



An empirical investigation of entrepreneurial environment in Sudan

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Abstract

Purpose – The purpose of this paper is to investigate how potential entrepreneurs perceived the entrepreneurial environment in Sudan.

Design/methodology/approach – It evaluates economic, political, legal and administrative, socio-cultural, educational, and infrastructure and public support conditions affecting entrepreneurship development. Furthermore, it examines attitudes of government, Sudanese society, and Sudanese business community towards enhancement of entrepreneurial environment. Data are collected from 236 national potential entrepreneurs through questionnaires. Respondents are asked 45 questions to assess their perception of the main six factors composing the entrepreneurial environment.

Findings – The study revealed that the entrepreneurs perceived economic, education and infrastructure conditions as fair (neither strong nor poor). However, they perceived political, legal, administrative, social and cultural conditions as poor. Factors that contributed in shaping these conditions are government policies, and social and cultural beliefs of Sudanese society.

Originality/value – The study is the first contribution to the literature on the Sudan entrepreneurship environment.

Keywords Sudan, Entrepreneurialism, Entrepreneurial environment

Paper type Research paper

1. Introduction

Entrepreneurship has remained a hot issue in academia for the last three decades, due to its essential role in modern economies. It is considered and empirically approved by many researchers as an engine of economic growth, source of employment, and means of societal development (Gómez-Haro *et al.*, 2011; Bosma and Levie, 2010; Bosma *et al.*, 2009). Since entrepreneurship development is important for the development of the economy, most of countries of the world have launched initiatives to promote entrepreneurship among their societies and Sudan is no exception. In 1992, the Sudanese Government decided to implement private sector led growth in liberalized economic conditions. Since that time subsequent governments have continued to stress the importance of the private sector for the development of its economy. This was clearly stated in the Ten Year Comprehensive Strategy (1993-2003), and the Five Year Plan (2005-2010).

The national government which was formulated after the Comprehensive Peace Agreement (CPA) in 2005 has expressed a vision favoring an economic growth broadly based on the private sector. The essence of this vision is the encouragement of entrepreneurs to establish businesses and make choices in the process of competition that raise their productivity, and as a result, enhance economic growth, create



employment opportunities and finally, raise the welfare of the country as a whole. What needs to be known is the impact of these policies on the entrepreneurial environment in Sudan. This will be the subject matter of the present paper in which we try to get answers for the following questions:

- Has government orientation toward private sector empowerment resulted in a conducive entrepreneurial environment?
- Has social and cultural values of Sudanese society helped in promoting entrepreneurial environment?
- To what extent has the Sudanese business community contributed in formulating a healthy environment for entrepreneurial development?
- How do entrepreneurs perceive the entrepreneurial environment in Sudan?

The aim of the present research is to explore empirically the effects of government policies, and social factors on the entrepreneurial environment in Sudan. These factors include: cultural acceptance, availability of capital, economic conditions, educational system, labor market conditions and the simplicity of administrative procedures in starting a business. Both government policies and social factors are studied.

The methodology adopted in this research involves descriptive statistics for the secondary data which were obtained from government reports and publications of international financial institutions. In addition, primary data on entrepreneurs perceptions for entrepreneurial environment were collected via questionnaire. The questionnaires focus on the following environmental factors: society acceptance for entrepreneurship as a career, availability of finance for entrepreneurs' investment projects, suitability of macroeconomic environment, existence of entrepreneurial skills in educational and training institutions, labor market conditions and ease of administrative procedures required for getting licenses to start-up a business.

2. Literature review

Entrepreneurial phenomenon has been studied excessively in many countries, using different methods and covering different aspects (Alvarez *et al.*, 2011). Among the commonly used approaches to study the impact of the entrepreneurial environment on entrepreneurship are psychological, economic, sociological and institutional. This section reviews some of the research that employs these approaches.

The institutional economic approach was proposed by North (1990, 2005) and adopted by Alvarez *et al.* (2011) to examine the influence of environmental factors on entrepreneurship at a regional level in Spain. They applied a fixed effect model on panel data from the Global Entrepreneurship Monitor (GEM) for the period (2006-2009). They found that both informal (cultural and social, perception of opportunities to start-up and entrepreneur social image) and formal factors (intellectual property rights) influence entrepreneurship, but the informal are more determinant than the formal.

Schøtt and Jensen (2008) used regression analysis to compare the coupling between entrepreneurship policy and practice in developed and developing countries. They found that the coupling between entrepreneurship policy and practice is loose in developing countries and tight in developed countries. This result supports the argument that developing countries fail to increase levels of entrepreneurship up to the potential of their economies. This is due to their failure to pursue policies for their entrepreneurs that fits a country's political, economic and social aspects.

In his investigation of policies for developing entrepreneurship skills and culture in Croatia, Riverin (2007) pointed out the diversification of players who help in building an entrepreneurial society. He identified nine key entrepreneurship players namely, governments, universities and colleges, school system, entrepreneurs, community organizations, business associations, the media, capital providers and service providers. In examining the involvement of education systems, locally elected officials, the media and the businesses in development of entrepreneurship skills and culture in Croatia, he did not find a tangible evidence of their involvement in any aspect. He concluded that the non-involvement of these factors is responsible for poor entrepreneurial skills and culture.

Ojasalo (2004) used theme interviews and qualitative analysis to identify the factors which increase the attractiveness and improve the image of entrepreneurship in Finland. He found seven factors relevant to increasing the attractiveness of entrepreneurship. These are: holistic entrepreneurship education, a lower fear for failure, a stronger independent initiative and responsibility characteristics, a better social security for entrepreneurs, stronger desire to get rich by hard work, a better image of entrepreneurship in the media and a lower taxation and payments for entrepreneurs.

Fereidouni *et al.* (2010) examined the importance of business environment, social status of entrepreneurs and country external conflicts as predictors of motivation to start a business in Iran. They found that business environment and external conflicts are statistically significant factors that may influence the motivation to start businesses while social status is statistically insignificant factor.

A study undertaken by a team of experts from the World Bank in 2006 has presented some insights on Sudanese business environment. This study covered four areas: business entry and start up, locating the business, business operations and reporting, and closing a business. The study found that starting a business in Sudan is more difficult than in most developed countries but it still involves fewer steps, less time and lower costs than in most African countries. In addition, the study found that in the other areas of doing business, Sudan has achieved significant changes but still more changes are required for a conducive business environment.

Another study undertaken by the World Bank team in 2009 was about assessment of investment climate in Sudan. The study examined whether the opportunity to match the CPA with the necessary economic reforms has been lost. It suggests that it is not too late, but it requires a strategy based on raising productivity, diversification and broadening of the economic base. This study provided very good analysis for the investment climate in Sudan but it ignored the socio-cultural aspects of entrepreneurial environment.

The main results that can be derived from the previous literature reviews are that entrepreneurial environments are multi-dimensional phenomenon, which are composed of, and affected by various factors brought about by the actions of many players. To study the entrepreneurial environment in any country a holistic approach that covers all dimensions of entrepreneurial environment must be applied. In the next section we review macroeconomic and microeconomic policies of Sudan.

3. A review for Sudan's macroeconomic and microeconomic policies

Sudan has numerous natural resources that can be utilized by entrepreneurs to establish successful investment projects. These resources include arable agricultural land with different sources of water sufficient for irrigation, a diversified climate favorable for growing different crops, strategic geographic locations bordering seven

countries and a long shore line along the Red Sea suitable for the establishment of ports that can facilitate international trade for exports and imports of goods and services, native forests covering millions of acres, valuable minerals such as gold, oil, silvers, cooper and finally available human resources. With these incredible quantities of resources Sudan will be eligible for many entrepreneurship investment opportunities for business development, when these resources are coupled with suitable government policies. These abundant resources represent great opportunities for entrepreneurs that can be leveraged into new successful investment projects. The Sudanese Government should capitalize on potential entrepreneurs and investment opportunities to lead future economic change. We review the government policies for entrepreneurship development.

The evolution of the Sudanese Government policy for entrepreneurship development has passed through three distinctive periods.

Prior to 1992

Before 1992, the focus of government policies was on public enterprise to expand employment opportunities and generate economic growth. This was the plan actions of the former government regimes and during the first few years of the current government which took office in 1989. The governments during that time tried to establish fully supported public enterprises, envisaging that they would help in achievement of macroeconomic objectives. These enterprises were given priority to access bank credit, exemption from taxes and monopoly of supply for some necessary goods and supported with subsidized inputs. In contrast, private enterprises were deprived from all previous supports. In addition, entrepreneurs were required to go through very long procedures to get licenses to start up a business. During this period, the role of the private sector in achieving macroeconomic objectives was not recognized by the government. As a consequent, it was unusual for anyone to talk about entrepreneurs or entrepreneurship development at that time. Hence, we could say surely that there was almost little public policy for entrepreneurship development during that time apart from the establishment of the industrial bank and the agricultural bank for providing credit for manufacturing and agricultural sectors, respectively. Even these two banks provide finance to the two sectors at terms and conditions almost similar to that of the commercial banks.

1992-2005

During this period the government of Sudan (with a technical assistance from the World Bank and the IMF) has made numerous macroeconomic, microeconomic and institutional policy reforms to promote entrepreneurial environment and hence encourage both domestic and foreign investment (World Bank, 2006). These policy reforms included, economic liberalization for goods' prices, exchange rates and wages, an amendment to the Investment Encouragement Act of 1999 in 2003, the launching of graduate self-employment programs, introduction of some legislative changes to improve the administrative procedures of starting-up business and the establishment of a Ministry for Investment with its one-stop-shop. In addition to this, Sudan launched many initiatives in relation to reduction of business tax rates (from 30 to 15 percent) and restructuring of the tax administration to improve handling and introducing a little improvement in the procedures of property registration. Moreover, many roads, bridges, telecommunication services were built to address the deficiencies of the infrastructure. In addition to these micro finance for small scale enterprises were encouraged and central bank emphasized it on its monetary policy for this period.

2005-2011
This period witnessed the implementation of the CPA which was signed by the Sudanese Government and the Sudanese People Liberation Army in Nairobi in 2005. In recognition of Sudan’s political leaders will to support entrepreneurial environment, the World Bank (2009) puts it clearly that broad-based growth led by the private sector was the preferred strategy of the government for this period. In this respect, the World Bank (2009) argued that individual firms should be given chance to make choices in a free competition context that raised their productivity, and as a result, improved the welfare conditions of the country as a whole. To emphasize this new orientation, the government has pursued many policy changes such as the Joint Assessment Mission in 2005, the Five-Year Plan (2007-2011) launched in 2007, and the Interim Constitution in 2005. These sets of national documents represented a policy guide that would enable the government to achieve private sector led growth. However, this empowerment of the private sector is yet to be achieved.

These macroeconomic policies has succeeded in creating a relatively sustained macroeconomic environment. Real GDP growth averaged about 7 percent during (2000-2011), putting Sudan among the fastest growing economies in the region. Rate of inflation was reduced to one digit, per-capita income were increased approaching 2,000 US dollars, exchange rate was sustained at stable position for the period (2000-2010) (Arab Monetary Fund, 2011). Foreign direct investment inflow has rapidly increased putting Sudan among the top four African countries for the period (2005-2007) (World Bank, 2009).

Regarding the impact of government policies on entrepreneurial environment, there is lack of studies and secondary data due to the fact that Sudan is not covered by GEM. Thus, the only source of data on this issue is the World Bank and the International Finance Corporation report on *The Doing Business Report*. In this report countries’ economies are ranked according to the Ease Of Doing Business based on a set of ten indicators. These are starting a business, dealing with construction permits, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contacts and closing a business. The following table include data extracted from the doing business reports of 2013.

Sudan ranks very low in the world with respect to the “Ease of Doing Business.” As can be seen from data depicted in Table I, Sudan ranks with in the world lowest 10 percent in eight of the ten ranking indicators. Exceptions are the registering property and paying taxes. Registering property clearly stand out. Unfortunately, there was a noticeable deterioration in Sudan’s ranking position during the period (2011-2013), in nine out of the ten indicators. For the purpose of getting a clear picture about

Indicator	2011	2013	Indicator	2011	2013
Starting a business	121	122	Protecting investors	154	158
Dealing with construction permit	139	156	Paying taxes	94	101
Protecting investors	154	158	Trading across borders	143	153
Registering property	40	37	Enforcing contracts	146	151
Getting credit	138	167	Closing a business	183	170

Table I.
Ease of Doing Business
Ranking (2013), Sudan

Source: The World Bank (2013)

Sudan ranking in *Doing Business* report, in what follows we compare it with comparable economies.

As clearly shown from Table II, Sudan is ranked very low among comparable economies. Out of the nine indicators that make the Ease of Doing Business Ranking, Sudan has registered a good ranking of 40 in registering property, and middle ranking of 94 in paying taxes and a very low ranking of 183 in closing a business (World Bank, 2011). This low ranking makes Sudan as one of the worst destination for foreign investors compared to the other economies. An obvious implication of this low ranking is that, a keen entrepreneur who plans to start-up a business in Sudan, should pass through many procedures, wait for long time to complete these procedures and incur high costs at the early stage of his business. As a result, reluctant entrepreneurs who seek advice from their friends that passed through this complicated procedures might get discouraged, because of the bad experience of their friends.

4. Theoretical model and empirical results

Recognizing that entrepreneurial activity in any country is influenced by actions of many institutions, this study considers the attitudes representing the entrepreneurial environment in Sudan. There are five main institutional attitudes that may affect the entrepreneurial environment in Sudan. These are: the government, the society, the educational institutions, the financial institutions and firms. The government pursues policies for entrepreneurship development, makes infrastructure for entrepreneurs investment projects and passes laws and administrative regulations for investment. The society with its social and cultural norms can encourage or discourage the process of entrepreneurship development. The universities, training centers and higher schools with their education and training programs can promote entrepreneurial activities. The banks and other financial institutions can make financial resources available to entrepreneurs and facilitate the process of development. Firm communities with its associations and individual firms' decisions to buy from entrepreneurs and supply them with the required inputs can play an important role in the entrepreneurs' environment. Actions of these five institutions are expressed in terms of six factors: economic, political, social and cultural, legal and legislative, public support and education system. The extent to which these six factors have resulted in a conducive entrepreneurial environment are investigated from potential entrepreneurs point of views. The potential entrepreneurs perceptions for these six components of the entrepreneur environment are examined via a questionnaire that contains 45 questions. Each factor is represented by several questions of five-point Likert scale, where one indicates "strong disagreement" and five indicates "strong agreement." The questionnaire was distributed to a sample of 236 national potential

Country	2011	2012	2013
Rwanda	50	45	52
Egypt	108	110	109
Kenya	106	106	121
Ethiopia	104	111	127
Sudan	135	135	143
Eritrea	178	180	182

Source: The World Bank (2012, 2013)

Table II.
Sudan and comparator
economies rank on
the Ease of Doing
Business (2013)

entrepreneurs and their responses for the questionnaire questions were collected and presented in Table III.

The study used the mean as an index of respondents answer of any variable within the list of the factor variables. The questions related to each factor were compiled to form up an index for the factor. On the Likert scale of five a mean score of three is regarded as average. A factor index score higher than 3 represent entrepreneur positive perception toward the factor, while the index score lower than 3 represent entrepreneur negative perception toward the factor.

As can be seen from the data depicted in Table III, that the entrepreneurs perceive Sudan's entrepreneurial environment as weak. Only two of the six factors achieved a mean score slightly higher than 3. The best positive entrepreneurs perception cluster around the educational factor, while the most negative perception cluster around social and cultural; and legal and administrative factors. The entrepreneurs perception for the quality of infrastructure and public support factors are somehow closer to the mean with an average index of 2.96, while their perception for suitability of political atmosphere for entrepreneurship activity are low with an average index of 2.71. This result suggests that entrepreneurial environment do not seem supportive to entrepreneurship development in Sudan. This finding is consistent with the World Bank's Doing Business reports and the World Bank (2006) study.

To check the stability and internal consistency of data for all variables, the study ran a reliability check of α Cronbach's test, and the result was > 0.5 , which confirmed the consistency of the data (Table IV).

5. Discussion of the result

The entrepreneurial environment in Sudan is clearly perceived by the respondents as weak. This weakness can partially be attributed to government failure to adopt a suitable policy for entrepreneurship development. The government failed to implement macroeconomic policies for maintaining stable economic conditions. This failure manifested itself into high rates of inflation, large budget deficit and fluctuating

Table III.
Summary indices
of entrepreneurs'
perceptions of sudanese
entrepreneurial
environment

Factor	Index (mean)	SEM	SD
Economic	3.0466	0.091	0.964
Political	2.7160	0.05146	0.48548
Social and cultural	2.6150	0.08433	0.89644
Legal and administrative	2.6174	0.04902	0.45986
Infrastructure and public support	2.9637	0.11808	0.92975
Educational	3.3067	0.09934	0.99345

Table IV.
Case processing summary
and reliability statistics

	<i>n</i>	%	Cronbach's α
<i>Cases</i>			
Valid	49	43.4	0.861
Excluded ^a	64	56.6	
Total	113	100.0	
Note: ^a List-wise deletion based on all variables procedure			

exchange rates. About half of the respondents perceived economic conditions as not conducive. To conclude, the government failed to adopt microeconomic policies initially designed to assist entrepreneurs. A few partial initiatives were undertaken to support entrepreneurs. Entrepreneurial environment could have been improved by policies that integrate entrepreneurship education in school and university curricula, provision of starting-up supports and monitoring programs and promoting entrepreneurship culture. In addition, the business environment was suppressed by heavy regulations required for start-up of businesses, high government fees and unfavorable conditions for new business finance. According to the World Bank (2009), the share of management time required to deal with regulatory issues is 18 percent, higher than in comparable countries in Africa.

In addition to the government, there are some other important players that have contributed to creating a poor entrepreneurial environment in Sudan. One of these players is Sudanese society and social institutions. They have contributed in formulating poor entrepreneurial environment in two ways: first, the Sudanese people prefers rent-seeking activities over entrepreneurs activities. This fact is reflected by family attitudes of sending their children to schools and universities to learn and earn certificates that would enable them to get jobs in public or private sector. Few families want their members to be engage into self-employment businesses. This mentality has led to widespread development of rent-seeking activities at the expense of entrepreneurs activities.

The second way in which social values of Sudanese society have negatively impacted on entrepreneurial environment is imitation practices as risk aversion tactics. Entrepreneurs who plan to start-up business would like to succeed in establishing business without taking risks. However, this is not the correct way in which business can be done. The road for success always passes through risks. This kind of socio-cultural attitudes have led to widespread of business imitation practices and the suppression of innovative business ideas. To avert risk, investors duplicate successful projects to the extent that creates excess supply of products and causes loses for investors. Entrepreneurs who have innovative skills are discouraged by others who imitate them. This is due to the lack of regulations maintaining patent rights and protecting innovative entrepreneurs.

Another feature of the Sudanese business community is that it is composed of many laymen who are mainly school leavers engaged into business with one of their kinsmen. Because of this nepotism, they lack the necessary skills and knowledge that enable them to establish a healthy business environment. The existence of these types of people among the business communities has limited the possibility of innovation and business expansion. It also led to widespread malpractice, misbehavior, tricky deals and unfair competition. Consequently, an up-and-coming entrepreneurs may struggle hard to build business relationship with unwelcoming business community. It normally takes them long to penetrate the market and establish successful businesses.

6. Conclusions

The aim of the present paper was to explore the entrepreneurial environment in Sudan. It was justified by the dearth of study on entrepreneurship in Sudan and the deficiency of information in this field of study. To contribute filling in the gap in the literature, secondary and primary data were collected from government reports and questionnaire. The questionnaire was distributed to 236 potential entrepreneurs to see their perception of different components of the entrepreneurial environment.

Descriptive statistics were used to analyze the data. It was found that entrepreneurial environment is slightly poor. Out of the six components of entrepreneurial environment, three (economic, education and infrastructure and public support) were found in the middle neither poor nor strong, while the other three (political, social and cultural, and legal and administrative) were poor. This poor entrepreneurial environment is partially due to misguided government policies. In addition social and cultural factors have contributed to some extent on the poor entrepreneurial environment.

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