Motivating Entrepreneurial Activity in the MENA Region: Do Human Capital and Corruption Matter?

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Abstract

Since the time of Schumpeter, entrepreneurship has been strongly associated with positive economic development. His primary contribution stems from his core theory that ‘entrepreneurship is the engine of national economic growth’. But not all entrepreneurship creates a positive impact on the economy. Thus, it is important to develop a deep understanding of the business climate that leads entrepreneurial activity to foster economic growth. This article delves into the role of human capital (HC) and corruption (CPI) in developing the type of entrepreneurial climate that leads to economic growth. Using data gathered from the Global Entrepreneurship Monitor (GEM), the World Bank and various NGO data sites, this article conducts an empirical investigation of the impact of human capital (HC) and corruption (CPI) on the overall level of the total entrepreneurial activity (TEA) and follows this by further studying the impact of these antecedent factors on the disaggregated levels of total entrepreneurial activity; opportunity-motivated entrepreneurial activity (OME) and necessity-motivated entrepreneurial activity (NME).

1. Introduction

Entrepreneurship is widely seen as a core component to national- and regional-level economic growth. Both theoretically and empirically, increasing levels of entrepreneurial activity in a nation is seen as an antecedent to core economic development, spillover activity and overall job creation. Schumpeter in 1939) established what is still widely seen as the core theory on connecting entrepreneurship and the economy and stated that entrepreneurship is the engine of national economic growth. Further, he provided evidence that innovation is what determines the value...
of entrepreneurship to economic society. In later studies, Porter (1990) agreed stating that ‘entrepreneurship is at the heart of national advantage’ [3].

The economic, social and political value of entrepreneurial activity cannot be overstated. In developed economies, entrepreneurship, driven by the high-tech sector, helps bring new technologies to market, provides efficiencies through innovation and increases the opportunities for job growth. Developing countries have also seen significant impacts in the form of substantial poverty reduction and increased standards of living – all owing to the rise of innovative and entrepreneurial activities and the emergence of new ventures.

However, it is not simply entrepreneurship in general that drives economic growth. Research suggests that the type of entrepreneurial activity plays a deciding role in how entrepreneurial activity impacts an economy. Entrepreneurial activity (measured in total) tends to behave differently in developed economies verses developing economies, and research has indicated that studies incorporating only the level of total entrepreneurial activity can be misleading. Total entrepreneurial activity, as defined by the Global Entrepreneurship Monitor (GEM) is comprised of two primary components: opportunity-motivated entrepreneurial activity (OME) and necessity-motivated entrepreneurial activity (NME). Research indicates that these disaggregated components will behave differently in developed verses developing economies and that the level of total activity is not accurately reflected by either component. Further, the level of overall economic development of a nation impacts how these components influence economic growth.

The preponderance of research on the impact of entrepreneurial activity indicates a clear relationship with economic activity. However, what is less understood are the antecedents that lead to a thriving entrepreneurial environment. The entrepreneurial environment that fosters economic growth of a nation is complex, incorporating economic, social and political factors. Existing research into entrepreneurship largely is focused on the relationship between entrepreneurial activity and economic growth, but research into the factors involved in developing the climate to encourage that a thriving entrepreneurial activity is largely lacking. This study attempts to fill that gap. More specifically, the study attempts to address the following four research questions: (1) What is the relationship between human capital and entrepreneurship: specifically, How does human capital influence TEA, OME and NME; (2) What is the relationship between corruption and entrepreneurship: specifically, How does corruption influence TEA, OME and NME?; (3) Does the existing economic status of a nation (developed/developing) influence the relationship between human capital and
entrepreneurship?; and (4) Does the existing economic status of a nation (developed/developing) influence the relationship between corruption and entrepreneurship?

To facilitate investigation into these questions, our empirical analysis uses data from several sources including (1) the GEM, (2) the United Nations Development Program (UNDP) and (3) Transparency International (TI). From the GEM model, we utilize TEA, OME and NME. The key features of the GEM model are data that are completely harmonized across time and nations to allow for cross national study comparison. Additionally, these data are widely used by entrepreneurship scholars. The TEA measures the proportion of working-age adults in the population who are either involved in the process of starting up a business or are active as owner-managers of enterprises less than 42-months old. The OME rate and the NME rate are the two subcomponents of TEA. From the UNDP, we utilize measures for human capital (specifically from the Human Development Index (HDI)). Finally, from TI, we utilize the CPI index as a measure of perceived national-level corruption.

This study makes several important contributions to the field. First, the research provides a deeper understanding to the relationship between human capital and the type(s) of entrepreneurial activity and their respective impacts on economic development. Second, this study contributes to the literature by providing a deeper understanding to the relationship between corruption and the type(s) of entrepreneurial activity that lead to increased economic development. Third, this study contributes to the literature by shedding light on how the economic status of a nation may moderate the relationship between human capital and entrepreneurship. Fourth, this study contributes to the literature by identifying how the economic status of a nation may moderate the relationship between corruption and entrepreneurship. Finally, the study offers some policy implications aimed at directing investment toward the types of entrepreneurial activity that fosters economic growth.

The remainder of this article is organized as follows: the first section provides the foundational theories on which we build our conceptual argument regarding the relationships among human capital, corruption, and entrepreneurial activity. The second section presents literature review and hypothesis development. The third section details the methodology used in hypotheses testing. The fourth section presents the findings and discusses the overall results. The final section provides a conclusion and possible implications of this research.
2. Foundational Theories

2.1. Entrepreneurship

Much of the theoretical work surrounding entrepreneurship is founded on the principles of evolutionary economics, primarily that from Schumpeter (1934, 1939). The entrepreneur for Schumpeter is driven internally by the ‘joy’ of innovating. In what Schumpeter himself considered his seminal work, ‘The theory of economic development: an inquiry into profits, capital, credit, interest, and the business cycle’ (Schumpeter, 1934, 1962), he develops his ideas of evolutionary economics and the business cycle, which he begins with his ‘treatise of circular flow’. The core of circular flow is that without innovation, the economy remains at a stationary state. It is only the entrepreneur (innovator) who upsets the stationary state with what Schumpeter famously termed ‘creative destruction’. Creative destruction not only upsets the stationary economic state, it also drives the marketplace. Schumpeter describes creative destruction as innovation that creates temporary monopolies that allow for abnormal temporary profits, which would be competed away by competitors and imitators. It is these temporary monopolies that create the necessary incentive for firms to develop new products (Pol, 2006).

3. Literature Review and Hypothesis Development

3.1. Entrepreneurship

Entrepreneurship has been widely acknowledged as an engine of economic growth. In the literature, entrepreneurship is considered as a multidimensional concept and is often discussed under various labels such as the entrepreneurial function, which refers to the discovery, evaluation and exploitation of opportunities or to the creation of enterprise and entrepreneurial behavior, which is viewed as a behavior that manifests the combination of innovation, risk-taking and proactive characteristics. In other words, entrepreneurial behavior combines the classic theories of Schumpeter’s innovative entrepreneur (1934, 1942), the risk-taking entrepreneur that occupies a position of uncertainty as proposed by Knight in 1921, and the entrepreneur with initiative and imagination who creates new opportunities. Others refer to the notion of entrepreneurship as ‘a process by which individuals – either on their own or within organizations – pursue opportunities’ [2]. Entrepreneurship is the manifest ability and willingness of individuals to recognize and create new economic opportunities (e.g.,
new products and services, new process, etc.) and to introduce their creative ideas to the marketplace.

Research on entrepreneurship comes from various disciplines including economics. In economic theory, entrepreneurship has been viewed as an occupational choice between self-employment and wage-employment. Self-employment has been one of the most commonly used indicators of entrepreneurship in contemporary research and is thus often synonymous with the concept of self-employment. According to Le, self-employment refers to those individuals who perform work for profit or family gain, in cash or in kind. Several reasons are noted for the motivation of self-employment. For example, researchers connect the motives to unemployment. The two effects of unemployment on self-employment are called the refugee effect and the entrepreneurial effect. The refugee effect is the case when an individual is pushed into self-employment because all other options for work are either absent or unsatisfactory. The entrepreneurial effect is a situation in which, an individual chooses to pursue self-employment in order to exploit a perceived business opportunity. In the literature, the push–pull theory underlies the concept of necessity and opportunity entrepreneurship, the Schumpeterian/pull effect and the refugee/push effect hypotheses, and provides the basic understanding of the relationship between entrepreneurship and a nation’s economic development.

According to the entrepreneurship literature, the GEM has focused on necessity (push) and opportunity (pull) types of entrepreneurship and their link to a nation’s economic development. The GEM project has paved the way to better understand the complex nature of entrepreneurs’ motivations and their effect on economic growth. The ensuing discussion presents a brief discourse of the demarcation between these two types of entrepreneurial motivations.

The distinction between opportunity- and necessity-based entrepreneurs could also be interpreted as the separation between self-employed and high-growth entrepreneurship. Necessity-(push-)motivated entrepreneurs (NME) are those who are pushed/forced to go entrepreneurial for reasons such as poverty and lack of employment opportunities. In terms of push motivation, Oxenfeldt was one of the first to argue that unemployed individuals or individuals with low prospects for wage-employment may become self-employed to earn a living. Starting a business is not a prime motivation of these people until they have exhausted other options. Furthermore, these entrepreneurs are assumed to have little ambition for growing their businesses. In order to survive over poverty and/or unemployment, they are forced
to be entrepreneurs. They might be directed to try considering the self-employment option and be entrepreneurs as an alternative to the current life circumstances.

Opportunity-motivated entrepreneurs, on the other hand, are those who desire to pursue entrepreneurial path in order to exploit some identifiable business opportunities (such as an innovative business idea or an existing network to exploit). It seems obvious that opportunity-motivated entrepreneurs are attracted to self-employment with the intention to explore and exploit business opportunities; therefore, they are more likely to set up a new venture. On the other hand, necessity-motivated entrepreneurs are often driven into self-employment when they become unemployed. The literature suggests that necessity-driven entrepreneurial activities are commonly observed to occur in the traditional (and informal) sectors, whereas opportunity-driven entrepreneurial activities occur in the modern sectors [4]. Extant literature points out that the relationship between the economic development level and the entrepreneurial activity rate has received considerable attention. However, the attempts to explain the differences in the level of entrepreneurial rate between countries have not been unsuccessful. Furthermore, the entrepreneur’s motivations vary depending on the economic development of a nation.

3.2. Corruption

Given the potential foundational impacts of entrepreneurial activity on national economic performance, the relationship between corruption and entrepreneurial activity is particularly salient. However, as pointed out clearly by Anokhin and Schulze in 2009, investigations into the relationship between corruption and entrepreneurial activity are scant at best.

Tonoyan, Strohmeyer, Habib and Perlitz in 2010 investigated the role of national institutions on the entrepreneur’s decision to engage in corrupt economic activities – specifically to pay bribes. They focused on both formal and informal institutions and argued that poor enforcement and low efficiency of economic and legal institutions provided impetus to the entrepreneur to engage in corruption. Regarding formal institutions, they found that inefficient financial institutions, inefficient legal institutions with poor enforcement and a lack of legal alternatives to bribery increased the likelihood that an entrepreneur would offer a bribe. Regarding informal institutions, they found both a lack of business ethics, and close-knit personal networks increased the likelihood for entrepreneurial corruption.
Building on the concept that corruption can ‘grease the wheels’ of an economy, Dreher and Gassebner investigated the impact of corruption on entrepreneurial activity, specifically on market entry [5]. First, they found that the larger the number of procedures required for entry and the higher the minimum capital requirements, the more they were detrimental to entrepreneurial activity. They also found, however, that when the number of procedures for initiating a business were high, corruption (bribe paying) facilitated new firm entry. Thus, their work provides some support for the ‘greasing the wheels’ hypothesis for entrepreneurial activity.

These results are largely supported by additional research by Dreher and Gassebner [5] and Aidis, Estrin and Mickiewicz who explored the country-level institutional characteristics that were likely to influence entrepreneurial activity, specifically new entry. Additional support can be found in Anokhin and Schulze, whose findings confirm a positive curvilinear relationship between the control of corruption and entrepreneurial activity as indicated by GEM’s TEA data.

3.3. Human capital

The theory of human capital can be traced back to John Stuart Mill and Alfred Marshall, both of whom conceptualized the idea of labor productivity being a result of the capital required to develop it [6]. However, it was the more recent work of Mincer [7], Schultz [8] and Becker [9], who are largely credited with developing human capital as a field of inquiry.

Mincer developed an empirical model expressly designed to measure the economic impacts of training [7]. He found that the economic gains that were sacrificed for years invested in training were compensated with higher lifetime earnings. Basically, he saw that time spent in training was indeed an investment with a lifetime economic benefit.

Schultz [8] agreed with Mincer [7] and introduced the idea that education was a form of capital. He posed that the useful skills and knowledge acquired by people was a form of capital and that this capital ‘was a product of deliberate investment’ [8]. Schultz also noted that expenditures were either consumed or invested – which reflected the thinking of Pigou [10], who was the first to use the term ‘human capital’. Schultz further extended the current thinking by posing that a higher allocation of expenditures to investment (as opposed to consumption) would produce a greater rate of return [8]. He found that ‘the income of the US had increased at a higher rate than the combined amount of land, man-hours worked, and the stock of reproducible capital used to produce the income’. With this, he challenged economists to find the
reason for this seeming inequality. This challenge thus became the foundation for the theory of human capital.

Following Schultz, Becker in 1964 studied the lifetime economic benefits of a college education when compared with a high school education. His initial work on human capital found that ‘direct’ returns did not justify increased expenditure in education \[11\]. However, his later work \[9\] showed evidence to the contrary. In 1975, Becker developed the idea of separating human capital investment into two distinct studies: (1) general-purpose human capital investment and (2) firm-specific human capital investment \[12\]. The former – general purpose – is generally applicable across the industry. It increases the marginal productivity of the individual by increasing the value of the individual to the industry firms. Thus, the firm paying the highest wage will thus attract the best talent. The latter type of investment – firm-specific – is not generally applicable across the industry. It increases the marginal productivity within a firm without increasing the marginal productivity to other firms. Thus, the firm bears the cost for specific training \[9\].

Becker’s idea of different types of training confirms the earlier work of Mincer \[7\], who presented the idea that inter-occupational wage differentials were a result of training (general purpose), while intra-occupational wage differentials were a result of experience on the job (specific; \[7\]).

Through the work of Mincer, Schultz and Becker, two central themes emerged that ultimately resulted in creating human capital as a field of inquiry: (1) that economic growth could not be fully accounted for by conventional economic measurement and (2) that increased levels of education seemed to account for increased personal income \[6\].

Subsequent to the foundational work, the importance of human capital investment to national economic growth is supported by various empirical research. The effects of total investment in human capital are directly related to increased GDP in developing nations \[13\] and in developed nations \[14\]. Further, empirical research supports economic growth from both formal education systems and informal training system \[3, 15, 16\].

3.4. The moderating effect of corruption

Mauro investigated the causes and effects of corruption on economic growth, foreign investment and government expenditures \[17\]. His study focused on (1) the causes and
consequences of corruption and (2) the relationship between corruption and govern-
ment expenditure. The study found corruption to have ‘considerable, adverse effects on economic performance’. Further, and more to the point of this present work, that corruption is found to lower investment and economic growth and to reduce the share of government spending on education.

To further support his previous work, Mauro studied the composition of government expenditure in light of corruption [18]. The primary research question was ‘whether predatory behavior by corrupt politicians distorts the composition of government spending’. There were three primary results: (1) corruption was found to alter the composition of government spending by directing public funds to those public projects on which it was easier to levy larger bribes and keep them secret; (2) that spending on education was found to be adversely affected by corruption; and (3) Mauro tested the direction of causality and found evidence to support a causal link from corruption to reduced spending on education. Finally, the relationship between corruption and reduced spending on education remained consistent when testing either developed or developing countries.

Delavallade examined the impact of corruption on the structure of government spending by sector [19]. Her study found similar results to Mauro [18, 20] that corruption distorts the structure of public spending by increasing funds toward those projects that provide greater opportunity for bribes, such as fuel, energy and defense, and decreasing funds toward ‘social expenditure’ such as education.

4. Methodology

To test research hypotheses, we gathered data from several sources. All data are aver-
aged over the 6-year period from 2005–2010. Following the reasoning from Voyer and Beamish [21], taking the average over several years tends to account for fluctuations in the yearly data and reduces potential impacts of single-year abnormalities. For this study, we excluded those developing countries with incomplete data, resulting in a sample size of 60 countries (see Appendix).

4.1. Measurement of the variables

In our study, we use Entrepreneurial Activity (TEA, OME, NME) as our primary depen-
dent variables, against which we regress the independent variables: (1) human capital
and (2) corruption, (3) Human capital x Corruption, and (4) control variables (unemployment, labor growth rate, population (log), GDP/Capita, government consumption as a percentage of GDP, economic freedom (i.e., open markets, limited government, regulatory efficiency, etc.).

4.1.1. Research variables

We use TEA, OME and NME as our dependent variable(s).

4.1.2. Independent variables

Human Capital Investment: Based on the existing research on human capital investment and the impact on economic growth, we measure human capital using both the level of education and government spending on education [22]. To reflect the level of education, we utilize the education index (EI) produced as part of the HDI from the UNDP. We use the 6-year average (2005–2010). To reflect the level of government spending on education, we use government spending on education as a percent of total government spending. These data were obtained from the World Bank and averaged over the 6-year period (2005-2010 inclusive). By using the 6-year average for both variables, we remove the impact of single-year abnormalities and create a variable more indicative of a county’s investment in human capital. We used factor analysis on two variables to create a multidimensional construct to reflect human capital investment. Factor analysis produced a single factor with eigenvalue greater than 1. We labeled this factor as human capital investment.

Corruption: In this study, data for measuring corruption were gathered from TI’s Corruption Perception Index (CPI). The CPI index is one of the most widely known and widely used measures of perceived national corruption [21, 23, 24]. The CPI index ranges from 0 (zero) to 100, with 100 indicating the lowest levels of corruption (or highly transparent country) and 0 indicating the highest levels of corruption (or least transparent country). In the current study, the CPI index represents the 6-year (2005–2010) average. This approach is supported by previous studies [21, 23, 25].

4.1.3. Control variables

Labor Growth Rate: We follow Peng and Beamish [26] in controlling for the growth in labor availability as research has shown that as the availability of cost-effective labor
decreases, labor costs increase. Thus, a key factor in attracting resource-seeking FDI is the availability of competitive labor [25, 27].

Unemployment: We control for the unemployment rate. Research indicates that FDI stimulates employment at a national level by both MNEs and SMEs [23, 26, 28]. Further, empirical evidence suggests that lifelong learning provides a shield against unemployment [29].

Population: Regarding labor availability, a nation’s population is also a factor in attracting investment. We, thus, follow [30, 31] in controlling for national-level population.

GDP per capita: We followed Habib and Zurawicki’s [23] and Peng and Beamish’s [26] research in controlling for GDP, which has been shown to be an important explanatory variable in determining the amount of inward FDI [32–34].

Government consumption as a percentage of GDP: We control for host government consumption following Voyer and Beamish [21], who indicated that market-seeking FDI may be influenced by the degree of government consumption. Additionally, studies have indicated that the degree of inward FDI can be influenced by the size of the host government’s economy [25, 33].

Economic Freedom: We control for economic freedom since the level of economic freedom has been found to be a contributing factor for both economic growth [35] and inward FDI [36]. While several indices of economic freedom exist, we relied on economic freedom data from the Heritage Foundation’s Index of Economic Freedom. However, while a single aggregate index of economic freedom has been used empirically in many studies as a measure of economic freedom in a nation, recent studies reveal that a single aggregate index may not be appropriate for operationalizing the measure [37–39]. Thus, for our study, we sought to remove the concerns associated with using a single aggregate variable. After removing freedom-from-corruption from the list of 10 economic variables gathered from the Heritage Foundation, we ran exploratory factor analysis to determine sub-indices for the remaining 9 variables. We control for economic freedom by grouping the remaining 9 variables into the 3 categories indicated by exploratory factor analysis. These three sub-indices are: (a) Open Markets comprised of trade freedom, investment freedom and financial freedom; (b) Limited Government comprised of fiscal freedom and government spending; and (c) Regulatory Efficiency comprised of business freedom, labor freedom, monetary freedom and property rights freedom. This is consistent with the methodology used by the Heritage Foundation.
Paper Development

This article is being developed using data from the GEM, the UNDP, Ti, and various other NGO’s. The goals of the article are to extend existing literature on the relationships between entrepreneurship and the antecedents human capital, and corruption. The cross-sectional empirical tests (using multiple linear regression techniques) will be completed in the month of August 2017, with the results reported in September 2017. Completion of the article including analysis and implications will come in October 2017 and will be presented at the International Applied Research Symposium at USEK (Lebanon) in November 2017.

References


