, not submitting itself to the values of the free market. Most of the Gulf states adopted the option of creating public entities in order to stimulate the growth of the economy, marking the slow transition

theory, neoliberalism might actually not be the solution for a prosperous economy. A study conducted by the Centre of Economic Policy Research has found that the period of neoliberalism from 1980 to 2000 has been less progressive on social and economic grounds than the period between 1960-1980, when most countries had restrictive economies (Thompson, 2015). The result is that the countries which protected their economies developed faster than the ones which have implemented the model of laissez-faire.

Large oil revenues, credit growth and economic diversification have led to high real GDP growth rates in the GCC countries during the 2000s, Qatar registering growth rates in double digit (Woertz, 2012) – reaching 30% in 1997 (IMF, 2015) and 13% in 2011. From 1984 to 2013, the average annual GDP growth of Qatar was of almost 8% per year, in the non-hydrocarbon sector the growth exceeding 8% per year (IMF, 2015). The growth in non-hydrocarbon sector is expected to drive an average GDP growth of Qatar of 3.6% between 2016 and 2018 (World Bank, 2016), as the low oil prices have marked a slowdown in activity (Global Economic Prospects, 2017). The government investment accelerated to a peak in 2007 and it remains high, its influence on the GDP growth reflecting the contribution of investment to aggregate demand (IMF, 2015). This means that productivity in other sectors will be improved once the structures will be completed. The rise in nonhydrocarbon GDP started back in 2004 with the implementation of construction projects which have boosted the GDP in Construction, Transportation and Storage, Government, Hotels, Banking and Finance (IMF, 2015). The economic performance of these sectors is influenced by the role of the state and not by market forces.

The concept of the state playing a vital role in economic development has been developed before the modern mercantilist period. The imperfect market competition, necessity of public goods, positive and negative externalities resulting from production and consumption have provided the justifications for state intervention (United Nations, 2013). As most of the Gulf states gained their independence recently (1971), the post-colonialism period influenced their pattern of development which has been shaped around the state as a driver of development. Oman was the first Gulf country to design its model of development in 1995 by launching the National Vision 2020, followed by Qatar and Bahrain in 2008 which released their National Visions 2030, followed by UAE in 2010 with National Vision 2021, Saudi Arabia in 2016 with National Vision 2030 and Kuwait in 2017 with National Vision 2035. Qatar's National Vision aims at achieving human, social, economic and environmental development through sustainable and institutional development. The public sector employment and spending on infrastructure, health and education have raised the standards of living. Airlines, under the state ownership, are able to meet the national objectives and can be used as elements in state foreign policy (Bowen & Leinbach, 1995). As the government is the dominant force in the economy, this chapter will provide the assessment of Qatar Airways from the developmental state concept in order to identify its role as a public entity in economic diversification and ultimately in economic development. Thus, Qatar Airways will be examined using the developmental state theory within the national vision which aims at developing Qatar's economy into a knowledge-based economy. Therefore, the airline will be analyzed in terms of its contributions to creating knowledge, innovation processes, of its connectivity benefits and in terms of its economic footprint and catalytic effects on tourism sector.

According to the developmental state theory, the state assumes the role of facilitating the structural transition from a primitive/agrarian to a modern/manufacturing society (United Nations, 2013). In the case of Qatar, the government assumed the role of facilitating the transition from a primitive economy to a knowledge-based economy. In the developmental state, the interventionism does not alter the socio-economic growth, on the contrary, it stimulates the development.

Knowledge plays a vital role in the long-run economic growth, while innovation converts the knowledge into benefits such as new or improved products, processes or services (Wilson, 2012). Innovative business entities develop relations with private and public sectors, including educational institutions. The creation of this model of state-owned companies in Gulf represents an innovation itself. Qatar Airways, for instance, adopted the features of Western corporate practices combined with local institutional traditions, generating a hybrid company (Hertog, 2012). SOEs can also be seen as penetrators of certain sectors or markets where the private sector might not venture due to unforeseen risks. SOEs test the respective sectors, setting a path for private entities. Nevertheless, this is applicable when an SOE does not dominate the entire market.

In order to assess Qatar Airways from a developmental state perspective, the variables of knowledge, innovation and connectivity have been selected. As Qatar Airways aligned its policies to Qatar National Vision 2030, the creation of knowledge-based economy represents an important pillar in the economic development. A knowledge-based economy includes innovative processes. Improved connectivity has the potential to lead to other economic processes (knowledge transfer, FDI), thus, it has been selected as an

important variable in defining the role of Qatar Airways in the economic development of Qatar.

Qatar Airways and Knowledge-Based Economy

Knowledge plays an important role in the economic development, however, its incidence and use in socioeconomic systems are slow and show gradual evolution (Hossain, 2013). The term "knowledge" presents ambiguity. Many scholars have given different definitions and characteristics of the term. Viktor Dorfler (2010) defined knowledge as a system of cognitive schemata. Nonaka (1991) identified two types of knowledge: the explicit knowledge (databases, books, journals, manuals, messages) and the tacit knowledge (personal skills). According to Thierstein et al. (2006), the pillars of knowledge economy are Advanced Producer Services (APS), High-Tech Industries and knowledge creating institutions (universities, research centers). According to OECD (1996), knowledge is the driver of productivity and economic growth, directing towards the role of technology, information and learning in economic performance. The Knowledge Economy Index designed by World Bank assesses the knowledge economies on four pillars: a) Economic and Institutional regime; b) Innovation; c) Education; and d) Information and Technology pillar.

In 2013, Qatar ranked 54th among 145 countries, below UAE, Bahrain, Oman and Saudi Arabia (World Bank, 2013). In terms of knowledge based economy (KBE), Qatar is still weak (Thierstein et al., 2015). One of the reasons behind this weakness is represented by the shortage of unskilled and skilled manpower in the GCC countries (Hossain, 2013). This is one important factor as human capital encompasses the skills, intellect, attitudes and tacit knowledge driven by employees and management structures.

The networks developed by the companies' relational capital can create synergies within the entire value system (Lopes, Ferraz & Rodrigues, 2016). Due to the shortage of local manpower in GCC, the labor force is constituted 70% by expatriates, phenomenon which challenges the involvement of national workforce in the competitive sector (Hossain, 2013). As an effort to overcome this challenge, Qatar plans to increase the national workforce and to produce qualified employees via the implementation of the "Qatarisation" programme. Qatar Airways is embedded in the national strategies, therefore the airline developed Al Darb Qatarisation Programme in order to form highly educated workers who will help to transform economy into knowledge-based economy. Qatar Airways' Qatarisation Programme include the following: National Cadet Programme, Cadet Pilot Programme, Aircraft Maintenance, Engineering Programme, Summer Internship Programme, Graduate Developee Programme, Airport Operations Programme, Massey University MBA Programme, Aviation Management Programme, Jossor Programme (qatarairways.com). This represents a contribution to Qatar's development strategy to increase the national workforce in technical and professional occupations.

In the case of establishments employing "10 employees and more" in the Transport and Communication sector in Qatar, a number of 11,276 employees (out of the total of 59,794) are registered under the occupation of "Specialist and Technicians" (Ministry of Development Planning and Statistics, 2015). There were 3,038 Research and Development personnel registered in Qatar in 2012 (Ministry of Development Planning and Statistics, 2012). As a knowledge-based economy manifests via an increased labor market demand for highly skilled workers, the training and education of Qatari nationals

represent important factors in the creation of KBE. With its rapid growth, the GCC aviation industry would require more than 35,000 new pilots and 50,000 new technical personnel aver the next two decades (Al Masah Capital, 2015). Knowledge and skilled workers are definitely valuable strategic assets for a country (Hossain, 2013). According to Wilson (2012), "it is the accumulation of knowledge, rather than the accumulation of physical capital and the exploitation of natural resources, that is the engine of long-run economic growth" (p. 270). Research and development (R&D) generates the production of knowledge, university research having significant spillovers in industries. Qatar's expenditure on R&D in 2012 amounted to 0.47% of its GDP (the value of gross domestic expenditure on R&D being of QAR3,254,836,183), the percentage of expenditure on R&D in the Medical and Health Sciences accounting for 27%, and in Social Sciences and in Engineering & Technology accounting for 21% for each (Ministry of Development Planning and Statistics, 2013). The R&D expenditure for Transport, Communication and other infrastructures amounted to QAR46 million, only 1.4% of the total expenditure. The average of European countries' expenditure on R&D was 1.9% of GDP in 2010, at that time the European Commission was calling on member states to increase their expenditure on R&D to 3% of their GDP (Subbaraman, 2010). In 2015, the Professional, scientific and technical activities; the Administrative and support service activities sector contributed QAR19,059 million to Qatar's GDP (standing at QAR599,295 million). The figure below offers an overview on Qatar's global ranking in terms of GDP, expenditure on R&D, competitiveness and innovation.

| Country | Ranking of countries according to per capita GDP | Gross domestic ex- penditure on R&D of GDP | Global Competitive- ness Index | Type of Global Competitive- ness Index | Enabling innovation for Global Com- petitiveness Index | Available technology within Global Competitive- ness Index | Global Innovation Index |
|----------------|--|---|--------------------------------------|--|--|--|-------------------------------|
| Chinese Taipei | 28 | 3.07 | 12 | Innovation | 8 | 30 | NA |
| Kuwait | 25 | 0.09 | 36 | Factor / influence | 118 | 69 | 50 |
| Luxembourg | 5 | 1.5 | 22 | Innovation | 18 | 2 | 12 |
| Norway | 10 | 1.65 | 11 | Innovation | 13 | 3 | 16 |
| Oman | 51 | 0.13 | 33 | Factor / influence | 45 | 56 | 80 |
| Qatar | 1 | 0.47 | 13 | Innovation | 17 | 20 | 16 |
| Saudi Arabia | 44 | 0.07 | 20 | Factor / influence | 30 | 41 | 42 |
| Singapore | 7 | 2.23 | 2 | Innovation | 9 | 7 | 8 |

Source: Ministry of Development Planning and Statistics, 2013

Figure 8. Comparison of Science and Technology Indicators in 2012

Qatar Airways, in partnership with Qatar University, Qatar Science and Technology Park and Qatari Diar Vinci Construction, started to invest in 2010 in the Algae Biofuel Project. The research is led by Qatar University's Centre for Sustainable Development and it is based on the identification of 98 strains of algae in Qatar and on the classification of each strain for biomass growth potential, resilience to local climatic conditions and potential as a biofuel feedstock (Qatar Airways Sustainability Report 2015-2016, 2016). The first stage of the project was completed in June 2015 and it has involved the establishment of indoor laboratories and outdoor demonstration facility to cultivate, harvest and analyze large-scale micro-algae production with the potential to apply algae biomass to biofuel production (Qatar Airways Sustainability Report 2015-2016, 2016). In addition to this, Qatar Airways invested in California firm Byogy Renewables, which makes jet-fuel from alcohol (Lane, 2012). Airbus, British Airways and Cranfield University (UK) are other entities exploring the growth of algal biomass for aircraft fuel (Subbaraman, 2010). This shows the expected importance of biofuels in

commercial aviation. The Bio Fuel Project in Qatar has later been labeled as Algal Technologies Programme. It not only serves the development of biofuel for aviation, but it also develops technologies that can protect the environment by utilizing Qatar's non-fossil fuel and diversify the economy by capturing carbon dioxide in the atmosphere and producing animal feeds locally (algaeindustrymagazine.com, 2016). This type of project brings benefits to Qatar at a food security level and at economic diversification level.

Qatar Airways' Innovative Processes

Innovation represents the conversion of knowledge into benefits which can be new or improved products, processes or services for commercial or public use (Cutler, 2008). Innovation "is a process of continuously generating and applying new ideas, complements and facilitates the knowledge creation and application process, is one of the key drivers of economic growth, is essential to the competitiveness and sustainability of an economy" (Wilson, 2012, p. 273). According to the Global Innovation Index 2016, Qatar ranked number 50 in the world among 128 countries with a score of 37.47, and ranked number 3 in the Arab World. According to Hossain (2013), there is a poor R&D expenditure as percent of GDP in the GCC countries, this showing that R&D activities are not sufficiently encouraged although the Gulf countries have high per capita income (see Table 1). Nevertheless, Qatar plans to extend its R&D expenditure to 2.8% of its GDP (Wilson, 2010).

In an innovation driven economy, three components have been identified: common innovation infrastructure, cluster development and capacity of entrepreneurship (Khalifa, 2012). While the role of the innovation infrastructure is to augment the productivity, the cluster development (science and engineering workforce, access to

universities, ICT infrastructure) stimulates innovations, facilitates commercialization and strengthens the linkages and spillover across companies and associated institutions (Khalifa, 2012). The aviation industry presents cluster characteristics as its industrial chain requires cooperation, the aviation industry requirements stimulate the technology developments of other related industries and the internal cooperation enhances the sharing of technologies and division of labor (Zhu, Wang & Hipel, 2012). The capacity of entrepreneurship includes developing entrepreneurship training, risk capital providers, tax policies encouraging risk capital, infrastructure that promotes access to facilities, incubators and services for startups, policies of ease of doing business and a culture of public recognition of entrepreneurs and risks of failure (Khalifa, 2012).

Innovation lays at the basis of the aviation industry's development. From the view of industry cluster innovation, the performance and competitive advantages of the industry cluster can be improved by the optimization of the value chain and the technology sharing and diffusion (Zhu et al., 2012). In 2012, Qatar Airways and Thales (the airline's In-Flight Entertainment and Connectivity French supplier) opened a new technology research, development and training center located at Qatar Science and Technology Park (MENA Report, 2012). The Joint Innovation and Technology Project has been established to develop in-flight entertainment solutions (touch-screen technology, seat-back screens, etc.) for Qatar Airways. As Qatar Airways aims at introducing pioneering products for its passengers, the innovation process in technology is a vital element in developing new services that will help in attracting more customers. Furthermore, Qatar Airways has been awarded for content innovation at the fourth annual

in-flight workshop and awards at Aircraft Interiors Middle East, held in partnership with F&E Aerospace (gulf-times.com, 2017).

The technological progress has developed a more efficient application of operations research, facilitating large-scale optimizations and the implementation of strong real-time solutions (Oancea, 2015). In terms of innovation, Qatar Airways has created in 2015 a new fleet management system called Total Operations System which "integrates data from multiple sources and produces a holistic view into the airline's operation, from the global scale to the individual flight level, in order to anticipate and notify operations staff of any potential issue and provide solution options" (Qatar Airways Group Annual Report, 2016). The system has a tail assignment optimizer (aircraft are assigned to specific routes according to the route's operational requirements and aircraft's capabilities), NOTAM manager (to increase the situational awareness of dispatchers and operations staff) and Flight Watch (offers operations personnel multiple filters, such as weather patterns, flight path routing, and restricted or prohibited air space so that the team of professionals in the airline's Integrated Operations Centre have nearperfect awareness of each airborne flight, and the ability to quickly communicate with the flight deck) (Qatar Airways Group Annual Report, 2016). Qatar Airways adds technical innovations to its in-service aircraft before entering the market. A320 aircraft is enhanced with a Sharklet wingtip device which saves each aircraft up to 900 tonnes CO2 per year. while the B777 Performance Improvement Package reduces fuel burn by 0.9% (Qatar Airways Group Annual Report, 2016).

Connectivity

As seen, Qatar Airways aligns its strategies with the national vision and with strategies of its partners, both Qatar Airways and Airbus focusing on certain similar projects in the aviation market. This consolidates the aviation industry, which is improving its performance by following strategies implemented worldwide. Civil aviation plays an important role in developing the networking between nations, additionally contributing to economic growth and development (Lopes, Ferraz & Rodrigues, 2016). From Qatar Airways' hub in Doha, the airline has created a global network of more than 150 destinations in Europe, the Middle East, Africa, South Asia, Asia Pacific, North America and South Asia (see Figure 8).

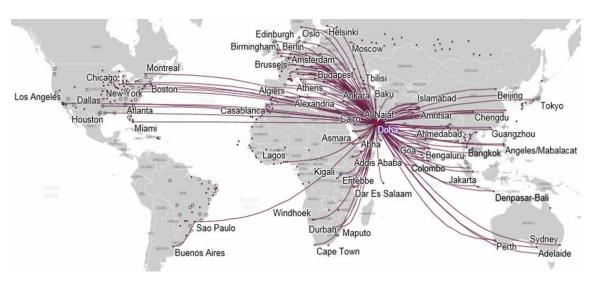


Figure 9. Qatar Airways Route Map

Qatar Airways is a member of oneworld Alliance and has more than 20 airlines as codeshare partners. Strategic alliances, codeshare agreements and slots represent a few of the intellectual resources which drive the airline companies by influencing the turnover (Lopes et al., 2016). At another level, the connectivity developed by Qatar Airways through its various destinations can enhance the performance of corporations in the

knowledge economy. As these corporations can split their activities into different units and locate them in places rich in knowledge resources and industrial culture (Dicken, 2007), Qatar Airways can facilitate a rapid access to these places. According to a study conducted by Thierstein, Salam & Wiedmnn (2015) on Doha's connectivity pattern, Doha's Advanced Producer Services (APS) economy has a strong spatial linkage to major European cities (London, Paris, Frankfurt, Milan, Vienna, Madrid), to New York City in the US (showing the highest gross connectivity from among 20 cities). For High-Tech companies, the most connected cities are Singapore, Moscow, Paris, Sao Paulo and Buenos Aires, the European and the Asian spatial scale being relevant within their value chain processes (Thierstein et al., 2015).

The connections created between cities and markets are an important infrastructure asset which enable foreign direct investment (FDI), business clusters and other spill-over impacts on the productive capacity of the economy (Oxford Economics, 2011). Qatar Airways has around 30 routes which connect Qatar to cities of more than 10 million inhabitants and has increased its daily flights to economically important destinations. Frequencies are higher for London - 7 flights per day Doha-London, for Paris - 3 flights per day Doha-Paris and for Dubai - 17 flights per day Doha-Dubai. The high frequencies provide high speed access for business and leisure purposes, bringing benefits to air transport passengers, markets, tourism, trade.

A developed connectivity contributes to the economic performance of the economy as it benefits the productivity in firms outside the aviation sector by offering a rapid access of domestic firms to foreign markets and by facilitating a freer movement of investment capital and workers between the countries (Oxford Economics, 2011). Thus,

firms are encouraged to specialize in areas where they have a comparative advantage and to invest outside their home countries. Improved connectivity can also favor the inward investment from foreign firms (Oxford Economics, 2011).

Qatar Airways' Economic Impact

There are no public statistics on the direct contribution of Qatar Airways to the Qatari economy, therefore, its impact has been determined by looking at the airline's revenues for 2016 and the total of Qatar's GDP in the same year. Thus, Qatar Airways directly contributed USD9,79 billion (QAR35,64 billion) to Qatar's GDP of USD164,60 billion in 2016. By using the cross-multiplication method, this represents approximately a contribution of 6% to Qatar's GDP. Qatar Airways directly employed 23,803 people for the fiscal year 2015-2016, supporting other thousands of employees through its supply chains: Qatar Executive has 113 employees, Qatar Aircraft Catering Company – 1867 employees, Qatar Duty Free Company – 2011 employees, Qatar Distribution Company – 100 employees, Qatar Aviation Services – 7,748 and Hamad International Airport – 1,235 employees (Qatar Airways Sustainability Report, 2016). The total number of jobs supported by Qatar Airways Group reaches 39,369. According to The Annual Bulletin of Transport and Communications Statistics 2015 released by the Ministry of Development and Planning, there were 23,767 employees within the "Passenger air transport" economic activity category and 2,043 employees within the "Cargo handling" category. This leads to a total of 25,810 employees for the air transport, which is less than the number of employees recorded by Qatar Airways. Nevertheless, the governmental report does not specify whether it includes the number of employees generated by the supply chains. The total number of employees for the Transport and Communications sector

stands at 60,609, this meaning that Qatar Airways Group, with almost 40,000 employees, contributes around 70% to the sector.

According to Oxford Economics (2011), "the resources deployed by the aviation sector are measured by its Gross Value Added (GVA), which is calculated either as the output created by the sector less the cost of purchased inputs (net output measure), or by the sum of profits and wages (before tax) generated from the sector's economic activity (income measure)" (p. 13). The value added of air transport represents approximately half of the value added of the entire Transport and Communication sector. The Transport, storage and communications sector contributed 6% to Qatar's GDP in 2012 (Ministry of Development Planning and Statistics, 2012) and was increased by 10.4% in 2014, driven by Qatar Airways expansion (Ministry of Development Planning and Statistics, 2015). The following table provides the estimates for value added by main economic activity within the Transport and communication sector of Qatar in 2015.

Table 6. Estimates of Value Added by Main Economic Activity, 2015

| Main | Net | Depreciations | Gross | Intermediate | Intermediate | Production |
|----------------|---------|---------------|----------|--------------|--------------|------------|
| Economic | Value | | Value | Services | Goods | Value |
| Activity | Added | | Added | | | |
| (Value QR | | | | | | |
| '000) | | | | | | |
| Land | 1803124 | 466788 | 2269912 | 523443 | 490743 | 3284098 |
| Transport | | | | | | |
| Water | 3532799 | 884619 | 4417418 | 1431167 | 291662 | 6140247 |
| Transport | | | | | | |
| Air Transport | 9097446 | 3457110 | 12554556 | 5484292 | 16776459 | 34815307 |
| Warehousing | 1804517 | 132009 | 1936526 | 584945 | 266276 | 2787747 |
| and support | | | | | | |
| activities for | | | | | | |
| transportation | | | | | | |
| Postal and | 215705 | 6566 | 222271 | 41383 | 16351 | 280005 |
| courier | | | | | | |

Telecommuni-1427402 52588 5419075 6846477 1421950 8321015 cations 21872666 6374494 55628419 Total 28247160 9487180 17894079 Source: Ministry of Development Planning and Statistics, 2015

Air transport is the core of global business and tourism. Its improvements in speed, convenience and affordability have expanded the opportunities for tourists and business travelers, stimulating a variety of economic activities. Airlines and airports are substantially contributing to economy by supporting the tourism sector (Oxford Economics, 2014). International tourism generates 9% of the world's GDP, providing 1 in 11 jobs globally (Oatar Tourism Authority, 2016). Travelers spend money on food, accommodation, travel and other activities at their destinations. These services providers make purchases from suppliers, creating a chain of economic operations. Foreign visitors spent in Qatar in 2014, QAR23.2 billion and it is expected to increase to QAR35 billion in 2025 as the tourist arrivals are forecast to 5,141,000 (World Travel and Tourism Council, 2015). The development of Qatar Airways has increased its catalytic benefits to tourism. Oatar's tourism industry was ranked second most competitive in the region and 43rd out of 141 countries by the World Economic Forum, Travel and Tourism Competitiveness Index, 2015. GCC region contributed 53% to Qatar's arrivals growth, Asia and Oceania - 23%, Europe - 14% and Americas - 4% (Oatar Tourism Authority, 2016).

Qatar became the fastest growing destination in GCC in terms of visitor arrivals, with an average of 11.5% growth over the past 5 years, phenomenon which has boosted the hospitality sector, with 20 new hotels in 2015 and 71% average occupancy (Qatar Tourism Authority, 2016). The Qatari hotel industry has known an impressive growth,

increasing from 3,503 hotel rooms in 2005 (Hazime, 2011) to 20,713 in 2015 (Qatar Tourism Authority, 2016). The direct contribution of tourism and travel to GDP was QAR15.4 billion (2% of total GDP) in 2014, while the total contribution was QAR39.5 billion (5.1% of GDP) in the same year (World Travel & Tourism Council, 2015). According to Qatar Tourism Authority (2016), the tourism sector will reach 9.7% of Qatar's non-hydrocarbon economy by 2030. In 2014, tourism and travel directly supported 66,500 jobs, its total contribution being equivalent to 105,000 jobs (World Travel and Tourism Council, 2015).

In terms of developing the private sector, Qatar Tourism Authority, Qatar Development Bank and Qatar Business Incubation Center have established QBIC Tourism, which was officially launched in 2016. QBIC Tourism is a specialized business incubator which enables local entrepreneurs to develop products and services that augment the Qatar tourism experience (Qatar Tourism Authority, 2016).

Conclusion

The Transportation and Storage sector contributed in 2015 to Qatar's GDP (total of QAR599 billion) only QAR17 billion, compared to a contribution of QAR231 billion from Mining and Quarrying sector, QAR58 billion from Manufacturing sector, QAR57 billion from Construction sector. The expansion of Qatar Airways, supported by the government, has increased the company's revenues to QAR35,64 billion in 2016 from QAR24,84 billion in 2012. The growth of the airline came along with the strategies of Qatar's National Vision 2030, focused on economic diversification towards a knowledge-based economy. Qatar Airways is involved in the expansion of local skilled workforce by implementing various Qatarisation programmes. Its projects on developing alternative

fuels contribute not only to the airline's growth, but also to national plans for environmental development, one of the 4 pillars of National Vision 2030. Technical innovations also support the commitment towards environmental development, additionally generating partnerships with technology specialized companies (e.g. Airbus, Thales, Boeing). The business linkages (of high-tech companies and Advanced Producer Services firms) with foreign markets are enhanced by improved air transport connectivity. Moreover, Qatar Airways strongly supports tourism industry in Qatar through its airport-hub, destinations and its own acquisitions in the hotel industry (Oryx Rotana Hotel in Doha, Sheraton Skyline Hotel in London, Novotel Edinburgh Park Hotel in Scotland).

Qatar Airways' contributions to creating knowledge or developing innovation processes are not numerous, however, the airline plays an important role in generating the necessary global connectivity, which is a significant factor in the development of a diversified economy as it stimulates the growth of private sector. Compared to Dubai, where the aviation sector's contribution to GDP was 16.5% in 2013 and the total jobs generated were 259,000 (Oxford Economics, 2014), the impact of aviation sector on Qatar's economy is moderate. The government has heavily invested in the aviation industry in Qatar and, according to its evolution in terms of revenues, it is expected to greater impact the economic sector.

Chapter 6: Conclusion

The aviation industry in the Arabian Peninsula has transformed the region into a global hub, the Gulf airlines being propelled into the global market of aviation industry. The research aimed at analyzing one Gulf carrier in order to see the effects of a state-owned airline on global free markets and most importantly, on its national economy. Therefore, Qatar Airways has been selected as a case study in identifying the air transport impact on the economic development of Qatar.

The neoliberal theory has been utilized in order to understand the economic performance of the airline under neoliberal policies. It has been concluded that Qatar Airways operates in a privileged environment created by the government of the State of Qatar via the expansion of the airport infrastructure, taxation system, capital injections in the form of equity. Except privatization, the state adopted the neoliberal policies of deregulation and cutting taxes in order to support the growth of the national airline, however, the same policies are not implemented in the case of all business entities in Qatar, different treatment being applied to business entities in the private sector. The financial statements of Qatar Airways (since the company's inception until 2014), which have been

made public by three American airlines (Delta, United, American Airlines), indicate that the large investments of Qatar Airways were not matching its small-scale revenues. Thus, the American airlines, members of open skies agreements, aimed at pointing out the lack of competitiveness of Gulf airlines. In 2016, Qatar Airways moved toward a more transparent policy and made public its profits for the first time in its history. Qatar Airways' financial statement for the fiscal year 2015-1016 has shown improvements in the airline's profitability. Despite the announced high revenues of Qatar Airways, QAR35.65 billion in 2016, the aviation sector continues to benefit from governmental privileges. Nevertheless, the state's support is partly legitimized by the status of Qatar Airways as a 100% state-owned airline.

For assessing the growth of the airline within the national vision upon economic development, the developmental state theory has provided the theoretical background for understanding the role of Qatar Airways in the economy of Qatar. As a flag carrier, the airline internalized policies of development prescribed by Qatar's National Vision 2030. Thus, the airline adopted the Qatarisation policy by developing a Qatarisation Programme within the company, its innovative processes focus on environmental development and its researches are conducted in partnership with scientific centers such as Qatar Science and Technology Park and Qatar Airways, aligning its progress with the government's strategies toward the creation of a knowledge-based economy. The greatest contribution of Qatar Airways to the national economy comes from the improved connectivity, which stimulates the connection with foreign markets and develops the tourism sector. Moreover, in terms of gross value added, in the Transport and Communication sector, the value added of air transport represents almost half of the value added of the entire sector. Compared to the

contribution to GDP of sectors as Mining and Quarrying, Construction, Manufacturing, the Aviation sector's contribution is currently moderate, but growing. The aviation industry in Qatar is building the capacities to further impact the economic development, its real contributions starting to be seen in terms of revenues and generated employment.

Limitations

One of the limitations of the study consists in the lack of information collected from interviews. The research is based on publicly available economic reports and statistics from the Ministry of Development Planning and Interior, from Qatar Airways, from American airlines and from various regional and global reports. It has been assessed that due to the general reticence in revealing specific pieces of information, the publicly available reports represent the optimal data source. Another limitation has been identified while comparing different reports and statistics which have shown different results on the same analyzed categories and in the same period of time. In this case, reports with similar results have been used.

Future Contribution

As Qatar Airways started in 2016 to reveal more pieces of information with regards to its economic activities, a trend toward more transparent policies might emerge. In light of such development, a further expanded study can provide more details on air transport direct, indirect, induced and catalytic impact on the economy.

References

- Almutairi, H. (2016). Economic Diversification in GCC Economies: A Heaven for Investors. International Journal of Economics and Finance, Vol. 8, No. 4. Canadian Center of Science and Education
- Acosta, A. (2011). Extractivism and New-Extractivism: Two Faces of the Same Curse.

 Quito: Fundacion Rosa Luxemburgo and Ediciones Abya Yala.
- AlAzzawi, S. (2011). Multinational Corporations and Knowledge Flows: Evidence from Patent Citations. Economic Development and Cultural Change, 59(3), 649-680. doi:1. Retrieved from http://o-www.jstor.org.mylibrary.qu.edu.qa/stable/10.1086/658350 doi:1
- AlgaeIndustryMagazine.com (2016). Qatar Algae Research Programme Moves to Phase 2.

 Retrieved from www.algaeindustrymagazine.com/qatar-algae-research-project-moves-to-phase-2/
- Al Masah Capital (2015). GCC Aviation Spreading wings to the world. Retrieved from http://almasahcapital.com/uploads/report/pdf/report 134.pdf
- Alpen Capital (2014). GCC Aviation Industry
- Al-Roubaie, A., Al-Ameen, A. (2015). Trade and Knowledge Creation in GCC Countries:

- The Case for Sustainable Development. Int. J. Innovation and Knowledge Management in the Middle East and North Africa, Vol. 4, No. 1, pp. 1–13
- Al-Waqfi, M., Al-Faki, A. I. (2015). Gender-Based Differences in Employment Conditions of Local and Expatriate Workers in the GCC Context. International Journal of Manpower, 36(3), 397-415. Retrieved from http://osearch.proquest.com.mylibrary.qu.edu.qa/docview/1681449140?accountid=13370
- American Airlines, Delta, United (2015). Restoring Open Skies: The Need to Address

 Subsidized Competition from State-Owned Airlines in Qatar and the UAE.

 Retrieved from http://www.openandfairskies.com/wp-content/themes/custom/media/White.Paper.pdf
- Arabianbusiness.com (2016). India Should Not Auction Air Traffic Rights, Says Qatar Airways CEO. Retrieved from http://www.arabianbusiness.com/india-should-not-auction-air-traffic-rights-says-qatar-airways-ceo-621992.html
- BALSVIK, R. (2010). Multinationals' Mode of Entry in the Presence of Upstream Spillovers. Economica, 77(306), new series, 334-351. Retrieved from http://owww.jstor.org.mylibrary.qu.edu.qa/stable/27764422
- BARRY, J. (2011). Knowledge as Power, Knowledge as Capital: A Political Economy

 Critique of Modern 'Academic Capitalism' The Irish Review (1986-), (43), 14-25.

 Retrieved from http://o-www.jstor.org.mylibrary.qu.edu.qa/stable/23350111
- Bathelt, H., Gluckler, J. (2011). The Relational Economy. Geographies of Knowing and Learning. Oxford University Press
- Bourgouin, F., Haarstad, H. (2013). From 'Good Governance' to the Contextual Politics of Extractive Regime Change. In Singh, J. N., Bourgouin, F. (2013). Resource

- Governance and Developmental States in the Global South. Critical Political Economy Perspectives. International Political Economy Series. Palgrave Macmillan. Pp. 89-106
- Bowen, J.T., Leinbach, T.R. (1995). The State and Liberalization: The Airline Industry in the East Asian NICs. Annals of the Association of American Geographers, Vol. 85, No. 3, pp.468-493. Retrieved from http://www.jstor.org/stable/2564511
- Bremmer, I. (2010). The End of the Free Market. Who Wins the War between States and Corporations? Penguin Books
- Bresman, H., Birkinshaw, J., & Nobel, R. (2010). Knowledge Transfer in International Acquisitions. Journal of International Business Studies, 41(1), 5-20. Retrieved from http://o-www.jstor.org.mylibrary.qu.edu.qa/stable/27752473
- Brinkley, I., Hutton, W., Schneider, P., Ulrichsen, K. C. (2012). Kuwait and the Knowledge Economy. The Work Foundation and the Kuwait Programme on Development, Governance and Globalisation in the Gulf States. The London School of Economics and Political Science.
- Callen, T., Cherif, R., Hasanov, F., Hegazy, A., Khandelwal, P. (2014). Economic Diversification in the GCC: Past, present, Future. IMF Staff Discussion Note. International Monetary Fund
- CAPA Centre for Aviation (2016). Qatar Airways & Italy's Meridiana Part 1: Similar to Etihad-Alitalia, but Different and Smaller. Retrieved from https://centreforaviation.com/analysis/qatar-airways--italys-meridiana-part-1-similar-to-etihad-alitalia-beneficial-but-smaller-partner-265937
- Castillo-Ospina, O. L. (2013). Sustainable v. Development? Mining and Natural Resources

- Governance in Colombia. In Singh, J. N., Bourgouin, F. (2013). Resource Governance and Developmental States in the Global South. Critical Political Economy Perspectives. International Political Economy Series. Palgrave Macmillan. Pp. 149-171
- Chang, H. (1999). The Economic Theory of the Developmental State. In Woo-Cummings,M. (1999). The Developmental State. Cornell University Press. Pp. 182-199
- Conventz, S., Thierstein, A., Salama, A. M., Wiedmann, F. (2015). When the Oryx Takes OFF: Doha a New Rising Knowledge Hub in the Gulf Region? International Journal of Knowledge-Based Development. Doi: 10.1504/IKJKBD.2015.069443
- Cutler, T. (2008). Venturous Australia. Melbourne: Cutler & Co.
- Deloitte (2016). Deloitte GCC Powers of Construction. The Funding Equation.
- Derudder, B., Bassens, D., Witlox, F. (2013). The Potential of Political-Geographical Interpretations of Massive Air Transport Developments in Gulf Cities. Political Geography, 36, A4-A7
- Dicken, P. (2007). Global Shift. Mapping the Changing Contours of the World Economy.

 London: SAGE Publications.
- Dofler, V. (2010). Learning capability: the effect of existing knowledge on learning.

 Knowledge Management Research and Practice. Vol. 8. Issue 4
- Dresner, M., Eroglu, C., Hofer, C., Mendez, F., Tan, K. (2015). The Impact of Gulf Carrier Competition on U.S. Airlines. Transportation Research Part A 79, Elsevier, pp. 31-41.
- Driffield, N., Love, J., & Menghinello, S. (2010). The Multinational Enterprise as a Source of International Knowledge Flows: Direct Evidence from Italy. Journal of

- International Business Studies, 41(2), 350-359. Retrieved from http://o-www.jstor.org.mylibrary.qu.edu.qa/stable/27752497
- El Beyrouty, K., Tessler, A. (2015). Economic Benefits of Improvements to Middle East Traffic Control. Oxford Economics. Retrieved from http://www.nats.aero/me/wp-content/uploads/2015/08/NATS-Report-Final-Report clean.v2.pdf
- Friedman, M. (1951). Neo-Liberalism and its Prospects. Retrieved from http://0055d26.netsolhost.com/friedman/pdfs/other_commentary/Farmand.02.17.1
 951.pdf
- Global Research. (2015). Qatar Budget 2016.
- Goby, V. P. (2015). Financialization and Outsourcing in a Different Guise: The Ethical Chaos of Workforce Localization in the United Arab Emirates. Journal of Business Ethics, 131(2), 415-421. doi:http://o-dx.doi.org.mylibrary.qu.edu.qa/10.1007/s10551-014-2285-6
- Gray, M. (2011). A Theory of "Late Rentierism" in the Arab States of the Gulf. Center for International and Regional Studies. Georgetown University School of Foreign Service in Qatar.
- Gray, M. (2013). Qatar: Politics and the Challenges of Development. Boulder and London:

 Lynne Rienner Publishers
- Grimme, W. (2011). The Growth of Arabian Airlines from a German Perspective A Study of the Impacts of New Air Services to Asia. Air Transport Journal
- Gulf One Investment Bank. (2008). Financing the Aviation Industry in the GCC Region.

 Research Bulletin. Retrieved from
 http://www.gulf1bank.com/research/Gulf_One_Research_Bulletin_Aviation_Indu

- stry_March_2008.pdf
- Gupta, R. (2013). Qatar Ranks 40th Globally in World Bank Ease of Doing Business' Report. BQ Doha
- Haji, J. (2016). Pioneering Role of Bahrain in Aviation. Retrieved from http://www.gdnonline.com
- Hazime, H. (2011). From City Branding to e-brands in Developing Countries. An Approach to Qatar and Abu Dhabi. African Journal of Business Management. Vol.5(12), pp.4731-4745
- Hertog, S. (2010). Defying the Resource Curse Explaining Successful State-Owned

 Enterprises in Rentier States. Retrieved from

 http://eprints.lse.ac.uk/29834/1/Defying the resource curse (Publisher).pdf
- Hertog, S. (2012). How the GCC Did It: Formal and Informal Governance of Successful Public Enterprise in the Gulf Cooperation Council, in OECD, Towards New Arrangements for State Ownership in the Middle East and North Africa, OECD Publishing
- Holland. Aerospace and Aviation. (2016). Opportunities for Dutch Business in the Gulf Region. Retrieved from http://www.hollandplusyou.com/bijlagen/opportunity-report-for-dutch-businesses-in-gulf-region---aerospace--aviation.html
- Hooper, P., Walker, S., Moore, C., Al Zubaidi, Z. (2011). The Development of the Gulf region's Air Transport Networks The First Century. Journal of Air Transport Management
- Hossain, A. (2013). Evolution of Mutual Knowledge-Based Economy in Regional

- Integration: An Experience from the Gulf Cooperation Council of Arab States of the Gulf. Springer
- Hvidt, M. (2014). The State and the Knowledge Economy in the Gulf: Structural and Motivational Challenges. The Muslim World, Vol. 105. Hartford Seminary. Doi: 10.1111/muwo.12078
- IATA. (2009). IATA List of Ticket and Airport Taxes and Fees.
- Ibrahim, I., Harrigan, F. (2012). Qatar's Economy: Past, Present and Future. QScience

 Connect. Retrieved from

 http://www.qscience.com/doi/pdf/10.5339/connect.2012.9
- IDC Research (2016). Qatar airways company Q.C.S.C.: Transport and Logistics Company Profile, SWOT & Financial Analysis. London: Progressive Digital
 Media. Retrieved from http://o-search.proquest.com.mylibrary.qu.edu.qa/docview/1850338358?accountid=13370
- International Monetary Fund (2016). Economic Diversification in Oil-Exporting Arab Countries. Annual Meeting of Arab Ministers of Finance. April 2016. Manama, Bahrain
- International Monetary Fund (2015). Qatar. Selected Issues. IMF Country Report No.15/87. Washington, D.C.
- InterVISTAS (2015). The Economic Impacts of Air Service Liberalization. Updating the Landmark 2006 Study to Reflect the New Realities of Commercial Passenger Aviation. InterVISTAS Consulting Inc. Retrieved from http://www.intervistas.com/wp-content/uploads/2015/07/The Economic Impacts of Air Liberalization 2015.pd

- Ishutkina, M.A., Hansman, R.J. (2009). Analysis of the Interaction between Air Transportation and Economic Activity: A Worldwide Perspective. MIT ICAT
- Jones, D. S. (2012). Hayek, Friedman, and the Birth of Neoliberal Politics. Princeton University Press
- Johnson, C. (1982). MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925-1975. Stanford, California: Stanford University Press
- Kamrava, M. (2013). Qatar: Small State, Big Politics. Cornell University Press. Ithaca and London
- Keller, W., & Yeaple, S. (2013). The Gravity of Knowledge. The American Economic Review, 103(4), 1414-1444. Retrieved from http://o-www.jstor.org.mylibrary.qu.edu.qa/stable/23469623
- Khalifa, A. (2012). Macroeconomic Competitiveness of the GCC Economies. In M. A. Ramady, The GCC Economies. Stepping Up to Future Challenges. Springer
- Kornai, J. (1979). Resource-Constrained versus Demand Constrained Systems. Econometrica, 47(4).
- Kotoky, A., Kamel, D. (2016). Qatar Airways Keen on IndiGo Holding, Wants Meridiana

 Job Cuts. Bloomberg. Retrieved from

 https://www.bloomberg.com/news/articles/2016-03-16/qatar-air-keen-on-indigo-holding-wants-job-cuts-at-meridiana
- Kotz, D. (2015). The Rise and Fall of Neoliberal Capitalism. Cambridge: Harvard University Press. Retrieved 17 Mar. 2017, from http://0-

- www.degruyter.com.mylibrary.qu.edu.qa/view/product/430021
- Kumar, K. B., Welsum, D. (2013). Knowledge-Based Economies and Basing Economies on Knowledge. Rand Corporation
- Kurlantzick, J. (2016). State Capitalism: How the Return of Statism is Transforming the World. Oxford University Press
- Lane, J. (2012). Qatar Airways invests in aviation biofuels pioneer Byogy. BiofuelsDigest.

 Retrieved from http://www.biofuelsdigest.com/bdigest/2012/04/13/qatar-airways-invests-in-aviation-biofuels-pioneer-byogy/
- Lawrence, A. (2013). Neoliberalism, Mineral Resource Governance and Developmental States: South Africa in Comparative Perspective. In J. N. Singh, F. Bourgouin, Resource Governance and Developmental States in the Global South. Critical Political Economy Perspectives. International Political Economy Series. Palgrave Macmillan. Pp. 40-60
- Lemco, J., MacDonald, S. B. (2015). State Capitalism's Uncertain Future. Praeger
- Lopes, I.T., Ferraz, D.P., Rodrigues, M.G. (2016). The Drivers of Profitability in the Top 30 Major Airlines Worldwide. Measuring Business Excellence. Vol. 2. Issue 2.
- Luciani, G. (2012). The Gulf Region: Economic Development and Diversification.

 Resources Blessed: Diversification and the Gulf Development Model. Gerlach

 Press
- Marshall, A. (1919). Industry and trade: A study of industrial technique and business organization. London: Macmillan
- MENA Report (2012). Qatar Airways Partner with Thales for Opening of new Technical Centre in Doha. Albawaba Ltd. London.

- Metcalfe, J. (2010). University and Business Relations: Connecting the Knowledge Economy. Minerva, 48(1), 5-33. Retrieved from http://owww.jstor.org.mylibrary.qu.edu.qa/stable/41821512
- Ministry of Development Planning and Statistics (2015). Qatar Economic Outlook 2015-2017
- Ministry of Development Planning and Statistics (2013). R&D Survey 2012-2013.

 Retrieved from http://www.mdps.gov.qa/en/statistics/Statistical%20Releases/Social/RAndD/2012
 /RD-Survey-2012-2013-En.pdf
- Ministry of Development Planning and Statistics (2015). The Annual Bulletin of Transport & Communications Statistics. 15th Issue. Economic Statistics and National Accounts Department.
- Ministry of Development Planning and Statistics (2016). Window on Economic Statistics of Qatar. Issue 17th. Retrieved from http://www.mdps.gov.qa/en/statistics/Statistical%20Releases/Economic/GeneralE conomicStatistics/windowonstatistics/2016/Econ_Window_on_Statistics_Q2_201 6 AE.pdf
- Moody's Investors Service (2016). Moody's places Qatar's Aa2 rating on review for downgrade. Retrieved from https://www.moodys.com/research/Moodys-places-Qatars-Aa2-rating-on-review-for-downgrade--PR 344414
- Myrdal, G. (1968). Asian Drama: An Inquiry into the Poverty of Nations. New York: Twentieth Century Fund.

- Nonaka, I. (1991). The Knowledge Creating Company. Harvard Business Review
- Oancea, O. (2016). Analytical Framework for Airline Revenue Management and Network Planning. Journal of Revenue and Pricing Management. Vol. 15. Macmillan Publishers Ltd.
- Oman Arab Bank. (2016). GCC Aviation Sector. Retrieved from http://content.argaam.com.s3-eu-west-1.amazonaws.com/43f3085d-644e-487b-afd1-8027efdb2a56.pdf
- Oxford Business Group. Tax Regulation in Qatar. Retrieved from https://www.oxfordbusinessgroup.com/analysis/tax-regulations-qatar
- Oxford Analytica (2015). Gulf Airlines Face US, EU Push-Back. OxResearch Daily Brief

 Service. Retrieved from http://o-search.proquest.com.mylibrary.qu.edu.qa/docview/1673831948?accountid=13370
- Oxford Analytica (2008). Gulf States: Airlines Boom Masks Key Differences. OxResearch

 Daily Brief Service. Retrieved from http://o-search.proquest.com.mylibrary.qu.edu.qa/docview/192343964?accountid=13370
- Oxford Analytica (2014). Gulf States: Airlines poised to expand market share. OxResearch

 Daily Brief Service. Retrieved from http://o-search.proquest.com.mylibrary.qu.edu.qa/docview/1551154291?accountid=13370
- Oxford Analytica (2013). Gulf States: Airlines set to reshape global aviation. OxResearch

 Daily Brief Service Retrieved from http://o-search.proquest.com.mylibrary.qu.edu.qa/docview/1283770947?accountid=13370
- Oxford Business Group (n.d.). Tax Regulation in Qatar. Retrieved from https://www.oxfordbusinessgroup.com/analysis/tax-regulations-qatar

- Oxford Economics (2011). Economic Benefits from Air Transport in Saudi Arabia.

 Retrieved from https://www.iata.org/policy/Documents/Benefits-of-Aviation-Saudi%20Arabia-2011.pdf
- Oxford Economics (2014). Quantifying the Economic Impact of Aviation in Dubai
- Palma, J. S. (2009). The Revenge of the Market on the Rentiers. Why Neoliberal Reports of the End of History Turned Out to be Premature. Cambridge Journal of Economics, 33, 829-869, doi:10.1093/cje/bep037
- Peterson, J.E. (2000). Defending Arabia. London: Croom Helm
- Pivac, D. Z. (2015). Business Beyond Borders in GCC Free Trade Zones. BQ Magazine.

 Retrieved from http://www.bq-magazine.com/industries/construction-industries/2015/01/gcc-free-zones
- Prodromidis, K.P., Frangos, T. (1995). Public or Private Enterprises in the Airline Industry? International Journal of Transport Economics / Rivista internazionale di economiadei trasporti, Vol. 22, No. 1, pp. 85-95. Retrieved from http://www.jstor.org/stable/42747529
- PwC (2016). Doing Business in Qatar. A Tax and Legal Guide. Retrieved from https://www.pwc.com/m1/en/tax/documents/doing-business-guides/doing-business-guide-qatar.pdf
- Qatar Airways (2016). Qatar Airways Group Sustainability Report 2015-2016. Retrieved from http://www.qatarairways.com/iwov-resources/temp-docs/csr/sustainability-report.pdf
- Qatar Airways (2016). Qatar Airways Q.C.S.C. Consolidated Financial Statements 31

 March 2016. Retrieved from http://www.qatarairways.com/iwov-resources/temp-

docs/gatarairways consolidated financial statement 2015 2016.pdf

- Qatar Airways (2016). Qatar Airways Group Annual Report Fiscal 2016. Retrieved from http://www.qatarairways.com/iwov-resources/temp-docs/qatarairways_group_annual_report_fiscal_2016.pdf
- Qatar Airways (2015). Comments of Qatar Airways Q.C.S.C. Re: Information on Claims Raised about State-Owned Airlines in Qatar and the UAE.
- Qatar Statistics Authority (2012). Qatar Economic Statistics at a Glance.
- Qatar Tourism Authority (2016). The Complete Guide to Investing in Qatar's Tourism Sector.
- Rostow, W. W. (1960). The Stages of Economic Growth: A Non-Communist Manifesto.

 Cambridge University Press
- Sadik, A., Bolobol, A. (2001). Capital Flows, FDI, and Technology Spillovers: Evidence from Arab Countries. World Development
- Scourse, M. (2013). Market Update: The Big Three Gulf Airlines. Retrieved from http://www.aviationeconomics.com/NewsItem.aspx?title=Market-Update:-The-Big-Three-Gulf-Airlines
- Seifman, S. M., Benjamin, E. A., Michael, S. R., & Badaya, S. (2016). Aerospace and defense. (). New York: JPMorgan Chase & Company. Retrieved from http://osearch.proquest.com.mylibrary.qu.edu.qa/docview/1783894685?accountid=13370
- Singh, J. P. (2010). Kuwait Passenger Airline Industry. Capital Standards. An Independent Rating Agency
- Singh, J. N., Bourgouin, F. (2013). States and Markets in the Context of a Resource Boom: Engaging with critical IPE. In J. N. Singh, F. Bourgouin, Resource Governance and

Developmental States in the Global South. Critical Political Economy Perspectives.

International Political Economy Series. Palgrave Macmillan. Pp. 21-39

Smith, P.A. (2010). GCC Aviation Investment to Top \$200 billion. The Middle East

Subbaram, N. (2010). Airlines Ahead on Algae. Nature Biotechnology. Vol. 28.

The Economist (2015). Airline Subsidies. Retrieved from http://www.economist.com

The Economist Intelligence Unit (2010). The GCC in 2020: Broadening the Economy.

Retrieved from http://graphics.eiu.com/upload/eb/AVIVA %20GCC to 2020 Economic diversi

fication in GCC WEB.pdf

- The Economic Times (2016). India's Decision to Auction Air Traffic Rights Disappointing

 Qatar Airways CEO Akbar Al Baker. Retrieved from

 http://economictimes.indiatimes.com/industry/transportation/airlines-/-aviation/indias-decision-to-auction-air-traffic-rights-disappointing-qatar-airways-ceo-akbar-al-baker/articleshow/50999396.cms
- Thierstein, A., Kruse, C., Glanzmann, L., Gabi, S., Grillon, N. (2006). European Metropolitan Region Northern Switzerland: Driving Agents for Spatial Development and Governance Responses
- Thierstein, A., Salama, A.M., Wiedmann, F. (2015). When the Oryx Takes Off: Doha a New Rising Knowledge Hub in the Gulf Region? International Journal of Knowledge-Based Development
- Thompson (2015). The Neoliberal Theory of Economic Development. Retrieved from https://revisesociology.com/2015/12/07/neoliberalism-economic-development/
 Ulrichsen, K. C. (2014). Qatar and the Arab Spring. Hurst & Co.

- Ulrichsen, K. C. (2015). Gulf Airlines and the Changing Map of Global Aviation. Center for the Middle East. Rice University's Baker Institute for Public Policy
- United Nations (2013). The Asian Developmental State and the Flying Geese Paradigm.

 Discussion Papers. United Nations Conference on Trade and Development
- United Nations (2016). World Investment Report 2016. Investor Nationality: Policy Challenges. United Nations Conference on Trade and Development
- Waterbury, J. (1993). Exposed to Innumerable Delusions: Public Enterprise and State Power in Egypt, India, Mexico and Turkey. Cambridge University Press
- Wiedmann, F., Thierstein, A., Salama, A. M. (2012). Urban Evolution of the City of Doha:
 An Investigation into the Impact of Economic Transformations on Urban
 Structures. Middle East Technical University. Journal of the Faculty of Architecture.
- Williams, K. (1957). Aviation in the Arab States. The Pattern of Control. Middle East Journal
- Wilson, K. (2012). How Competitive are Gulf Economies. In E. Woertz, The Gulf Region:

 Economic Development and Diversification. GCC Financial Markets: The World's

 New Money Center. Gerlach Press. pp. 255-288
- Woertz, E. (2012). Logistics and Economic Development in the GCC. In G. Luciani, The Gulf Region: Economic Development and Diversification. Resources Blessed:

 Diversification and the Gulf Development Model. Gerlach Press. pp. 233-254
- Wohgelmuth, M. (2008). A European Social Model of State-Market Relations. The Ethics of Competition from a "Neo-liberal" Perspective
- Woo-Cummings, M. (1999). The Developmental State. Cornell University Press.

World Bank (2013). Knowledge Economy Index

World Bank (n. d.). Measuring Knowledge in the World's Economies. Knowledge

Assessment Methodology and Knowledge Economy Index. Retrieved from

http://web.worldbank.org/archive/website01030/WEB/IMAGES/KAM_V4.PDF

World Travel & Tourism Council (2015). Travel & Tourism. Economic Impact 2015. QatarZhu, Y., Wang, R., Hipel, K.W. (2012). Grey Relational Evaluation of InnovationCompetency in an Aviation Industry Cluster. Grey Systems: Theory andApplication. Vol. 2. Emerald Group Publishing Limited.