



# TOWARDS A THEORETICAL FRAMEWORK BETWEEN OPPORTUNITY ENTREPRENEURSHIP, INSTITUTIONS AND ECONOMIC DEVELOPMENT

**HASAN GHURA\***

Box Hill College Kuwait, Kuwait, Business Department  
PO Box 29192, Safat 13152, Kuwait  
Tel: +96525458534: Email: hasan.ghura@brunel.ac.uk

**XIAOQING LI**

Brunel University London, UK, Brunel Business School  
Tel: +44 (0)1895 265762: Email: xiaoqing.li@brunel.ac.uk

## ABSTRACT

**Purpose:** The purpose of the present paper is to explore the experience of Qatar with entrepreneurship education and training, and their contribution in creating a knowledge-based economy. By doing so, the paper will contribute towards raising our awareness about the state of entrepreneurship education, training and the knowledge economy in Qatar.

**Design/methodology/approach:** The research design for this paper is a descriptive and interpretive case study that is analysed through qualitative methods. Secondary data are analysed through descriptive statistics.

**Findings:** The main finding of this paper is that although Qatar has launched many initiatives of entrepreneurship education and training to help diversify its economy by creating knowledge-based economy, the data show no improvement in Qatar's ranking in KEI.

\*Corresponding Author

**Originality/value:** The paper represents an original work that links entrepreneurship education and training with the knowledge economy.

**Keywords:** Entrepreneurship education, entrepreneurship education, knowledge economy, Qatar.

**Paper type:** Case study

---

## INTRODUCTION

In the history of development economics, the availability of abundant natural resources such as oil, gas, copper and gold has been thought of as a key driver in economic growth (Schwab and Sala-i-Martin, 2013). Over several decades, Gulf Cooperation Council (GCC) countries that are driven by non-renewable resources, mainly oil and gas, have experienced a rapid increase in economic growth and standards of living due to the high demand on mineral resources (Callen et al., 2014). However, the abundance of oil and gas resources may not necessarily be directly associated with sustainable economic growth and overall competitiveness (Al-Roubaie, 2013). In particular, the risks of relying heavily on oil income may lower the level of productivity of other activities, such as manufacturing and services. This leads to increase a country's exposure to variations of oil prices in the global market. This risk is known in the academic literature as the "Dutch disease" (Sachs and Warner, 1995; Schwab and Sala-i-Martin, 2013).

Several attempts at development have been made by GCC countries, such as sustaining a stable low inflation economic environment, supporting the business environment, opening the local markets for trade and Foreign Direct Investments (FDI), developing the financial sector and focussing on the importance of education. However, none of these previous strategies ensured sustainable development (Callen et al., 2014). In addition, with the exception of a few oil-based countries such as Norway, UAE, Qatar and Bahrain, which have managed to move forward in the stages of economic development to reach the innovation-driven stage (knowledge-based economy), Schwab and Sala-i-Martin (2016) showed in the Global Competitiveness Report that most oil-based countries are located in lower stages of economic development, such as the factor or efficiency-driven stage (Al-Obaidy, 2012; Nour, 2014; Al-Roubaie and Al-Ameen, 2015). In recent years, therefore, promoting entrepreneurship policies in oil-based countries has become an important factor as a conduit to diversify and develop their economies (Al-Obaidy, 2012; Al-Roubaie, 2013; Callen et al., 2014).

Entrepreneurship is considered a key driver that contributes to economic development through employment, innovation, and prosperity. However, it does not appear like "manna from heaven" as a country moves through the stages of economic development (Porter et al., 2001). Instead, it plays a role in all stages of economic development and is a process that continues over several years. Economists contended that the capacities of entrepreneurship activity are considered as the "input-competing" and "gap-filling" in economic development (Leibenstein, 1968; Acs et al., 2014a). In other words, innovative entrepreneurs create the technology for new products and create the markets where customers buy them (Schumpeter, 1942; Acs and Szerb, 2010).

## Towards a Theoretical Framework

According to Acs et al. (2014a), there is an S-shaped relationship between economic development and entrepreneurship activity. Acs et al. (2014a) further argued that poor countries who are in the factor-driven stage suffer from low entrepreneurship activity. The opportunity for increasing income or wealth is therefore limited; at the same time, there is an increase in entrepreneurship activity among countries in the efficiency and innovation stage until it levels off. In addition, building on Baumol's (1990) theory, Acs et al. (2014a) further contended that the role of entrepreneurship in achieving higher rates of economic growth depends on the quality of a nation's institutions. In particular, countries that are in the factor-driven and efficiency-driven stages should focus on building an institutional environment that encourages productive entrepreneurship activities, and minimises destructive and unproductive activities, in order to achieve higher rates of economic growth (Baumol, 1990; Acemoglu and Robinson, 2012; Méndez-Picazo et al., 2012).

Hence, several studies have shown the importance of an entrepreneurial environment in encouraging the emergence of new ventures (Gnyawali and Fogel, 1994; World Bank, 2007). However, much of the research to date has tended to restrict the concept of institutions into legal and political factors, rather than focussing on other factors of formal and informal institutions (Dennis Jr, 2011; Mason and Brown, 2013; Arshed et al., 2014).

This treatment of institutions showed an incomplete picture of the factors of formal and informal institutions in describing an entrepreneurial environment. In addition, much uncertainty still exists about the relationship between opportunity entrepreneurship, institutions and economic growth. Therefore, there is a need to understand the relationship of various factors of institutions that affect opportunity entrepreneurship, which would then advance the theoretical framework of the institutional environment (Bruton et al., 2008; Al-Roubaie, 2013; Carlsson et al., 2013; Smallbone et al., 2013; Ahlstrom and Ding, 2014; Chowdhury et al., 2015). As a result, this study attempts to fill this gap by proposing a theoretical framework of institutional factors that moderates the relationship between opportunity entrepreneurship and economic growth (Bjørnskov and Foss, 2013).

The findings should contribute to the field of entrepreneurship and institutional economics theory by exploring the formal and informal institutional factors in the context of oil-based countries. To fill this gap in our study, the authors focus on GCC countries that are located in Middle East (Al-Roubaie, 2013; Nour, 2014; Al-Roubaie and Al-Ameen, 2015). Therefore, the research question is: what are the factors of formal and informal institutions that encourage opportunity entrepreneurship in the context of GCC countries? By answering this critical question, this study sheds more light on understanding the link between opportunity entrepreneurship, institutions and economic growth.

In an attempt to bridge this gap in the literature, we first developed a conceptual framework by discussing the main issues related to opportunity entrepreneurship and

economic development. Then, we developed an entrepreneurial environment framework by reviewing recent research into the institutional factors that are effective for opportunity entrepreneurship and economic growth. Finally, we concluded by discussing some implications for scholars and policy makers in developing an entrepreneurial climate in the GCC context.

## **THEORETICAL FRAMEWORK DEVELOPMENT**

### *Opportunity entrepreneurship and economic growth*

Research into economic development has a long history. Since the seminal work of Adam Smith's (2003) (original work published in 1776) *The Wealth of Nations*, several theories have contributed to the explanation of economic development. However, many of the previous theories on economic development have not considered the role of entrepreneurship in economic growth (Dang and Pheng, 2015).

Solow (1956), in his neoclassical growth model, contended that the nuances and dynamics of economic growth among countries come to higher productivity in a population; therefore, rich countries have better factors of production. While Solow (1956) considered physical and human capital as driving forces in achieving economic growth, Romer (1989) developed Solow's (1956) model by emphasising the importance of knowledge capital as an endogenous factor, whereby human capital and technological innovations are the key drivers to economic growth. Romer (1989) further argued that new ideas and most R&D are produced by well-educated entrepreneurs who create and exploit new technological advances and ultimately drive economic development. Although Romer's (1989) economic growth model helped to explain the divergence in growth rates among countries, Acemoglu et al. (2014) argued that institutions play an important role in producing and organising the factors of production (i.e., physical capital, human capital, and technological innovations), where these institutions create appropriate incentives to entrepreneurs to be more productive and eventually contribute to economic growth.

In line with this argument, different studies developed a theoretical model by offering a possible explanation of how entrepreneurship can contribute to economic growth (Minniti and Levesque, 2010; Sautet, 2013). On the other hand, a considerable amount of empirical studies have shown the role of entrepreneurship on economic growth (e.g., Audretsch and Keilbach, 2004a, b, 2005, 2008; Minniti and Levesque, 2010; Bjørnskov and Foss, 2013; Liñán and Fernandez-Serrano, 2014). These studies suggested that entrepreneurship should be added as a new input into Solow's model to contribute to the economic growth process.

Historically, a preliminary work on the significant role of entrepreneurship in economic growth was introduced by Schumpeter (1942). He contended that innovative entrepreneurs are described as "agents of creative destruction". These 'agents' destroy

## Towards a Theoretical Framework

the value of existing markets by creating new markets with new products, services, and technological innovations that offer a higher rate of return than that offered by existing firms. Contrary to previous growth models, Schumpeter (1942) concluded that creative destruction is the ultimate source of economic growth.

Therefore, the academic literature on entrepreneurship and its possible effects has revealed the emergence of several themes. Carlsson et al. (2013) found that future research should focus on exploring the interaction between entrepreneurship and different types of institutions and policies that contribute to economic development. In addition, Sautet (2013) suggested that entrepreneurship can play an important role in economic growth if institutions provide sufficient incentives that enable entrepreneurs to create the types of firms that are able to generate economies of scale and faster growing economies.

Other studies empirically assessed the role of entrepreneurship on economic growth, employment and innovation (van Praag and Versloot, 2007; Ayyagari et al., 2014). van Praag and Versloot (2007) found that entrepreneurship has a significant role regarding economic growth by decreasing the unemployment rate, increasing productivity growth, and producing and commercialising high-quality innovations. Similarly, Ayyagari et al. (2014) stated that entrepreneurship plays an important role in terms of job creation. In particular, the authors suggested that future studies should focus more on productive entrepreneurship that promotes economic growth.

Recent studies have clearly indicated that entrepreneurship based on knowledge makes a greater contribution to economic growth than other types of entrepreneurship without a knowledge base (e.g., necessity entrepreneurship) (Audretsch and Keilbach, 2004a, 2004b, 2005, 2007, 2008; Audretsch, 2007; Audretsch et al., 2008; Acs et al., 2012). In particular, Reynolds et al. (2005) argued that entrepreneurship based on knowledge could be positively related to transform an opportunity into a real start-up that has an added value to the market. This entrepreneurial behaviour process is known in academia as opportunity entrepreneurship (Reynolds et al., 2005; Naudé, 2011; Acs et al., 2014b). While the definition of entrepreneurship has been a matter of on-going discussion among researchers (Davis, 2008; Avanzini, 2011), there appears to be some agreement in the last decade that opportunity entrepreneurship refers to “opportunity-driven agents who drive economic change through innovative new firms” (Hart, 2003; Reynolds et al., 2005; Naudé, 2011, p. 7; Acs et al., 2014b).

Reynolds et al. (2005) further contended that opportunity entrepreneurship can be considered as the result of an individual’s decision to create a new business opportunity based on knowledge. However, questions have been raised about the usefulness of opportunity entrepreneurship in economic growth (Wong et al., 2005). Specifically, Acs et al. (2012) recommended that opportunity entrepreneurship should be examined in relation to its capacity to create new firms and stimulate knowledge in the country simultaneously. Together, these studies suggested that entrepreneurship could be a conduit to transfer knowledge capacity and, consequently, produce spill over dynamics

that contribute to economic growth for a specific society (Audretsch and Keilbach, 2008; Acs et al., 2012).

In the same vein, Acs et al. (2012) challenged Romer's (1989) conclusions, arguing that knowledge may not automatically be associated with economic growth as assumed in models of endogenous growth. Thus, there has been an increasing amount of literature that has investigated the effects of opportunity entrepreneurship as a conduit of knowledge (Audretsch, 2007; Audretsch and Keilbach, 2008; Noseleit, 2013; Aparicio et al., 2016). In this sense, previous research has considered the importance of entrepreneurs' abilities and motivation to innovate and grow businesses that contribute to economic growth (Audretsch, 2007; Aparicio et al., 2016). In particular, Audretsch et al. (2008) contended that innovative entrepreneurs who are motivated by business opportunity bring the benefit of new knowledge to economic growth by creating new products and services that lead to a continuous increasing of knowledge spill overs. Therefore, opportunity entrepreneurship is considered as a key driver in the transformation of new knowledge into economic development (Audretsch et al., 2008). Several studies supported Audretsch's et al.'s (2008) conclusion, arguing that opportunity entrepreneurship rates are positively linked to the creation of knowledge and technology that could contribute to economic growth (Wong et al., 2005; Valliere and Peterson, 2009; Acs et al., 2012; Noseleit, 2013; Aparicio et al., 2016).

However, previously published studies on the effects of opportunity entrepreneurship on economic growth are not consistent among countries. While this relationship was assessed by some studies regarding the importance of being located in emerging or developed countries, the empirical findings were uncertain. In particular, these studies found that there is a U-shaped relationship between opportunity entrepreneurship and the level of economic development (Wennekers et al., 2005; Wong et al., 2005; Valliere and Peterson, 2009). In addition, Chowdhury et al. (2015) analysed the data from 44 countries and concluded that economic development has consistent negative relationships with all three types of entrepreneurial activity; these are nascent/new firm ownership, self-employment and new firm start-up.

Acs et al. (2014b) contended that the current datasets are rather controversial and the vast majority of researchers have not considered the interaction effects of entrepreneurship and institutions. They further argued that entrepreneurs tend to be more productive in terms of employment and economic growth when an appropriate environment exists. In this sense, Acs et al. (2017) provided evidence in the global entrepreneurship Index (GEI) that some oil-based countries, such as the UAE and Qatar, could have an effective national system of entrepreneurship in which opportunity entrepreneurship plays an important role in economic growth. According to the GEI measure, these oil-based countries are in the first 21 out of the 137 countries that have been ranked (Acs et al., 2017). In addition, GEI results are consistent with other studies in relation to the impact of opportunity entrepreneurship on economic growth (Wennekers et al., 2005; Sternberg and Wennekers, 2005). Naudé (2010) suggested

## Towards a Theoretical Framework

that if the demand for opportunity entrepreneurship was established in the context of developing countries, entrepreneurship could make a better contribution in these countries. In line with Galindo and Méndez (2014), Castaño et al. (2015) empirically found that higher rates of economic growth create new opportunities for entrepreneurs and stimulate innovation. As a result, we propose the following hypothesis:

H1: Opportunity entrepreneurship has a positive correlation with economic growth in the context of GCC countries.

### *Opportunity entrepreneurship, institutions and economic development*

Although scholars have discussed the importance of opportunity entrepreneurship in economic growth, the conditions that encourage these individuals and their businesses remain relatively understudied (Stenholm et al., 2013). Therefore, this study attempts to develop an entrepreneurial environment by reviewing recent research into the institutional factors that are effective for opportunity entrepreneurship, and consequently for economic growth. In broad terms, entrepreneurial environment refers to the “combination of factors that play a role in the development of entrepreneurship” (Gnyawali and Fogel, 1994, p. 44), whereas institutions refer to “the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interactions” (North, 1990, p. 3).

According to North (1990), institutions are classified into formal factors, such as protection of property rights, procedures or laws, and informal factors, such as values, culture or social norms of a specific country. North (2005) contended that formal institutions exist to decrease transaction costs caused by laws, while informal institutions are intended to reduce the uncertainties involved in human interaction. In addition, North (1990) further argued that informal institutions that are culturally derived may constrain the changes of formal institutions, and vice versa. Thus, the interactions between formal and informal institutions produce outcomes that have important implications for opportunity entrepreneurship and economic growth.

This theoretical framework closely followed Gnyawali and Fogel’s (1994) entrepreneurial framework and North’s (1990, 2005) propositions in order to explore a wider range of formal and informal institutions that moderate the relationship between opportunity entrepreneurship and economic growth (Álvarez et al., 2014). Therefore, government policies and procedures, entrepreneurial and business skills, and financial and non-financial assistance are considered as formal factors, whereas social conditions are considered as informal factors; this is shown in Figure 1. In the same way, economic conditions are related to the economic growth of a specific country, as discussed in the previous section (Álvarez et al., 2014).

The criteria for developing the framework of an entrepreneurial environment were as follows: first, the authors attempted to include a complete set of formal and informal factors that are empirically studied in the existing literature. Second, the interaction between formal and informal institutions was presented in the framework. Finally,

this framework attempted to develop propositions worth pursuing in future empirical studies.

In the government policies and procedures dimension, this study identified six relevant formal institutions: protection of property rights, business freedom, labour freedom, fiscal freedom, openness to trade, and scale of government activity. With regard to the entrepreneurial and business skills dimension, technical and business education, and entrepreneurial training programmes, these can be approached through society's educational capital. As regards financial assistance, access to credit in an economy is discussed in this part. In addition, non-financial assistance is identified through government support for R&D, university-industry collaboration, and modern communications facilities. Finally, social conditions are explained through an entrepreneurs' status in the society, social networks, power distance and level of corruption of a certain country.

### *Government policies and procedures*

Government policies and procedures consist of governmental proceedings that can affect market mechanisms. These policies and procedures can encourage the market to function more efficiently by minimising market barriers and rigid administrative regulations (Gnyawali and Fogel, 1994; Álvarez et al., 2014).

The literature on governmental policies and procedures has highlighted several aspects related to entrepreneurial activity. A variety of empirical studies have established that fewer procedures and regulations in starting a business increases the level of opportunity entrepreneurship (Urbano and Alvarez, 2014; Castaño-Martínez et al., 2015; Chowdhury et al., 2015; Fuentelsaz et al., 2015; Aparacio et al., 2016). Moreover, in a study investigating labour freedom regulations, Fuentelsaz et al. (2015) found that lower restrictions in labour legislation, such as salary determination, working conditions or compensation in case of dismissal, have a positive impact on opportunity entrepreneurs leaving their jobs and searching for higher opportunity costs.

In the same vein, Estrin et al. (2013) made an interesting contribution with regard to the impact of government activity on opportunity entrepreneurship. The authors contended that when government policies become more active in terms of expenditures on social security and welfare schemes, individuals tend to be less motivated and ambitious to exploit opportunities in the market and start a business. They further argued that governments with high expenditure may compete with the private sector for key resources that lead entrepreneurs to be less keen to start a business due to higher costs of finance (i.e., taxes) and human capital, and lack of experience and social networks. Hence, in relation to informal institutions, social networks (e.g., trade fairs, informal loans, associations and clubs) with other entrepreneurs may reduce the negative impact of inefficient government institutions and encourage individuals to exploit opportunities in the market (Estrin et al., 2013; Urbano and Alvarez, 2014). This view was supported by de Clercq et al. (2010), who argued that entrepreneurs tend to be more involved in social networks when there are complex administrative procedures in the context of emerging economies.





## Towards a Theoretical Framework

As discussed earlier, a large public sector is generally associated with higher tax rates (Estrin et al., 2013). However, previous research findings into tax rates have been inconsistent and contradictory. While Carlos Díaz Casero et al. (2013) and Chowdhury et al. (2015) argued that a lower level of tax rates would increase the level of opportunity entrepreneurship, Fuentelsaz et al. (2015) found that more fiscal freedom (i.e., a lower tax level) negatively affects opportunity entrepreneurship. These rather contradictory results may be due to using different datasets to measure entrepreneurship and tax rates. Another possible explanation for this is that higher tax rates would allow the government to invest more in developing education, infrastructure, judicial system or protection of property rights that encourage entrepreneurs to find better opportunities in the market (Chowdhury et al., 2015; Fuentelsaz et al., 2015).

Data from several sources have identified that a higher level of protection of property rights has a positive effect on opportunity entrepreneurship through decreased risk and uncertainty (Estrin et al., 2013; Stenholm et al., 2013; Castaño, et al., 2015; Chowdhury et al., 2015; Fuentelsaz et al., 2015). In particular, Carlos Díaz Casero et al. (2013) contended that the priority for factor- and efficiency-driven economies is to improve the legal structure, safety of property rights and openness to trade. However, Sambharya and Musteen (2014) found little evidence that the latter would stimulate opportunity entrepreneurship. Conversely, Chowdhury et al. (2015) argued that government policies that include increasing the level of foreign direct investment and international trade have a positive effect on entrepreneurs to export and seek opportunities in foreign markets. As a result, this allows entrepreneurs in turn to have better access to knowledge and technologies in foreign markets (Castaño et al., 2015). The above discussion suggests the following hypotheses:

H2: A higher level of protection of property rights, business freedom, labour freedom, fiscal freedom and openness to trade impact positively on the relationship between opportunity entrepreneurship and economic development in the context of GCC countries.

H3: A lower level of government activity impacts positively on the relationship between opportunity entrepreneurship and economic development in the context of GCC countries.

H4: In the case of inefficient formal institutions, a higher level of social networks impact positively on the relationship between opportunity entrepreneurship and economic development in the context of GCC countries.

### *Social conditions*

Social conditions or culture can broadly be defined as social attitudes that encourage entrepreneurial activity and value innovation (Busenitz et al., 2000; Álvarez et al., 2014; Urbano and Alvarez, 2014). It encompasses the general status and attitude of society towards entrepreneurship behaviour, such as close social networks (family, relatives, and spouses) and appreciating successful role models to motivate individuals to start a

new business (Gnyawali and Fogel, 1994; Hayton and Cacciotti, 2013; Stenholm et al., 2013; Álvarez et al., 2014; Urbano and Alvarez, 2014).

A number of studies have postulated a convergence between social conditions and opportunity entrepreneurship. In particular, corruption is an example of social norm that could undermine confidence in institutions required to start a business (Álvarez et al., 2014). In a corrupt environment, individuals are discouraged to take advantage of an entrepreneurial opportunity and start their own business as they suffer from additional costs and time to complete business activities (Estrin et al., 2013; Chowdhury et al., 2015; Aparicio et al., 2016). Therefore, control of corruption is necessary to reduce uncertainty from human interaction and motivate higher levels of opportunity entrepreneurship (Chowdhury et al., 2015; Aparicio et al., 2016). Moreover, there is some evidence to suggest that control of corruption could be associated with an increase in government budget for improving education and training, as well as research and development (R&D). These factors encourage opportunity entrepreneurship in the context of developing countries (Castaño et al., 2015; Aparicio et al., 2016).

With regard to the cultural dimension, findings provided evidence that culture plays a significant role as a moderator factor between entrepreneurship and economic growth. However, results showed that culture is a complex phenomenon that cannot be explained by focussing on cultural values without interaction with other variables, such as institutions and government policies. Moreover, culture should be considered at the regional level (e.g., GCC countries), as previous studies used larger samples that led to uncertain findings (Hayton and Cacciotti, 2013; Liñán and Fernandez-Serrano, 2014). Hence, by analysing data from 43 countries to examine the role of institutional environment on opportunity entrepreneurship, Sambharya and Musteen (2014) found some evidence that a lower power distance encourages opportunity entrepreneurship among other cultural dimensions (i.e., uncertainty avoidance and institutional collectivism).

In the same vein, using the Global Entrepreneurship Monitor (GEM) dataset, some cross-sectional studies on the effect of the normative dimension on entrepreneurship were inconsistent. Stenholm et al. (2013) contended that normative institutional arrangements (measured as high status and media attention) do not have a significant impact on opportunity entrepreneurship. However, other studies concluded that social recognition on entrepreneurial achievements are associated with the rate of entrepreneurial activity in a specific country (Urbano and Alvarez, 2014; Castaño-Martínez et al., 2015). These findings may be somewhat limited by focussing on different samples of developed countries where institutional changes are relatively stable over time. It can thus be suggested that future studies should focus on developing countries by considering longitudinal changes of institutional dimensions over time (Stenholm et al., 2013). Accordingly, we posit the following hypotheses:

H5: A lower level of corruption impacts positively on the relationship between opportunity entrepreneurship and economic development in the context of GCC countries.

## Towards a Theoretical Framework

H6: In the case of lower levels of corruption, a higher level of education and R&D impact positively on the relationship between opportunity entrepreneurship and economic development in the context of GCC countries.

H7: A lower level of power distance impacts positively on the relationship between opportunity entrepreneurship and economic development in the context of GCC countries.

H8: A higher level of social recognition on entrepreneurial achievements impacts positively on the relationship between opportunity entrepreneurship and economic development in the context of GCC countries.

### *Entrepreneurial and business skills*

Several studies have proposed a convergence between education and training with opportunity entrepreneurship (Castaño-Martínez et al., 2015; Chowdhury et al., 2015; Fuentelsaz et al., 2015; Aparicio et al., 2016). Individuals with a higher level of education and business skills have a greater sense of self-confidence, as well as the entrepreneurial skills required to exploit market opportunities and create a new venture (Gnyawali and Fogel, 1994; Castaño-Martínez et al., 2015; Fuentelsaz et al., 2015; Aparicio et al., 2016). Hence, education and training services that focus on entrepreneurial skills are particularly important in developing countries to ensure manpower efficiency and encourage firms to design growth strategies in their businesses (Gnyawali and Fogel, 1994; Carlos Díaz Casero et al., 2013; Castaño-Martínez et al., 2015; Fuentelsaz et al., 2015).

While the previous view was not supported by Stenholm et al. (2013), who argued that cultural-cognitive dimensions of institutional arrangements that focus on opportunity recognition, social networks and business skills are not associated with the rate of opportunity entrepreneurship, other studies found that successful entrepreneurs with a higher educational background are appreciated by society and media attention where they have a positive effect on promoting the entrepreneurial culture (Urbano and Alvarez, 2014; Castaño-Martínez et al., 2015). In addition, Castaño et al. (2015) also found that there is a significant relationship between higher levels of education and less corruption, as discussed in the previous section. This discussion leads us to propose the following hypotheses:

H9: A higher level of education and training impact positively on the relationship between opportunity entrepreneurship and economic development in the context of GCC countries.

H10: In the case of higher levels of education and training, a higher level of social recognition on entrepreneurial achievements impacts positively on the relationship between opportunity entrepreneurship and economic development in the context of GCC countries.

### *Financial and non-financial support to businesses*

Evidence suggests that financial assets is among the most important factors for entrepreneurs to start and grow their businesses (Gnyawali and Fogel, 1994; Castaño-Martínez et al., 2015; Chowdhury et al., 2015; Fuentelsaz et al., 2015; Aparacio et al., 2016). In order to promote entrepreneurship, several studies have shown that policies for increasing access to bank credit should focus on decreasing capital requirements, creating investment companies, promoting low-interest loans and loan guarantee systems for small business financing (Gnyawali and Fogel, 1994; Castaño-Martínez et al., 2015; Fuentelsaz et al., 2015; Aparacio et al., 2016). In particular, access to credit could be a priority for opportunity entrepreneurs with higher growth aspirations to expand their businesses or seek opportunities in foreign markets (Fuentelsaz et al., 2015; Aparacio et al., 2016).

However, the availability of financial resources is limited in the context of developing countries due to the lack of formal financial institutions (Chowdhury et al., 2015). Hence, opportunity entrepreneurs who are associated with higher risk levels rely mainly on social networks and family connections as existing financial institutions are less likely to support their ventures (Chowdhury et al., 2015; Fuentelsaz et al., 2015). Moreover, Carlos Díaz Casero et al. (2013) suggested that the priority for countries in the innovation-driven (developed) stage is to increase credit availability to the private sector. Thus, our hypotheses can be defined as:

H11: A higher level of financial support impacts positively on the relationship between opportunity entrepreneurship and economic development in the context of GCC countries.

H12: In the case of lower levels of financial support, a higher level of social networks impacts positively on the relationship between opportunity entrepreneurship and economic development in the context of GCC countries.

A seminal study in this area is the work of Stenholm et al. (2013) who introduced a new conducive dimension that measures a country's capability of encouraging high impact entrepreneurship (opportunity entrepreneurship). Stenholm et al. (2013) found that availability of venture capital and access to the latest technology and university-industry collaboration is likely to increase opportunity entrepreneurship levels in a country; it does this by providing a fertile environment for new innovations and knowledge-based growth. Others have highlighted the relevance of specific infrastructural elements, such as ICT infrastructure, government R&D policies, and spending on R&D investment by universities that make substantial impact on opportunity entrepreneurship (Gnyawali and Fogel, 1994; Al-Obaidy, 2012; Castaño et al., 2015; Castaño-Martínez et al., 2015). Consequently:

H13: A higher level of R&D spending, ICT infrastructure, university-industry collaboration and technology readiness, impact positively on the relationship between opportunity entrepreneurship and economic development in the context of GCC countries.



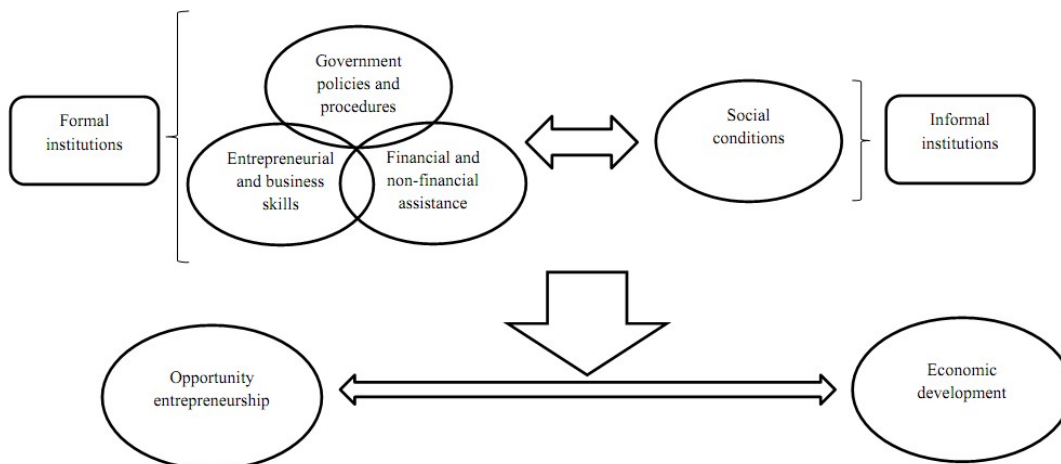
## Towards a Theoretical Framework

### CONCLUSIONS

The aim of this study is to develop a theoretical framework to show that oil-based countries (such as GCC countries) can diversify and sustain their economies towards knowledge-based growth, while appropriate institutions are effective for opportunity entrepreneurship.

This study has found that the relationship between opportunity entrepreneurship and economic development is moderated by different institutional arrangements. In line with previous studies (Al-Obaidy, 2012; Nour, 2014; Al-Roubaie and Al-Ameen, 2015), the second major finding was that GCC countries can diversify and sustain their economies towards knowledge-based growth through higher levels of protection of property rights, business freedom, labour freedom, fiscal freedom, openness to trade, social recognition on entrepreneurial achievements, education and training, financial support, R&D spending, ICT infrastructure, university-industry collaboration, and technology readiness, where these institutions impact positively on opportunity entrepreneurship. The third major finding was that societies with lower levels of government activity, corruption and power distance, have a positive effect on opportunity entrepreneurship. Finally, this study has shown an interaction between formal and informal institutions where higher levels of social networks exist when formal institutions are not efficient in supporting opportunity entrepreneurship.

These previous findings are consistent with the Global Competitiveness Report (2016), which indicated that the most problematic factors for doing business in the context of GCC countries are inefficient government bureaucracy, restrictive labour regulations, corruption, poor work ethics in the national labour force, an inadequately educated workforce, inadequate supply of infrastructure, access to financing and insufficient capacity to innovate (Schwab and Sala-i-Martin, 2016).



**Figure 1:** A developed framework for entrepreneurial environment

Source: Gnyawali and Fogel, 1994; North, 1990, 2005; author's own work

Our study makes several contributions to the field of entrepreneurship and institutional economics. First, our results complement previous studies emphasising the important relationship between opportunity entrepreneurship, institutions and economic development. Second, we extend Gnyawali and Fogel's (1994) framework by making a clear distinction between formal and informal institutions. This distinction is important because each dimension impacts opportunity entrepreneurship in a different way. Third, this study adopts a more holistic approach by providing new empirical insights into the environmental factors that affect opportunity entrepreneurship in the light of institutional economics. Finally, the study could be useful for the design of policies that encourage opportunity entrepreneurship in the context of oil-based economies by considering the relevance of formal and informal institutions in the creation of new ventures.

## REFERENCES

- Acemoglu, D. and Robinson, J. (2012): *Why nations fail: The origins of power, prosperity, and poverty*. Crown Business, New York.
- Acemoglu, D., Gallego, F. and Robinson, J.A. (2014): Institutions, human capital and development, *Annual Review of Economics*, Vol. 6, No. 1, pp. 875-912.
- Acs, Z.J. and Szerb, L. (2010): *Global entrepreneurship and the United States*. *Small Business Administration*, Washington DC.
- Acs, Z.J., Audretsch, D.B., Braunerhjelm, P. and Carlsson, B. (2012): Growth and entrepreneurship. *Small Business Economics*, Vol. 39, No. 2, pp. 289-300.
- Acs, Z.J., Szerb, L., and Autio, E. (2014a): *The global entrepreneurship and development index*. In *Global Entrepreneurship and Development Index 2014*. The Global Entrepreneurship and Development Institute, Washington, D.C., USA.
- Ács, Z.J., Autio, E. and Szerb, L. (2014b): National systems of entrepreneurship: Measurement issues and policy implications. *Research Policy*, Vol. 43, No. 3, pp. 476-494.
- Acs, Z.J., Szerb, L., and Autio, E. (2017): The global entrepreneurship and development index. In *Global Entrepreneurship and Development Index 2017*. The Global Entrepreneurship and Development Institute, Washington, D.C., USA.
- Ahlstrom, D. and Ding, Z. (2014): Entrepreneurship in China: An overview. *International Small Business Journal*, Vol. 32, No. 6, pp. 610-618.
- Al-Obaidy, H. (2012): Development alternative: building capacity for a knowledge-based economy in Bahrain. *International Journal of Innovation and Knowledge Management in Middle East and North Africa*, Vol. 1, No. 1, pp. 57-79.
- Al-Roubaie, A. (2013): Building knowledge capacity for sustainable development in the Arab World. *International Journal of Innovation and Knowledge Management in the*

## Towards a Theoretical Framework

*Middle East and North Africa*, Vol. 2, No. 1, pp. 7-20.

- Al-Roubaie, A. and Al-Ameen, A. (2015): Trade and knowledge creation in GCC Countries: the case for sustainable development. *International Journal of Innovation and Knowledge Management in the Middle East and North Africa*, Vol. 4, No. 1, pp. 1-13.
- Álvarez, C., Urbano, D. and Amorós, J.E. (2014): GEM research: achievements and challenges. *Small Business Economics*, Vol. 42, No. 3, pp. 445-465.
- Aparicio, S., Urbano, D. and Audretsch, D. (2016): Institutional factors, opportunity entrepreneurship and economic growth: Panel data evidence. *Technological Forecasting and Social Change*, Vol. 102, No. C, pp. 45-61.
- Arshed, N., Carter, S. and Mason, C. (2014): The ineffectiveness of entrepreneurship policy: is policy formulation to blame? *Small Business Economics*, Vol. 43, No. 3, pp. 639-659.
- Audretsch, D.B. (2007): Entrepreneurship capital and economic growth. *Oxford Review of Economic Policy*, Vol. 23, No. 1, pp. 63-78.
- Audretsch, D.B. and Keilbach, M. (2004a): Does entrepreneurship capital matter?. *Entrepreneurship Theory and Practice*, Vol. 28, No. 5, pp. 419-429.
- Audretsch, D.B. and Keilbach, M. (2004b): Entrepreneurship capital and economic performance. *Regional studies*, Vol. 38, No. 8, pp. 949-959.
- Audretsch, D.B. and Keilbach, M. (2005): Entrepreneurship capital and regional growth. *The Annals of Regional Science*, Vol. 39, No. 3, pp. 457-469.
- Audretsch, D.B. and Keilbach, M. (2007): The localization of entrepreneurship capital: Evidence from Germany. *Papers in Regional Science*, Vol. 86, No. 3, pp. 351-365.
- Audretsch, D.B. and Keilbach, M. (2008): Resolving the knowledge paradox: Knowledge-spillover entrepreneurship and economic growth. *Research Policy*, Vol. 37, No. 10, pp. 1697-1705.
- Avanzini, D.B. (2011): Designing Composite Entrepreneurship Indicators. In *Entrepreneurship and Economic Development*, pp. 37-93. Palgrave Macmillan, UK.
- Ayyagari, M., Demirguc-Kunt, A. and Maksimovic, V. (2014): Who creates jobs in developing countries? *Small Business Economics*, Vol. 43, No. 1, pp. 75-99.
- Baumol, W.J. (1990): Entrepreneurship: Productive, Unproductive, and Destructive. *Journal of Political Economy*, Vol. 98, No. 5, pp.893-921.
- Bjørnskov, C. and Foss, N. (2013): How strategic entrepreneurship and the institutional context drive economic growth. *Strategic Entrepreneurship Journal*, Vol. 7, No. 1, pp. 50-69.
- Bruton, G.D., Ahlstrom, D. and Obloj, K. (2008): Entrepreneurship in emerging

- economies: Where are we today and where should the research go in the future. *Entrepreneurship theory and practice*, Vol. 32, No. 1, pp. 1-14.
- Busenitz, L.W., Gomez, C. and Spencer, J.W. (2000): Country institutional profiles: Unlocking entrepreneurial phenomena. *Academy of Management Journal*, Vol. 43, No. 5, pp. 994-1003.
- Callen, M.T., Cherif, R., Hasanov, F., Hegazy, M.A. and Khandelwal, P. (2014): *Economic diversification in the GCC: Past, present, and future*. International Monetary Fund, Kuwait City, Kuwait.
- Carlos Díaz Casero, J., Almodóvar González, M., de la Cruz Sánchez Escobedo, M., Coduras Martínez, A. and Hernández Mogollón, R. (2013): Institutional variables, entrepreneurial activity and economic development. *Management Decision*, Vol. 51, No. 2, pp. 281-305.
- Carlsson, B., Braunerhjelm, P., McKelvey, M., Olofsson, C., Persson, L. and Ylinenpää, H. (2013): The evolving domain of entrepreneurship research. *Small Business Economics*, Vol. 41, No. 4, pp. 913-930.
- Castaño, M.S., Méndez, M.T. and Galindo, M.Á. (2015): The effect of social, cultural, and economic factors on entrepreneurship. *Journal of Business Research*, Vol. 68, No. 7, pp. 1496-1500.
- Castaño-Martínez, M.S., Méndez-Picazo, M.T. and Galindo-Martín, M.Á. (2015): Policies to promote entrepreneurial activity and economic performance. *Management Decision*, Vol. 53, No. 9, pp. 2073-2087.
- Chowdhury, F., Terjesen, S. and Audretsch, D. (2015): Varieties of entrepreneurship: institutional drivers across entrepreneurial activity and country. *European Journal of Law and Economics*, Vol. 40, No. 1, pp. 121-148.
- Dang, G. and Pheng, L.S. (2015): Theories of economic development. In Dang, G. and Pheng, L.S. (Eds): *Infrastructure Investments in Developing Economies*, pp. 11-26. Springer Singapore.
- Davis, T. (2008): Understanding entrepreneurship: Developing indicators for international comparisons and assessments. In Davis, T. (Ed.): *Measuring entrepreneurship*, pp. 39-63. Springer US.
- De Clercq, D., Danis, W.M. and Dakhli, M. (2010): The moderating effect of institutional context on the relationship between associational activity and new business activity in emerging economies. *International Business Review*, Vol. 19, No. 1, pp. 85-101.
- Dennis Jr, W.J. (2011): Entrepreneurship, small business and public policy levers. *Journal of Small Business Management*, Vol. 49, No. 1, pp. 92-106.
- Estrin, S., Korosteleva, J. and Mickiewicz, T. (2013): Which institutions encourage entrepreneurial growth aspirations? *Journal of Business Venturing*, Vol. 28, No. 4,



## Towards a Theoretical Framework

pp. 564-580.

- Fuentelsaz, L., González, C., Maícas, J.P. and Montero, J. (2015): How different formal institutions affect opportunity and necessity entrepreneurship. *BRQ Business Research Quarterly*, Vol. 18, No. 4, pp. 246-258.
- Galindo, M.Á. and Méndez, M.T. (2014): Entrepreneurship, economic growth, and innovation: Are feedback effects at work? *Journal of Business Research*, Vol. 67, No. 5, pp. 825-829.
- Gnyawali, D.R. and Fogel, D.S. (1994): Environments for entrepreneurship development: key dimensions and research implications. *Entrepreneurship theory and practice*, Vol. 18, No. 4, pp. 43-43.
- Hart, D. (2003): Entrepreneurship policy: What it is and where it came from. In, Hart, D.M. (Ed.): *The emergence of entrepreneurship policy: governance, start-ups and growth in the US knowledge economy*, Cambridge University Press, pp. 3-19.
- Hayton, J.C. and Cacciotti, G. (2013): Is there an entrepreneurial culture? A review of empirical research. *Entrepreneurship & Regional Development*, Vol. 25, Nos 9-10, pp. 708-731.
- Leibenstein, H. (1968): Entrepreneurship and development. *The American Economic Review*, Vol. 58, No. 2, pp. 72-83.
- Liñán, F. and Fernandez-Serrano, J. (2014): National culture, entrepreneurship and economic development: different patterns across the European Union. *Small Business Economics*, Vol. 42, No. 4, pp. 685-701.
- Mason, C. and Brown, R. (2013): Creating good public policy to support high-growth firms. *Small Business Economics*, Vol. 40, No. 2, pp. 211-225.
- Méndez-Picazo, M.T., Galindo-Martín, M.Á. and Ribeiro-Soriano, D. (2012): Governance, entrepreneurship and economic growth. *Entrepreneurship & Regional Development*, Vol. 24, Nos 9-10, pp. 865-877.
- Minniti, M. and Lévesque, M. (2010): Entrepreneurial types and economic growth. *Journal of Business Venturing*, Vol. 25, No. 3, pp. 305-314.
- Naudé, W. (2010): Entrepreneurship, developing countries, and development economics: new approaches and insights. *Small business economics*, Vol. 34, No. 1, pp. 1-12.
- Naudé, W. (2011): Entrepreneurship and Economic Development: An Introduction. In Naudé, W. (Ed.): *Entrepreneurship and Economic Development*, Palgrave Macmillan UK, pp. 3-17.
- North, D.C. (1990): *Institutions, institutional change and economic performance*. Cambridge University Press, New York.
- North, D.C. (2005): *Understanding the process of institutional change*. Princeton, NJ:

Princeton University Press.

- Noseleit, F. (2013): Entrepreneurship, structural change, and economic growth. *Journal of Evolutionary Economics*, Vol. 23, No. 4, pp. 735-766.
- Nour, S. (2014): Transition to a knowledge-based economy in the Arab region. *International Journal of Innovation and Knowledge Management in the Middle East and North Africa*, Vol. 3, No. 2, pp. 125-145.
- Porter, M.E. (2001): Enhancing the microeconomic foundations of prosperity: the current competitiveness index. *The Global Competitiveness Report, 2001-2002*.
- Porter, M., Sachs, J. and McArthur, J. (2001): Executive summary: Competitiveness and stages of economic development. *The global competitiveness report, 2002*, pp. 16-25.
- Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., Lopez-Garcia, P. and Chin, N. (2005): Global entrepreneurship monitor: Data collection design and implementation 1998-2003. *Small business economics*, Vol. 24, No. 3, pp. 205-231.
- Romer, P. (1989): Endogenous technological change, *Journal of Political Economy*, Vol. 98, No. 5, part 2, pp. S71-S102.
- Sachs, J.D. and Warner, A.M. (1995): *Natural resource abundance and economic growth* (No. w5398). National Bureau of Economic Research.
- Sambharya, R. and Musteen, M. (2014): Institutional environment and entrepreneurship: An empirical study across countries. *Journal of International Entrepreneurship*, Vol. 12, No. 4, pp. 314-330.
- Sautet, F. (2013): Local and systemic entrepreneurship: Solving the puzzle of entrepreneurship and economic development. *Entrepreneurship Theory and Practice*, Vol. 37, No. 2, pp. 387-402.
- Schumpeter, J.A. (1942): *Socialism, capitalism and democracy*. Harper and Brothers, New York.
- Schwab, K. and Sala-i-Martin, X. (2013): *Insight Report: The Global Competitiveness Report 2013-2014*. Geneva, World Economic Forum, .
- Schwab, K. and Sala-i-Martin, X. (2016): *Insight Report: The Global Competitiveness Report 2016-2017*. Geneva, World Economic Forum, Geneva.
- Smallbone, D., Welter, F. and Ateljevic, J. (2013): Entrepreneurship in emerging market economies: Contemporary issues and perspectives. *International Small Business Journal*, Vol. 32, No. 2, pp. 113-116.
- Smith, A. (2003): *The wealth of nations*, Bantam Classics, New York.
- Solow, R.M. (1956): A contribution to the theory of economic growth. *The Quarterly Journal of Economics*, Vol. 70, No. 1, pp. 65-94.

## Towards a Theoretical Framework

- Stenholm, P., Acs, Z.J. and Wuebker, R. (2013): Exploring country-level institutional arrangements on the rate and type of entrepreneurial activity. *Journal of Business Venturing*, Vol. 28, No. 1, pp. 176-193.
- Urbano, D. and Alvarez, C. (2014): Institutional dimensions and entrepreneurial activity: An international study. *Small Business Economics*, Vol. 42, No. 4, pp. 703-716.
- Valliere, D. and Peterson, R. (2009): Entrepreneurship and economic growth: Evidence from emerging and developed countries. *Entrepreneurship & Regional Development*, Vol. 21, Nos 5-6, pp. 459-480.
- Van Praag, C.M. and Versloot, P.H. (2007): What is the value of entrepreneurship? A review of recent research. *Small business economics*, Vol. 29, No. 4, pp. 351-382.
- Wennekers, S., Van Wennekers, A., Thurik, R. and Reynolds, P. (2005): Nascent entrepreneurship and the level of economic development. *Small business economics*, Vol. 24, No. 3, pp. 293-309.
- Wong, P.K., Ho, Y.P. and Autio, E. (2005): Entrepreneurship, innovation and economic growth: Evidence from GEM data. *Small Business Economics*, Vol. 24, No. 3, pp. 335-350.
- World Bank (2007): *Building Knowledge Economies Advanced Strategies for Development*. WBI Development Studies. Washington, DC World Bank.
- 

## BIOGRAPHIES

**Hasan Ghura** is a business instructor at Box Hill College, Kuwait. He attained his early education and high school studies in Kuwait, then moved to the United Arab Emirates and gained a Bachelor degree in Business Administration from the University Of Sharjah in 2004. After that, he gained his MBA degree from Kuwait Maastricht Business School in 2011. Currently, he is a PhD student at Brunel Business School, Brunel University London. His research is focused on the link between entrepreneurship, institutions and economic growth.

**Dr. Xiaoqing Li** is a Lecturer in Strategy and Entrepreneurship at Brunel Business School, Brunel University London. She gained her PhD in Management from Royal Holloway, University of London, and an MBA in International Business from the University of Birmingham. She previously worked as a Senior Lecturer in Strategic Management and International Business at the Newcastle Business School, Northumbria University.