CHAPTER I

INTRODUCTION

Dependency is an issue to every natural source-based country, including Qatar. Therefore, economic diversification is urgently needed. Mastery over knowledge-based economy has become the main focus in Qatar's economic diversification agenda. In the effort of achieving economic diversification, private sector is expected to play more role rather than depending entirely on the public sector. The development of private sector will contribute to achieve the goal of International Cooperation Sector Strategy as part of economic diversification agenda. This chapter will discuss the underlying issues of this research, the question arises, the theoretical framework that support this research, hypothesis to temporarily answer the research question, scope of research, methodology along with data collection technique, and the systematic writings of this research.

A. Background

Globalization brings about many impacts to human life. After globalization, many aspects of life are transformed. For Qatar, globalization is crucial. Globalization provides Qatar a significant impetus to cultivate and optimize its oil resources and promote its economic and social growth to the international community. Through globalization, Qatar can modernize its country with the development of infrastructure and efficient logistics systems, with access to advanced technology and the latest knowledge in the oil and gas industry is much more open. The door for foreign investment that can improve technological capabilities and production efficiency is also opened by globalization. Access to global markets is even wider, which leads to further economic stability and increases state revenues. Without globalization, the oil discoveries of the 1970s would not have had as much impact as Qatar is currently enjoying. Without globalization, Qatar might still be one of the world's poorest countries (Aarab, 2021).

Besides creating opportunities, the rapid development of globalization also creates challenges that were never imagined before. Many new renewable energy sources that are developing along with the development of globalization. The emergence of renewable energy may not harm Qatar directly but presents some challenges and changes in the global energy landscape that could affect the country since Qatar is one of the world's leading oil and gas producers. Therefore, the emergence of renewable energy such as solar, wind or hydro can have an impact on the demand and price of fossil resources. The decline in demand and prices for

fossil resources can affect state revenues, as this sector is the largest contribution to Qatar state revenues to date. Investors who initially invested in oil and gas projects in Qatar will also divert their investment to the development of new technology and infrastructure for renewable energy. With increasing adoption of renewable energy, energy competition with other producers that is more stringent cannot be avoided. Furthermore, the emergence of international demands on fossil resource-producing countries to reduce greenhouse gas emissions and adapt to a low-carbon economy has put Qatar under pressure to contribute to global efforts to tackle climate change (Al-Mohannadi, 2023).

Challenges and opportunities are a package that will always come along with globalization. When it creates challenges, globalization also creates opportunities, and vice versa. While the shift to renewable energy may pose challenges for the oil and gas sector, it may also encourage Qatar to invest more in a diversified economy. However, the shift towards renewable energy also opens up new opportunities for Qatar to adapt to global energy changes and contribute to the transition to a more sustainable economy. Through economic diversification, Qatar can reduce the risk of its dependence on the oil and gas sector. Given the need for demographic change and job creation, sustainable development, and the need to reduce macroeconomic risks from rising commodity prices and turbulent markets, economic diversification is an essential strategy for resource-dependent nations like Qatar (Bank, 2021).

In achieving a diversified economy, Qatar faces several challenges. In the international level, other natural resource-based economy countries like Saudi Arabia, Bahrain and the UAE are trying to do the same. On the one hand, this situation can be beneficial to each country as it creates more cross-country learning. While on the other hand, these countries are focusing on the same area of diversification, including petrochemicals, air transport, logistics, real estate, knowledge services, finance, life science and telecommunications. (General Secretariat For Development Planning of Qatar, 2011)

The growth of a knowledge-based economy and diversification are closely related. According to UN Economic Commission for Europe report presented by Rumen Dobrinsky, present diversification implies not only industrialization and modernization but mastery over knowledge-driven economic activity. Diversification risk being non-sustainable unless they are oriented towards developing and promoting knowledge-based economic activities. Qatar's future economic success will increasingly depend on the ability of the Qatari people to navigate the new knowledge-based and highly competitive international order (Dobrinsky, 2008).

Challenges also occur in the local level. Following the reforms at Qatar University, there has been a rise in engineering graduates. However, in 2010 a greater proportion of

graduates—39%—had specializations unrelated to enterprises in the knowledge-based economy than in other OECD countries. Creating more graduates in the knowledge-based economy will be essential to Qatar's future economic success. The Qatar Foundation's initiatives and the university's changes are helping to meet these objectives. The disciplines that are relevant to the knowledge-based economy are of much greater interest to graduates of Education City's universities (Qatar's Third Human Development Report, 2012).

Many graduates of knowledge economy programs—such as technological education, science, and engineering—are ill-prepared to meet the practices and values demanded by the private sector due to a lack of graduates in these fields, as well as their low performance in comparison to global norms (Planning and Statistics Authority of Qatar, 2019). Furthermore, the work attitudes, skill level, and motivation of recent Qatari workers have disencumbered private sector firms. It is expected that hiring decisions and employability in the private sector will be influenced by the performance of present employees (General Secretariat For Development Planning of Qatar, 2011).

Young Qataris entering the workforce today have previously unimaginable options and opportunities, but frequently lack the knowledge and credentials necessary to take advantage of them. As a result, the number of Qataris employed has drastically decreased as the economy has risen at an astounding rate and the demand for non-Qatari labor has increased proportionately. In some cases, some Qatari nationals face discrimination in the workplace, particularly in private sector companies, where they may be perceived as less experienced, less committed, and expect higher salaries than their foreign counterparts (The Economist Intelligence Unit, 2015). Each year, Qatar adds fewer people to the labor force than the country's economy requires. The majority of Qatari nationals are employed in the public sector, which can lead to an over-reliance on government jobs and limited opportunities in the private sector. Employment quotas may affect firms' incentives to hire locals in this setting (Gulf Times, 2023).

As a non-profit private organization in Qatar that focuses on education, research and innovation, and community development, Qatar Foundation (QF) is trusted by the government to be one of the realization agents of national strategy to develop private sector in knowledge-based economy in the mission to diversify the nation’s economy. Since its formation, QF has helped Qatar in education, research and community development. Most of the initiatives they carry out are independent but dominated by the government. Starting from Education City which is home to branches of well-known foreign universities (one of which is an Ivy League campus), to Qatar Science and Technology Park (QSTP) which is home to various branches of

world-renowned companies such as Microsoft. The things that are the focus of QF are apparently part of the characteristics of a knowledge-based economy which is Qatar's future economic strategy, which makes QF have an important role in realizing the national vision and strategy.

B. Research Question

Based on the explanation that has been described in the background, the research question is formulated as follows: "**How Qatar Foundation contribute to Qatar's private sector development in a knowledge-based economy?"**

C. Theoretical Framework

The basic framework of the theory is the section of a study that explains the variables and their relationships based on a concept or a specific definition. Theories that serve as references in the research will be presented in this section of the basic theoretical framework. The author applied Knowledge-based Economy Concept and the Human Capital Theory.

1. Knowledge-based Economy Concept

Fritz Machlup, an Austrian-American economist, is frequently credited with coining the phrase "knowledge industry" in the 1960s to refer to industries whose primary business is knowledge-related activities, such as education, research, and information services. His research helped to pave the way for later talks of knowledge-based economies. While Peter Drucker, a well-known author and management theorist, also acknowledged the growing importance of knowledge and knowledge workers in the contemporary economy. He wrote on the emergence of knowledge work and how the economy was changing into one that was knowledge-based in "The Age of Discontinuity," published in 1969. Most common and used definition of knowledge-based economy is from OECD, which describes the knowledge economy is the accumulation of capital, technology, technology-relevant capabilities, and science in the conduct of productive activity (Unger).

According to Edward Steinmueller, a professor at Sussex university, all economies are knowledge based. However, certain specific features that are referred to as modern knowledge, namely:

i. Science-based industries

ii. Creative industries
iii. Modernization of traditional industries with a much more modern technology.

Those three types of knowledge are particularly valuable or essential for the 21th century and it depends upon the composition and economic activities within that society.

As a country that is entirely dominated by natural resource income, petroleum in particular, Qatar is interested in diversification to build their future economy. Therefore, a particular kind of knowledge will need to be elevated in relationship to other forms of knowledge. Moreover, the increasing number of young populations in Qatar has obliged Qatar to strive for a very long-term sustainability to achieve intergenerational justice, meaning to meet the needs of the present generation without compromising the ability of future generations to meet their needs.

To build a knowledge-based economy that is characterized by innovation, entrepreneurship, and excellence in education, Qatar needs the help of private sector to develop economic activities such as the technical and human requirements to expand industries and services with competitive advantages derived from hydrocarbon industries.

An extensive plan focused on research and sound development is required to manage the knowledge-based economy system. Additionally, it is necessary to support information and communication technologies (ICT) in the corporate and government sectors due to the impact of globalization and ICT on the business environment. Furthermore, by offering stable macroeconomic policies for "human capital development," investment can make it easier to adapt to the knowledge-based economy. University research journals need to improve in terms of both quantity and quality. This suggests that funding for research and development must be substantially expanded. It is necessary to enhance the use of computers in education and the connections between academics and researchers in R&D at various universities and corporate companies (Kalim, Lodhi, & Haroon, 2003).

Qatar is aware of how important a trained and educated workforce is to a knowledge-based economy. As a result, the nation has made large investments in skill development and education to foster human capital and produce a

workforce that is knowledge-driven. Qatar supports entrepreneurship and innovation as a means of fostering the development of new knowledge-based enterprises. To encourage the creation of novel solutions and promote a creative culture, the nation has built innovation canters and research facilities. Adopting and integrating cutting-edge technologies into a variety of industries is necessary to embrace a knowledge-based economy. Qatar is dedicated to implementing cutting-edge technologies to boost production, efficiency, and overall economic performance. To benefit from the knowledge and experience of the world, Qatar also actively seeks out international partnerships. Qatar hopes to gain access to global insights and promote knowledge on a global scale through collaborations with top academic institutions, research centers, and business professionals (The Qatar General Secretariat for Development Planning, 2011).

2. Human Capital Theory

The idea of human capital can be traced back to early economic thinkers, such as Adam Smith and David Ricardo, who recognized the importance of human skills and knowledge in contributing to economic growth. However, their discussions on the topic were relatively limited compared to the later developments (Spengler, 1977).

With the contributions of economists Theodore W. Schultz and Gary S. Becker, the contemporary idea of human capital started to take shape in the 1950s and 1960s. Theodore W. Schultz which is an American economist, released his ground-breaking book, "Investment in Human Capital: The Role of Education and of Research," in 1961. He coined the phrase "human capital" to refer to the abilities, skills, and information that people gain via formal education and training. Schultz suggested that spending money on education and training could result in higher productivity and economic growth (Schultz, 1961).

American economist Gary Becker expanded on Schultz's concepts to create the theory of human capital. Becker broadened the idea of human capital to include health, experience, and on-the-job training in his landmark book "Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education". He emphasized that people decide whether to invest in their

human capital depending on the anticipated benefits in terms of improved earnings and employment opportunities (Becker, 1993).

Jacob Mincer, a Polish-born American economist, also plays an important role in the development of human capital theory. He contributed to measuring the impact of education and work experience on individual earnings. The concept of "Mincer Earnings Function" developed by him became an important tool for analyzing the relationship between education and income.

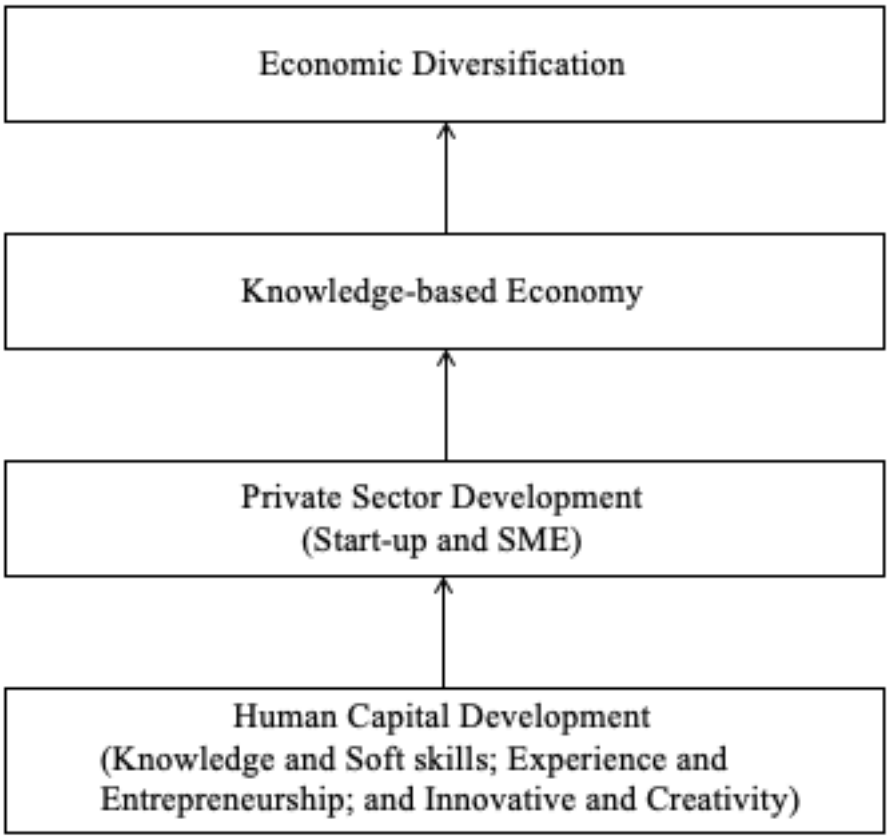
In simple words, the skills, knowledge, experience, and capacities that individuals within a population or workforce possess are referred to as human capital. It places a strong emphasis on investing in the workforce's development through investments in their health, education, and training to increase their productivity and contribution to the economy (Mincer, 1958).

In the ensuing decades, Becker and Schultz's theories were widely embraced by economists and decision-makers. Governments all around the world have begun to realize how crucial it is to spend money on healthcare, education, and skill development. The theory of human capital was expanded and improved throughout the twenty-first century. The measurement of human capital and its connection to economic outcomes have drawn economists' attention. The idea has also faced criticism, including questions about its capacity to fully harness human potential and the possibility for societal disparities to result from unequal access to chances for education and training since knowledge is the largest component of human capital (Ibel, Cairnduff, O'Donnell, & etc, 2017).

Numerous policy domains, including education, labor market regulations, and workforce development, have extensively used the human capital idea. Many nations have incorporated human capital factors into their economic development strategies because they understand the need of investing in people's skills and capacities as a key engine of long-term growth. Human capital, general or specific, enhances abilities, natural or acquired, that one may already have to perform assigned activities. Knowledge and abilities are said to be general attributes required to perform a job if they are used in a variety of activities across industries and if they are easily transferable among individuals without negatively impacting the competitive advantage of the organization (Kriechel & Pfann, 2005).

Since human resource is considered the most valuable commodity because it is the only resource that can both regenerate and increase its potential over time. Therefore, investing in human resource will never be an outdated strategy for economic development, especially in a knowledge-based economy. A "pure" knowledge economy generates creativity to produce new ideas instead of making use of existing knowledge. This creativity is innovation. Adequate human skills and training programs to empower local workers are critical for building capacity for innovation.

Figure 1. Relationship between the components of human capital, private sector development, knowledge-based economy, and economic diversification.



The aforementioned figure demonstrates how, in a knowledge-based economy, investment in human capital components drives the expansion of the private sector. In an economy as such, human capital development supplies the trained labor required for the expansion of the private sector. A workforce that is imaginative, creative, and capable of entrepreneurship all contribute to the

generation of new concepts, information, technology, goods, and services that characterize a knowledge-based economy. On top of that, a knowledge-based economy promotes economic diversification by producing ideas, knowledge, technologies, goods, and services that lessen reliance on revenue from natural resources and build a more robust and competitive business environment.

D. Hypothesis

Based on the formulation of the existing problem and the use of the theory used by the author, a hypothesis can be derived as follow: **Qatar Foundation develops private sector in a knowledge-based economy by investing in human capital.**

E. Scope of Research

Due to its status as an international relations thesis, the author will limit the research within the aspects of international relations realm. The results of this research will be revolved around cross-border initiatives, and globally and regionally impact initiatives.

F. Research Methodology

The method used in this research is a qualitative method. Qualitative method is a research method in the context of problems concerning social, political, cultural, and human behavior phenomena. This research was carried out systematically and strictly as a disciplined inquiry. Information and data collected through books, e-journals, and online articles will be reduced and categorized before analysis is carried out which will lead to a conclusion. The level of analysis of this research is group level, namely Qatar Foundation.