Global Entrepreneurship Monitor

GEM

SUDAN National Report 2018
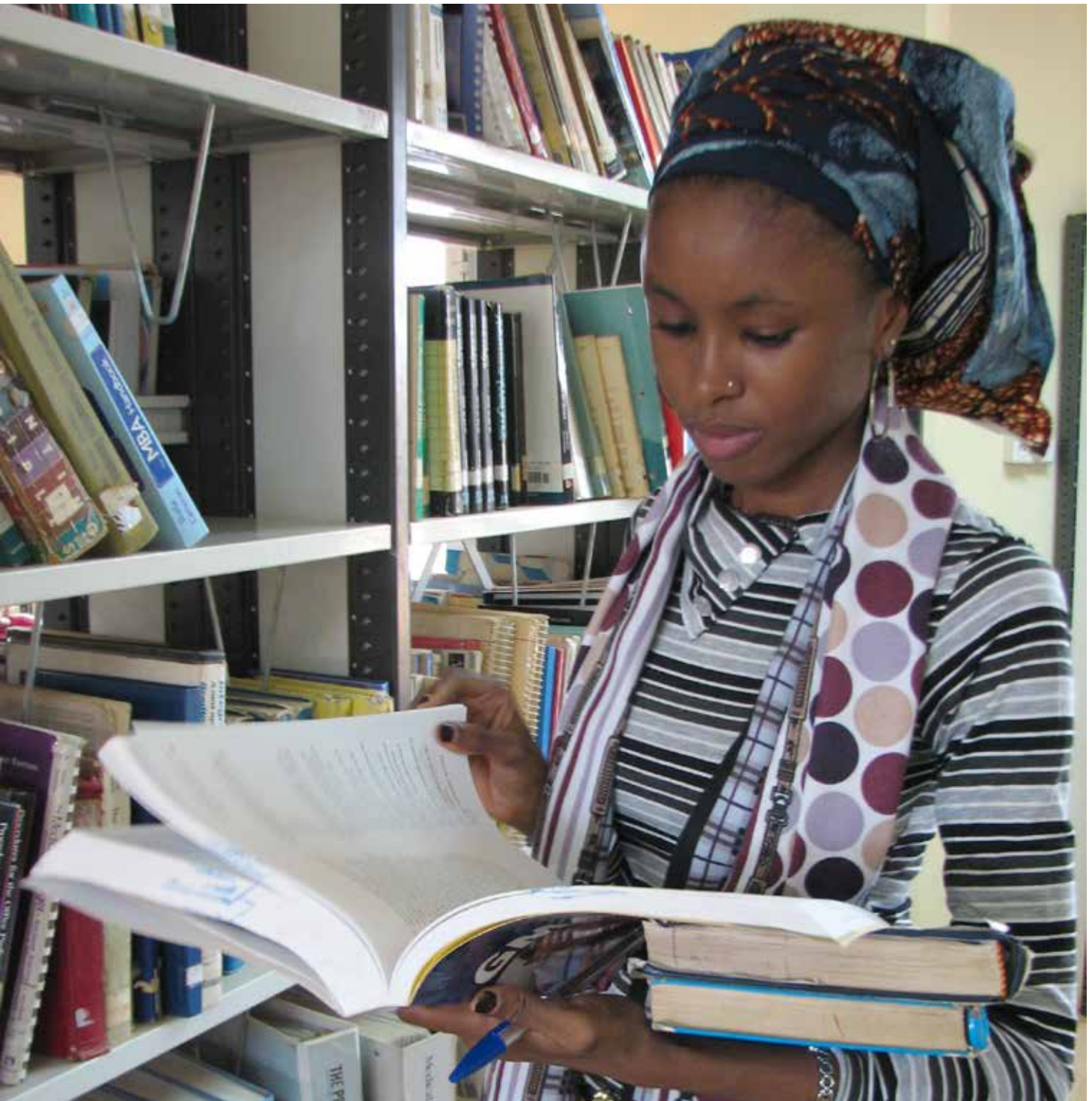
Global Entrepreneurship Monitor

GEM

SUDAN National Report 2018

GEM Sudan Sponsor

- ENABLE Youth Sudan Program (Ministry of Agriculture and Forests)

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Implementing Institutions

- Ahfad University for Women
- Impact Hub Khartoum
- Innovation and Entrepreneurship Community

Dr. Salih Khairalla Hussien

GEM-SUDAN SPONSOR

A Statement by GEM-Sudan Sponsor
ENABLE Youth Sudan Program

As a comitted sponsor of the GEM Sudan-2018 project, ENABLE Youth Sudan Program has the great honour that this pioneering study became a reality as a result of collaboration with our esteemed partners namely the African Development Bank, Ministry of Agriculture and Forests, Ministry of Finance, International Institute of Tropical Agriculture (IITA), Ahfad University for Women (AUW), Impact Hub Khartoum (IHK), and Innovation and Entrepreneurship Community (IEC).

The ENABLE Youth Sudan initiative is a comprehensive program that builds youth entrepreneurship in agribusiness via skill acquisition and creates an enabling environment in which young men and women become owners of profitable agribusinesses. The higher-level objectives of the program are to accelerate the growth and competitiveness of young agripreneurs by improving productivity and innovation. Key instruments include youth empowerment, strengthening the innovation and entrepreneurship ecosystem, enhancing youth managerial and technical skills, building linkages between traditional agroindustries and startups, and upgrading their equipment and technology. Given this mandate, we do believe that the output of the conducted GEM Study will represent a sound base for any intervetion in the area of Enterpreneurship where the impact of ENABLE program and other initiatives by partners in the field can be easily monitored, compared and measured.

Dr. Salih Khairalla Hussien
Program Coordinator
ENABLE Youth Sudan

Photo credit: ENABLE Youth Sudan Program

Dr. Widad Ali A/Rahman

Word from GEM Sudan Project Director

The significance of entrepreneurship as an economic and social phenomenon, and the role it plays in economic growth, is highly acknowledged by the government, private sector, society organizations and the public at large. It is observed that economic downturn is always lifted by entrepreneurial activities that tend to boost the economic performance of a nation. Entrepreneurship has indeed proven to have the potential to address gaps in economic growth and stability; it increases employment rates, results in the creation of new innovative businesses and positively impacts on economic development. However, entrepreneurship and its success are highly influenced by a set of factors including finance, policies and regulations, education, culture, infrastructure, markets and human capital.

The engagement of Ahfad University for Women (AUW), as the leading institution of the GEM–Sudan Project, affirms the level of importance AUW places on entrepreneurship. Joining GEM and conducting research in entrepreneurship, for the first time in the year 2018, shows high commitment to contribute to the development of entrepreneurship and Small, Medium and Micro-Size Enterprises (SMMEs) in Sudan. The GEM research contributes to fill a gap in knowledge about the entrepreneurial actions and conditions, in Sudan, and provides evidence that will inform decisions to enhance and maintain SMMEs and entrepreneurship. It will also help to create research networks and collaboration to conduct further studies about the vital issues relevant to entrepreneurship development in the country.

Being a women and social development centered university, AUW sees great potential that women and youth entrepreneurs can be a driving force for human development in Sudan. Accordingly, the hope is to capitalize on GEM studies to do profound and credible research dealing with female and youth entrepreneurship in the various sectors, especially in agri-preneurs and agri-businesses.

GEM Sudan project is really thankful for all the parties without whom this project would have not been possible:

[•] Our main sponsor – ENABLE Youth Sudan Program, thank you sincerely for the financial support as well as the encouragement for capacity building of the team members and the effort for strengthening our networks.
[•] Impact Hub Khartoum (IHK) and Innovation and Entrepreneurship Community (IEC), that continuously supported this project.
[•] The 38 national experts who willingly gave their time and insights with the entrepreneurial framework conditions in Sudan.
[•] The GEM Sudan Team for their great work in coordinating the project.
[•] The GEM Global Data Team. We acknowledge their continuous support and significant contribution in reviewing, evaluating and harmonizing data before, during, and after the survey process.

The GEM Sudan 2018 Report highlights many positive entrepreneurial profiles and portrays the entrepreneurial ecosystems in Sudan. The report hopefully can give solid basis for policy formulation and development in the areas that have been studied, and exhibited low performance indicators. Furthermore, we expect to work together with many stakeholders to support the entrepreneurship journey. Thus, we call for more collaborative work based on GEM 2018 findings.

Dr. Widad Ali A/Rahman
Director /GEM Sudan - 2018
Ahfad University for Women

Acknowl-edgements

This is the first time for Sudan to participate in GEM project, thus this is the first GEM National Report for Sudan prepared by a National team from sound institutions led by Ahfad University for Women. GEM Sudan Team thanks GEM Consortium and GEM Data Management Team; our great appreciation for their help and guidance throughout the project phases.

We are grateful to our sponsor; ENABLE Youth Sudan Program, for funding the different phases of GEM-Sudan 2018 project, and for their continuous support and encouragement.

We extend special thanks to Moen IT for their effort exerted in managing field- work and IT supported data collection.

Our gratitude extends to Dr. Amira Kamil Ibrahim, the project Statistician, for her great efforts and diligent work on the statistical aspects of both surveys; the APS and NES. Her role also extended to preparing all the visualized data in this report.

Special thanks go to the adult population who provided information for the APS survey, and also appreciation and gratitude extend to the national experts in the different fields relevant to the entrepreneurial context in Sudan for their contributions to the NES, informing this report.

We further acknowledge the contribution of the experts and professionals who contributed to the review and validation of the draft report by giving invaluable insights and comments.

ABOUT THE AUTHORS

Widad Ali A/Rahman is an associate professor at Ahfad University for Women (AUW), School of Management Studies, in the field of Entrepreneurship and Small Business Management and is a gender specialist. Dr. Widad is immensely engaged in a portfolio of activities related to the enhancement of knowledge and practice in the fields of women entrepreneurship, microfinance, migration and gender. She strongly advocates for strengthening the 'entrepreneurial triangle'; entrepreneurial education, entrepreneurial training and research to improve entrepreneurship practice for poverty reduction and for the betterment of people's lives, particularly women.

Lena Alshiekh is a development, sustainability and corporate responsibility consultant. She has successfully managed to embed CR and Sustainability in the business strategy of a leading Sudanese food company and has won awards in CR and social investment on both regional and global levels. She prepared for the launch of the UNGC local network and worked for ensuring its sustainability. Lena Alshiekh has been actively engaged with the various stakeholders – Civil Society, Government, Private Sector and the UN bodies to advocate for the UNGC and to establish a local network. She is also one of the co-founders of Impact Hub Khartoum and holds an MA (ECON.) in development studies from the university of Manchester and a BSc in Business administration from Ahfad University for Women.

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Mohammed Alsaeed is a Lecturer at Ahfad University for Women (AUW), School of Management Studies, and at University of Khartoum, Faculty of Engineering, in the field of Operations Management, Project Management, Entrepreneurship and Small Business Management. He is a certified professional trainer in Entrepreneurship, Business Start-ups, Project management and soft skills. Mohammed Alsaeed is engaged in research issues related to general social fields. He devotes himself to contributing to teaching, training and human development, and research for the advancement of people and communities at the national and regional levels. To achieve that he collaborates with different institutions and organizations national and international.

Moneera Yassien is a postgraduate student at Erasmus Mundus Joint programme in International Development Studies (GLODEP). With an undergraduate degree in Economics from the University of Khartoum. She is a researcher, social entrepreneur and women's rights activist based in Sudan. Moneera Yassien is the head of IECRC (Innovation and Entrepreneurship Community Research Chapter), she also works with UNDP (United Nation Development Program) in Darfur and in the Regional Bureau of Arab states (RBAS) on Entrepreneurship, Innovation and Youth leadership.

Implement-ing Institutions

Ahfad University for Women

Ahfad University for Women (AUW) is a pioneer higher education institution in Sudan whose philosophy is to enhance women's education, development and empowerment towards gender equality. Established in 1966, their objective is to train and equip women to become active agents of change in the development of Sudan. Through its evolution from a small Girls' School to a full fledge Women University AUW has served considerable numbers of Sudanese female graduates who then contributed to development of their communities. Currently AUW has a population of around 6533 students from across Sudan and around the world. It offers quality higher education programs, committed to excellence and pioneering academic innovation.

AUW's mission is to provide quality education for women to strengthen their roles in national and rural development, and to seek equity for themselves and fellow women in all facets of Sudanese society using a combination of well-articulated academic programs, professional trainings, research, and community outreach activities. AUW's vision is to be a nationally prominent university and a leading institution recognized worldwide for its academic excellence, research, women empowerment, civic engagement and social responsibility.

Impact Hub Khartoum

Impact Hub Khartoum (IHK) is a global network comprised of 99 Hubs, with 16,000 member start-ups in 49 countries. The global network of social enterprises operates on the premise that through combined accomplishments of creative, committed, and compassionate individuals focused on a common purpose, impact can be created for a better world.

Impact Hub offers a unique ecosystem of resources, inspiration, and collaboration opportunities to grow positive impact. Impact Hub's diverse community of members and collaborators inspires, connects, and enable entrepreneurs to develop their best work every step of the way.
Impact Hub Khartoum IHK which started in 2015 is an enterprise that benefits from over 70 years of accumulated and extensive experience of its knowledge workers, entrepre-neurs, innovators and consultants advising, planning and directing programs in private, development and impact sectors.

Impact Hub Khartoum is more than just an inspiring co-working space, it is an innovation lab, an incubator and an accelerator where the entrepreneurial spirit comes to life, thrives, and is inspired.

IHK's vision is to bring together passionate, creative and committed individuals and groups who can collaborate and co-create business solutions for pressing societal needs.

IHK supports its members by facilitating collaborations between different sectors and by providing the space for such collaborations to occur, aided by meaningful content and access to networks.

IHK is a convener and an enabler - where access to markets, funding, and knowledge is facilitated and can be found.

Innovation & Entrepreneurship
Community

Innovation and Entrepreneurship Community (IEC)

IEC is a national youth-driven NGO initiated in 2013, with a mission to inspire entrepreneurial activity among Sudanese youth.

IEC's goal is to build a vibrant startup community through fostering knowledge, organizing events and workshops, partnering with leading global entrepreneurship communities and bringing new opportunities that support entrepreneurs in the Sudanese community.

IEC envision a world class community driven by innovation, where their role is to support the entrepreneurial activity in Sudan with all the resources that are or will be available, through regular researches in the field, partnering with leading global entrepreneurship communities and bringing new opportunities to the Sudanese youth.

IEC is committed to educate, spread and root the entrepreneurial way of thinking in the Sudanese community extensively. IEC aspires to be the entity that inspires and moves Sudanese entrepreneurs by offering them the needed mentorship, networks and opportunities of financial support.

Photo credit: Ahfad University for Women, University campus with library

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Photo credit - The Presidential Palace - Sudan | Hisham Karouri | Flickr.com

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ACRONYMS

AfDB	African Development Bank
AUW	Ahfad University for Women
APS	Adult Population Survey
ARCDE	Arab Regional Centre for Training and Development of Entrepreneurs
EB	Established Business
EEA	Entrepreneurial Employee Activity
EFCs	Entrepreneurial Framework Conditions
E-ship	Entrepreneurship
FB	Family Business
GEM	Global Entrepreneurship Monitor
GERA	Global Entrepreneurship Research Association
GDP	Gross National Product
IEC	Innovation Entrepreneurship Community
IHK	Impact Hub Khartoum
IMF	International Monetary Fund
IDB	slamic Development Bank
KSA	Kingdom of Saudi Arabia
MENA	Middle East & North Africa
MOHE	Ministry of Higher Education
MSEs	Micro and small enterprises
NECI	National Entrepreneurship Context Index
NES	National Expert Survey
NFC	National Framework Conditions
R&D	Research and Development
RBAS	Regional Bereau of Arab States
SEA	Social Entrepreneurial Activity
TEA	Total Early-stage Activity
UAE	United Arab Emirates
UNDP	United Nations Development Program
UNIDO	United Nation Industrial Development Organization
USA	United States of America
WEF	World Economic Forum

Executive Summary

The Global Entrepreneurship Monitor (GEM) is the world's largest longitudinal study focusing on entrepreneurship practice and entrepreneurial activity. It is a collaborative research project run by a consortium the including Babson College, Boston and the London Business School and other partner institutions. GEM is evolving into a multi-country annual study representing a majority of the world's population and global GDP.

In 2018, 54 countries participated in GEM, Sudan amongst them, conducting the specific Adult Population Survey (APS) which is a highly standardized process using GEM defined questions and survey methods to ensure consistency and comparability between the results of the different participating countries. The results are based on a random sample of at least 2,000 adults, in that country, in addition to the National Expert Survey (NES). The NES was conducted by asking carefully specified and consistent questions, this time of at least 36 identified experts with detailed knowledge and experience of the main components of the national ecosystem for entrepreneurship.

The 2018 Report is the first GEM National Report for Sudan, allowing for a comprehensive reflection of the status of entrepreneurship and the overall context within which this important economic activity is undertaken. This Report looks at a range of perceptual and demographic variables that may influence the level of entrepreneurial activity in Sudan. The entire stages of the entrepreneurial activity of business creation is carefully described and monitored; from the potential thinking about starting a business to start-up intentions, and then to creating the business, to running the new business and the eventual transition into an established business, or perhaps to exit business or business discontinuation.

The consistent GEM methodology has yielded results that allow comparison between Sudan's studied regions (States) and also other countries: throughout this Report, comparison is made to results from the other GEM participating countries and neighboring countries in the Middle East and North Africa (MENA) region in 2018.
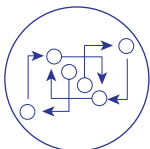
GEM 2018 Sudan National report consists of four main parts; part one is a general introduction about the GEM project in which an outline of the GEM methodology, concepts and measures and a consistent conceptual framework are presented. It also gives details about business stages and the indicators that are used to measure process for each stage. It also provides the main elements of the entrepreneurial context conditions measured by the NES. A highlight of the status of the entrepreneurship context as a brief background is also presented within this part.
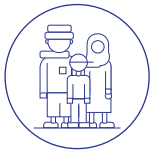
Part two presents detailed results from the 2018 Adult Population Survey (APS) in Sudan, including findings about attitudes towards entrepreneurship and levels of entrepreneurial activity. It compares entrepreneurial activity by state, and its relationship to other important variables such as age, gender and household income. It also compares results for Sudan with the overall GEM results as well as to GEM-participating neighbours in the region.

Part three exhibits the GEM National Expert Survey (NES) results for Sudan summarizing the views of 37 national experts, who contributed to this study, on the defined entrepreneurial framework conditions, reflecting the enhancers and constraints of the entrepreneurial context in Sudan.
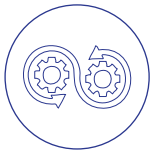
The final part includes brief conclusions and recommendations to develop the entrepreneurial ecosystem in Sudan and result in improvements of entrepreneurship practice and enhance its impacts as an accelerator of social and economic development in Sudan.

Key Findings

The Adult Survey (APS) Results

Socially entrepreneurship is perceived as ....

79% a desirable career option

78.2% offering a high status and respect

Self-perception ...

74.5% have knowledge, skill and experience

34.7% fear of failure prevents starting a business

Entrepreneurial and Business Activity

69% stand as potential business

22.1% total of Nascent and New business

10% only are established businesses compared to

17% the rate of business discontinuation

A modest level of use of technology

62.6% level of use of technology for early-stage businesses

76.3 % level of use of technology for established firms

Top reasons for business discontinuation

23.4% lack of financial resources

22.5% family and personal issues

19.8% poor levels of profitability

Perception of Societal Values Related to Entrepreneurship

A pleasing outcome from this inaugural survey is the moderate-high positive perception of societal values related to entrepreneurship. Positive responses were recorded around values denoting social perception of entrepreneurship as a desirable career option (79%), offering a high level of status and respect (78.2%), with primary objective to solve social problems and often reflected on public media. Some variation by State was noticeable relevant to the mentioned variables.

Sudan, in fact, comes ahead of some countries in the region, such as Qatar and the UAE in this metric in some areas. It recorded the highest percentage (85%) regarding the perception that successful entrepreneurs gain high status as a result.

Individual Self-Perceptions about Entrepreneurship

Similar moderate-high levels are also recorded when the individual self-perception about entrepreneurship is measured. The results observed in this report suggest that although the population (with variation based on gender, age, educational levels and location) believes that they have the necessary knowledge, skill and experience to start a business (74.5%), nonetheless there is still a strong fear of failure that prevents many (34.7%) from starting a business.

Upon comparison to countries in the zone ranking, Sudan is second to the Kingdom of Saudi Arabia.

Entrepreneurial and Business Activity

Discouragingly, this high standing of societal and individual perception is not reflected in the 'conversion' to established businesses. A symptom of the shortcomings in the business process in Sudan, the rate of established businesses is only just above 10% compared to a 22.1% total of Nascent and New business. The picture becomes even more disheartening when we note that the figure for potential business stands at over (69%). Another area of interest covered in the same chapter is the reasons for business discontinuation. Even though it may be debated that some of the conclusions (e.g. business continued in other hands/business continued but changed its main activity) may not be in the strictest sense 'discontinuation', the figure of 17% is high. In fact, Sudan scores the highest percentage of business discontinuation in its zone.

Entrepreneurial Activities Characteristics

A partial explanation of the findings on entrepreneurial activity characteristics may be the relatively high level of 'necessity-driven' entrepreneurs versus opportunity driven. There is a difference between drivers for entrepreneurship between male and female where the latter are, mostly, driven by necessity.

GEM considers four large sectors by which to categorize all types of business activities captured by the monitor, namely, extractive, transforming, business-oriented service, and consumer-oriented service sectors. The results show that most business activities are within the consumer-oriented service sector, most of it are started and managed by a single entrepreneur, hiring only few employees and recorded generally low percentage for the expectation of future job creation.

An important finding regarding the level of use of technology show a modest level of use of technology for early-stage businesses and established firms (62.6% and 76.3 %) respectively, with minimum use of new technology (1-5 years). However, it suggests an improvement in the tendency to use modern technology.

The typical profile of entrepreneurs (TEA) is;

A male, aged **34.82** in average;

With **1st** stage level of education;

Medium level of income; Self-employed and lives in large households with mean **6.14** family members.

Informal Investment Activity

18% of the adult population had acted as informal investors in the past **3** years

Entrepreneurship and Family Business

9.3% are engaged in family business

68.4% are young male entrepreneurs

81.3% with post-secondary education and from the higher income level

15.71% in Blue Nile State ... highest

5.87% in Khartoum State, the least

52.7% highest engagement in the consumer- sector

Only a very small percentage (**5.5%** *) engaged in such arrangements as GIG Economies*

61.1% online

31.6% on-the-site

Another important finding is that the top three reasons mentioned for business discontinuation among entrepreneurial firms are lack of financial resources (the highest at 23.4%), family and personal issues (22.5%) and poor levels of profitability (19.8%).

Entrepreneurs' Characteristics

Another important area examined by the APS for the year 2018 is the characteristics of the entrepreneurs, owner managers, informal investors, entrepreneurs and the rest of the adult population. An interesting finding is that the mean age of a TEA entrepreneur is about 34 years and it takes about five years for them to get to an established business status (aged 39). The typical profile of entrepreneurs (TEA) is; a male, aged 34.82 in average, with first stage level of education, medium level of income, self-employed and lives in large households with mean 6.14 family members.

Informal Investment Activity

Another interesting feature was Sudan's position as the country with the highest level of informal finance in its zone, albeit the lowest in dollar value. Near to one fifth (18%) of the adult population mentioned that they had acted as informal investors in the past three years. Sources of this type of investment are mostly family members. This, perhaps identifies an area of 'comparative advantage' to the Sudan and can be taken up by the relevant bodies to help develop it.

Entrepreneurship and Family Business

GEM's 2018 survey introduced two new areas for research – Family business and the 'GIG' economy. In Sudan the results show that 9.3% of the adult population are engaged in family business; 6% of them apply a 'full family model' (family has most ownership, management and work), dominated by young male entrepreneurs (68.4%), with post-secondary education (81.3%) and from the higher income level.

Important features of family businesses show that the highest representation geographically goes to the Blue Nile State (15.71%) while the least is in Khartoum State (5.87%). The distribution by sector reveals that the highest engagement (52.7%) is in the consumer-oriented sector with low levels of use of technology and modest innovation.

Entrepreneurship and GIG Economies

It is the second newly introduced area for research by GEM 2018, examining the use of digital platforms and part-time flexible work arrangements by businesses and institutions. Only a very small percentage (5.5%) of the studied adult population are engaged in such arrangements, either online (61.1%) or on-the-site (31.6%). The mostly used applications mentioned by the respondents are Facebook and WhatsApp.

Compared to countries in the zone Sudan reports a low score regarding the importance of digital platforms to its economy, however Sudan's experts gave a high average score (7.88 points) to the expectation of quick development for the GIG economies in Sudan.

The National Expert Survey (NES) Results

Sudan ranks 45 out of 54 participating countries

4.29
SCORE

Perception of the Quality of the National Entrepreneurship Framework Conditions

GEM's report uses the National Entrepreneurship Context Index (NECI) - presented by GEM for the first time this year – to compare (on a Likert scale of 10 points) – the general entrepreneurship context. A value of one point represents a very bad context and ten means a very good context for entrepreneurship. Disappointingly, the Sudan, ranked 45th from the 54 countries surveyed, while a 4.29 score ranks it in the "Bad state" on the NECI index (i.e. in the Lower Middle segment).

The responses for this section were provided by the National Experts, selected from the relevant fields, who participated in the NES.

The report identifies a number of the NECI elements, some of which are areas of concern scoring the least (26th, 25th, 23rd) in ranking amongst the 54 participating countries. These include the Sudan's very low score in terms of government assistance and policies, government entrepreneurial programs, and entrepreneurship education - respectively. The best score (32nd) goes to entrepreneurial finance.

Recommendations

GEM 2018 study provided comprehensive recommendations, to guide policy reform, by the different stakeholders relevant to the field of entrepreneurship. Following is a highlight of key recommendations:

For Policy-makers

[•] Reform the regulatory environment and reduce bureaucracy in order to make it easier for new businesses to register and operate.

[•] Reducing costs involved, such as licensing requirements from local municipalities, labor and tax registrations.

[•] Women entrepreneurs face specific challenges, due to gender stereotype and a disadvantage status, thus it is imperative to provide women-centered, policies, support structures and mentorship to help them successfully engage in entrepreneurial activities.

[•] New supportive funding and investment policies with focus on provision of seed funding with flexible repayment policies especially for small and new firms, need to be introduced and implemented.

[•] A more supportive tax system should be introduced, such as tax exemption/reduction to target MSEs and new firms.

[•] Update and improve physical and technical infrastructure.

[•] Introduce appropriate educational and training program that enhance entrepreneurship and apprentice competencies. Educational facilities need to improve their capacity to provide the education and job skills that will be needed to develop greater productivity and technology-intensive industries.

For the Private Sector

[•] Engage in financing entrepreneurs through modalities such as capital ventures to facilitate access to a variety of options and reduce dependency on the rigid banking sector and /or informal investors.

[•] Avail and encourage business consultancy offices and experts' services.

[•] Direct investments to agriculture and agro-industries with focus on expansion of external trade and export production.

[•] Create a balance of business services and entrepreneurship development over all States not only focus on center cities, with more focus on mentoring, business incubators and business clinics.

For Academic and Research Institutions

[•] Entrepreneurship theoretical and practical curricula should start at least at secondary school level to equip learners with key business skills and motivate youth to enter this field.

[•] Academic and research centers should contribute to create business related data-base, which is supported by scientific research, on the overall ecosystem, internal and external markets and the different industry sectors.

[•] A high rate of business discontinuity/failure entails the need to conduct in-depth rigorous scientific research to understand the reasons behind that, and avail data to guide policy regarding the support for business sustainability.

[•] Support for entrepreneurs on the R&D function especially for those with limited resources, to help them be competitive and sustain their ventures.

PART 1

INTRODUCTION
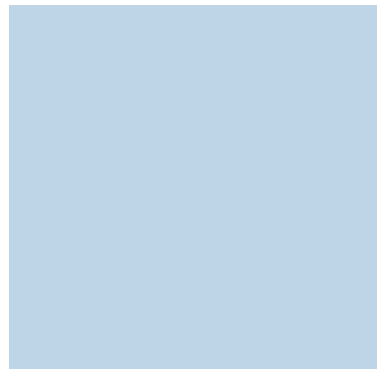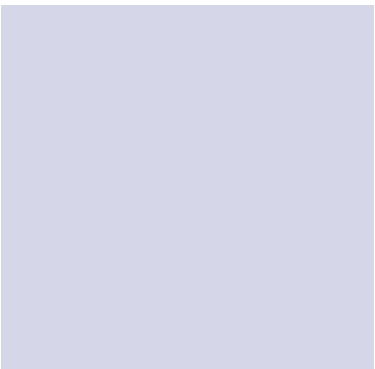
Photo credit - IEC- Global Entrepreneurship week

1.1
About GEM

GEM started in **1999** *with* **10** *participating countries.*

54 *countries in* **2018**

representing almost **70%** *of the world's population*

individuals in the ages of **18-64** *in a given country*

GEM is evolving towards the construction of new indicators and improving some of its classical ones.

GEM continuously design new tools to collect data for covering unexplored new topics like family businesses and GIG economies.

The Global Entrepreneurship Monitor (GEM) started as a partnership between London Business School and Babson College in 1999 with 10 participating countries. Since then it has expanded significantly to include 54 countries in 2018, representing almost 70% of the world's population. GEM's major activity is overseeing an annual, internationally coordinated, cross-country assessment of national and regional entrepreneurial activity. GEM's annual report, summarizing the results of that assessment, is widely recognized as the most authoritative poll of entrepreneurship in the world and its data forms the basis of many academic and policy studies (GEM-Jordon, 2018).

The GEM initiative started at a time when very limited sources of information in the field of entrepreneurship were available. Thus, the aim of GEM was to fill that information gap and give answers to several primary questions such as:

[•] Are some countries more entrepreneurial than others?
[•] What are the factors that determine these differences?
[•] How entrepreneurial are societies?
[•] What is the dimension of entrepreneurial activity and its components by country?
[•] What relationship (if any) exists between entrepreneurship and economic development?
[•] How is the state of the national environments/contexts where the entrepreneurial activity takes place?

GEM is not focused only on businesses; rather it sheds light on the individuals, their activities in relation to the enterprise, their perceptions and motivations, and the personal characteristics that may influence those perceptions and activities. It studies a demographically representative sample of the adult population comprising individuals in the ages of 18-64 in a given country. Two groups in the survey are considered to fulfill this ultimate central focus, National Adult Survey (APS) group and the National Expert Survey (NES) group. GEM collates information on start-ups, early-stage entrepreneurial activities, and the overall contextual conditions and business environment within which entrepreneurship in the participating countries operates.

The 2018 (GEM) survey represents the 20th consecutive year in which GEM has tracked rates of entrepreneurship across multiple phases of entrepreneurial activity, assessed the characteristics, motivations, and ambitions of entrepreneurs and explored the attitudes societies have towards this activity. GEM has covered much more than the basic information gap around entrepreneurship and is evolving towards the construction of new indicators and improving some of its classical ones. Entrepreneurship is not a static concept; its main source of information must follow up its development and continuously design new tools to collect data for covering unexplored aspects. Thus, for example, in recent years, new topics like entrepreneurial ecosystems, family businesses and the development of entrepreneurial businesses based on digital platforms (GIG economies) and others, have caught the attention of GEM researchers and are being addressed within the project (GEM, 2018).

1.2 Participating Countries

GEM research project has been measuring entrepreneurship and providing information covering over 100 economies around the globe. In 2018 participating countries comprised 70% of the world's population and 86.0% of the world's GDP (GEM, 2018).

*These economies are shown in Table 1, organized by world regions and three economic groups as classified according to the World Economic Forum's typology of countries based on Porter's definition of economic development levels. It categorizes countries as factor-driven, efficiency-driven, and innovation–driven countries. The participating economies are presented in two ways: geographic region and economic development level.

Table 1. Economies participating in the 2018 GEM surveys, grouped by geographic region and economic development level

North America	Innovation–driven [•] Canada [•] United States	
Central America & Caribbean	Efficiency-driven [•] Dominican Republic [•] Guatemala [•] Mexico [•] Panama	Innovation–driven [•] Puerto Rico
South America	Efficiency-driven [•] Argentina [•] Brazil [•] Chile [•] Colombia [•] Peru [•] Uruguay	
Europe	Efficiency-driven [•] Bulgaria [•] Croatia [•] Latvia [•] Poland [•] Russia [•] Slovak Republic	Innovation–driven [•] Austria [•] Luxembourg [•] Cyprus [•] Netherlands [•] France [•] Slovenia [•] Germany [•] Spain [•] Greece [•] Sweden [•] Ireland [•] Switzerland [•] Italy [•] United Kingdom
Middle East and North Africa	Efficiency-driven [•] Egypt [•] Saudi Arabia [•] Iran [•] Turkey [•] Lebanon [•] Morocco	Innovation–driven [•] Israel [•] Qatar [•] United Arab Emirates

Sub-Saharan Africa	**Factor-driven** [•] Angola [•] Madagascar [•] Mozambique [•] Sudan		
Asia	**Factor-driven** [•] India [•] Kazakhstan	**Efficiency-driven** [•] China [•] Indonesia [•] Thailand	**Innovation-driven** [•] Japan [•] Korea (South R.) [•] Taiwan

*The classification of economies by geographic region is adapted from the United Nation's composition of the world's macro geographical regions.
http://unstats.un.org/ unsd/ methods/m49/m49regin.htm.
Classification of economies by economic development level is adapted from the World Economic Forum (WEF). According to WEF's classification, the factor-driven phase is dominated by subsistence agriculture and extraction businesses, with a heavy reliance on (unskilled) labour and natural resources. In the efficiency-driven phase, an economy has become more competitive with more-efficient production processes and increased product quality. As development advances into the innovation-driven phase, businesses are more knowledge-intensive, and the service sector expands (http://weforum.org). Economies in transition from factor- to efficiency- driven have been grouped with the factor-driven economies, while those in transition from efficiency- to innovation-driven have been included in the efficiency-driven category (GEM Global Report 2018/2019).

Since its inception, the GEM project has adopted the theoretical stance of a two-way relationship between entrepreneurship and economic development. New business creation promotes economic development, being an important source of jobs and incomes and a fountain of innovation through new product and process development. At the same time, a highly developed economy may provide easier access to the resources that can aid business development, including expertise and infrastructure as well as finance. Similarly, a less developed economy may provide few alternatives to self-employment, most likely as a coping strategy to face necessity.
(GEM Global Report 2018/2019)

1.3 Entrepreneurship Development in Sudan

Quick Facts

National name:
Jamhuryat as-Sudan

Total area:
1,886,068 km2

Population:
40.8 million

Density:
21.3 / km2

Capital:
Khartoum

GDP (PPP):
- $177.678 billion
- 3.2% growth
- 3.0% (5-year compound annual growth)
- $4,232 per capita

GDP (nominal)
- Total $33.903 billion
- Per capita $808

Unemployment:
12.7%

Inflation (CPI):
32.4%

FDI Inflow:
$1.1 billion

In Sudan the evolution and practice of entrepreneurship extend back in history to unrecorded times; It is a social and economic endeavor which entails utilization of resources, production, exchange, commercialization, value creation and wealth accumulation. Historically, many entrepreneurs were involved at the very micro-level of home-based production (especially among women) and micro enterprises. It has been well observed that many micro and small enterprises (MSEs) have been operated driven by necessity and 'Push factors'. As the economy grew, the scope of economic activities widened, and entrepreneurship practice expanded and became more competitive and diversified in terms of motive, type, complexity and market reach. However, lack of research-based knowledge on the evolution and development of entrepreneurship in Sudan limits understanding and conceptualization of the phenomenon beyond the generic level.

Globally, many scholars, development and business practioners and policy makers perceive the vitality of entrepreneurship development as core for accelerating economic growth. It helps creating jobs and employment, increase innovative productivity, and offers effective ways to deal with economic challenges at all levels; micro, meso and micro.

In Sudan, governments are facing enormous economic slowdown and unemployment problems. In addition, the forces of globalization and technological advancements, are putting pressures and demands on the rate of enhancement in social and economic development. In such situations entrepreneurship is thought of as the main accelerator of economic development; by means of job creation, utilization of resources, improved production through innovation, value creation and wealth accumulation. However, due to the challenges that face the success of entrepreneurship (finance, management of business, policies etc), there is a pressing need to adopt a holistic approach to this phenomenon to generate high levels of dynamism, innovation, effectiveness and introduce policies, programs and initiatives that foster entrepreneurship development (Khattab & Al-Magli, 2017).

Since the nineties of the past century 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, among others, the 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 (Gangi and Timan, 2013). 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, accompanied by 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 (Gangi and Timan, 2013), in an effort to help improving the overall context for entrepreneurship development.

Since the beginning of the century, a vibrant entrepreneurship scene in Sudan started to emerge with many initiatives and programs that focus on facing the challenges in the business environment and ecosystem components vital for entrepreneurship success. These initiatives targeted factors such as; finance, policies and regulations, education and culture, infrastructure, markets and human capital.

Below are more selected Entrepreneurship Development Programs and initiatives introduces by different stakeholders including government agencies, the private sector, youth societal groups, and international agencies.

Microfinance-supported Entrepreneurship

Despite the dearth of research on the evolution and development of entrepreneurship in Sudan, some available evidence show that limited financial resources constrain entrepreneurs to seize opportunities, start ventures and manage them successfully. Against this situation, the government of Sudan in collaboration with the World Bank launched the microfinance initiative in 2007. This initiative came within a poverty reduction framework to support small enterprise development and entrepreneurship for its well-recognized role in employment generation, poverty reduction and economic development. The Central Bank of Sudan established a Microfinance Unit (2007) and emphasized its policy mandate on programs that focused on building individual and institutional capacity to foster microfinance- supported entrepreneurship and MSEs establishment. This has encouraged many potential entrepreneurs and newly established businesses to benefit from the facilities provided by this initiative (financial and non-financial) to start or grow their businesses.

Mashrouy Entrepreneurship Programme

Mashrouy, is an Arabic word literally meaning 'My Project', is based on innovatively identifying a business idea and translate it into a viable project. It intends to spread a culture of entrepreneurship among young people and to shed light on the vast opportunities that entrepreneurship can provide to the youth of Sudan. Mashrouy is a project that is run in partnership with the British Embassy and the Sudanese Young Businessmen's Association, which tries to promote entrepreneurship among young people in the country and raise awareness among the general public. Mashrouy is a competitive endeavor that gives a fair opportunity to those capable to compete with each other to present their best business ideas. Their ideas are then developed and refined by a panel of business executives, who provide valuable professional advice, and, at an advanced stage, training. After a series of challenges and twists, prize winners are chosen by the panel of judges. The program involves universities, business entities and media coverage which help in spreading public awareness of the concept.

Sudan Startup Weekend Programme

This programme is part of a worldwide initiative targeting potential entrepreneurs and equipping them with the basics of establishing startups and launching successful ventures. The non-profit organization responsible for this initiative is headquartered in Seattle, Washington, but Startup Weekend organizers and facilitators can be found in over 200 cities around the world. All potential entrepreneurs come together for weekend long workshops to pitch ideas, form teams, and start ventures. In Sudan, the same model is followed and the programme is regularly run led by a group of dedicated youth. It is supported and acknowledged by influential individuals and institutions from the government, the business community, the academia and international entities. Many successful ideas have been turned into new-startups and entrepreneurial ventures; many of which are applications of technological concepts.

Inauguration of Entrepreneurship Centre based on the Bahraini Experience

Based on the noticeable success of the Bahraini Entrepreneurship Model overseas, an Entrepreneurship Training and Development Centre has been set up in Sudan under the auspices of UNIDO in collaboration with the Islamic Development Bank (IDB) and the Ministry of Investment in Sudan. The Centre was named the Arab Regional Centre for Training and Development of Entrepreneurs (ARCDE) (Khatab and Al-Magli, 2017). The new Entrepreneurship Centre in the Sudan was well received by all concerned parties based on a widespread belief that the Bahraini experience in the area of entrepreneurship development has gained an international acclaim. It is widely expected that the establishment of this new center will not only secure an access to the Bahrain experience to be considered for adoption and adaptation, but will also boost the prospects of inter-country partnership and collaboration in various investment areas, particularly agriculture and animal production (it covers seven States) (Khatab and Al-Magli, 2017).

Establishment of National Entrepreneurship Development Centres

To provide institutional support for the development of entrepreneurship, several bodies such as academic institutions, banks, and other Microfinance Institutions have established entrepreneurship Development Centres that seek to provide microfinance customers with business training services and hands on experience to start up business. Examples of these centres: Sudanese Riyadah Centre, Sudanese Eibdah Centre, etc. (Khatab and Al-Magli, 2017).

The Ministry of Higher Education (MOHE) efforts towards promotion of entrepreneurship

The Ministry of Higher Education is responsive to the national concerns and aspirations to support entrepreneurship development acknowledging its contribution to availing job opportunities to increase the employability of graduates from higher education institutions. In this context the Ministry has so far undertaken some activities such as consultations with the British Council and similar organizations on ways and means of injecting into the higher education system activities which aim at the promotion of the enterprise culture and the development of entrepreneurial competences. Along these lines the proposed initiatives include; Establishment of entrepreneurship centres in as many Sudanese universities as possible, and to introduce entrepreneurship related courses as part of the university curriculum for all disciplines (Khattab & Al-Magli, 2017). It is to be mentioned that some universities and educational institutions in Sudan have introduced entrepreneurship module as a compulsory course within their curriculum, for example, Ahfad University for Women, Sudan University for Science and Technology and Khartoum University.

National Institutions and Youth groups

In Sudan a remarkable feature for entrepreneurship development is the establishment of shared work spaces and programs to enhance communities' awareness and practice of entrepreneurship. Innovative Entrepreneurship Community (IEC) and Impact Hub Khartoum (IHK) being leading examples of these spaces and communities, aiming at providing a conducive environment for startups and entrepreneurs where they can team up, discuss and develop new business ideas. They also work with public, private and non-profit sectors to provide educational programs and skills to entrepreneurs and try to facilitate their access to credit, to markets and to information which are vital for success.

Engagement of International Agents

In 2017, the African Development Bank (AfDB) launched ENABLE Youth Sudan Program with the main objective to create business opportunities and employment for young women and men along priority agricultural value chains in Sudan. ENABLE Youth Sudan Program is one of AfDB's ENABLE Youth Initiatives under the Bank's Feed Africa Strategy (2016–2025). The first GEM Sudan Report has been conducted under this project.

In 2018, Orange Corners was launched for the first time in Sudan. It is an initiative designed and implemented by the Kingdom of the Netherlands with the main goal to provide young entrepreneurs across Africa and the Middle East with the necessary training, networks and facilities to start and grow their startups. It aims at working with different stakeholders to support and strengthen the entrepreneurial ecosystem, and it has partnered with the IEC and a few prominent private sector companies in Sudan to work towards entrepreneurship development in Sudan.

The significance of entrepreneurship is more and more recognized by the government, public and private organizations and the general public. It is considered both an economic and social phenomenon and it is perceived to play a key role in the economic development of nations. Entrepreneurship has indeed proven to have the potential to address gaps in economic growth and stability, however for the entrepreneur to succeed a conducive environment or ecosystem is vital. Despite lack of studies on the impact of the above mentioned efforts, it is believed to have, to some extent, improved the overall picture of entrepreneurship in Sudan, as reflected by the improvement in the ranking of ease of doing business (World Bank, 2018).

Photo credit - Sudanese female entrepreneurs - BarakaBits, www.barakabits.com

1.4
GEM-Sudan

Target population was adults in the age range **18-64** *in* **12** *states out of* **18** *states*

Elected states represent all the regions, reflecting the basic demographic, social, cultural and economic dimensions

Used a sample which covered a little over **2000** *adults*

Used a highly structured questionnaire provided by GERA for obtaining data for APS

Sudan participated in GEM for the first time in 2018; this opportunity included Sudan to the 2018 GEM surveys which covered 54 economies and provided a representative sample of the world's population and of the world's GDP.

A carefully selected, high caliber team led by Ahfad University for Women (AUW) has taken the responsibility for assessing the status of entrepreneurial activities within Sudan's specific context, providing information and critical analysis of multiple factors. This is considered a basis for giving support to the design of adequate actions to improve entrepreneurship's effectiveness and socioeconomic impact within Sudan. This is the first Report conducted by GEM Sudan national team.

GEM reports and analysis are based on data collected using two of its own information tools:

[•] The **Adult Population Survey** (APS) applied as a survey for a representative sample of the populations aged 18–64 participating in the monitor this year;

[•] The **National Experts' Survey** (NES) designed to obtain subjective information on the status of nine entrepreneurial framework conditions.

The first component of the GEM survey, APS has focused on a number of variables/indicators; opportunities, abilities to detect and seize them, motivations, and attitudes toward entrepreneurship are part of the adult population survey along with the register of nascent, new, established, and exited entrepreneurial activities. Informal investment, family business, GIG economies, and others, are topics covered as well by the 2018 survey. Individuals are the target population of this complex survey, able to provide a wide range of indicators on potential, effective entrepreneurial activity, and many other topics.

Since 1999 GEM has been collecting, analyzing, and interpreting data across the world on the capacity of individuals to act entrepreneurially and about the context in which these activities occur. In 2018, the Sudan's inaugural GEM study, the focus was on the above mentioned topics, strictly following the GEM methodology as provided by GERA. The target population was the adults in the age range 18-64 in 12 states carefully selected from the 18 States of the country, following a non-probability sampling method (see map in appendix 1).

The selected states are representative of all the regions, reflecting the basic demographic, social, cultural and economic dimensions. From the adult population a sample was selected following triangulation of methods guided by the GERA statistical specifications for the APS. The project statistician worked in close collaboration with the GEM Data Management Team ensure accuracy of calculation and selection of this sample which covered a little over 2000 sample elements. Data have been collected by fieldwork which was administered by a specialized vendor using IT supported tools and program. A well trained team of data collectors reach all states and conducted the field work. A highly structured questionnaire was provided by GEM in English. It was translated to Arabic to make sure that it is well apprehended by the participants, then uploaded using a specific software. The data was directly shared with GEM data management Team who revised the data for coding, double check with the statistician before embarking on the data analysis using SPSS program. From the SPSS output data, the results are then prepared in the form of tables and figures.

For the NES (37) National Experts were purposively selected from the areas that reflect the entrepreneurial conditions.

The sample for the National Experts' Survey comprised (37) experts purposively selected from the areas that reflect the entrepreneurial conditions within the Sudanese context. Similarly, a structured method was followed using a questionnaire covering the areas of study focus. Data analysis yielded significant results shown on the tables and figures under the NES result section.

The key aim of the Sudan Global Entrepreneurship Monitor - 2018 provides a broad audience (educators, researchers, policymakers, practitioners etc.) with information and analysis that can enhance understanding, decision-making, and actions to be taken in regards to entrepreneurship within the Sudan context.

1.5 GEM Conceptual Framework

Academics and policy makers agree that entrepreneurs, and the new businesses they establish, play a critical role in the development and wellbeing of their societies. As such, there is increased appreciation for and acknowledgement of the role-played by new and small businesses in an economy. GEM contributes to this recognition with longitudinal studies and comprehensive analyses of entrepreneurial attitudes and activity across the globe (GEM 2018).

GEM's conceptual framework depicts the multifaceted features of entrepreneurship, recognizing the proactive, innovative and risk responsive behaviour of individuals, always in interaction with the environment. The GEM survey was conceptualized in regards to the interdependency between entrepreneurship and economic development, in order to:

[•] Uncover factors that encourage or hinder entrepreneurial activity, especially related to societal values, personal attributes, and the entrepreneurship ecosystem.

[•] Provide a platform for assessing the extent to which entrepreneurial activity influences economic growth within individual economies.

[•] Uncover policy implications for the purpose of enhancing entrepreneurial capacity in an economy.

The GEM conceptual framework derives from the basic assumption that national economic growth is the result of the personal capabilities of individuals to identify and seize opportunities, and that this process is affected by environmental factors which influence individuals' decisions to pursue entrepreneurial initiatives. Figure 1 shows the main components and relationships into which GEM divides the entrepreneurial process and how it classifies entrepreneurs according to the level of their organizational development.

The social, cultural, political and economic context is represented through National Framework Conditions (NFCs), which take into account the advancement of each society through the three phases of economic development (factor-driven, efficiency-driven, and innovation-driven).

The Entrepreneurial Framework Conditions (EFCs) relate more specifically to the quality of the entrepreneurial ecosystem and include: entrepreneurial finance, government policy, government entrepreneurship programs, entrepreneurship education, research and development (R&D) transfer, commercial and legal infrastructure, internal market dynamics and entry regulation, physical infrastructure, and cultural and social norms.

Figure 1. GEM Conceptual Framework
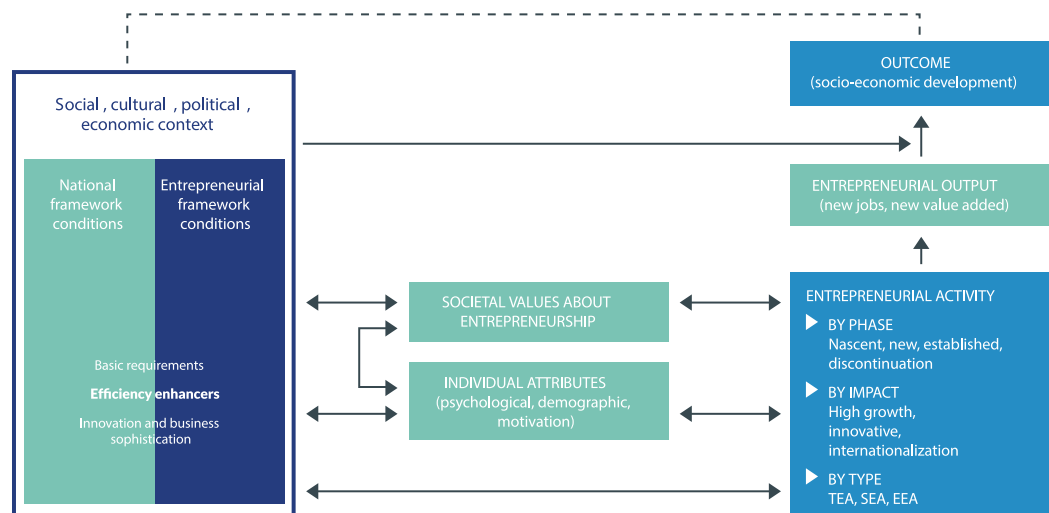
Source: GEM Global Report 2018

As indicated in Figure 1 above, the GEM conceptual framework recognizes that entrepreneurship is part of a complex feedback system, and makes explicit the relationships between social values, personal attributes and various forms of entrepreneurial activity. It also recognizes that entrepreneurship can influence the effect of the NFCs on new job creation and new economic or social value creation.

Entrepreneurial activity is thus an output of the interaction of an individual's perception of an opportunity and capacity (motivation and skills) to act upon this AND the distinct conditions of the respective environment in which the individual is located. In addition, while entrepreneurial activity is influenced by the framework conditions in the particular environment in which it takes place, this activity ultimately benefits this environment as well, through social value and economic development.

Social values toward entrepreneurship: This includes aspects such as the extent to which society values entrepreneurship as a good career choice; whether entrepreneurs have high societal status; and the extent to which media attention to entrepreneurship is contributing to the development of a positive entrepreneurial culture.

Individual attributes: This includes different demographic factors (such as gender, age, geographic location); psychological factors (including perceived capabilities, perceived opportunities, fear of failure); and motivational aspects (necessity versus opportunity based ventures, improvement-driven ventures).

Entrepreneurship activity: This is defined according to the phases of the life cycle of entrepreneurial ventures (nascent, new business, established business, discontinuation); according to impact (high growth, innovation, internationalization); and by type (Total Early-stage Activity (TEA), Entrepreneurial Employee Activity (EEA) and Social Entrepreneurial Activity – SEA). Operational definitions of the business phases and entrepreneurship characteristics are represented in Figure 2.

Figure 2. GEM model of business phases and entrepreneurship characteristics
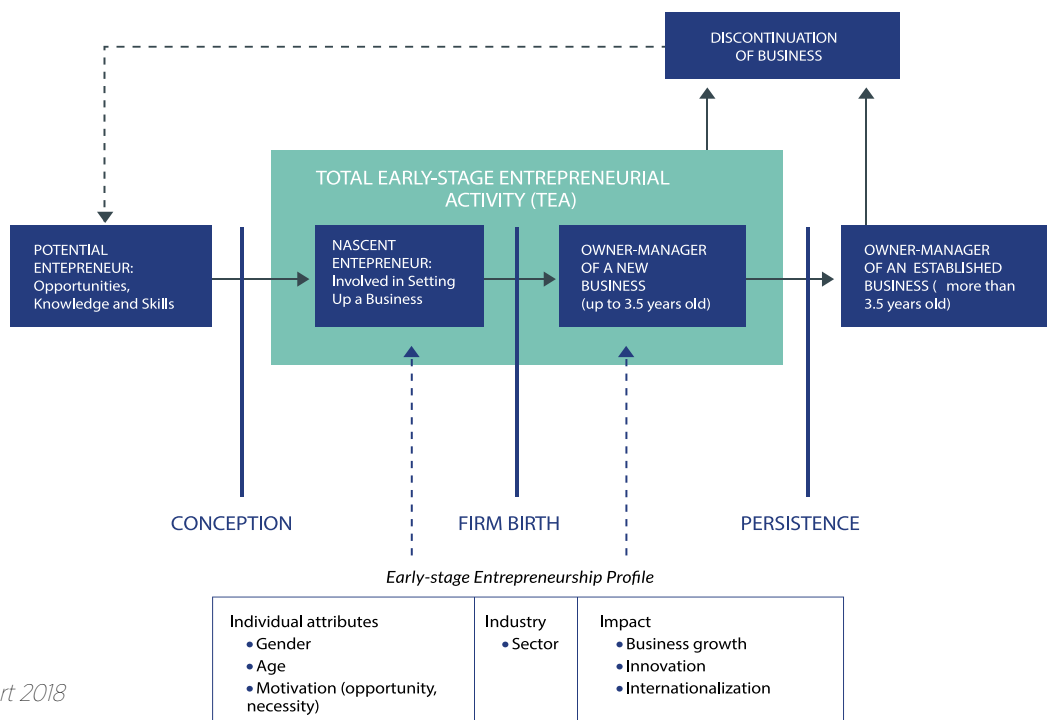
Source: GEM Global Report 2018

Given that GEM's goal is to provide a comprehensive view of entrepreneurship across the globe, it aims to measure the attitudes of the population, and the activities and characteristics of individuals involved in various phases and types of entrepreneurial activity. Research teams in each participating economy collect primary data through an Adult Population Survey (APS) of at least 2000 randomly selected adults (18 – 64 years of age) annually.

Complementing the APS is a National Expert Survey (NES), which gathers in-depth opinions from selected national experts about the factors that have an impact on the entrepreneurship ecosystem in each economy. At least four experts from each of the entrepreneurial framework condition categories must be interviewed, making a minimum total of 36 experts per country. In order to construct a balanced and representative sample, the experts are drawn from entrepreneurs, government, academics, and practitioners in each economy.

Photo credit - Global Entrepreneurship Week - SUDAN, www.facebook.com/GEWSudan/photos

1.6 Dash Board of GEM Indicators

The dashboard of GEM indicators is based on the GEM conceptual framework featuring, on the one hand, the entrepreneurial framework conditions and, on the other hand, detailed key entrepreneurship measures. Overall, this group of measures provides a comprehensive set of variables that contribute towards understanding the impact entrepreneurship has on a society and the extent society supports this activity. It is well documented that the entrepreneurial framework conditions and variables are very much related to and influenced by the level of development and type of economies firms operate within.

According to the classifications in Table (1), Sudan falls within factor-driven economies. This has its implications on the conditions influencing entrepreneurship practice and outcomes. Measuring these conditions is crucial for better knowledge and understanding of entrepreneurship as a concept and practice and contributes to the overall improvement of the conditions.

The following is a list of these measures of the entrepreneurial framework condition (GEM 2018).

Entrepreneurial Framework Conditions

[•] The quality of the entrepreneurial framework conditions is based on the average value of experts' perceptions, using a Likert scale of one (highly insufficient) to nine (highly sufficient), for the following entrepreneurial framework components:
[•] Entrepreneurial financing,
[•] Government policies: support and relevance, policies regarding taxes and bureaucracy,
[•] Government entrepreneurship programs,
[•] Entrepreneurship education at school stage, Entrepreneurship education at post-school stage and entrepreneurship training,
[•] Research & Development (R&D) transfer,
[•] Commercial and legal infrastructure,
[•] Internal market dynamics, internal market burdens or entry regulations,
[•] Physical infrastructure,
[•] Cultural and social norms

Societal Values and Perceptions

[•] **Good career choice:** The percentage of the adult population aged 18–64 years who believe that entrepreneurship is a good career choice.
[•] **High status of successful entrepreneurs:** The percentage of the adult population aged 18–64 years who believe that high status is afforded to successful entrepreneurs.
[•] **Media attention for entrepreneurship:** The percentage of the adult population aged 18–64 years who believe that there is a lot of positive media attention for entrepreneurship in their country.

Individual Attributes of a Potential Entrepreneur

[•] **Perceived opportunities:** The percentage of the population aged 18–64 years who see good opportunities to start a business in the area where they live.
[•] **Perceived capabilities:** The percentage of the population aged 18–64 years who believe they have the required skills and knowledge to start a business.
[•] **Entrepreneurial intention:** The percentage of the population aged 18–64 years (individuals involved in any stage of entrepreneurial activity excluded) who are latent entrepreneurs and intend to start a business within three years.
[•] **Rate of fear of failure:** The percentage of the population aged 18-64 years perceiving good opportunities who indicate that fear of failure would prevent them from starting up a business.

Entrepreneurial Activity Indicators

[•] **Total early-stage entrepreneurial activity** – TEA The percentage of the adult population aged 18–64 years who are in the process of starting a business (a nascent entrepreneur) or started a business less than 42 months before the survey took place (owner-manager of a new business). This indicator can be enriched by providing information related to motivation (opportunity vs. necessity), inclusiveness (gender, age), impact (business growth in terms of expected job creation, innovation, and industry sectors.

[•] **Established business ownership rate:** The percentage of the adult population aged 18–64 years who are currently an owner-manager of an established business, i.e. owning and managing a running business that has paid salaries, wages, or any other payments to the owners for more than 42 months.

[•] **Business discontinuation rate:** The percentage of the adult population aged 18–64 years that have discontinued a business in the past twelve months, either by selling, shutting down, or otherwise discontinuing an owner/management relationship with the business.

[•] **Entrepreneurial Employee Activity – EEA:** The percentage of the adult population aged 18–64 years who, as employees, have been involved in entrepreneurial activities such as developing or launching new goods or services, or setting up a new business unit, a new establishment, or a subsidiary.

[•] **Social Entrepreneurial Activity – SEA:** The percentage of the adult population aged 18–64 years who are engaged in early-stage entrepreneurial activities with a social goal.

Photo credit - CEO of Fandora Massion Hassan Matar, Entrepreneurs making use of rubbish in Sudan, https://ichef.bbci.co.uk/images

PART 2
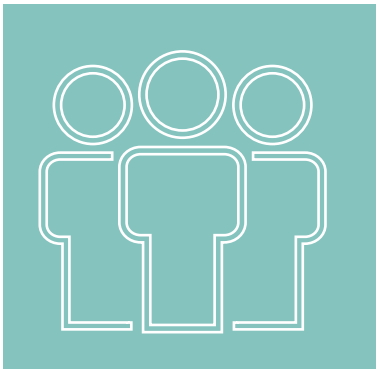
Adult Population Survey (APS) Results
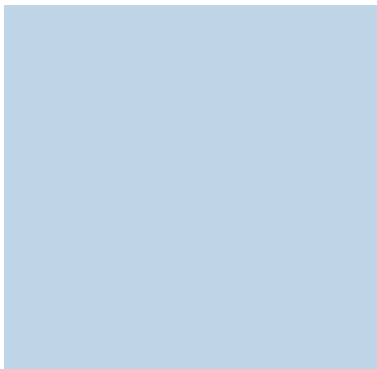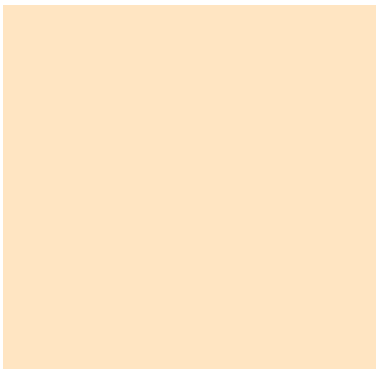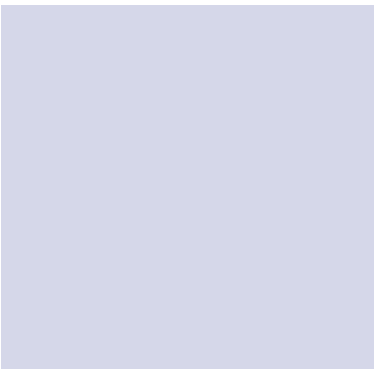
Photo credit - Twitter: Sudanese Folklore Art, https://pbs.twimg.com/media

1. Perception of Societal Values Related to Entrepreneurship

1.1 Introduction

Societal attitudes and values are of strong influence on the way people perceive entrepreneurship in an economy. As part of a society's culture, they blend with many other factors and components of the business environment, to shape a society's views on entrepreneurship. As a result, these views can affect the entrepreneurial ambitions and aspirations towards entrepreneurship and the extent to which this activity will be supported by individuals and institutions within a specific society/community. GEM adult survey assesses societal values towards entrepreneurship by measuring a number of variables; the extent to which people consider entrepreneurship as a career option, the extent to which they consider entrepreneurs are socially acknowledged with high status, to what extent there are positive representations of entrepreneurs in the media, to what extent people in Sudan think that their society has (or lacks) a preference for competitive environments, how easy they think it is to start and establish a business in their country, and to what extent they think businesses in their country often focus on designing a business case that contributes to solving social problems.

In Figure 1.1, the results for GEM Sudan-2018 indicate that 67.0% of the population would prefer that everyone had a similar standard of living, while a high percentage of the population (79.4%) considers that starting a new business is a desirable career choice, that successful entrepreneurs enjoy a high level of social recognition and respect (85.3%), that public media and the Internet reasonably provide information and good coverage of successful new businesses (70.8%). However, only a little more than half (53.6%) of the population considers that it is easy to start a new business in Sudan. A similar percentage (56.8%) of the adult population who participated in the GEM study perceive businesses as contributors to social wellbeing by often offering solutions to social problems as a primary business objective.

*Figure 1.1
Perception of societal
values related to
entrepreneurship in
Sudan:
Percentage of
positive responses
within the 18–64-year-
old population to key
questions related to
this topic*

% Yes, in Sudan...

67.0%

Most people would prefer that everyone had a similar standard of living

79.4%

Most people consider starting a new business a desirable career choice

85.3%

Those successful at starting a new business have a high level of status and respect

70.8%

*You will often
see stories in the
public media and
or internet
about successful
new businesses*

53.6%

*It is easy to start
a business*

56.8%

*You will often
see businesses
whose primary
objective is
solving problems*

Sudan shows a moderate-high cultural preference for entrepreneurship. Around 67% of the working-age population would prefer that everyone had a similar standard of living, while 33% shows a more competitive spirit. Near a 79.4% of the same population consider starting new businesses to be a good career choice and 85.3% that success earns social status and respect. Also, a high portion perceive media to pay attention to new business creation, that it is easy to start new businesses, and that many businesses aim primarily to solve social problems.

GEM SUDAN-2018

**1.2
Perception of
societal values
related to
entrepreneurship
by gender, age,
educational level
and Potential
Entrepreneurship
(PE)**

[•] Although the perception of societal values related to entrepreneurship is moderately high in the adult population of Sudan, it is noted that clear differences occur by gender, age, and educational level, involvement in the business sector, potential entrepreneurship, and region. These differences, which shape the understanding, public-policy design and the overall entrepreneurial ecosystem, are summarized here (Table 1.1):

[•] In statistical terms, in the year 2018, more women than men think that most people in Sudan would prefer that everyone had a similar standard of living.

[•] Men and Women equally perceive Sudanese society as favorable towards entrepreneurship as a professional choice. They also believe that those successful at starting a new business have a high level of status and respect.

[•] More women than men have positive perception regarding the level of media attention for entrepreneurs by reflecting stories about successful businesses on public media.

[•] More women, than men, believe that in Sudan it is easy to start a new business and show a higher level of perception than men regarding the contribution of firms towards solving social problems.

[•] Individuals with graduate experience have a higher perception regarding entrepreneurship being a good career choice, that those successful at starting new businesses enjoy a high level of status and respect and that media provide a good echo for successful entrepreneurs' activities.

[•] Individuals with secondary educational levels, have a higher level of perception that starting up a new business is easy in Sudan.

[•] Individuals with secondary level of education, think that in Sudan, one will often see businesses to have solving social problems as their primary aim.

*Table 1.1
Perception of societal
values related to
entrepreneurship by
Gender, Age,
Education and
Entrepreneurship
experience
(% positive response)*

In my country, …

	most people would prefer that everyone had a similar standard of living. (Yes %)	most people consider starting a new business a desirable career choice. (Yes %)	those successful at starting a new business have a high level of status and respect. (Yes %)	you will often see stories in the public media and/or internet about successful new businesses. (Yes %)	it is easy to start a business. (Yes %)	you will often see businesses that primarily aim to solve social problems. (Yes %)
Gender						
Male	62.7	79.1	83.0	67.1	52.2	55.1
Female	69.5	79.7	87.0	74.6	55.1	58.5
Age						
18–24 years	65.4	75.8	86.3	72.0	50.5	56.3
25–34 years	67.0	81.3	81.9	74.4	49.6	58.7
35–44 years	68.1	78.5	86.4	71.1	60.0	53.5
45–54 years	68.6	83.0	89.0	69.9	55.6	61.2
55–64 years	67.4	81.9	84.2	53.4	58.7	53.8
Education						
None	78.5	76.3	86.1	46.1	59.7	51.4
Some secondary	68.7	79.1	85.3	55.0	68.8	51.7
Post-secondary	73.5	77.1	90.0	63.5	64.6	57.1
Grad experience	64.8	80.0	84.2	74.2	50.2	57.1
Entrepreneurship experience						
Not in bus. Sector	66.7	77.5	84.4	67.7	49.8	55.0
Yes in bus. Sector	67.7	83.7	87.3	77.4	61.6	60.7
Not (PE)	67.5	75.5	82.1	56.7	49.6	49.1
YES (PE)	67.3	81.0	87.2	77.7	55.9	59.3

*Differences between categories are significant at the 95% confidence level with $p < 0.025$ for chi-square tests.

1.3
Perception of
societal values
related to
entrepreneurship
by Regions

Diversity in Sudan has been sustained by historical, cultural, linguistic and geo-climatic disparities that influence attitudes and practices among the different regions in Sudan (Sudan census, 2008). As it is the first time for Sudan to participate in the GEM project, it is deemed useful to reflect on the perception of societal values related to entrepreneurship, comparing the indicators on perception of societal values related to entrepreneurship among different States (Table 1.2). The results reflect variation on the statistics measuring the variables related to perception of entrepreneurship, summarized below;

[•] The regions where the highest percentages of adults feel that most people would prefer everyone to enjoy a similar standard of living are the Blue Nile and the White Nile States, while the Northern State recorded the least statistic for this variable.

[•] The Blue Nile is the region where a higher proportion of the population thinks that in Sudan, most people consider starting a new business to be a desirable career choice, with the rest of the States reporting relatively similar results except for Gedarif State which reported the least proportion.

[•] The Blue Nile is the region where a higher proportion of the population thinks that those successful at starting new businesses enjoy high levels of status and respect. In addition, this region appears to have significantly higher proportion of people that think that one often sees stories in the public media and/or on the Internet about successful new businesses. However, only a modest proportion of the adult population often see businesses that primarily aim to solve social problems.

[•] The region where the highest percentage of adults think that it's easy to start a new business is the White Nile State.

[•] Sinnar State shows a significantly higher percentage of people who think that one often sees stories in the public media and/or on the Internet about successful new businesses in the country.

[•] The Red Sea State shows the least proportion of the adult population who think that one often sees stories in the public media and/or on the Internet about successful new businesses in the country.

[•] Gezira is the region that shows a lowest percentage of the population that thinks that it is easy to start a business.

[•] White Nile State is the region where the highest percentage of adults think that doing business is a means to solve social problems.

[•] The Northern State is the region with a lower proportion of people that identify firms whose primary aim is to solve social problems.

In conclusion, the main indicators on the perception of societal values related to entrepreneurship have highlighted variations by the selected factors, mainly in the perception of entrepreneurship as a good professional choice with more consideration and visibility of successful entrepreneurs due to many changes in the overall context that help to promote entrepreneurship (Table 1.2).

*Table 1.2
Perception of societal
values related to
entrepreneurship by
Regions in Sudan
(% positive response)*

	In my country, ...					
	most people would prefer that everyone had a similar standard of living. (Yes %)	most people consider starting a new business a desirable career choice. (Yes %)	those successful at starting a new business have a high level of status and respect. (Yes %)	you will often see stories in the public media and/or internet about successful new businesses. (Yes %)	it is easy to start a business (Yes %).	you will often see businesses that primarily aim to solve social problems. (Yes %)
States						
Khartoum	50.0	81.8	78.5	69.2	47.9	59.0
Northern	44.4	83.9	87.1	59.7	59.7	38.3
River Nile	46.9	73.5	78.4	64.3	62.2	45.9
Red Sea	60.2	82.4	83.2	52.8	49.2	43.2
Gadarif	50.5	72.4	75.8	65.6	47.4	45.4
Kassala	77.0	70.2	91.7	62.8	45.4%	55.2
Gezira	68.0	78.6	89.4	79.9	44.4	56.7
Sinnar	83.2	87.9	91.7	87.6	62.4	66.0
White Nile	94.0	79.3	93.3	83.0	82.2	80.7
Blue Nile	93.2	93.3	96.4	83.6	66.7	63.3
North Kordofan	87.9	73.1	83.1	72.8	61.0	63.2
North Darfur	77.0	84.1	91.7	62.1	50.3	45.3

1.4
Sudan's
International
Position with
Respect to
Societal Values
about
Entrepreneurship

Figure 1.2 compares Sudan's zone position with respect to indicators on perception of societal values related to entrepreneurship. The USA, GEM average and high-income earning countries have been included to give an international perspective.

Turkey and Egypt are the populations where people are most perceived, by a notable margin, as preferring a similar standard living for everybody. By contrast, Iran and the UAE are the most competitive societies in the zone. Sudan exhibits a sound indicator (67%) and an intermediate position among those countries.

All the populations of countries in the zones show high rates of people considering entrepreneurship to be a good career choice, except for Iran, where the rate is significantly lower. Notably, in all of these Middle Eastern countries – again, except for Iran and Morocco –entrepreneurship is viewed as a good career choice at a higher rate than in the USA. Sudan exhibits a prominent position expressed by an indicator of (79.4%) and stands in the second position among these countries after Turkey.

Sudan was in first position showing a majority (85.5%) of the adult population perceiving that successful entrepreneurs are accorded with high social status and respect, Egypt and Iran's populations show high percentage (generally around 80%) who perceive the same. Morocco recorded a significantly lower rate (70%) expressing views on this variable.

Well over (70.8%) of the adult population of the Sudan consider that public media channels sufficiently portray successful entrepreneurship experiences, followed by UAE, Saudi Arabia, and the USA. The other populations show more moderate results regarding this variable; the lowest rates are for Iran and Morocco, at slightly above 50%.

Figure 1.2
Sudan: International position with respect to indicators on perception of societal values related to entrepreneurship

	Preference of the population for similar living standard (%)	The population considers e-ship a good career choice (%)	Successful e-ship good status (%)	Media as echo of successful e-ship (%)
GEM	62.2	62.3	69.80	61.0
High income countries	60.7	57.9	67.60	60.6
Egypt	72.6	74.0	82.57	68.1
Iran	47.9	39.3	80.49	50.8
Morocco	63.8	61.1	68.31	52.2
Qatar	65.7	68.2	76.70	64.2
KSA	68.2	66.8	78.19%	71.4
Sudan	67.0	79.4	85.30	70.8
Turkey	77.0	80.8	66.09	52.6
UAE	56.4	71.7	69.44	72.5
USA	50.8	62.7	78.69	74.4
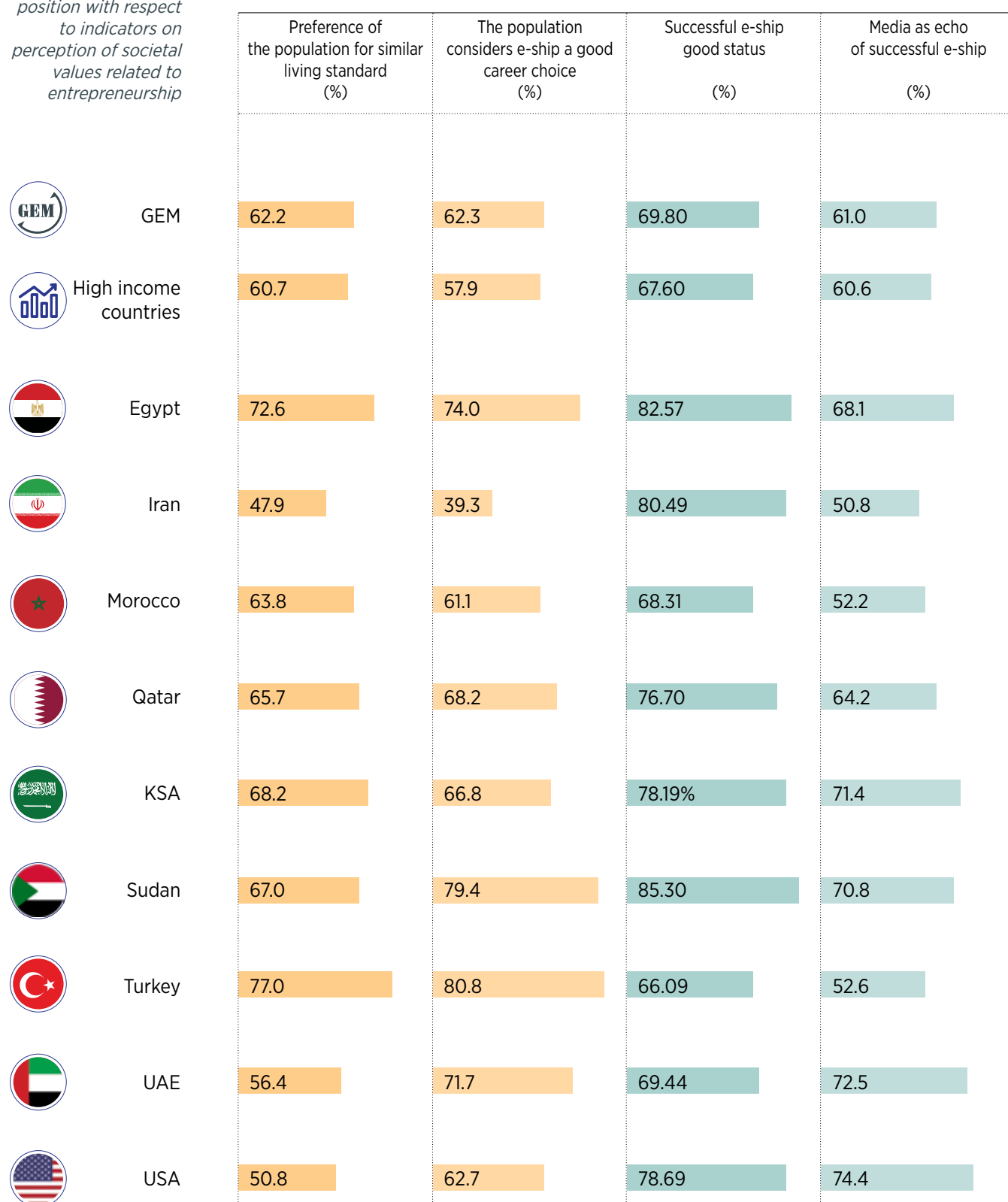
2. Individual Self-Perception about Entrepreneurship

2.1 Introduction

Figure 2.1 Percentages of positive responses for population of Sudan aged 18–64 when questioned on self-perceptions about entrepreneurship

The first GEM Sudan adult survey conducted in 2018 draws a general view about the individual self-perception about entrepreneurship among Sudanese, using four core questions as indicators. The results of these questions are summarized in Figure 2.1 revealing that 59.9% of working-age adults know someone who started a business in the last two years. This result suggests an entrepreneurially active community where many businesses are known to have been established regardless of their prospects or/and quality. The majority (74%) of the same population feel that they have the required levels of knowledge, skills, and experience to start a business, while 71% consider that there are many good opportunities within their context for starting a business. This may indicate that there is a favorable environment with opportunities attractive to entrepreneurs for starting a new business. Nonetheless, 34.1% of the working-age individuals feel a strong fear of failure to the extent that it prevents them from starting a business; which may reduce the number of utilized opportunities to initiate business startups. This fear may be related to many factors such as; culture, education, economic and market conditions and in some situations lack of knowledge about success stories.

positive responses aged 18–64 on …

59.3%	71.0%	74.5%	34.7%
Do you know someone personally who started a business in the past two years?	In the next six months, will there be good opportunities for starting a business in the area where you live?	Do you have the knowledge, skill, and experience required to start a new business?	Would fear of failure prevent you from starting a business?

Sudan's adult population show relatively high levels of self-perception about entrepreneurship. However, fear of failure and business risk-taking may be considered as a factor that influences the actual entrepreneurial practice as a viable path for self-employment, especially if the labour market is flourishing and offers more paid, secure jobs. In Sudan the percentage of the population that fear failure and risk taking would prevent from starting businesses. This is a feature that is more likely to negatively impacts on making use of the perceived opportunities for starting a business. Accordingly, there is a need to address this issue may be through education, media presentation of good examples of successful entrepreneurs to help minimize the level of fear and encourage taking business risks (a core trait of successful entrepreneurs).

GEM SUDAN-2018

2.2 Individual self-perceptions about entrepreneurship by gender, age group, educational level, involvement in business sector, potential entrepreneurship, and region

83.2% *of the people aged* **45–54** *years are perceiving themselves as having entrepreneurial skills.*

The results suggest that the younger population may have good potentials to start a business

(**75.2%**) *of those who hold higher educational level and graduate experience perceive themselves as knowledgeable, skillful, and gain the required experience to start a new business.*

Only **28.2%** *of those with the lowest level of education (no education) have considered fear of failure as a factor that prevents them from starting a business.*

To give a more detailed picture the survey identifies the individual self-perception about entrepreneurship in Sudan according to gender, age group, educational level, involvement in the business sector, and region. Table 2.1 describes the positive responses results to the main four questions mentioned in section 2.1.

> The most significant gender difference is related to the variable indicating feeling to have sufficient knowledge, skill, and experience to start a business; men reported 80.5% of positive responses compared to 68.7% women.
>
> *GEM SUDAN-2018*

The assessment of individual self-perceptions about entrepreneurship according to gender shows significant gender differences in some of the questions. However, the distances between women that respond positively about knowing recent entrepreneurs, seeing entrepreneurial opportunities, and feeling they have sufficient knowledge, skills, and experience to start up small businesses, vary in scope. The most significant difference is related to the variable indicating feeling to have sufficient knowledge, skill, and experience to start a business; men reported 80.5% of positive responses compared to 68.7% women. In fact, the percentage of women who perceive fear of failure as a reason that prevent their engagement in entrepreneurial activities is the only one exceeding the percentage of men. These results are not surprising in a conservative culture like Sudan where the socialization of women, in general, decreases their risk-taking propensity, especially in financial aspects (A/Rahman, 2006).

In terms of age, the percentages of positive response reported by the people aged 45–54 years stands the highest of all the groups regarding all the four variables. Specifically, 83.2% of the people aged 45–54 years are deeming themselves as having entrepreneurial skills. Fear of failure is statistically almost the same among the people of all age groups. However, one can see that the youngest individuals show a higher percentage compared to the older so, looking at the complete picture, the results suggest that the younger population may have good potentials to start a business.

The year 2018, adult populations with very low levels of education are those that exhibit the lowest rate (44.4%) of knowing recent entrepreneurs. However, they show higher rates of perceived opportunities compared to people with high educational attainment. The result suggests that necessity encourages the search for opportunities. The part of the population who hold higher educational level and graduate experience (75.2%) perceive themselves as knowledgeable, skillful, and gain the required experience to start a new business. Finally, in contrast, only 28.2% of those with the lowest level of education (no education) have considered fear of failure as a factor that prevents them from starting a business.

In the year 2018, adult people involved in any stage of the business sector in Sudan, had shown significantly higher rates of positive response on knowing recent entrepreneurs, on perceived opportunities, and on self-perception about possession of entrepreneurial skills and the experience of starting up a small business and significant lower fear of failure over the people not in the business sector. These results are not surprising since people who are already in the business sector are more attached to business conditions and the dynamics within the sector.

The survey results for Potential Entrepreneurs (PE) mirrors higher rates of self-perception about entrepreneurship than those that have no intention of starting up businesses in the short term. But the fear of failure rate is higher for potential entrepreneurs, which may be due to the lack of experience in the business domain thus the fear of uncertainty becomes higher.

Table 2.1
Perception of societal values related to entrepreneurship by gender, age, educational level and potential entrepreneurship (PE)

	Do you know someone personally who started a business in the past two years? (Yes %)	In the next six months, will there be good opportunities for starting a business in the area where you live? (Yes %)	Do you have the knowledge, skill, and experience required to start a new business? (Yes %)	Would fear of failure prevent you from starting a business? (Yes %)
*Differences between categories are significant at the 95% confidence level with p<0.025 for chi-square tests.				
Gender				
Male	63.3*	71.2	80.5*	31.0
Female	55.3	70.7	68.7	38.3*
Age				
18–24 years	54.0	71.8	67.4	33.9
25–34 years	59.6	71.1	74.6	35.5
35–44 years	63.7	71.9	78.7	35.7
45–54 years	68.1*	72.8	83.2*	33.7
55–64 years	49.7	61.5	74.3	33.3
Education				
None	44.4	61.2	61.5	28.2
Some secondary	56.7	64.4	70.6	38.8
Post-secondary	50.9	72.1	74.9	36.8
Grad experience	61.9*	71.4	75.2	34.2
Entrepreneurship experience				
Not in bus. Sector	52.3	66.7	66.4	36.3
Yes in bus. Sector	74.4*	79.9*	92.1*	31.4
Not (PE)	52.6	59.2	60.3	34.8
YES (PE)	62.2*	75.9*	81.5*	35.0

*The highest population that know personally of someone who started a business in the past two years is reported in Blue Nile State (**83.1%**).*

*The River Nile State in North Sudan shows the highest percentage (**88.1%**) regarding availability of good opportunities for starting a business in the area.*

Generally, people's perception of their knowledge, skill and experience necessary, to starting a new business. reflects high rates of positive responses.

*"Fear of failure to the extent that prevents starting a business", is found to be highest (**49.3%**) in White Nile State, and lowest (**25.8%**) in Northern State.*

Table 2.2 also exhibits the positive responses around the same variables about the individual perception about entrepreneurship, discussed above, by geographical regions (States) of Sudan. The regional perspective toward the four main indicators of the individual self-perceptions about entrepreneurship draws a good comparison between these regions (Table 2.2).

For the first question if the population know someone personally who started a business in the past two years the responses indicate that the more we go south the more population have higher positive responses; the highest (83.1%) is reported in Blue Nile State and the response rate (44.0%) is reported in the Red Sea State. The culture in South and West of Sudan is in general more supportive toward self-employment, and households depend more on individual businesses.

Not surprising the second set of positive responses about, *"Will there be good opportunities for starting a business in the area where you live?"* follow the same pattern as the first question nevertheless the River Nile State in North Sudan shows the highest percentage (88.1%) over the two South border States White Nile and the Blue Nile with 82.1% and 76.9% respectively. The responses of River Nile State can be justified by the opportunities recently availed by Gold mining that is attracting people from other states to work individually either in direct mining activities or as services providers to the people who work in gold mining (Ibrahim,2015).

Furthermore, Table 2.2 offers rates positive responses relevant to people's perception of their capacity, in terms of knowledge, skill and experience necessary, to starting a new business. Some variation is noticed and the responses show the highest range of (86.1%) in White Nile State and the lowest range of (66.0%) in Kassala State. Putting these results in perspective, it may be optimistically considered as a motivation for potential entrepreneurs to take concrete steps towards establishing new businesses out of the perceived opportunities.

The last variable, *"Fear of failure to the extent that prevents starting a business"*, is found to be highest (49.3%) in White Nile State, and lowest (25.8%) in Northern State. The other states show variation in the results within the highlighted two higher and lower rates. This can be considered as an area for further investigation since it is attributable to complex factors beyond the scope of these results.

Photo credit - Flickr.com, Eric Lafforgue, Gold mining activities

Table 2.2
Individual
self-perception
about entrepreneur-
ship by regions
(States) of Sudan
(% positive response)

States	Do you know someone personally who started a business in the past two years? (Yes %)	In the next six months, will there be good opportunities for starting a business in the area where you live? (Yes %)	Do you have the knowledge, skill, and experience required to start a new business? (Yes %)	Would fear of failure prevent you from starting a business? (Yes %)
Khartoum	55.9	67.1	75.4	27.1
Northern	56.5	88.1*	67.7	25.8
River Nile	45.9	70.4	75.5	34.7
Red Sea	44.0	61.5	67.5	40.5
Gadarif	52.5	61.2	74.7	27.3
Kassala	53.4	69.1	66.0	30.2
Gezira	62.5	66.1	76.5	38.3
Sinnar	66.7	78.4	68.4	36.7
White Nile	67.4	82.1	86.1*	49.3*
Blue Nile	83.1*	76.9	83.1	35.6
North Kordofan	65.4	75.8	77.7	44.3
North Darfur	65.1	76.9	70.6	32.9

*Differences between categories are significant at the 95% confidence level with p<0.025 for chi-square tests.

**2.3
Sudan's
international po-
sition regarding
self-perception of
entrepreneurship**

Figure 2.2 shows the rates for populations, age 18-64 years, of Sudan's zone position (GEM average and high income earning countries have been included to give an international perspective) giving a positive answer about questions on self-perception of values related to entrepreneurship, along with those for the US, the high-income nations group, factor-driven economies (categorized and established by the Global Competitiveness Report 2018), and GEM 2018.

Sudan shows that the percentage of the population who know entrepreneurs who started a business in the past two years is recorded as the second highest (59.3%) preceded by Saudi Arabia (79.1%). A considerable portion (71.0%) consider that there are good opportunities to start new businesses in the area where they live and that they perceive themselves as endowed with knowledge, skills, and experience sufficient to make them start new businesses (74.0%) of the population. These results place Sudan in second position compared to all zones, and the GEM average, included in the comparison.

Fear of failure as a hindrance to starting a business is stated by 34.1% of the population aged 18-64 years old in Sudan. So, this is a good position among the countries of the zone, high-income countries and GEM average. This figure peaks at 51.2% in Morocco.

Overall, Sudan stands out for having high rates on self-perceptions of entrepreneurship practice that far exceeds its fear of failure. The incorporation of Sudan to this picture shows that this economy has also a population with high rates of entrepreneurial values.

Figure 2.2 Sudan: International position with respect to indicators on individual self-perception about entrepreneurship	Do you know someone personally who started a business in the past two years? (%)	In the next six months, will there be good opportunities for starting a business in the area where you live? (%)	Do you have the knowledge, skill, and experience required to start a new business? (%)	Would fear of failure prevent you from starting a business? (%)
GEM	38.9	45.6	49.2	39.8
High income countries	37.0	46.6	46.6	40.4
Egypt	11.7	39.3	43.0	30.9
Iran	44.5	22.3	53.1	39.3
Lebanon	53.1	42.0	68.1	42.4
Morocco	34.1	33.6	29.5	51.2
Qatar	44.9	54.2	52.3	29.4
KSA	79.1	76.3	83.4	41.4
Sudan	59.3	71.0	74.5	34.1
Turkey	25.3	44.3	56.8	34.1
UAE	27.9	66.5	53.6	23.7
USA	38.5	69.8	55.6	39.4

3. Entrepreneurial and Business Activity

3.1 Introduction

This chapter exhibits the results of the adult population survey regarding entrepreneurial and business activity in Sudan. One of the GEM aims is to provide detailed information about entrepreneurial activity in target territories of participating countries. GEM understands entrepreneurial activity as the core of a complex process (Figure 3.1) that begins with individuals' or groups of individuals' entrepreneurial intention and continues with successive phases of effective business start-up (nascent activity), business consolidation (new or baby activity), business development and persistence (established activity), and business discontinuation (activity exited from the market) (GEM Global Report, 2018).

Figure 3.1
Business phases
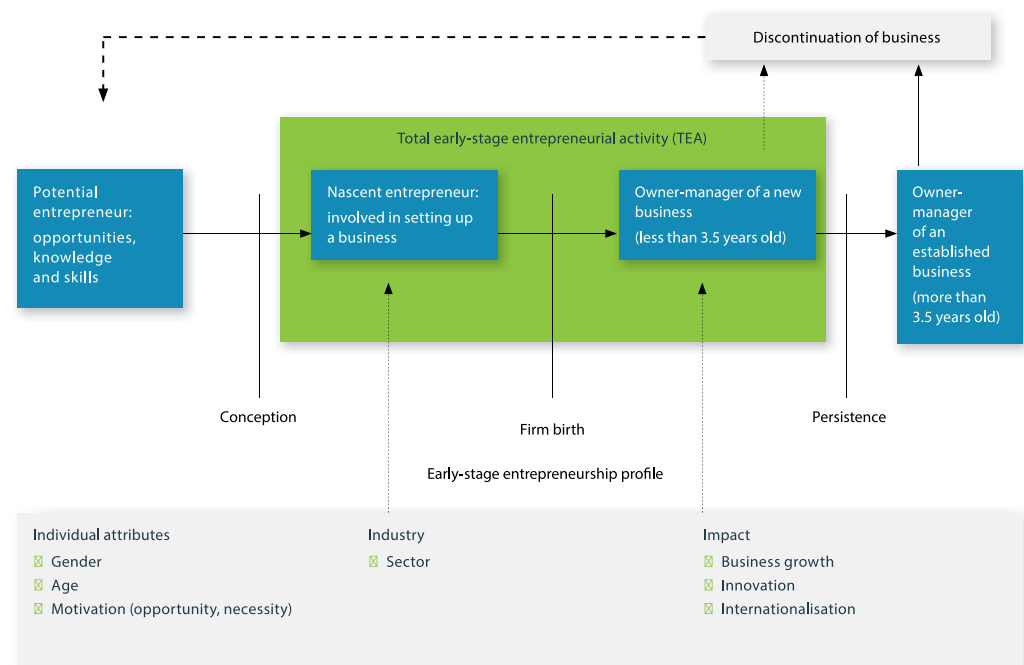
Source: GEM Global Report 2018

3.2 Entrepreneurial and business activity by phases

The 2018 GEM results of Sudan's adult population survey (APS) show a relatively high level of involvement in entrepreneurial activities (Table 3.1). At the time of the survey, 69.1% manifested the intention to start up a new business activity in the next three years, 10.3% were starting up a new business not older than three months, and 12.6% were consolidating a business older than three months but established less than 42 months ago. Thus, as of July 2018, 22.1% of Sudan's adult population was involved in early-stage entrepreneurial activity.

Sudan's TEA (Total Entrepreneurial Activity) rate indicator is the highest in the international ranking as shown in Section 4 of this chapter. But the real impact of the contribution of entrepreneurial activity to a country's economy, especially to the GDP and to peoples' welfare, is dependent on the quality of the business. That is why knowing the characteristics of entrepreneurs and entrepreneurial activities is critical to making a proper reflection of the effective contribution of any TEA rate to national GDP. These characteristics are analyzed with respect to Sudan in Chapters 4 and 5.

Activity at each phase of business creation and development
Percentages of Sudan's population aged 18–64 involved in each phase

Potential	69.1%
Nascent	10.3%
New (baby)	12.6%
TEA (total)	10.3+12.6=22.9%
Established	10.2%
Discontinuation	17.3%
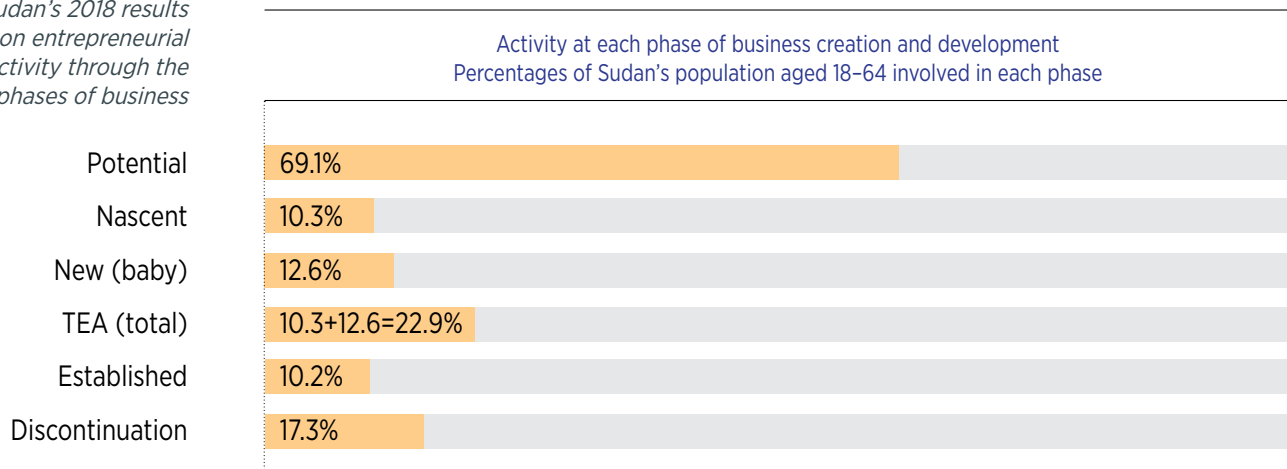
One symptom of the shortcomings in the business process in Sudan is the low rate of established businesses (EBs). The figures in Table 3.2 still suggest high volatility either during or following the consolidation process of entrepreneurial initiatives, which is estimated to last 3.5 years. In 2018, whenever someone was in the process of personally withdrawing from a business, this coincided with a failure of the business itself or due to the retirement of the owner-manager in 38.2% of the cases (Table 3.2).

These figures suggest that business survival determines the time pace of business creation versus destruction, which is still not well balanced. Currently, the market in Sudan features a very high proportion of recently created businesses. This could be good news in terms of innovation and renovation if the quality of a significant proportion of these activities is also high; however, it is more likely that high volatility reflects low-quality businesses unable to compete and survive in the market for long. This is despite the fact that a high percentage (54.9%) of abandoned activities continued in other hands, and 4% continued but changed its main activity. These reflections of this indicator make it necessary to conduct a profound and complementary study on the causes of failure; this is recommended for the next GEM cycle in Sudan.

Discontinuation of businesses' composition
Percentages of Sudan's population aged 18–64 involved in each phase

Discontinuation	17.3% (100%)
Business continued in other hands	9.5% (54.9%)
Business continued but changed its main activity	0.7% (4.0%)
Business exited the market completely	6.6% (38.2%)
Don't know/Refuse	0.5% (2.9%)
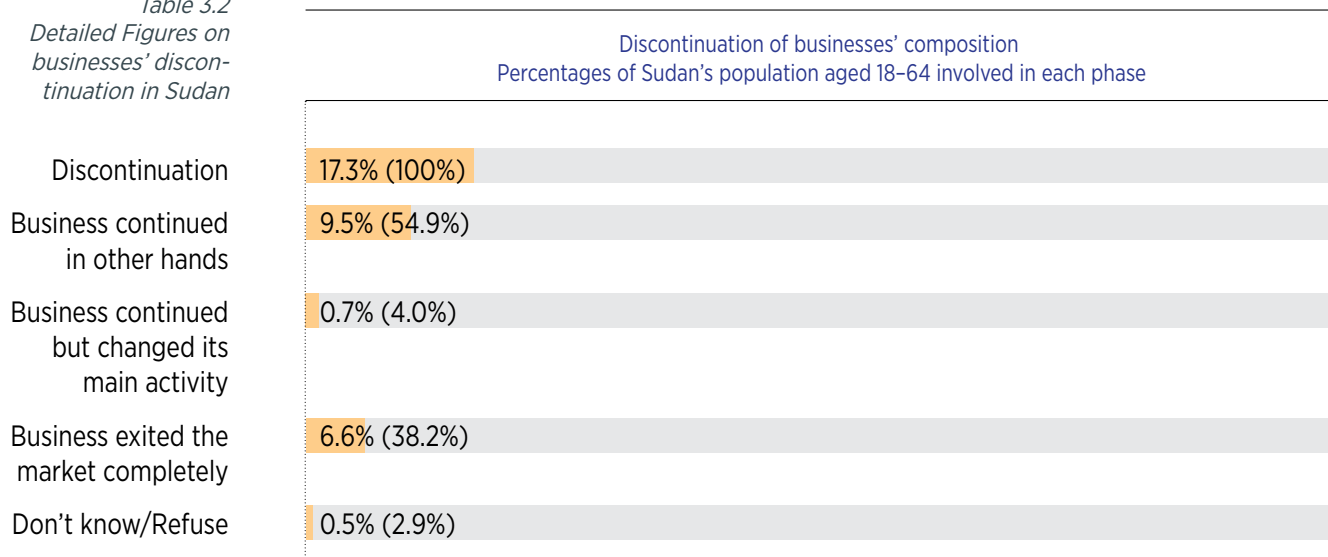
The ratio between TEA rate and potential entrepreneurship rate roughly indicates how readily entrepreneurial intentions are transformed into entrepreneurial activities (Both measurements refer to a three-year period). The value of this indicator for Sudan in 2018 is 0.32 (Table 3.3), which is rather low; a rate closer to 1 would indicate more effective entrepreneurship.

Another interesting indicator of the recent impact of business is the ratio between the percentage of nascent activity and the percentage of effective business discontinuation (Table 3.3, final column). The value of this ratio for Sudan is 1.56 (Table 3.3), which indicates that more businesses started than exited altogether. At the moment, the problem for Sudan is low level of businesses in the consolidation stage, which results in a noticeable small Established Business sector.

Table 3.3 Relevant rates derived from the results of the business creation and development model and their recent evolution in Sudan in 2018

	Rates - Year 2018 Abstract figures (no units of measurement)
TEA/potential entrepreneurship	22.1/69.1 = 0.32
Nascent activity/ exited activity	10.3/6.6 = 1.56

3.3 Regional status (by State) of the main indicators that make up an effective business process

Business development within Sudan is mostly shaped by traditional business activities since Sudan falls within the factor-driven economies classification introduced in the first part of this report. However, the business environment shows a moderate response to global technological advancements, which motivates a few modern entrepreneurs. This is a trend that has been observed by GEM in most countries: as economic and social development progresses, the rate of potential (traditional) entrepreneurship decreases as there is less necessity for self-employment. This transition, in the case of Sudan, is better to be reflected by examining the business evolution by region rather than temporal representation (Figure 3.2) since this is the first GEM study to be conducted in Sudan.

Gezira and the Blue Nile States show the highest rates (over 70%) of adult population age 18-64 who are potential entrepreneurs planning to start a business by themselves or with others within the next three years, followed by a similar percentage in Khartoum State. The least percentage (just over 40%) of potential entrepreneurs is observed in Kassala, North Darfur and the Northern State.

The nascent activity indicator shows great variation between States confirming the statement that high discontinuity rates prevail and fewer entrepreneurs are able to compete in the market. Figure 3.2 shows that this statement is supported by the evolution of the indicator on new businesses that are in the consolidation phase. It is true that part of nascent and new businesses does not survive 3.5 years, but it is not unreasonable to think that innovative and competitive businesses are among those that have better resistance to market and other dynamics. As a result, the TEA rate shows a positive situation within most States, the majority are clustered between (20-30%).

The indicator of new business activity (3-42 months in the market) shows the highest rate (over 20%) in White Nile State compared to the lowest rate (less than 10%) in the Northern State. Four States of Gadarif, Kassala, Gezira, and Sinnar shared relatively low rates with variation.

The exit rate that is highest (almost 60%) in the Blue Nile, River Nile and the Northern States indicates instability in the market and limited business sector improvements. Sinnar State shows the lowest exit rate (20%) while Khartoum State falls in between (20-60%), most likely as a result of the movement of businesses to persons other than the owner.

Figure 3.2 Main indicators of business development by State in Sudan	Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years? (Yes%)	Nasent activity (up to 3 month in market on July) (Yes%)	New activity (between 3 and 42 month in market on July) (Yes%)	TEA activity (between 0 and 42 months in market on July) (Yes%)	Established activity (more than 42 months in the market on July) (Yes%)	Exited buiness (the last 12 month before July) (Yes%)
States						
Khartoum	74.30	8.30	13.20	21.40	7.70	27.80
Northern	48.40	1.60	6.50	8.10	8.10	60.00
River Nile	71.40	13.30	13.30	24.50	15.30	8.30
Red Sea	61.60	7.90	14.40	21.60	8.00	35.70
Gadarif	69.10	14.00	11.00	23.00	11.00	50.00
Kassala	48.30	11.40	10.10	20.00	15.30	52.90
Gezira	81.00	11.50	10.50	21.60	8.10	42.60
Sinnar	76.30	6.00	10.00	16.00	21.00	18.20
White Nile	74.80	12.30	23.40	33.60	10.90	26.10
Blue Nile	80.30	14.80	16.40	30.00	11.70	60.00
North Kordofan	64.60	12.80	11.40	22.50	9.20	57.90
North Darfur	55.00	10.60	11.80	21.90	9.30	41.70

**3.4
Sudan's
international
position with
respect to
indicators of
business
development**

*The Nascent
activity rate in
Sudan* **10.3%** *is
higher than the
GEM average of*
6.8%.

The new activity rate for Sudan,
12.6%, *is close to
the GEM average of*
12.2%.

*Sudan shows high
business development volatility,
evidenced by the
big difference
between the TEA*
22.2% *rate and
the established
businesses rate at*
10.2%.

*Established
Business activity
in Sudan shows a
moderate rate
(* **10.2%***) among
the selected zone
areas.*

*Sudan shows the
highest rates
(* **17.3%***) of all
types of discontinuation, followed by
Morocco (* **10.1%***)*

Sudan shows a high position in regards to the rate of potential entrepreneurship (percentage of the adult population that declares the intention of starting a new business within the next three years) among the countries of its geographical zone (Figure 3.3). Thus, as Sudan develops, it should be expected that the development of an entrepreneurially minded society could cause business creation more than the necessity for creating self-employment. As a counterpoint, it can be observed that the countries within the zone with lower level of development show much higher rates of entrepreneurial intention in their populations.

The nascent activity rate in Sudan (10.3%) is very close to the USA's rate (10.5%) and is higher than the rate for GEM average (6.8%) and the rate for high-income countries (6.0%) (Figure 3.3). This rate changes according to the situation within the labor market and the level of innovativeness within the respective country. Thus, for example, Sudan and the USA show the highest rates of this indicator but due to different reasons: in Sudan there is still a big need of creation of self-employment due to the shortage of job opportunities within the formal labour market, while in the USA, there is a strong entrepreneurial cultural background and some of the most important innovative and technological-based entrepreneurial ecosystems of the world.

The new activity rate for Sudan, 12.6%, is somewhat higher than the GEM average of 12.2%. Taking into consideration its rate of nascent activity, it is a good figure, as it indicates a business potentially materializing. So, at this stage, the rate of consolidation is quite good, but after the 3.5 years of consolidation, a significant part of businesses did not survive. This indicates the persistence of the established business rate around a 10.2% (Figure 3.3). This balance between nascent and new activity is desirable for all countries. Sudan also shows high rates along the business development process, but much more volatility, evidenced by the big difference between the TEA 22.2% rate and the established businesses rate at 10.2%.

The TEA rate of Sudan 22.2% is also higher than the GEM average 12.6% and second among the selected countries of the zone; it falls right after Lebanon's average 24.1% but much higher than Egypt and Morocco averages. The difference between Sudan's and USA rates (22.4 vs 15.6%) may further support the expectation that necessity driven activities, in the case of Sudan, stay higher than that in advanced economies, such as the USA. Sudan's high TEA can be a reflection of the data coverage of rural areas in the states where considerable numbers of potential and new business have been recorded. This can be attributed to the labour market deficits, which justified the statement that entrepreneurs start businesses to create their own jobs through self-employment.

Established Business activity in Sudan shows a moderate rate among the selected zone areas. It falls at 10.2% of the zone, below Iran 12.3% and Lebanon, which records the highest EB rate of 21.6%. Lebanon stands out as the most active and balanced country, while the rest of the countries show high volatility, leading to lower rates, than the GEM average for the majority of countries, especially those in the MENA region. Sudan shows that business activity is undergoing a renovation process where old established businesses are being substituted by new ones at high speed. This explains the need to balance business creation and employment rate, where business volatility must be analyzed regularly to ensure that it is not associated with a lack of sustainability of innovative activities.

Figure 3.3
Sudan's International
position with respect
to indicators of
business
development

	Potential entrepreneurship (entrepreneurial intention for next three years) (%)	Nascent entrepreneurship (up to 3 months in the market) (%)	New entrepreneurship (between 3 and 42 months in the market) (%)	Total early stage entrepreneurial activity rate (0-42 months in the market) (%)	Established businesses (more than 42 months in the market) (%)
GEM	27.0	6.8	6.0	12.6	8.4
High income countries	20.4	6.0	4.2	10.0	6.8
Egypt	60.2	4.0	5.9	9.8	4.5
Iran	37.4	4.1	5.7	9.7	12.3
Lebanon	39.4	6.9	17.6	24.1	21.6
Morocco	43.9	3.3	3.5	6.7	4.2
Qatar	31.1	5.0	3.6	8.5	4.2
KSA	33.3	5.3	6.9	12.1	3.1
Sudan	69.1	10.3	12.6	22.2	10.2
Turkey	35.5	7.4	7.1	14.2	8.7
UAE	43.5	7.1	3.9	10.7	2.6
USA	18.5	10.5	5.3	15.6	7.9

All the compared countries, except Sudan, show rates of effective business discontinuation (where the business definitively exits the market) exceeding rates of discontinuation where the business continues in other hands (Figure 3.4 and Table 3.4). The rates of effective discontinuation indicate that there is significant business turbulence in the zone, except for Qatar where entrepreneurs appear as more skilled to stay in the market. Countries that show lower levels of discontinuity are the UAE and Turkey; very similar rates to the GEM average but higher than the rate observed in the USA, and high-income countries' averages. This may be attributed to the relative stability in the overall business sector in the mentioned countries.

Sudan shows the highest rates of all types of discontinuation (total discontinuation, businesses continue in other hands and businesses exit the market), followed by Morocco. However, it is observed that Sudan presents the highest proportion of cases where the business continued in other hands (Table 3.4). This rate of traded businesses can be relevant to the high rate of potential entrepreneurs and to the labour market dynamics presented earlier in this section.

Photo credit - Personal Development Goals and Entrepreneurship, https://www.startupist.com/2015/01/personal-development-goals-and-entrepreneurship/

Figure 3.4
Sudan international position with respect to detailed indicators on business discontinuation

	18–64 population, (%)		
	Discontinuation (Total)	Business continues in other hands	Business exited the market
GEM	5.0	1.7	3.3
High income countries	3.8	1.3	2.5
Egypt	7.6	1.5	6.1
Iran	6.1	2.0	4.1
Lebanon	8.0	3.4	4.6
Morocco	10.1	4.0	6.1
Qatar	3.0	1.0	1.9
KSA	8.5	3.2	5.3
Sudan	17.3	9.5	7.8
Turkey	5.2	1.9	3.2
UAE	5.0	1.8	3.2
USA	4.7	1.9	2.8
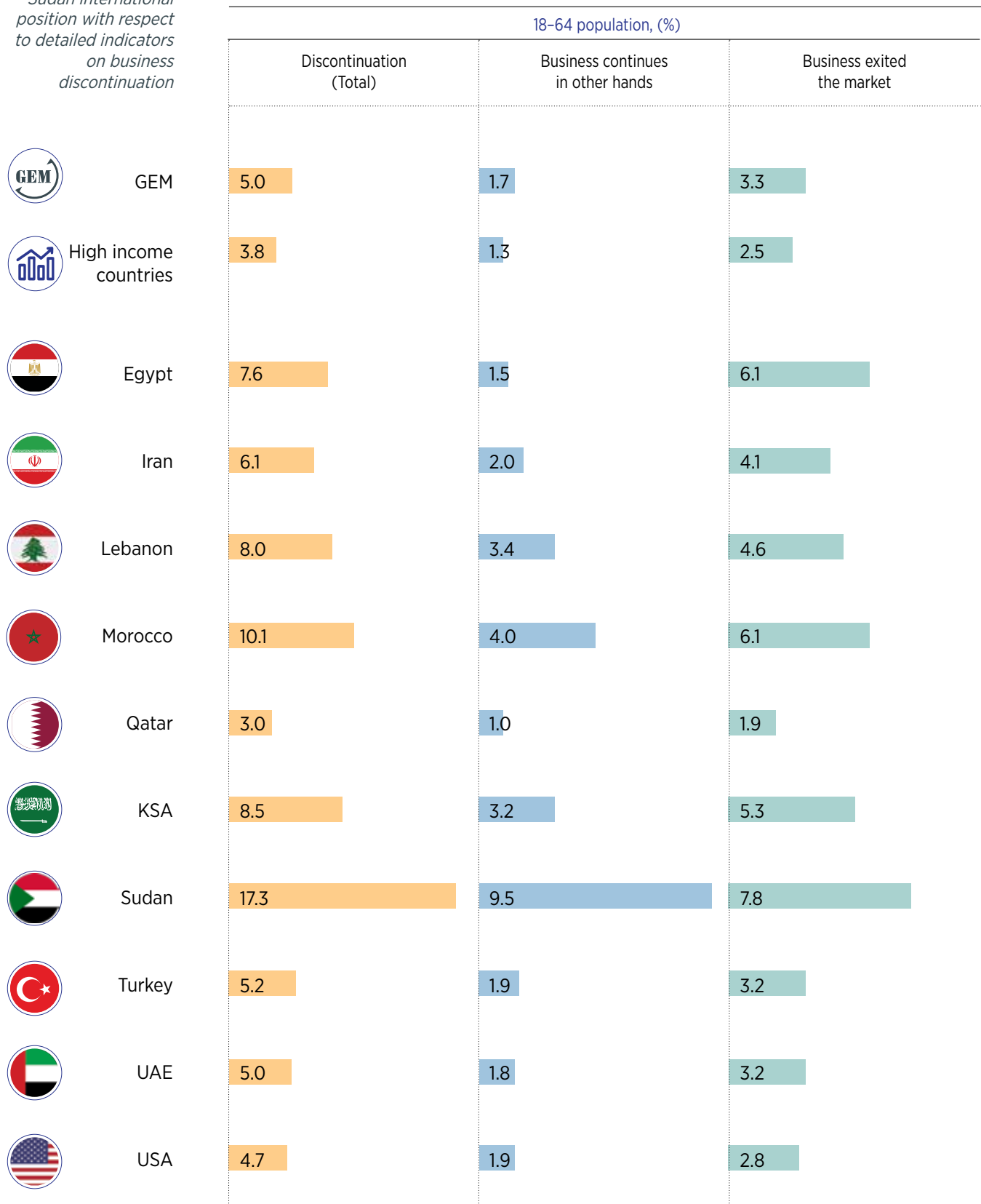
Entrepreneurship is a complex phenomenon that spreads over a wide spectrum of institutions and over time GEM has progressed in measuring it. Nowadays, employee entrepreneurship development is noticeable at private companies and public agencies and is being brought to focus, parallel to independent entrepreneurship. This increasing activity is known as "intrapreneurship" and constitutes a critical complement of innovation, diversification, and growth in any organization. The chance to successfully develop intrapreneurship activity is a function of organizational culture and an advantageous environment that supports innovation and business initiatives. It specifically needs management and leadership styles that allow the establishment of communication, interchange flows between the different hierarchical levels of the company or agency and resource allocation to support innovation. In this way, employees in different positions can channel their ideas, proposals, projects, and concerns in favour of their organization.

To measure intrapreneurship GEM has provided annual indicators since 2013. Those corresponding to Sudan for 2018 are shown in Table 3.5. According to the results, near 4.29 % of the adult population (which represents 3.24 % of the employees' population) have been involved in intrapreneurial activities acting as leaders of new business developments for their employers in the past three years, and 15.65 % (around 11.7 % of the employees' population) were still active in intrapreneurial activities and roles during the year 2018.

Figure 3.5
Intrapreneurship
indicators in detail for
Sudan

	18–64 population	
	involved in intrapreneurship - leading role - active in the past 3 years	involved in intrapreneurship - leading role - active now
... Adult Population	4.29	15.65
... Employees' Population	3.24	11.75
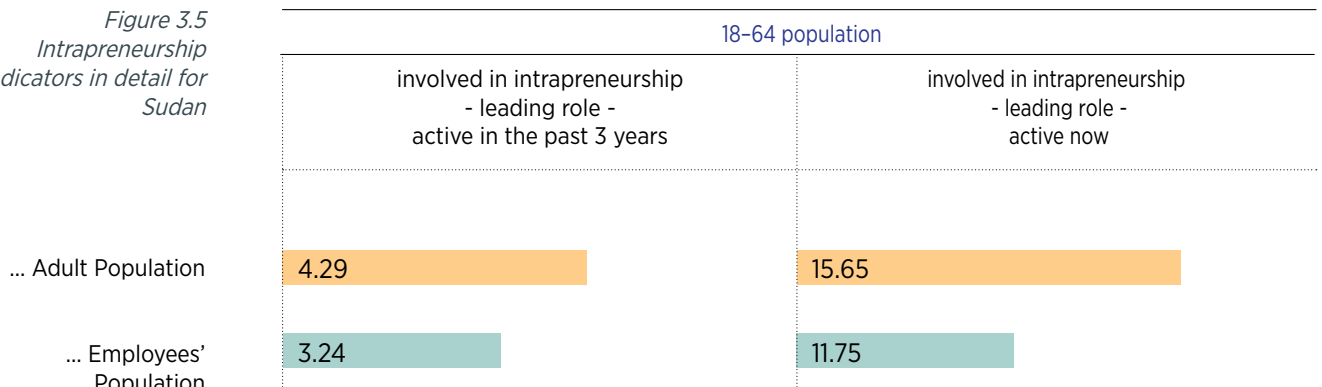
Figure 3.6 shows a more detailed picture of these figures offered about intrapreneurship activities in Sudan in 2018. The percentage of people involved in the development of new activities for their main employer in the last three years is 30.2%, while those currently involved in the development of such new activity is 66.6%. The percentage of those involved in roles to develop a new activity, in phase (1) is 80.7%; 43.9% of them take a leading role, 42.2 % take a supportive role while 13.9 % assume both roles. Fewer people (68.5%) are involved in the real implementation of new ideas in phase (2), with similar proportions of leading and supporting engagements.

Intrapreneurship rates for employees within the whole 18-64 aged population Year (2018)

	In the last three years, have you been involved in the development of new activities for your main employer?	30.2 (Yes %)
	Taking the rate 30.2% as 100% of employees involved in intrapreneurial activities:	
	And are you currently involved in the development of such new activity?	66.6 (Yes %)
Phase 1	Have you been actively involved in idea development for a new activity in the past three years?	80.7 (Yes %)
	And could you tell me whether you had a leading or a supporting role in this phase?	43.9 % leading
		42.2 % support
		13.9 % both
Phase 2	Have you been actively involved in preparation and implementation of a new activity in the past three years?	68.5 (Yes %)
	And could you tell me whether you had a leading or a supporting role in this phase?	40.7 % leading
		42.4 % support
		16.8 % both

4. Entrepreneurial Activities' Characteristics

4.1 Introduction

As discussed in previous sections, it is the quality of entrepreneurial activity, rather than the quantity, that determines its effective contribution to economic and social development.

GEM provides a comprehensive set of indicators that characterize entrepreneurial activities captured by the observation. The analysis allows us to assess their strengths and weaknesses; it also provides valuable information for the orientation and design of public policies, training activities, strategic plans of the private sector, and other mechanisms that may favour the development of the entrepreneurial sector.

The following sections offer detailed results on aspects related to entrepreneurial characteristics: entrepreneurship motive; sector of activity; number of owners; number of employees; job creation expectations; innovation component; use of recent technologies; competitiveness; internationalization; seed capital invested; and discontinuation motive for exited businesses.

4.2 Motivation for early-stage entrepreneurial activity

Motivation is one of the determinants of the quality of businesses resulting from early-stage entrepreneurial activity. GEM classifies early-stage entrepreneurial initiative as motivated by necessity, opportunity, or other motives.

Total early-stage Entrepreneurial Activity (TEA)

The central indicator of GEM is the Total Early-stage Entrepreneurial Activity (TEA) rate, which measures the percentage of the adult population (18 to 64 years) that are in the process of starting or who have just started a business. This indicator measures individuals who are participating in either of the two initial processes of the entrepreneurial process:

[•] Nascent entrepreneurs – Those who have committed resources towards starting a business, but have not paid salaries or wages for more than three months.

[•] New business owners – Those who have moved beyond the nascent stage and have paid salaries and wages for more than three months, but less than 42 months. TEA rates tend to be highest in the factor-driven group of economies, decreasing with higher levels of economic development (Figure 1.3). In comparison, among economies at the same development level, there is substantial variation.

GEM Global Report 2018/2019

Potential entrepreneurs are driven by necessity when they have no better choice of work to develop their professional career or when they need to survive by creating their own job activity. By contrast, nascent and new entrepreneurs are driven by opportunity when they detect a niche in the market, when they have and develop an original idea, or when they are able to develop an innovative idea. Nascent and new entrepreneurs are classified as being motivated by other causes when they are driven by a mixture of necessity and opportunity, when they continue a family business, or when they engage in developing projects, etc.

The literature on this topic indicates that opportunity entrepreneurship tends to be more valuable to economies because it usually makes more relevant contributions in terms of innovation, productivity, and competitiveness. However, it is not recommended that conclusions be drawn on the basis of motivation alone, because analysts must also evaluate the market development level, the sector, the businesses' size, and many other variables that complete the picture of early-stage entrepreneurial activities.

GEM highlights the indicators on Entrepreneurial activities' characteristics among adult population in 12 different states in Sudan (Figure 4.1). The level of necessity-driven entrepreneurship tends to be higher compared to opportunity- driven. The regions where the highest levels in opportunity - driven entrepreneurship were (in descending order) Gadarif (87%), River Nile (83.3%), Northern and North Darfur share the same percentage ((Figure 4.1).

Photo credit - https://pixnio.com/people/female-women/female-market-vendor-on-market-in-sudan

*Figure 4.1
Distribution of
motivation for early-
stage entrepreneurial
activity in Sudan by
region*

States	TEA necessity (%)	TEA opportunity (%)	TEA other motive (%)
Khartoum	18.1	69.5	12.4
Northern	20.0	80.0	0
River Nile	16.7	83.3	0
Red Sea	39.3	60.7	0
Gadarif	13.0	87.0	0
Kassala	30.0	66.7	3.3
Gezira	25.0	71.9	3.1
Sinnar	43.8	56.3	0
White Nile	36.2	53.2	10.6
Blue Nile	50.0	50.0	0
North Kordofan	44.0	56.0	0
North Darfur	20.0	80.0	0

The motivation for early-stage entrepreneurial activity by gender (Figure 4.2) shows significant differences in behavior between male and female entrepreneurs. Both men and women believe that availability and type of opportunity is the core motivation predominantly influencing their engagement in entrepreneurship. This indicator shows male dominance of TEA to be motivated by opportunity as high as (100%) in Gadarif and North Darfur, while exhibiting the highest percentage (78.6%) for women in River Nile. More prevalence of necessity entrepreneurship is recorded for women; the highest is (66.7%) in Blue Nile State, while the highest percentage recorded for men is (54.4%) similarly recorded in the Blue Nile State. On the other hand, the remaining regions in the sample show a variation of indicators, with women recording relatively high percentages in both types of motivation. Figure 4.2. Distribution of motivation for early-stage entrepreneurial activity in Sudan by gender and State-Motivation -women.

More women than men are motivated to engage in entrepreneurship by necessity, with the highest representation in Blue Nile State.

GEM SUDAN-2018

Figure 4.2
Distribution of
motivation for early-
stage entrepreneurial
activity in Sudan by
gender and State

States	Motivation-Men		
	TEA necessity (%)	TEA opportunity (%)	TEA other motive (%)
Khartoum	11.5	78.7	9.8
Northern	20.0	80.0	0
River Nile	10.0	90.0	0
Red Sea	35.0	65.0	0
Gadarif	0	100.0	0
Kassala	25.0	70.0	5.0
Gezira	23.9	71.7	4.3
Sinnar	41.7	58.3	0
White Nile	28.0	64.0	8.0
Blue Nile	44.4	55.6	0
North Kordofan	31.3	68.8	0
North Darfur	0	100.0	0
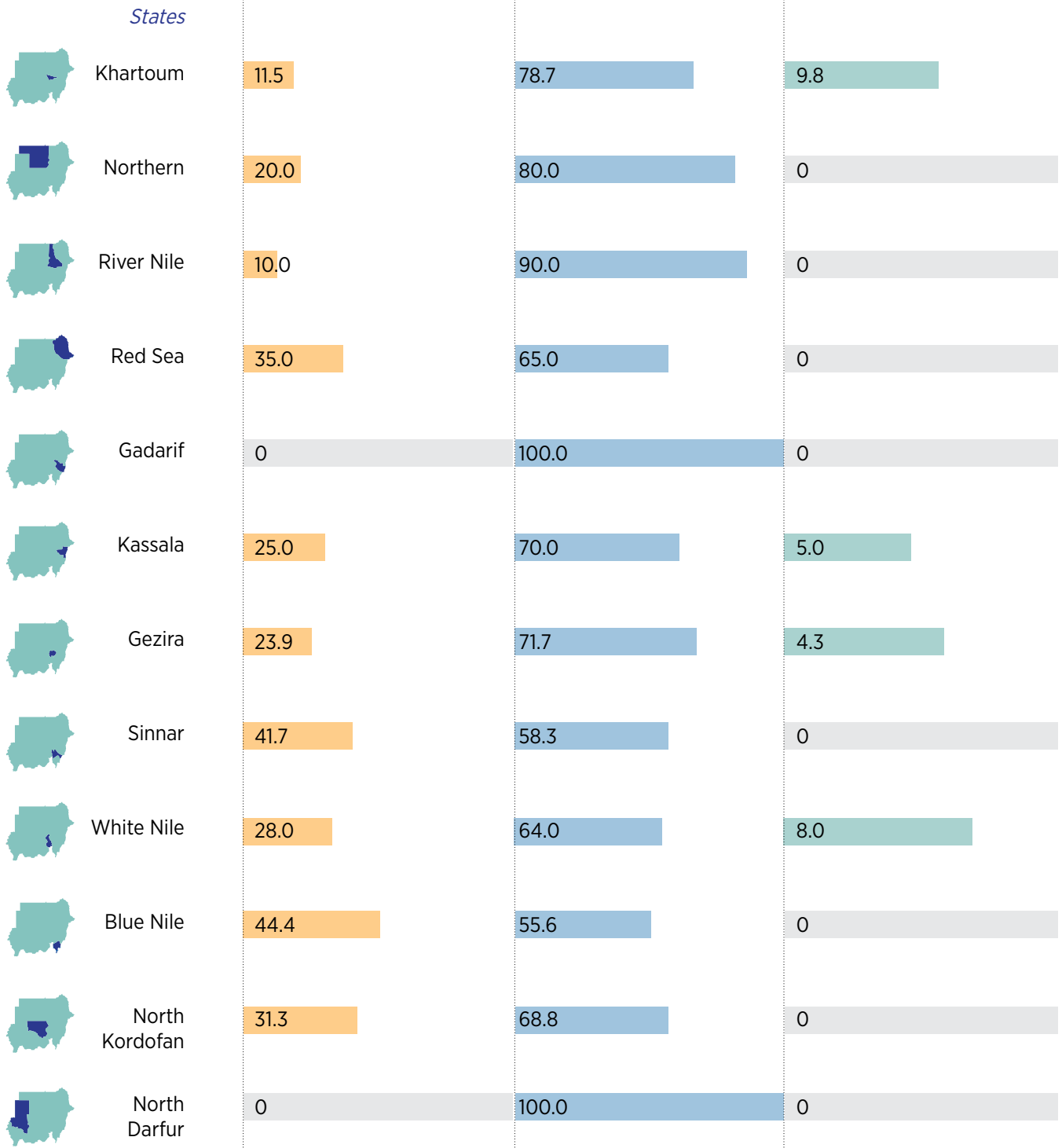
In 2018, Sudan entrepreneurs with opportunity-driven motives involved in nascent, new or established stages of business stated that they choose to pursue an opportunity mainly to increase their personal income, which is shown as the highest percentage in Table 4.1. Gaining greater independence is quite prevalent in the incentive's distribution, especially among nascent entrepreneurs (22.6%), which is a remarkable percentage and suggests that the socio-economic environment pushes entrepreneurs toward the search of increasing gains from entrepreneurship.

As discussed above, among opportunity entrepreneurs, a portion seeks to improve their situation, through increased income. Another portion of opportunity entrepreneurs, which is defined by GEM as 'IDO entrepreneurs', meaning that they only seeks to maintain their income. IDO index takes the value 46.7% that represents the percentage of entrepreneurs within the TEA stage that reported an IDO motive.

Table 4.1
Main incentive to pursue opportunities by types of entrepreneurs in Sudan

	Opportunity-driven Entrepreneurship, year 2018			
	SU Nascent Entrepreneur (up to 3 months) (%)	BB New or baby (3–42 months), (%)	TEA Early stage (0–42 months), (%)	EB Established (more than 42 months) (%)
Greater independence	22.6	18.8	20.5	21.1
Increase personal income	69.6	66.9	67.4	68.5
Just maintain income	7.8	12.3	10.9	8.1
Other	0	2.0	1.2	2.4
IDO index (TEA % of IDO: improvement-driven opportunity)	0	0	46.7	0

**4.3
Sector of
Activity**

GEM considers four large sectors by which to categorize all types of business activities captured by the monitor: extractive, transforming, business-oriented service, and consumer-oriented service sectors.

Figure 4.3 shows the distribution of TEA activity and established-business (EB) activity by sector. Entrepreneurs in Sudan focus their activity in the consumer-oriented service sector, recording 46.1% of the TEA activity. The transformation sector comes in second position (37.9%) in the GEM survey and the extractor sector comes third (10.2%), while the least percentage (5.8%) represents the business' service sector. This low percentage implies a lack and shortage of facilities and services that can support the other sectors. In conclusion, the extractive sector and the business services' sectors are the weakest of the four, suggesting that innovation in these sectors is essential to maximize business performance and optimal utilization of the national resources.

The results for the distribution of established business EB activity by sector in Sudan paint a similar picture to TEA; the highest percentage (47.2%) represent firms operating in the service consumer sector, the transformation sector is occupied by 36.1%, the extraction sector 14.2% while the lowest rate (2.4%) is in the business service sector.

> Most of the entrepreneurial activities at all stages operate in the consumer and service oriented sector with the highest rate (47.2%) among established businesses.
>
> *GEM SUDAN-2018*

*Figure 4.3
TEA and EB
activities by sector
in Sudan*

TEA Activities , year 2018

■ TEA Extractive	10.2%
■ TEA Transform	37.9%
■ TEA Bus. Services	5.8%
■ TEA Consumer	46.1%

EB Activities , year 2018

■ EB Extractive	14.2%
■ EB Transform	36.1%
■ EB Bus. Services	2.4%
■ EB Consumer	47.2%
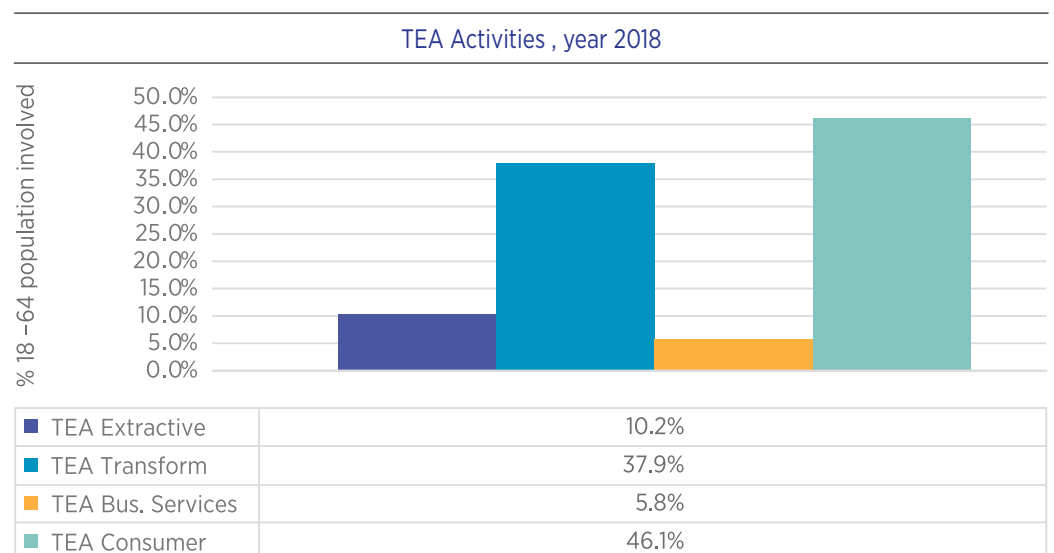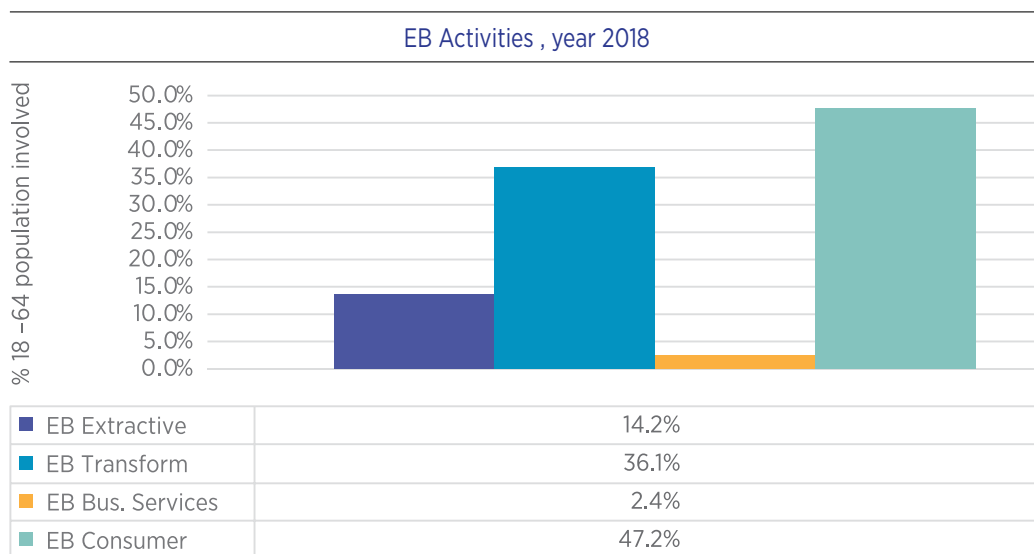
4.4
Number
of Business
Owners

Figure 4.4 shows the distribution of the number of owners of nascent (SU), new (BB), Total Early Activity (TEA) and Established Businesses (EBs) in Sudan. It demonstrates that in Sudan a high concentration of activities is started by single entrepreneurs; the highest rate (73.6%) is recorded for established business activity. Nascent entrepreneurial activity is the category that shows more favorable rates of entrepreneurial teams of two owners (19.8%), while all types of firms show relatively high rates (10%) of three or more owners.

Figure 4.4
The distribution of
the number of
owners at different
stages of entrepre-
neurial activity in
Sudan

	1	2	3	4	5	6	7	8	9	10
■ SU	58.0	19.8	8.3	4.6	3.4	0.6	0.4	0.7		4.2
■ BB	61.6	16.9	10.0	5.7	2.5					3.2
■ TEA	60.4	17.8	9.0	5.2	3.0	0.3	0.2	0.3		3.7
■ EB	73.6	14.0	4.2	3.1	1.1	0.6	1.5			2.0

Figure 4.5 shows the average numbers of owners for TEA and EB activities in Sudan in 2018. TEA owners are mostly in teams of two, which is more than the number of owners of established businesses. Thus, the distributions of numbers of owners presented in Figure 4.5 indicate that the situation is improving because there are larger numbers of entrepreneurial teams formed by 2 and more persons in TEA compared to EBs baring in mind the situation is improving during the life-cycle of the established business.

Figure 4.5
Average number of owners for early-stage and EB activities in Sudan

Average number of persons	
TEA owners	EB owners
2.02	1.93

Table 4.2 shows additional results on the number of owners classified by gender, age and income levels: men-led businesses tend to have a higher number of owners in 2018. The difference with respect to female-led business suggests that men tend to be more associative creating entrepreneurial teams. This could encourage female entrepreneurs to pursue collaborative partnerships and teaming up. Focusing on education, the results show that those with post-secondary education were more likely to form entrepreneurial teams (Table 4.2). Entrepreneurs classified in terms of income, the results show that the highest score (2.45%) is for those within the 80,001 to 100,000-income bracket.

Table 4.2
Average number of owners for early-stage entrepreneurial activity in Sudan by gender, educational and income levels

Gender

Education

Income
in (SDG)

Complementary variables	Average number of owners (TEA) year 2018
[•] Men	2.16
[•] Women	1.80
[•] Primary education or first stage of basic education	1.00
[•] Lower secondary or second stage of basic education	1.32
[•] (Upper) secondary education	1.79
[•] Post-secondary non-tertiary education	2.27
[•] First stage of tertiary education	2.09
[•] Second stage of tertiary education	2.17
[•] 0 to 20,000	1.37
[•] 20,001 to 40,000	2.17
[•] 40,001 to 60,000	1.97
[•] 60,001 to 80,000	2.24
[•] 80,001 to 100,000	2.45
[•] More than 100,000	1.68

4.5
Number of
employees in
entrepreneurial
firms

As mentioned before with the number of owners, entrepreneurial activity is made up of firms and businesses with limited employees. In Sudan, Established firms are better positioned compared to nascent and new entrepreneurial activity, scoring a median number of employees of 94.63. Established businesses are an indication of sustainability of entrepreneurship activity because these businesses moved beyond the nascent and new business phases, and are better able to contribute to a country's economy through the level of jobs they provide within the community (Table 4.3).

Table 4.3
Average number
of employees for
nascent and new en-
trepreneurial activity
(TEA) and for estab-
lished firms (EBs)

	Average number of employees, year 2018		
	Nascent (SU)	New (BB)	Established (EB)
Mean	0.04	3.50	14.18
SD	0.00	2.00	2.00
Median	0.37	9.43	94.63
Minimum	0.00	0.00	0.00
Maximum	4.00	100.00	1000.00

The results of Figure 4.6 shows that the highest score (70.5%) is recorded by TEA firms employing offering no jobs for employees. The percentage of firms within the TEA that currently employ more than 20 employees record the least percentage (1.8%). On the other hand, the highest proportion (66.3%) of EBs shows that they currently employ 1-5 employees. Similar to the situation with TEA, the least proportion of EBs (4.1%) currently employs more than 20 employees. The measurement of the level of employees within entrepreneurial activity may be useful for exploring the role of entrepreneurship in Sudanese economic development through offering employment opportunities (Figure 4.6).

Figure 4.6
The distribution of
current number of
employees in Early-
stage entrepreneurial
activities (TEA) and
established
businesses (EBs) in
Sudan

% TEA Businesses, year 2018	
1-5 jobs (TEA)	17.0%
no jobs	70.5%
6-19 jobs (TEA)	10.8%
20+ jobs (TEA)	1.8%

% EB Businesses, year 2018

■ No jobs (EB)	17.7%
■ 1-5 jobs (EB)	66.3%
■ 6-19 jobs (EB)	11.8%
■ 20+ jobs (EB)	4.1%
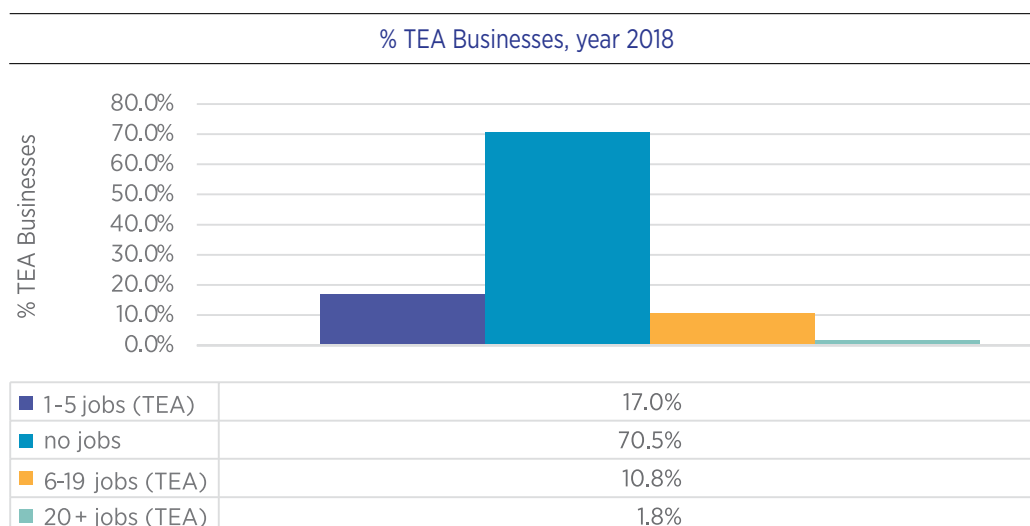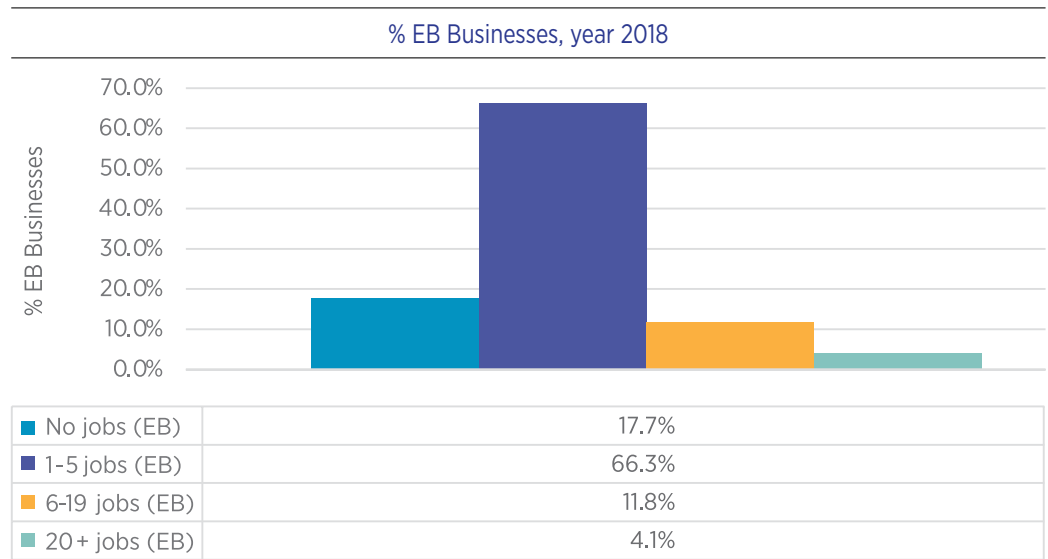
**4.6
Job-creation
expectations by
Entrepreneurial
Firms**

GEM collects information to estimate the level of job creation and contribution to the labour market development expected by early-stage entrepreneurial activities and established firms. Figure 4.7 displays those results; the first chart is for early-stage entrepreneurial activities TEA and the second is for established firms ,EBs., and the second is for established firms. For early-stage entrepreneurial activities the expectations are ambitious to create 1-5 jobs, however, the figure shows a lower percentages of firmsthat are expecting to create 6-19 jobs and 20 and more jobs. (23.6% and 11.8% respectively) A similar picture is observed for established businesses with 63.5% of the EBs expecting to create 1-5 jobs, and 10.5% expecting to add more than 20 job opportunities..

*Figure 4.7
The distribution of
expected number of
employees in Early-
stage entrepreneurial
activities (TEA) and
established
businesses (EBs) in
Sudan*

% TEA Businesses, year 2018

■ No jobs (TEA)	8.7%
■ 1-5 jobs (TEA)	55.9%
■ 6-19 jobs (TEA)	23.6%
■ 20+ jobs (TEA)	11.8%

% EB Businesses, year 2018

■ No jobs (EB)	8.3%
■ 1-5 jobs (EB)	63.5%
■ 6-19 jobs (EB)	17.7%
■ 20+ jobs (EB)	10.5%
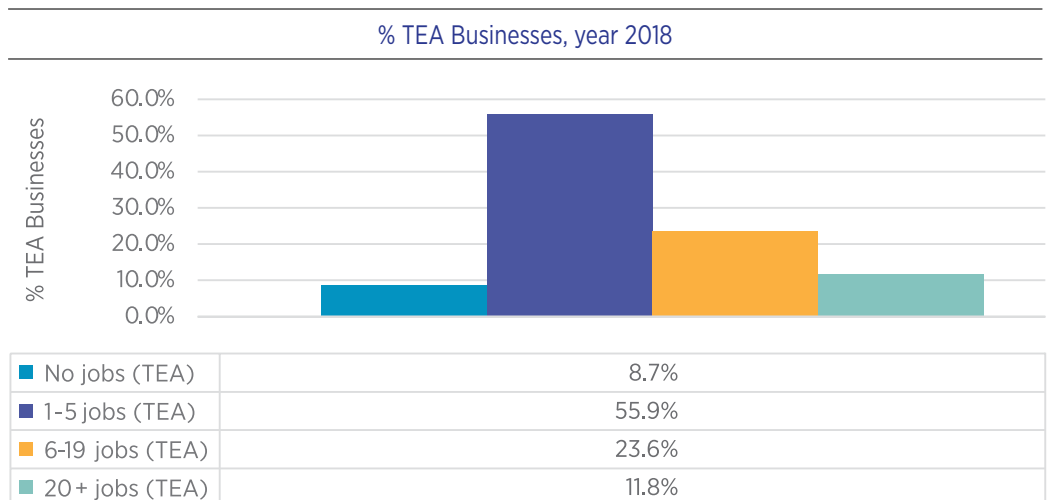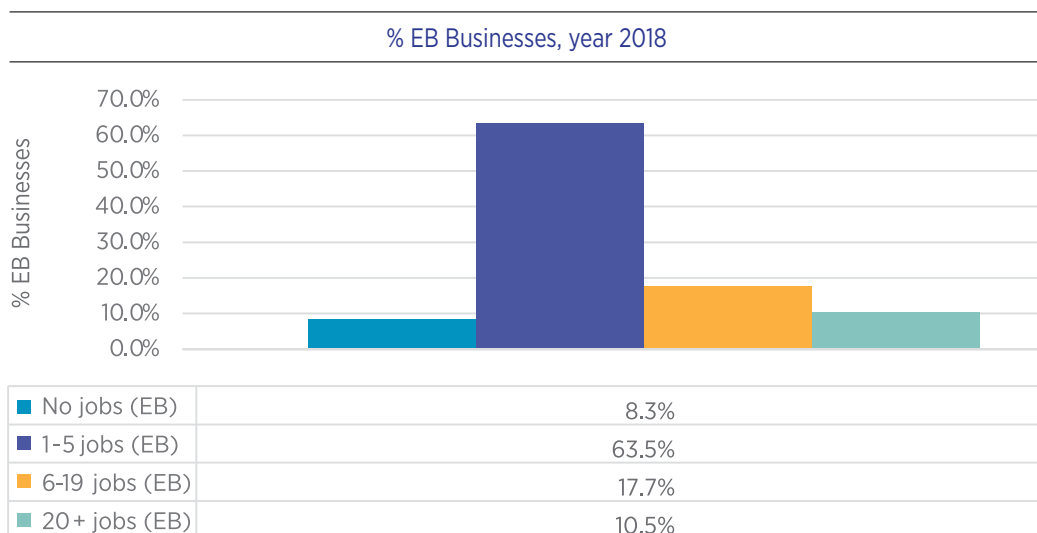
Figure 4.8 shows a comparison in the expected level of employees in 2018, showing the difference between the percentages of expected jobs for TEA and EBs at all levels of number of jobs. A decrease in the proportion of firms in TEA that are expected to have employees in the lower number range (0-5) is accompanied by an increase in the level of firms employing a higher number of employees. A similar situation is observed for EBs, but less notable. This may imply that a shift in the level of employability within entrepreneurial activity is expected to happen, more significantly a shift from the lower numbers of employees. This may also suggest an optimistic view of the role of TEAs and EBs in availing employment solutions to individuals.

Figure 4.8 Complementary indicators on expectations on job creation for TEA and established businesses, EBs, in Sudan

TEA %, year 2018

18.5%

firms expecting job growth ≥10 persons and ≥50%

9.96%

expected job growth (persons) in 5 years (average)

1398.55%

expected job growth (percentage) in 5 years (average)

EB %, year 2018

6.2%	10.81%	2655.74%

firms expecting job growth ≥10 persons and ≥50%

expected job growth (persons) in 5 years (average)

expected job growth (percentage) in 5 years (average)
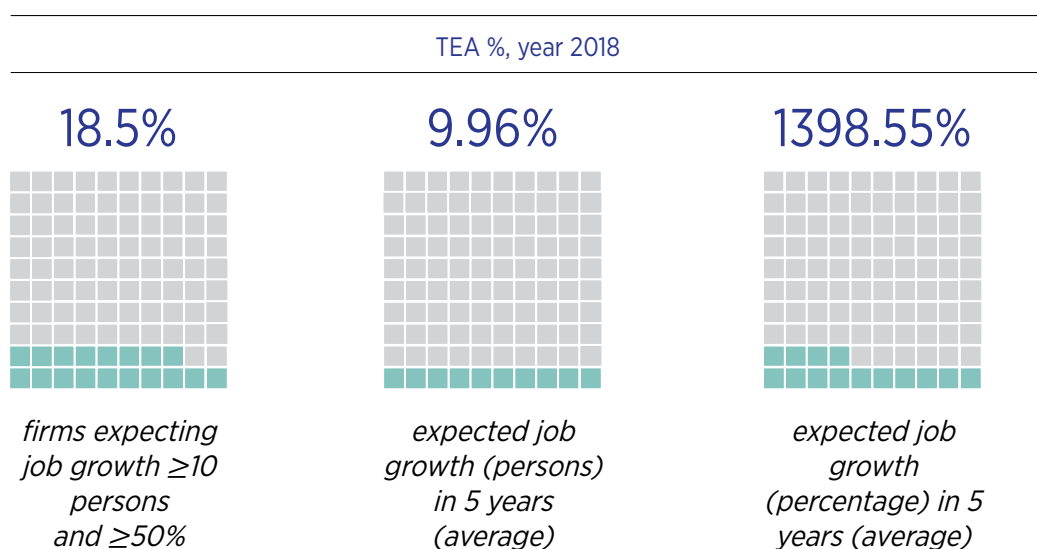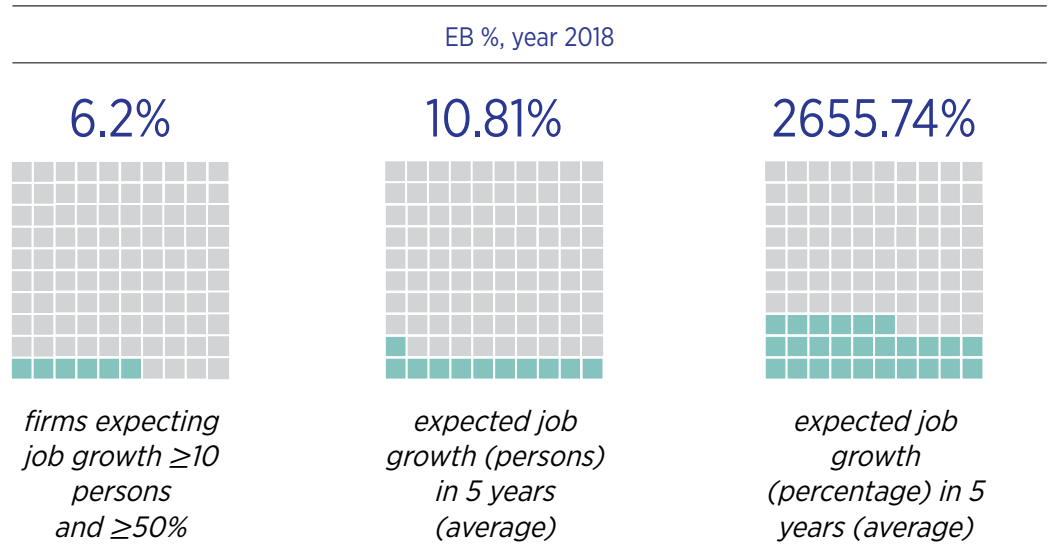
4.7 Innovation levels of entrepreneurial businesses in Sudan

GEM assesses the existence of an innovation component in early-stage firms and EBs by asking owner-managers about their perception of the percentage of the (potential) customers who believe that the product/service offered by these firms are new or unfamiliar to them as customers. The distributions of responses to this question are shown in Figure 4.9. The higher percentage of responses for the category "none," indicates a lower offer of innovative products/services.

The results indicate that both TEA and EB businesses in Sudan are not progressively launching innovative products or services.

Figure 4.9 Presence of innovation component in early-stage businesses and EBs and in Sudan (2018) (how many (potential) customers consider the product/service new or unfamiliar?)

% TEA Businesses, year 2018

	%
■ All (TEA)	19.6%
■ Some (TEA)	19.8%
■ None (TEA)	60.6%

% EB Businesses, year 2018

■ All (EB)	23.4%
■ Some (EB)	14.2%
■ None (EB)	62.3%
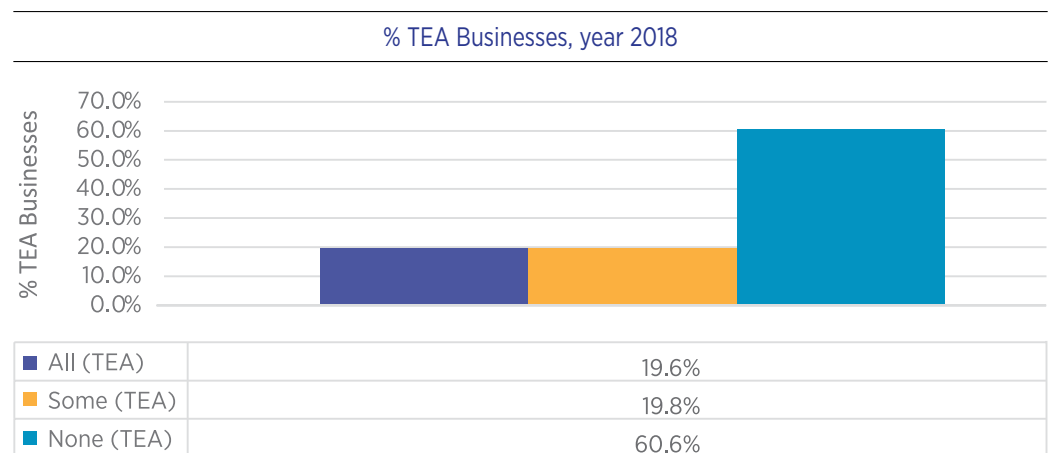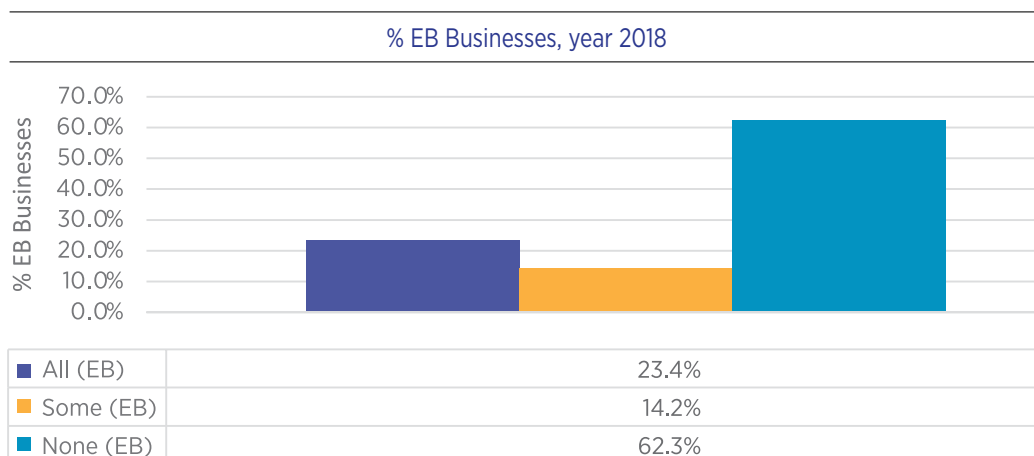
An innovation component is frequently associated with businesses developing new technologies, but in the case of Sudan, innovation is scarcely related to sectors with low technological level (Table 4.4). Thus, in Sudan, the innovation component of businesses appears mostly to reflect new products and services for consumers rather than technological innovation. These situations in both TEA and EB businesses have shown a high proportion of activities operating in no/low technology sectors. Sudan is a developing country and the use of new technologies is generally limited in all sectors due to many factors hindering rapid transfer of advanced technology.

Table 4.4 Technological levels of early-stage businesses and EBs in Sudan

TEA and EB, year 2018

Technological level	Early-stage Entrepreneurship (% TEA)	Established Businesses (% EB)
No/low technologies sector	98.0	97.3
Medium or high technologies sector	2.0	2.7
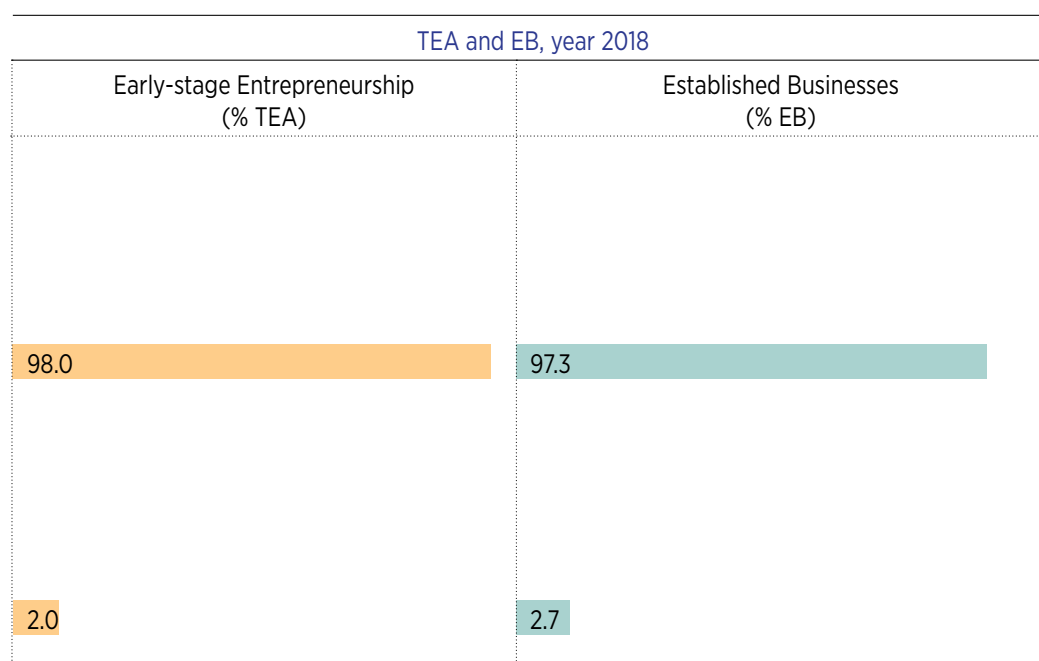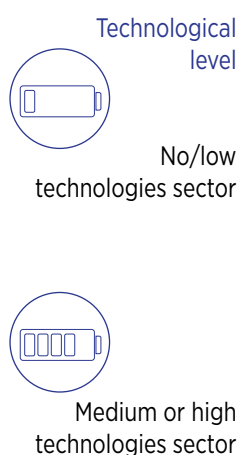
**4.8
Usage of recent
technologies**

Another important feature by which to assess the quality of entrepreneurial and established firms is the age of the technologies used to produce goods and services by these firms. GEM estimates what percentages of businesses use; the very latest (<1-year-old), new (1–5 years old) and non-new technology (>5 years old). The results for Sudan shown in Figure 4.10; show a very modest level of use of technology for early-stage businesses and for established firms. The majority (62.6%) and (76.3%) of the TEA firms and EBs respectively use no technologies less than 5 years old. A considerable percentage uses new technology, while those who use the latest technology count to 14.9% for TEAs, relatively better than EBs, which score 9.8% (Figure 4.10). This result is in line with the results shown in Table 4.4 regarding use of technological level of the sectors and may suggest that there is an improvement in the tendency to use more updated technologies in the business sector in general. This can be more realistic when matched with the observation that the younger population considers entrepreneurship as a legitimate career option.

*Figure 4.10
Age of technologies
used by early-stage
businesses and EBs
to produce goods or
services in Sudan*

% TEA Businesses, year 2018

■ Very latest tech, < 1 year (TEA)	14.9%
■ New tech 1 - 5 years (TEA)	22.5%
■ No new tech > 5 years (TEA)	62.6%

% EB Businesses, year 2018

■ Very latest tech, <1 year (EB)	9.8%
■ New tech, 1 -5 years (EB)	13.8%
■ No new tech, > 5 years (EB)	76.3%
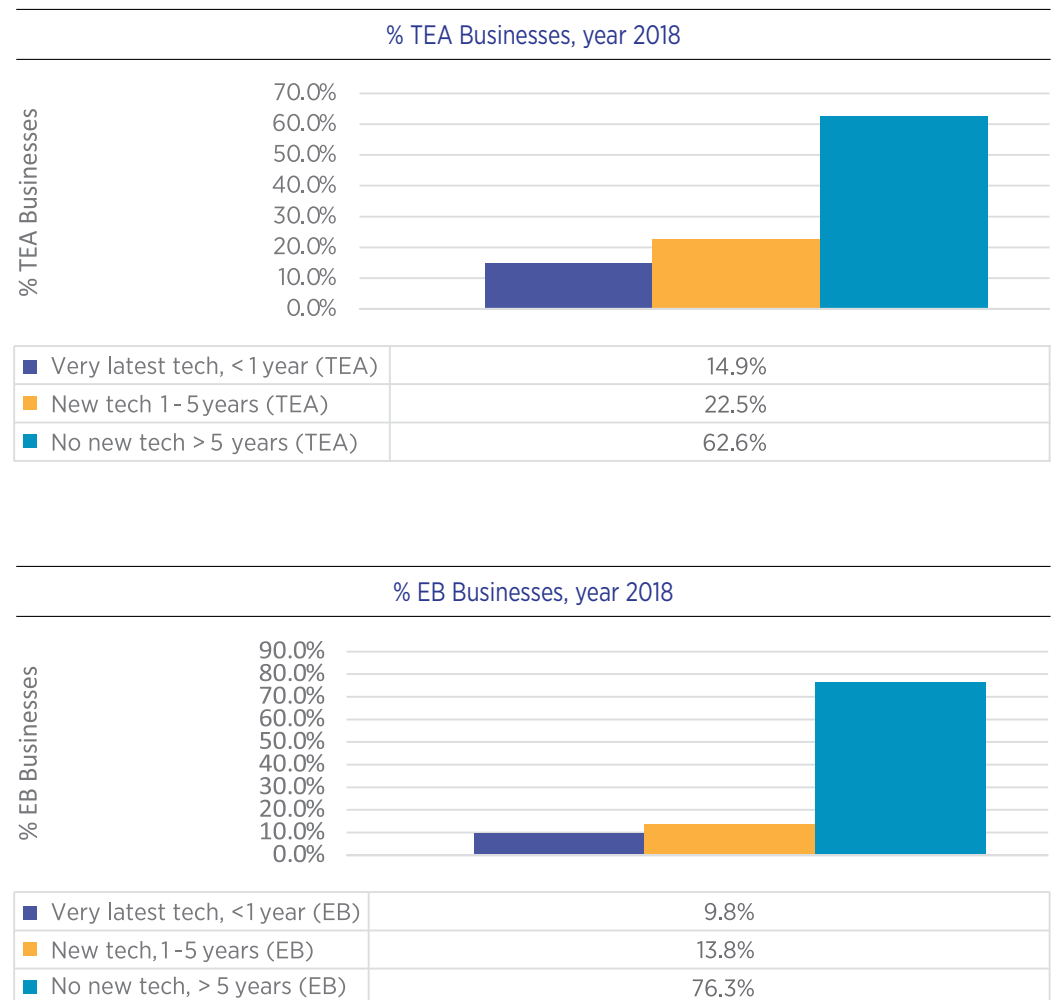
4.9
Competitiveness
of entrepreneurial
firms

GEM roughly estimates the competitiveness of entrepreneurial and established firms by measuring the percentage of businesses that consider there are many, few, or no firms offering the same products/services in their target markets (Figure 4.11).

The findings below indicate that the majority (72%) of TEA firms and (75.4%) established businesses, respectively, consider that many firms offer products and services similar to theirs. The other categories score similar results for TEAs and EBs; 19.2% of TEA firms and 18.8% of the EB firms stated that only a few businesses are competing with their products and service. Businesses that believe that there is no competition within the markets where they operate, scored the least percentages; 8.7% of TEA and 5.8% of the EBs. This indicates that in Sudan most people avoid new innovation due to the fear of failure, thus they tend to opt for ideas that have somewhat been successful and try to replicate ideas that have been implemented by others.

Figure 4.11
Competition faced by
early-stage
businesses and EBs in
their target markets
in Sudan
(how many
businesses offer the
same products/
services?)

% TEA Businesses, year 2018

■ Many (TEA)	72.2%
■ Few (TEA)	19.2%
■ None (TEA)	8.7%

% EB Businesses, year 2018

■ Many (EB)	75.4%
■ Few (EB)	18.8%
□ None (EB)	5.8%
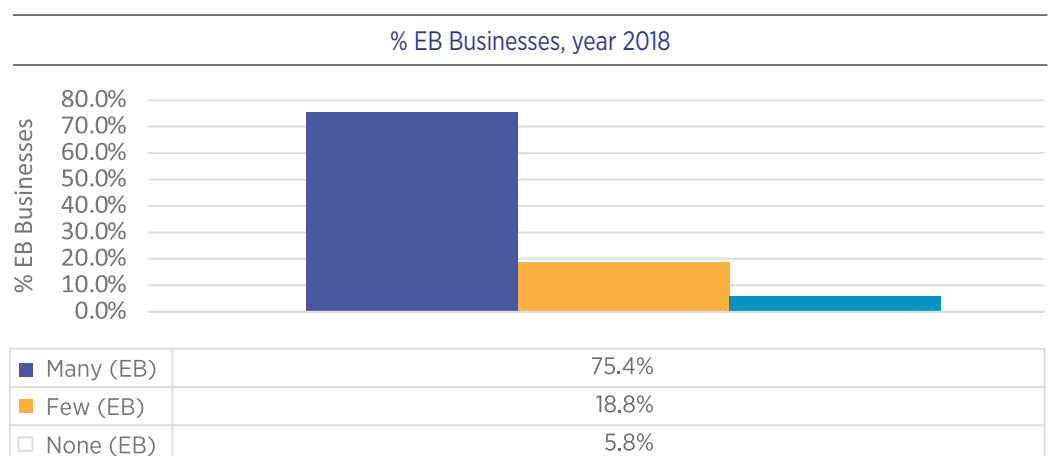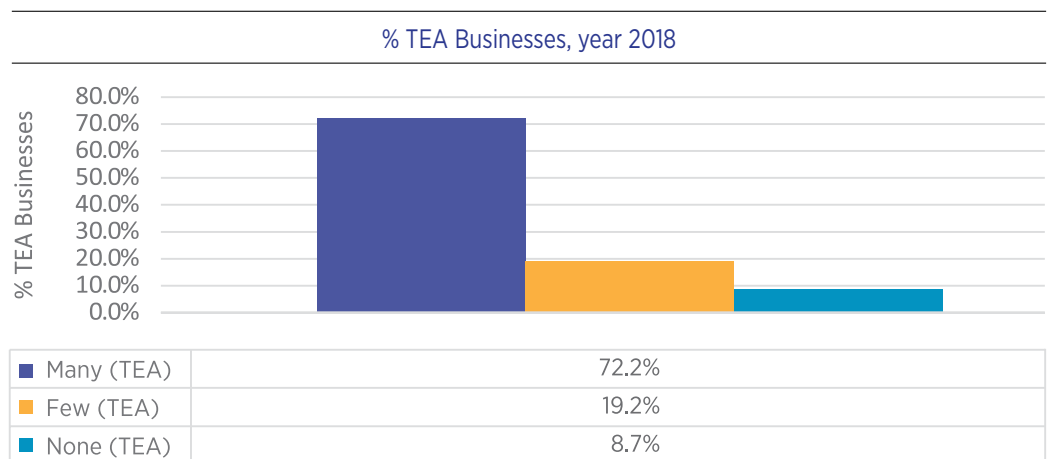
**4.10
Internationaliza-
tion of
entrepreneurial
activities**

Entrepreneurial activities are economic activities conducted within different lev-els of contexts; local, regional and global. In today's global context, internationali-zation is an important factor in assessing business performance. GEM estimates entrepreneurial (TEA) and established firms' (EBs) internationalization by asking owner-managers about the approximate percentage of their sales overseas, other-wise known as export intensity. The results for Sudan shown in Figure 4.12 exhibit a low level of export intensity, and that a high percentage (63.0%) of TEA owner-managers and (59.7%) of EBs owner-managers have no sales outside their country. Sudan entrepreneurs and owner-managers need to put efforts to reach a business performance supported by innovation and improved quality to be able to compete in the Global markets successfully. This will enhance the role of entrepreneurial con-tribution to the national economy and economic development.

*Figure 4.12
Export intensity for
early-stage
businesses and EBs in
Sudan*

% TEA Businesses, year 2018

■ More than 75% (TEA)	5.5%
■ 26 to 75% (TEA)	14.7%
■ 25% or under (TEA)	16.8%
■ None	63.0%

% EB Businesses, year 2018

■ More than 75% (EB)	10.0%
■ 26 to 75% (EB)	16.1%
■ 25% or under (EB)	14.2%
■ None	59.7%

The top three reasons mentioned for business discontinuation among entrepreneurial firms are lack of financial resources, family and personal issues and poor levels of profitability.

GEM SUDAN-2018

Figure 4.13 indicates that an important factor that causes business abandonment in Sudan was lack of financial resources, (23.5%). The second main reason for discontinuation is related to family and personal circumstances, (22.5%). The third reason is lack of business profitability, (19.8%). The results reflected diverse reasons with variation in scores, which implies that in general nascent and new businesses face a difficult environment to develop and sustain their activities.

Figure 4.13
Main motive for
business
discontinuation in
Sudan

Reasons	(%)
[•] Government?/tax policy?/bureaucracy	3.3
[•] Other	9.2
[•] An incident	0.3
[•] Family or personal reasons	22.5
[•] Retirement	1.8
[•] The exit was planned in advance	3.0
[•] Another job or business opportunity	7.4
[•] Problems getting finance	23.4
[•] The business was not profitable	19.8
[•] An opportunity to sell the business	9.5

4.12
International
position of
Sudan on main
indicators for
characteristics
of early-stage
entrepreneurial
activities

The TEA rate is comprised of two different parts defined by the main motivation to start-up businesses: 1) to gain profit and pursue an opportunity 2) to gain income in case of necessity. Comparing the distribution of the TEA rates among countries of the zone the results reveal that Sudan shows the second highest TEA opportunity rate (14.98%) but accompanied by a lower rate (6.18%) for the necessity TEA (Figure 4.14). Lebanon has the highest rates by opportunity but lowest rate in necessity of the zone, a big contrast that indicates that two classes of entrepreneurs share the market under very different conditions in each country. The USA shows the third highest TEA by opportunity rate but accompanied by the lowest necessity rate. The rest of opportunity rates for selected countries are lower than these.

Figure 4.14 Entrepreneurship motive	TEA 2018 by opportunity (%)	TEA 2018 by necessity (%)
GEM	8.86	3.11
Egypt	4.67	4.68
Iran	5.92	3.53
Lebanon	15.33	8.70
Morocco	4.29	2.07
Qatar	6.32	1.9
KSA	8.40	3.62
Sudan	14.98	6.18
Turkey	10.61	2.33
UAE	7.92	2.21
USA	12.20	1.27
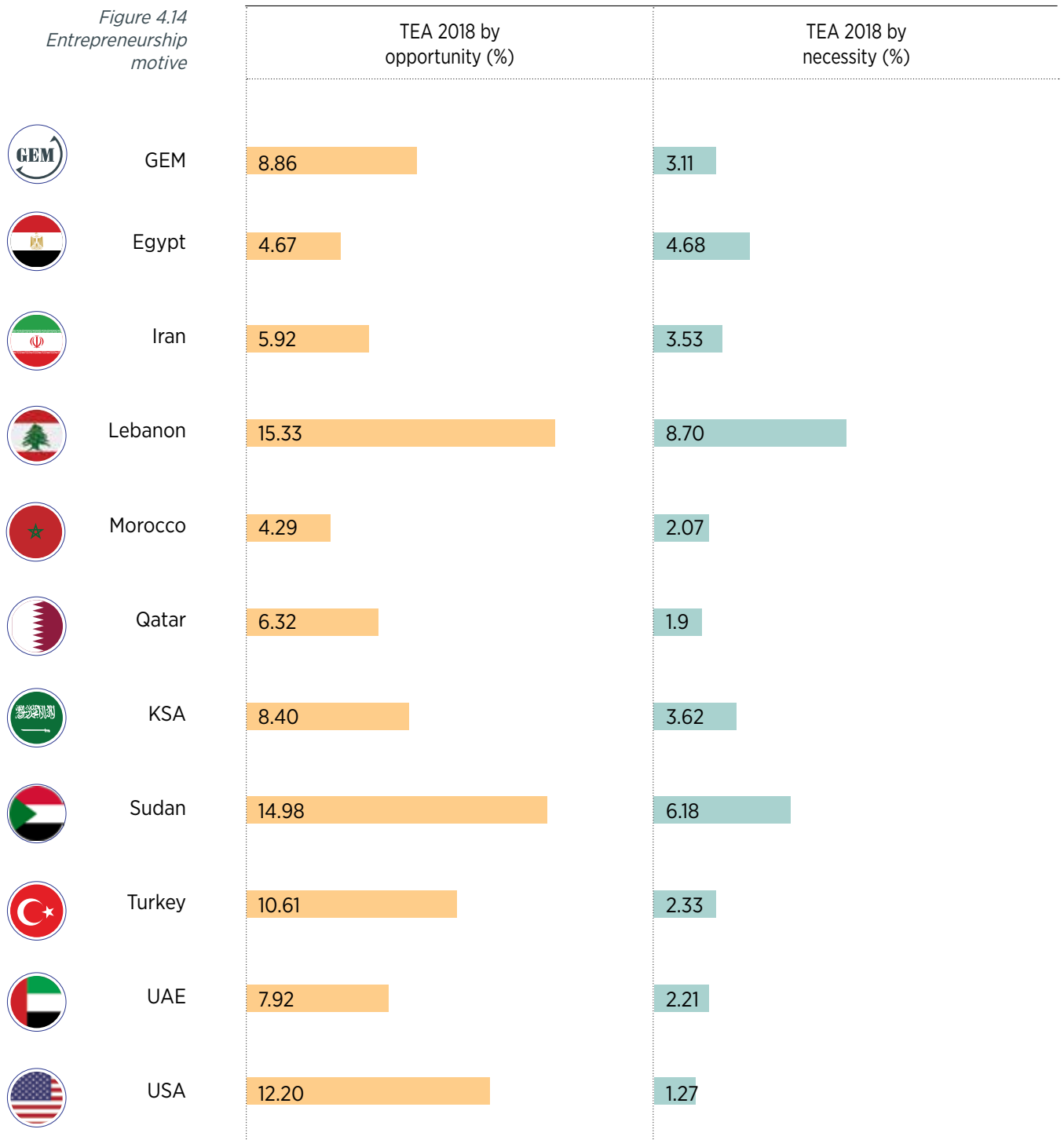
The analysis of the TEA and EB rates in four big sectors, points out that most entrepreneurial and established activities are started in the consumer-oriented sector in all countries. Entrepreneurial and EB's activity in the extractive sector is minimal, except in Sudan, Egypt, Turkey, and Iran (Figure 4.15). Sudan has shown the highest level in the extractive sector, which is good news because this primary sector is a source of opportunities, especially during its shift towards modernization. However, this sector is still of difficult access for potential entrepreneurs in most countries of the zone, because innovative and modern extractive activities require big amounts of seed capital and operation funds, which are not easy to get. Also, the population tends to concentrate in big urban zones, while working in this sector requires a different location. Education can revert this situation in the countries of the zone, if potential entrepreneurs are trained to enter this sector and to create entrepreneurial teams that include different professional profiles to develop this type of businesses, including affording internationalization of part of the production.

Entrepreneurial and established activity in the transforming sector is greater than in business services in all countries compared in the zone, but some of them have reduced entrepreneurial activity significantly in this sector.

> Looking at entrepreneurial activity by sector globally, Sudan shows the highest level in the extractive sector (10.22%). This is good news for Sudan because the primary sector is a source of opportunities, especially to conduct a transformation of the sector towards its modernization.
>
> *GEM SUDAN-2018*

This is leading societies towards a big consumer-oriented sector, but this sector will consume external products if the local industry is not reactivated with new start-ups from new entrepreneurs. Rates of entrepreneurialism in the business services sector are low in Egypt, Morocco, Lebanon, Saudi Arabia, and Sudan ranging between(0-5.78%). This implies a need to develop this sector as it is a source of opportunities and it is key to support the entrepreneurship modernization and growth in the zone. Considering the general picture of entrepreneurship in the zone, Qatar has the most balanced range of entrepreneurial activity, similar to that observed in the USA: diversified and distributed among the four main sectors without the big concentration on the consumers'-oriented sector.

*Figure 4.15
TEA and EB by
sector – international
positions*

	TEA 2018 (%)				EB 2018 (%)			
	Extractive sector	Transforming sector	Business service sector	Consumer sector	Extractive sector	Transforming sector	Business service sector	Consumer sector
GEM	4.72	22.64	18.10	54.56	7.84	27.55	18.64	45.96
Egypt	8.34	35.00	0	53.49	8.75	38.32	0	49.75
Iran	7.38	19.15	25.08	48.39	9.04	31.50	9.69	49.77
Lebanon	1.89	15.21	5.00	77.90	2.80	18.42	8.38	70.40
Morocco	4.42	42.11	0	49.52	2.95	49.48	0	45.99
Qatar	0	31.40	6.32	46.92	0	42.66	14.86	41.55
KSA	0	13.72	5.91	80.36	0	20.53	7.60	71.87
Sudan	10.20	37.89	5.78	46.13	14.24	36.12	0	47.21
Turkey	8.06	35.52	20.49	45.37	9.13	30.10	14.28	46.49
UAE	0	17.47	28.73	53.81	0	47.85	9.57	42.58
USA	4.42	17.26	34.83	43.49	12.21	25.20	32.75	29.83

Entrepreneurial and established activity in technology sectors (high or medium) is very moderate in the zone (Figure 4.16). Rates of entrepreneurialism in technology sectors are low in most countries, especially in Saudi Arabia, Sudan, Egypt, Lebanon, Morocco, and the UAE. In comparison, Iran, Qatar, and Turkey are somewhat better positioned. Iran and Qatar show the highest rates for this sector above of the GEM and of the USA level in the TEA sector and below in the EB sector, meaning that new entrepreneurs are entering the markets through the technologies' option.

Figure 4.16
Active in technology sectors (high or medium) TEA and EBs international position in (2018)

	% within TEA: Active in technology sectors (high or medium)	% within EB: Active in technology sectors (high or medium)
GEM	5.66	5.63
Egypt	1.39	0.77
Iran	7.92	4.97
Lebanon	1.24	1.86
Morocco	0.00	0.80
Qatar	6.33	1.84
KSA	2.28	2.42
Sudan	2.23	3.07
Turkey	5.01	4.42
UAE	1.14	0.00
USA	5.18	6.14
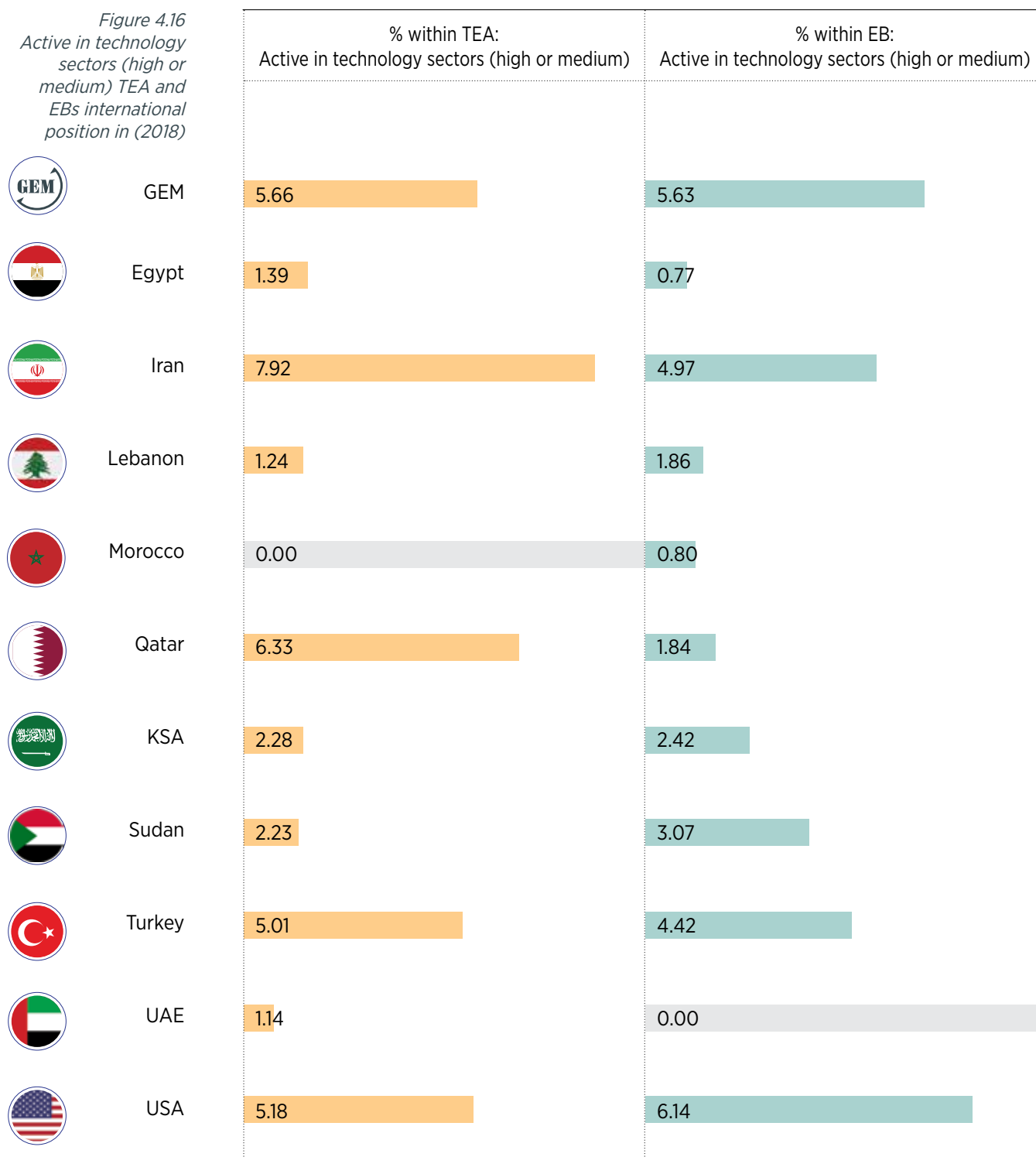
Except in the case of Morocco, the average number of owners of early-stage activity businesses is low, at around two individuals. The number of owners of the EB sector is higher in countries such as Saudi Arabia and the UAE. This result reflects the micro-dimension of newest businesses including the USA and the rest of countries, as the GEM averages are even lower than those of several countries in the zone.

Figure 4.17
Average number of owners for early-stage businesses (TEA) and EBs

	TEA 2018 average number of owners	EB 2018 average number of owners
GEM	1.96	2.24
Egypt	2.73	2.16
Iran	1.95	1.30
Lebanon	1.41	1.25
Morocco	6.29	6.56
Qatar	2.08	1.61
KSA	2.01	9.94
Sudan	2.02	1.66
Turkey	2.06	1.70
UAE	2.67	5.35
USA	1.92	6.74
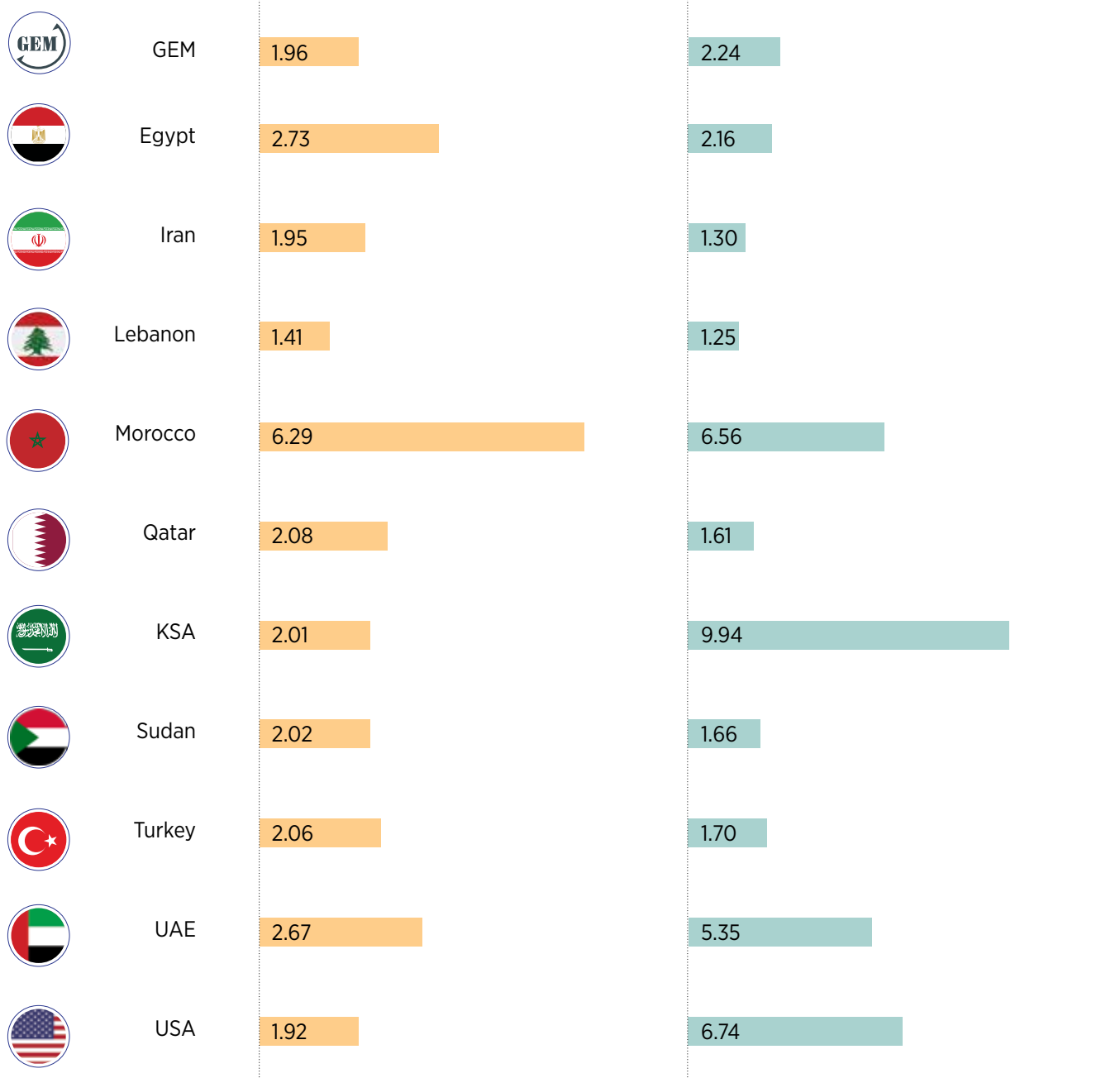
The proportion of adults involved in early-stage entrepreneurial activities with employees is low. The highest proportions correspond to Sudan and Lebanon, at around 17% (Figure 4.18). The lowest percentages are in Morocco and Qatar, at around 6%. The proportions of moderate job creation from entrepreneurial activities are low for all countries but, within early stage activities, the owners are moderately optimistic. More than 14% of cases in all countries of the zone expect to create at least 10 job positions or double the current workers' rate in the next five years.

Figure 4.18 Proportions of early-stage entrepreneurial activities with any jobs now or in 5 years, expectations of more than 19 jobs in 5 years, and high job expectations within TEA

	% 18-64 pop: TEA any jobs now or in 5 years	% 18-64 pop: TEA expects more than 19 jobs in 5 years	% within TEA: High job expectation (10+ jobs and over 50% in 5 years)
	Mean	Mean	Mean
GEM	9.19	1.22	15.98
Egypt	8.22	1.12	14.42
Iran	7.27	2.23	29.97
Lebanon	16.99	0.25	2.28
Morocco	4.74	0.33	6.43
Qatar	5.94	1.44	19.07
KSA	11.59	1.26	8.91
Sudan	17.49	2.12	18.55
Turkey	12.39	3.70	38.24
UAE	8.59	3.80	44.87
USA	12.97	2.38	26.16
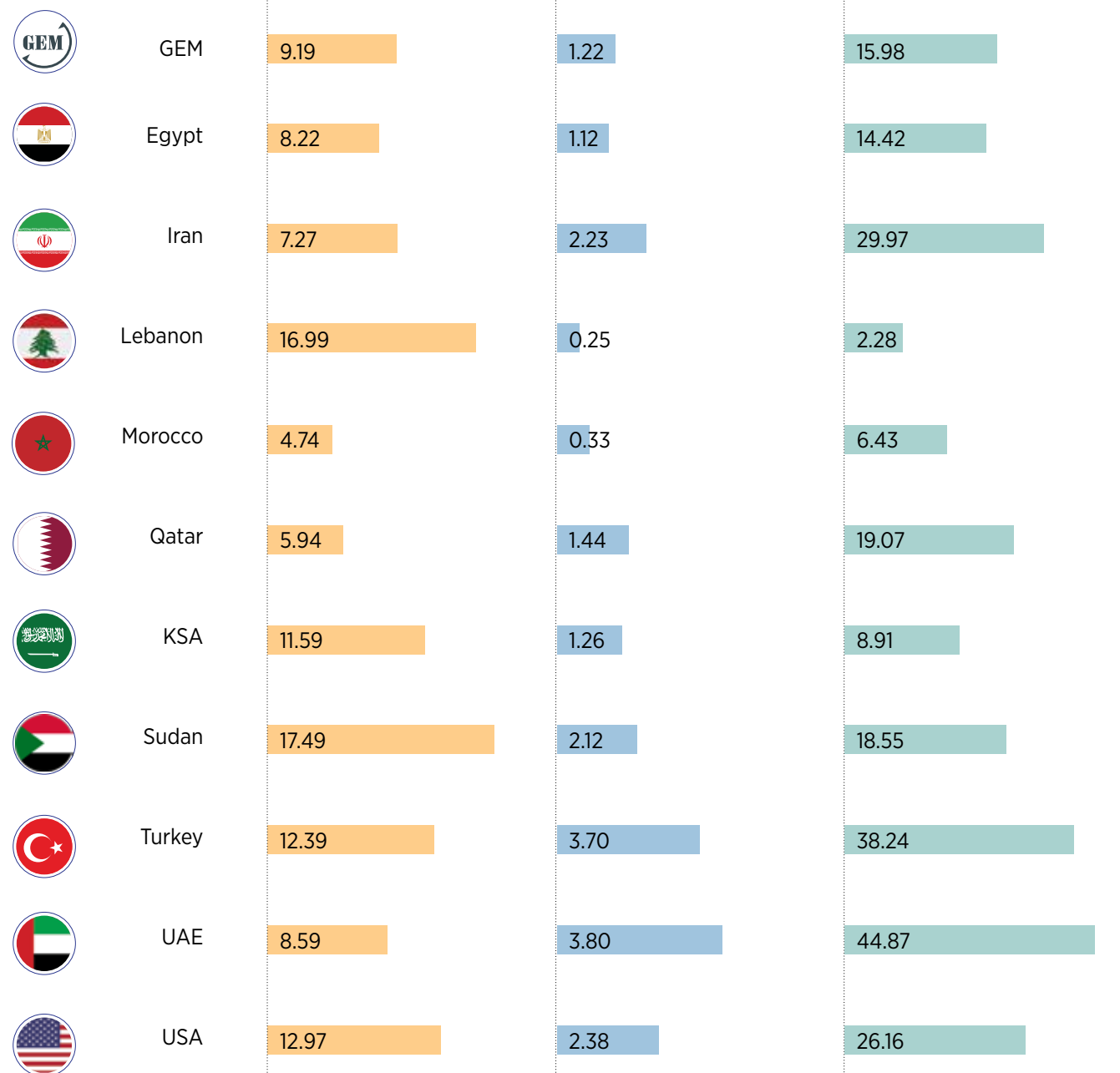
The innovation component, which is measured according to the percentage of businesses offering products or services new to all customers, is more present in early-stage activities than in established activities for almost all compared countries and zones. Qatar is the country with the highest percentage of entrepreneurial activities with an innovation component at the TEA stage, whereas Saudi Arabia and Iran are the countries with the lowest percentage of new businesses exhibiting an innovation component. Sudan has a reasonable range in innovation entrepreneurial activity for both TEA and EB firms.

Figure 4.19 Comparison of the International position of countries regarding the innovation component in TEA and EBs

	% within TEA: Product new to all customers	% within EB: Product new to all customers
	Mean	Mean
GEM	19.17	15.22
Egypt	26.92	23.59
Iran	6.00	2.04
Lebanon	18.86	13.46
Morocco	35.54	72.92
Qatar	36.32	38.03
KSA	8.50	6.45
Sudan	19.62	23.45
Turkey	36.02	32.73
UAE	26.58	16.93
USA	12.37	7.60
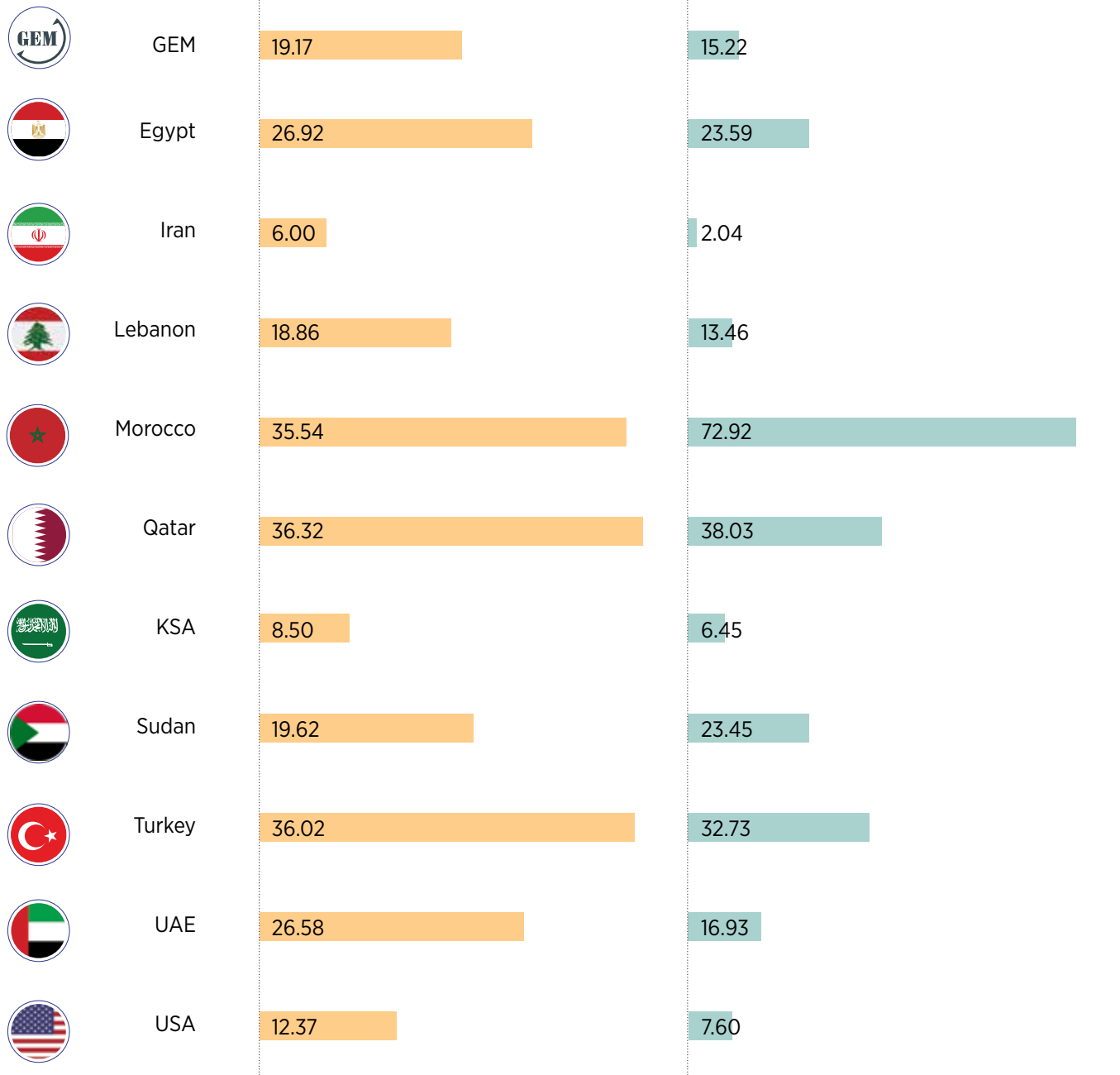
The competitiveness component, measured as the percentage of owner-managers reporting that no other businesses offer the same products or services, is more present in early-stage activities than in established activities for all compared countries and zones (Figure 4.19). This is a desirable result as it ratifies that innovation is on the rise and that entrepreneurial activity is competitive with respect to established businesses. Egypt and Lebanon are the countries with the highest percentage of entrepreneurial and EB activities with the competitiveness component, whereas Iran and Morocco are the countries with the lowest percentage of new businesses, along with Saudi Arabia and Qatar, the countries with the lowest proportions of EBs exhibiting the competitiveness component. Sudan has aligned with the GEM average in regards to this indicator in the TEA and a little higher than GEM average at the EB stage. This is good news because it is essential for the transformation process that is going on within the country that the new businesses have a strong capacity to compete.

Photo credit - Business is sweet at one of the world's largest sugar companies, lying in Sudan's "new south"
http://www.leadingedgeguides.com/guide-sudan-2016-sudan-new-south/

Figure 4.20 Competitiveness component: presence in early-stage entrepreneurial activities and in EBs, international positions (2018)

	% within TEA: Product new to all customers	% within EB: Product new to all customers
GEM	9.04	5.15
Egypt	26.92	23.59
Iran	6.00	2.04
Lebanon	18.86	13.46
Morocco	35.54	72.92
Qatar	36.32	38.03
KSA	8.50	6.45
Sudan	19.62	23.45
Turkey	36.02	32.73
UAE	26.58	16.93
USA	12.37	7.60
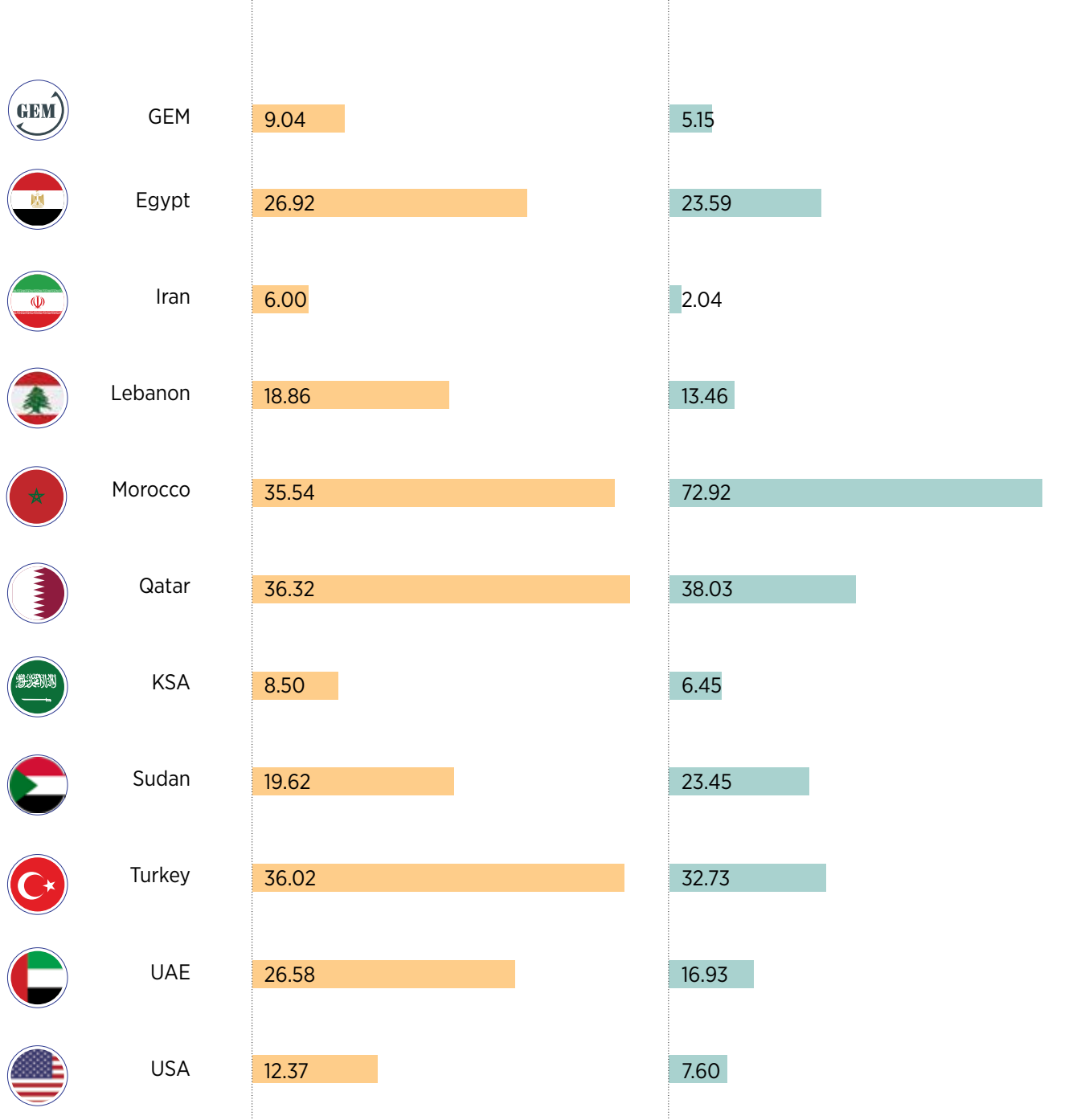
The use of very new technologies, measured as the percentage of businesses using technologies only available for less than a year previously to make their products or provide their services, is more present in early-stage activities than in established activities for all compared countries and zones. Lebanon, Morocco and Qatar show the highest TEA rates in this component, while Morocco, Egypt, and Lebanon show the highest EB rates for this component. Sudan is aligned with the GEM average in regards to this indicator in the TEA and EB stage.

Figure 4.21 Use of very recent technologies: presence in early-stage entrepreneurial activities and in EBs, international positions (2018)

	% within TEA: Uses very latest technology (only available since last year)	% within EB: Uses very latest technology (only available since last year)
GEM	16.34	7.62
Egypt	25.49	23.33
Iran	2.11	0.87
Lebanon	66.78	14.11
Morocco	44.40	44.61
Qatar	37.55	6.61
KSA	24.26	11.25
Sudan	15.19	9.79
Turkey	5.80	6.58
UAE	27.15	11.96
USA	8.11	1.11
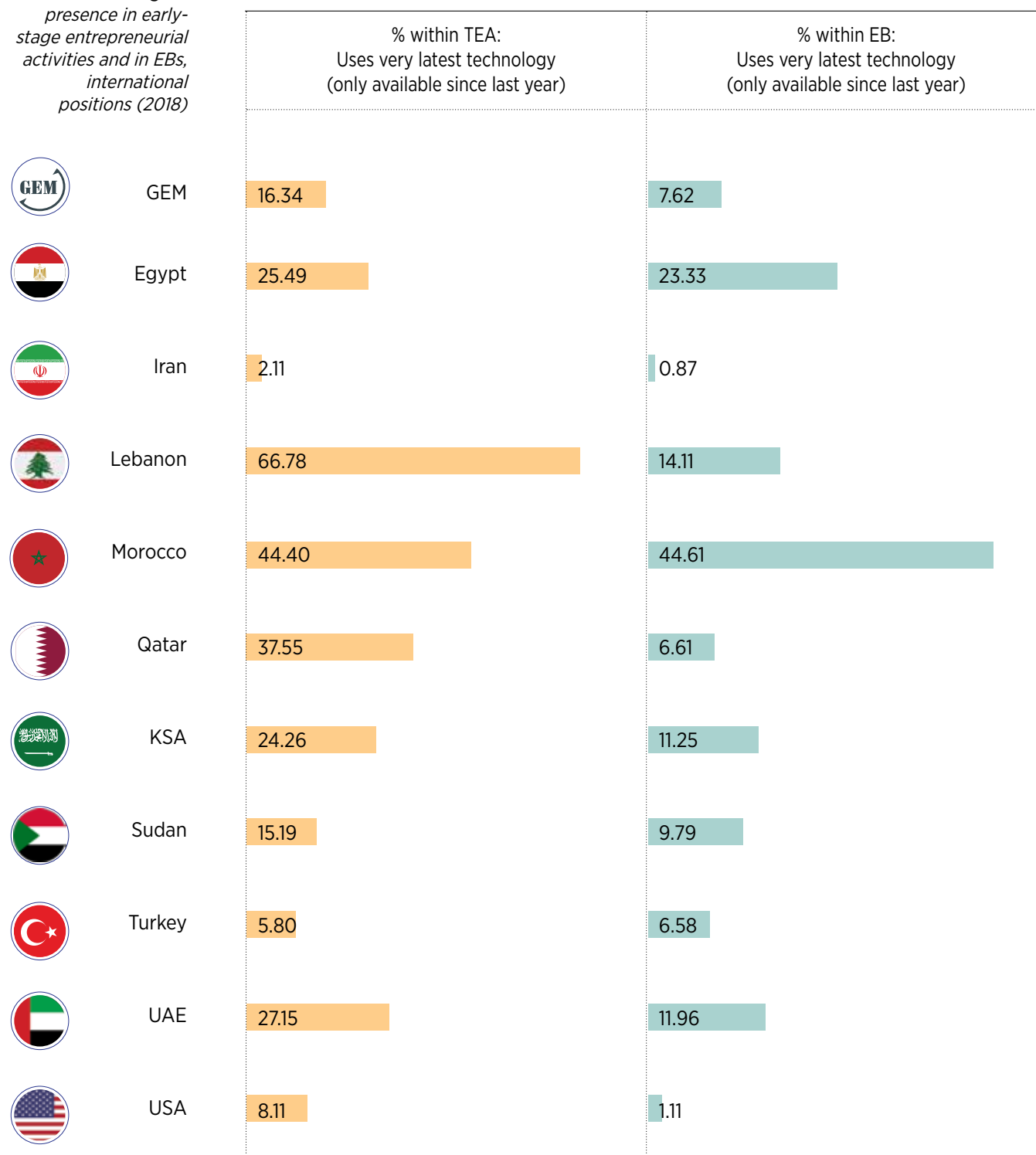
Most early-stage entrepreneurs are least motivated towards exporting, though some variation exists depending on the type of business they start. That is why export intensity, reflecting the incidence of exports representing more than 75% revenues earned by TEA and even EBs in the geographical zone, is a good indicator of business quality. For early-stage activities, the rates of export intensity are relatively low in the zone (Figure 4.21). Saudi Arabia and Qatar lead the rank in the zone for TEA activities and Morocco and the UAE for EB activities. Most countries show average percentages above the GEM and the USA means. Sudan is aligned with the GEM average in regards to this indicator in the TEA and it ranks as the fourth highest percentage level in EB among the countries.

Figure 4.22 Intensive Internationalization: presence in early-stage entrepreneurial activities and in EBs, international positions (2018)

	% within TEA: Export: 75-100% of revenue from outside country	% within EB: Export: 75-100% of revenue from outside country
GEM	7.25	5.82
Egypt	4.00	3.57
Iran	0.34	0.00
Lebanon	11.94	12.77
Morocco	13.20	15.27
Qatar	14.79	6.58
KSA	16.83	5.54
Sudan	5.03	8.26
Turkey	5.01	2.39
UAE	10.35	14.66
USA	4.80	2.70
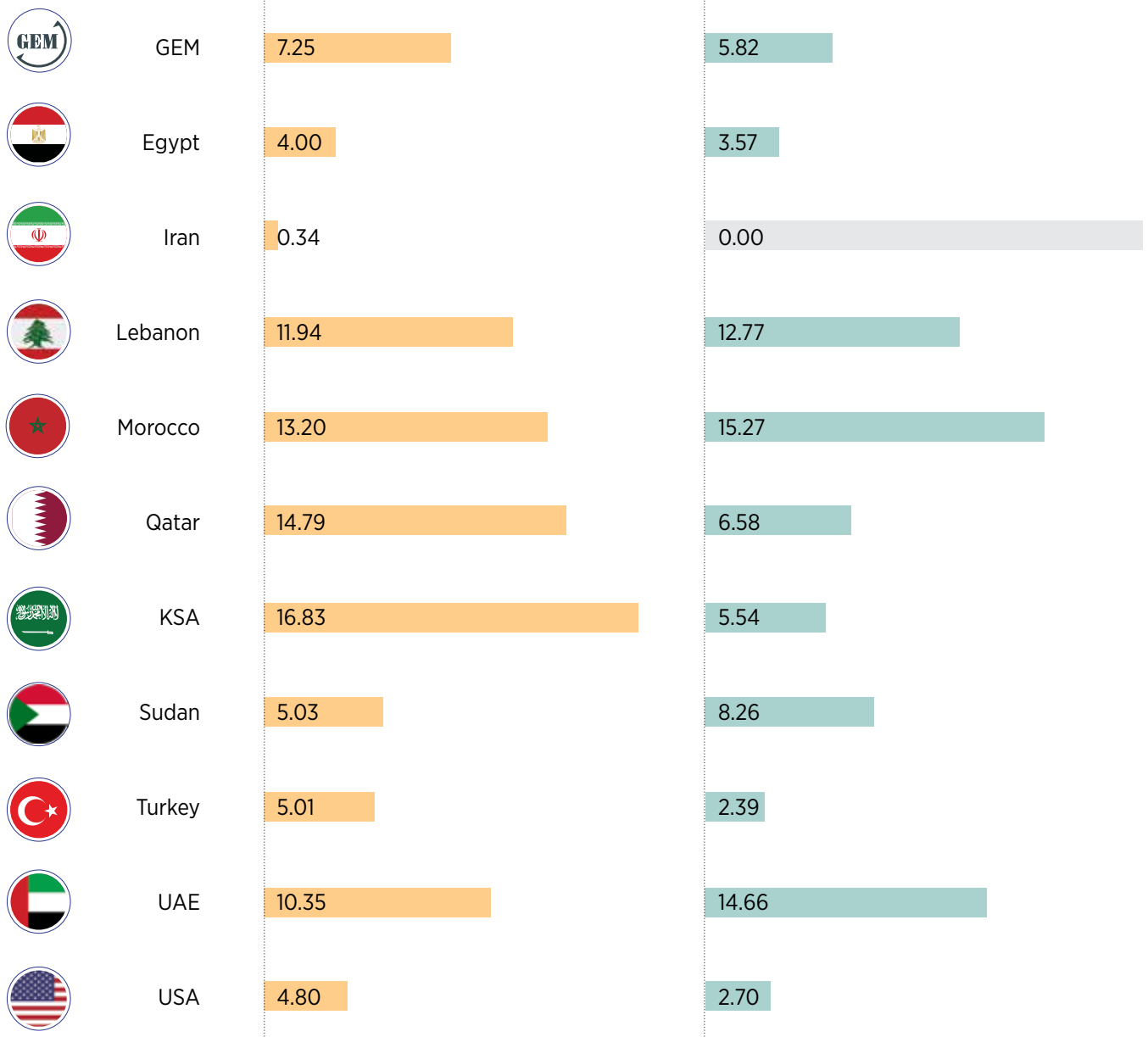
Move straight to this aspect; discontinuation international comparison Figure 4.22 includes graphs showing the proportions of business discontinuations for each of the reasons contemplated by GEM. Countries have been ordered from least to highest prevalence of each reason.

Morocco leads the rank for cases in which the business was abandoned because there was a good opportunity to sell it. Lebanon and Egypt show the highest rates for cases in which the business was closed because it was not profitable. Turkey and Iran stand out in the list for cases in which the main reason was problems to get financing. Qatar and Sudan standout regarding the prevalence of exits because the owner took another job or had another business opportunity. Lebanon leads the rank of cases in which the business exit was planned in advance, retirement cases, and incident cases as well. Egypt shows the highest rates in which the main reason for the discontinuation of the business were family or personal issues. Finally, Saudi Arabia, and for the second year, shows a high rate of cases in which the business was dissolved due to problems with taxes, government, policies or bureaucracy. Sudan stands out in the list for cases in which the main reason was problems acquiring finances, opportunity to sell the business, existence of another job, exit from the business was planned in advance, personal reasons, and government regulations. The positioning of Sudan compared to the rest of countries creates recognized disparity.

Photo credit - aaaid.org, White Nile Sugar Company (WNSC)

*Figure 4.23
Main reason for
business
discontinuation,
international
positions (2018)*

		% within EXIT ...							
		Exit reason is opportunity to sell	Exit reason is business not profitable	Exit reason is problems getting finance	Exit reason is another job or business opportunity	Exit reason is exit was planned in advance	Exit reason is retirement	Exit reason is family or personal reasons	Exit reason is an incident	Exit reason is govern-ment/tax policy/bu-reaucracy
	GEM	6.59	31.02	14.09	10.41	3.84	3.96	3.84	4.76	6.79
	Egypt	1.19	42.35	21.80	4.91	1.37	0.00	17.53	3.50	7.33
	Iran	1.51	35.25	28.61	10.56	2.14	4.88	14.13	1.91	1.01
	Lebanon	2.13	51.09	7.12	6.37	9.91	7.79	5.62	4.98	4.99
	Morocco	47.67	30.94	10.66	2.16	0.00	1.20	6.80	0.26	0.31
	Qatar	20.58	35.24	17.19	11.46	0.00	0.00	12.62	0.00	2.92
	KSA	5.02	13.13	13.89	6.11	5.31	2.93	7.16	3.49	42.96
	Sudan	8.14	23.36	22.81	10.60	5.53	1.26	23.71	0.50	4.09
	Turkey	2.77	27.58	34.75	9.11	1.12	4.27	17.51	0.00	2.88
	UAE	12.73	38.28	20.36	7.43	0.00	2.27	15.07	0.00	3.86
	USA	6.72	29.02	6.89	11.04	5.42	6.01	24.01	2.69	8.19

5. Entrepreneurs' Characteristics

The uniqueness of GEM project lays in the fact that it generates primary data from the population, rather than collecting data from secondary sources or business registers. Hence, it proves the opportunity to collect information on specific characteristics of entrepreneurs, owner-managers, informal investors, intrapreneurs, and the rest of the adult population. This information provides a standardized profile of the protagonists of the entrepreneurial phenomenon, helping researchers, policymakers, media, and other agents.

5.1 Introduction

To identify the characteristics of entrepreneurs we should understand the different phases of their entrepreneurial activities. As mentioned in section (3). Nascent entrepreneurship is defined as the stage before the start of a new firm, in other words, firms which have been in the market for up to 3 months. The stage directly after the start of a new firm is known as owning-managing a new firm; such firms have been in the market for at least 3 months but no more than 42 months. Taken together, these phases are known as "early-stage entrepreneurial activity" (TEA).

This chapter is devoted to showing the personal characteristics of Sudanese entrepreneurs in 2018.

5.2 Gender representation of entrepreneurs in Sudan

Table 5.1 shows the participation of male and female population in early-stage entrepreneurial activity (TEA) in Sudan, taking the total adult population as the base of calculation. The results show a gender disparity, where men appear to be more involved in TEA than women. Taking the TEA rates of involvement as bases for calculation, men represent 13.1% of the total population and 27.0% of the male population. On the other hand, females' involvement in TEA stands as 9.3% of the total population and 18.1% of the female population.

It is observed that male and female nascent entrepreneurs have close percentages as part of the total population; male participation represents 5.9% compared to 5% of female representation in respect of the total population. Upon comparison of the percentages within the same gender we can see that the percentage of male nascent entrepreneurs is 12.2% compared to 9.8% of female nascent entrepreneurs.

Table 5.1
Participation in early-stage entrepreneurial activity by gender in Sudan

	Involved in TEA (%)	Nascent entrepreneurs (%)	Involved by opportunity (%)	Involved by necessity (%)
Male				
Base: Total population 18–64	13.1	5.9	9.7	3.0
Base: Male population 18–64	27.0 (TEA male*)	12.2	19.9*	6.3
Female				
Base: Total population 18–64	9.3	5.0	5.2	3.6
Base: Male population 18–64	18.1 (TEA female)	9.8	10.2	7.0

* Gender differences are statistically significant at 95% of confidence in Chi Square tests

*Figure 5.1
Recent evolution of
main indicators
related to early-stage
entrepreneurial
activity by gender*
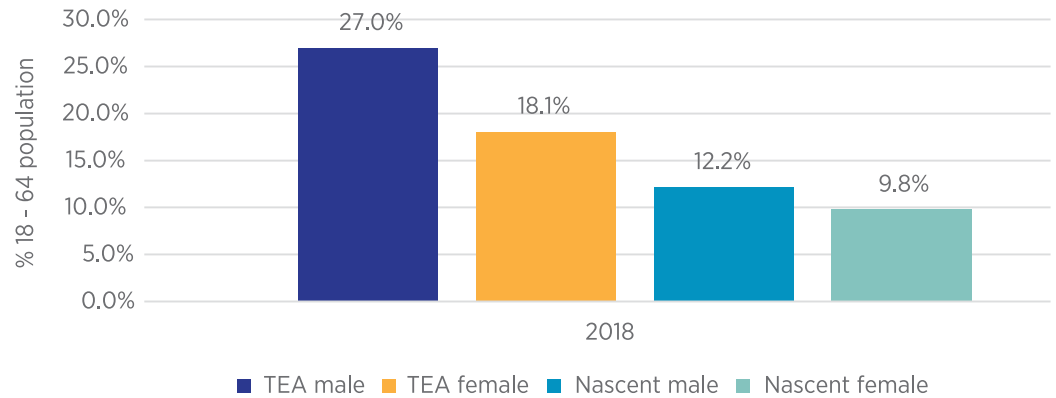
5.3
Age and senior entrepreneurship in Sudan

Sudan is considered a young country as youth represents a high percentage of the population, therefore the average age of people involved in entrepreneurship happens to be younger than in most other countries. The mean age of entrepreneurs in Sudan is 33.54% (Table 5.2). As may be expected, established owner-managers are of older age compared to mean age of entrepreneurs across the population, about 39.66 years of age. Close to this mean age of EB owner-manager is the nascent entrepreneur whose mean is 36.30 years. The mean age decreases among new entrepreneurs, 32.91 and TEA entrepreneurs with 34.82 mean. It can be noticed that the business owner-managers exit business at the mean age of 33.77 years.

*Table 5.2
Mean ages for
various
entrepreneurial
groupings in Sudan*

Year 2018		
Collective	Mean age (year)	Age SD (years)
[•] All population aged 18–64	33.54	11.914
[•] Potential entrepreneurs	32.91	11.286
[•] Nascent entrepreneurs	36.30	11.243
[•] New entrepreneurs	33.84	10.600
[•] TEA entrepreneurs	34.82	10.943
[•] EB owner-managers	39.66	12.943
[•] Exited business owner-managers	33.77	11.606

*Figure 5.2
Mean ages for
various
entrepreneurial
groupings in Sudan*
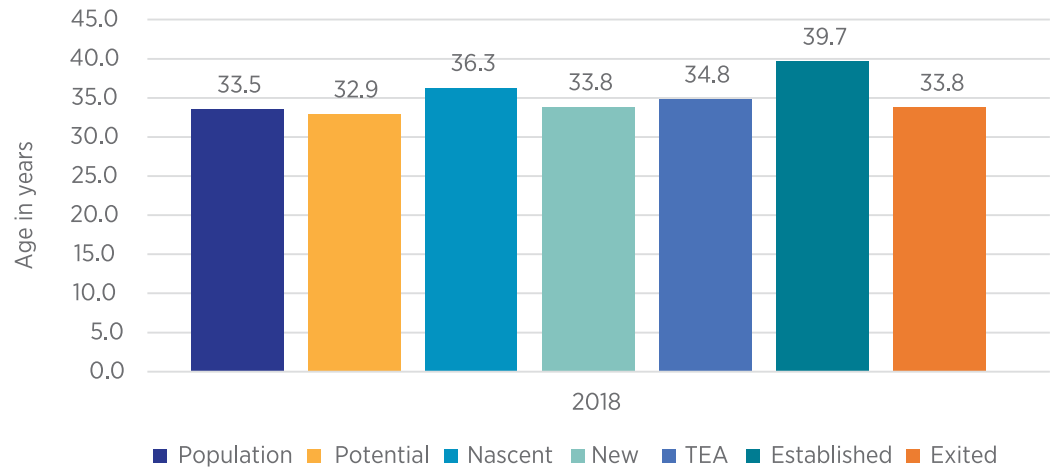
**5.4
Regional
prevalence of
Early-stage
entrepreneurial
activity in Sudan**

Figure 5.3 shows the regional prevalence of TEA within Sudan in 2018. The White Nile state has the highest prevalence of TEA with 33.6% and the Blue Nile state with 30%, while the Northern state recorded the lowest percentage of TEA prevalence, followed with 16% in Sinnar State. The percentage for the rest of the States fluctuates between 20%-22% (Figure 5.3).

Photo credit - https://en.wikipedia.org/wiki/Port_Sudan

Figure 5.3
Regional prevalence of Early -stage entrepreneurial activity in Sudan-2018

| | % 18–64 population, year 2018 | | |
States	Early-stage entrepreneurial activity (TEA) (%)	Nascent entrepreneurial activity (%)	New entrepreneurial activity (%)
Khartoum	21.40	38.7	61.30
Northern	8.10	20.0	80.00
River Nile	24.50	54.2	45.80
Red Sea	21.60	35.7	64.30
Gadarif	23.00	60.9	39.10
Kassala	20.00	58.6	41.40
Gezira	21.60	53.1	46.90
Sinnar	16.00	37.5	62.50
White Nile	33.60	36.2	63.80
Blue Nile	30.00	47.4	52.60
North Kordofan	22.50	57.1	42.90
North Darfur	21.90	48.6	51.40

5.5
Educational Level
of those engaged
in Entrepreneurial
Activity within
Sudan

Looking at the educational level of Sudanese entrepreneurs in the different phases of their entrepreneurial activity reveals that the majority either had secondary or post-secondary education. Figure 5.4 shows that 78.50% of the potential entrepreneurs are in post-secondary level of education, close to that percentage is nascent entrepreneurs where 80.20% of them have the same level of education. 77% of new entrepreneurs and 69.3% of established owner-managers had post-secondary education. Markedly, the percentage of entrepreneurs who had no educational background is the same for the entrepreneurs in potential and TEA stages (3.20%), while the established owner- managers group recorded the highest percentage (5%) of those with no educational attainment.

> Among Sudanese entrepreneurs in the different phases of their entrepreneurial activity the majority own a post-secondary degree.
>
> *GEM SUDAN-2018*

Figure 5.4
Educational levels
among Sudan´s
potential, nascent,
new, TEA
entrepreneurs and
established business
owner-managers

Potential Entrepreneurs

	NONE	SOME SECONDARY	SECONDARY DEGREE	POST SECONDARY
■%yes	3.20%	3.00%	15.30%	78.50%

Nascent Entrepreneurs

	NONE	SOME SECONDARY	SECONDARY DEGREE	POST SECONDARY
■%yes	3.90%	2.90%	13.00%	80.20%

New Entrepreneurs

	NONE	SOME SECONDARY	SECONDARY DEGREE	POST SECONDARY
■%yes	3.60%	4.00%	15.50%	77.00%

TEA
(nasecent + new entrepreneurs)

	NONE	SOME SECONDARY	SECONDARY DEGREE	POST SECONDARY
■%yes	3.20%	3.40%	14.50%	79.00%

Established owner-managers

	NONE	SOME SECONDARY	SECONDARY DEGREE	POST SECONDARY
■%yes	5.00%	5.50%	20.10%	69.30%

**5.6
Work status of
those engaged in
Entrepreneurial
Activity within
Sudan**

The work status of Sudanese entrepreneurs varies along seven categories: self-employed, not working, Student, Homemaker, Retired or disabled, part time only, and full or part time.

The results from the 2018 survey show that 56.90% of the TEA entrepreneurs are self-employed (47.8% nascent entrepreneurs and 65.9% new entrepreneurs), compared to 77% of the established owner-mangers are self-employed, while only 33.1% of potential entrepreneurs are self-employed. Special categories of the population, such as retired or disable, represent a small percentage of the work status of entrepreneurs; only 0.5% potential entrepreneurs and established owner managers under this category and 0.2% of TEA entrepreneurs. Remarkably, students represent a portion of the potential entrepreneurs with 5.90% and 1.6% of the TEA entrepreneurs are students. In general, we can see that the majority of Sudanese entrepreneurs in 2018 are self-employed and none of the established owner-managers are part-timers or students (Figure 5.5).

*Figure 5.5
Work status among
Sudan´s potential,
nascent, new, TEA
entrepreneurs and
established business
owner-managers*

Potential Entrepreneurs

	Full or part time	Part time only	Retired, disabled	Home-maker	Student	Not working	Self-employed
%Yes	21.00%	4.90%	0.50%	8.70%	5.90%	25.90%	33.10%

Nascent Entrepreneurs

	Full or part time	Part time only	Retired, disabled	Home-maker	Student	Not working	Self-employed
%Yes	23.20%	3.00%		6.40%	2.00%	17.70%	47.80%

New Entrepreneurs

	Full or part time	Part time only	Retired, disabled	Home-maker	Student	Not working	Self-employed
%Yes	20.90%	4.00%	0.40%	2.00%	1.20%	5.60%	65.90%

**TEA
(nasecent + new entrepreneurs)**

	Full or part time	Part time only	Retired, disabled	Home-maker	Student	Not working	Self-employed
%Yes	22.00%	3.70%	0.20%	4.10%	1.60%	11.50%	56.90%

Established owner-managers

	Full or part time	Part time only	Retired, disabled	Home-maker	Student	Not working	Self-employed
%Yes	18.00%		0.50%	0.50%		4.00%	77.00%

5.7
Educational Level
of those engaged
in Entrepreneurial
Activity within
Sudan

Entrepreneurship is an economic activity that is, to a great extent, influenced by resource availability, part of which is income. Therefore, the GEM survey examines the levels of income of those involved in entrepreneurial and business activities and classifies them into three levels: upper, middle and lower income.

Figure 5.8 reveals that 47% the potential entrepreneurs are in the upper income division, 30.5% are in middle and 22.5% are in lowest levels of income in Sudan for the year 2018.

For the TEA entrepreneurs, 46.10% are in the upper income level, 30.3% are middle income, while more than one fifth (21.5%) are in the lowest income level. The percentages of established owner-managers are very similar to the TEA entrepreneurs. A clear observation from Figure 5.6 is that the majority of the Sudanese entrepreneurs in all the stages of the entrepreneurship activity come from the upper income level.

Figure 5.6
Income distribution
among Sudan´s
potential, nascent,
new, TEA
entrepreneurs and
established business
owner-managers

Potential Entrepreneurs

	Lowest 33%tile	Middle 33%tile	Upper 33%tile
%Yes	22.50%	30.50%	47.00%

Nascent Entrepreneurs

	Lowest 33%tile	Middle 33%tile	Upper 33%tile
%Yes	21.30%	30.30%	48.30%

Nascent Entrepreneurs

	Lowest 33%tile	Middle 33%tile	Upper 33%tile
%Yes	21.30%	30.30%	48.30%

TEA (nasecent + new entrepreneurs)

	Lowest 33%tile	Middle 33%tile	Upper 33%tile
%Yes	21.50%	30.30%	48.10%

Establish owner-managers

	Lowest 33%tile	Middle 33%tile	Upper 33%tile
%Yes	20.80%	33.10%	46.10%
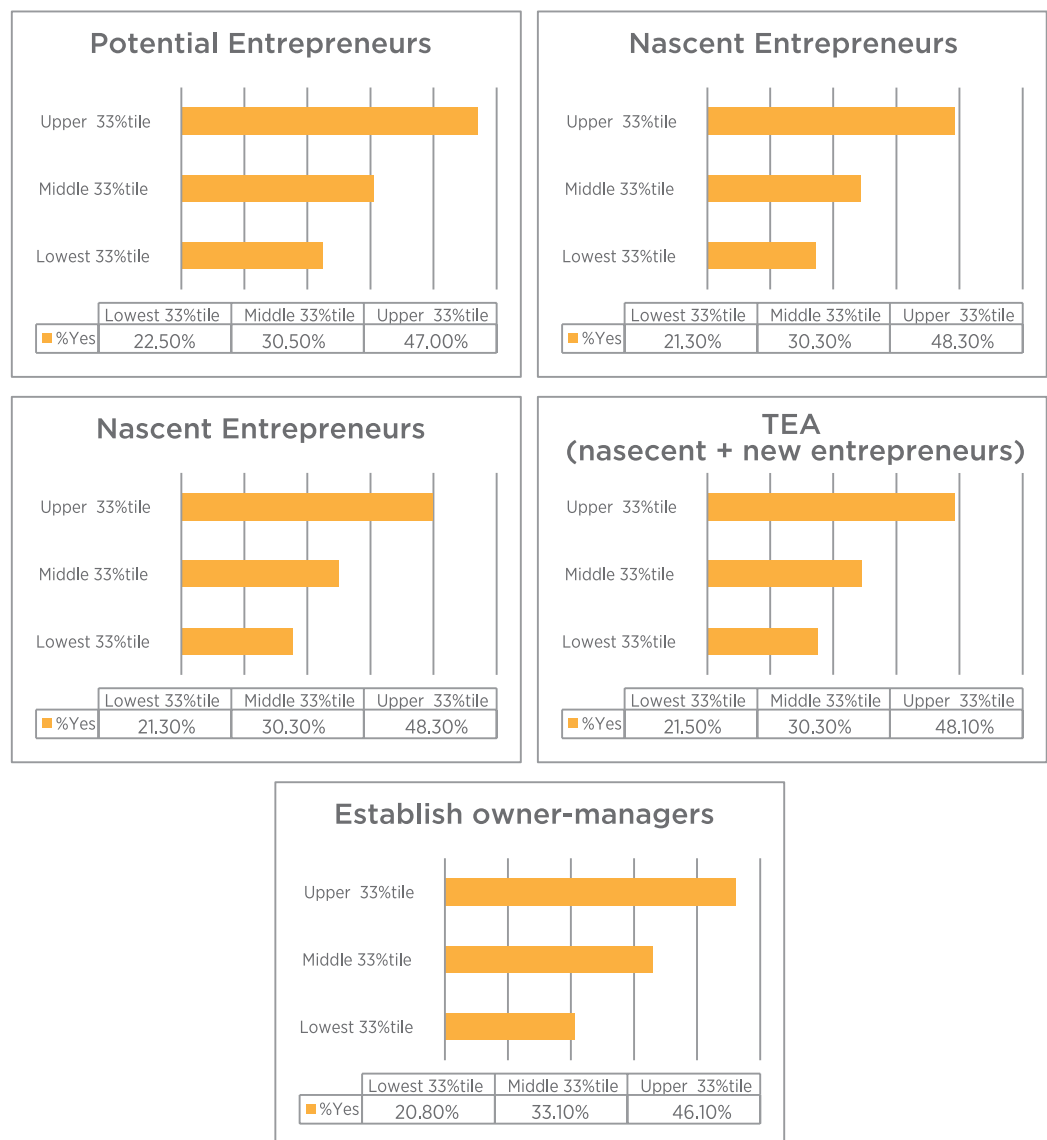
5.8
Distribution of those engaged in entrepreneurial activity by size of household within Sudan

The size of the households accommodating persons involved in all stages of the entrepreneurial process, as well as those of established owner-managers, have been surveyed in 2018. The results of the analysis show that the size of households across all the categories of those involved in the entrepreneurial process are very similar (Figure 5.7). An average size of 6.1 to 6.4 persons per households indicates that most of the entrepreneurs live in relatively large households.

Figure 5.7
Average size of households of potential, nascent, new, and early-stage entrepreneurs, and established owner-managers in Sudan (2018)
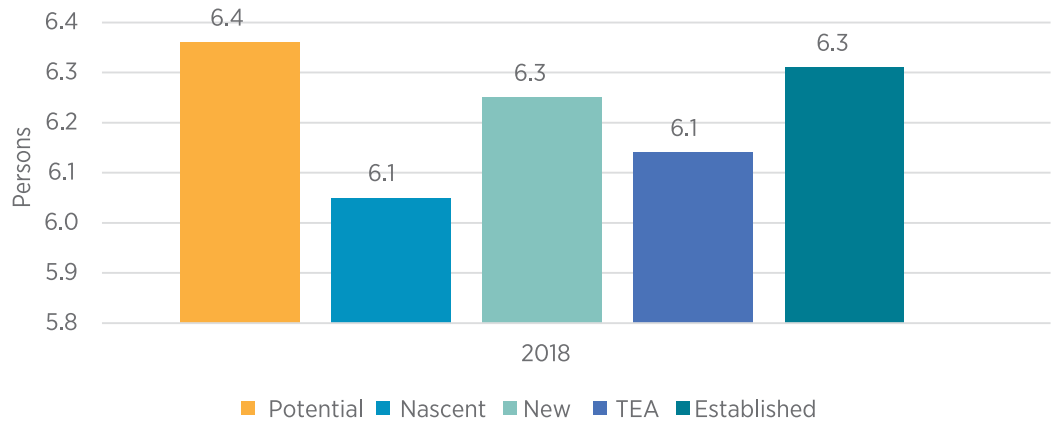
5.9
Typical Profile of the Early-stage (TEA) Entrepreneurs in Sudan

The profile of a typical an early-stage Sudanese entrepreneur is male, aged 34.82 in average, hold a first stage of tertiary education, with median annual income SDG 40,001 to SDG 60,000, and is self-employed and belongs to a family of a mean 6.14 family members (Table 5.3).

Table 5.3
Typical profile of the early-stage entrepreneur of Sudan

[•] The profile of a typical an early-stage Sudanese entrepreneur is: A male aged 34.82 in average,

[•] Holds a First stage of tertiary education,

[•] Median annual income SDG 40,001 to SDG 60,000,

[•] Is self-employed

[•] Belongs to a family of mean 6.14 family members
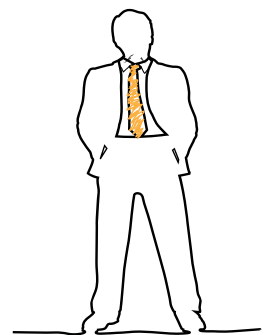
**5.10
International
position of
Sudanese TEA**

Sudanese TEA entrepreneurs function within a broader international context. GEM survey looks at the position of TEA entrepreneurs of Sudan and compares a set of variables including gender, age group, work status, educational level, and annual income with countries of the geographical and cultural zone of influence to Sudan. Most relevant are countries from the MENA region, Sub-Saharan Africa and low-income status, in addition to the GEM average.

Figure 5.8 shows in general that male entrepreneurs are proportionally more than female entrepreneurs in all countries, and in GEM averages, except for Qatar where the percentage of male and female entrepreneurs is almost equal. Sudan has more male (27.5%) than female (17.1%) entrepreneurs representing the second highest percentages compared to all other countries and the GEM average. Lebanon is the country that shows the highest rate of female activity, and Morocco the lowest.

Photo credit - www.nilebasindiscourse.org/news-blog/community-blog/136-sudan/321-the-need-for-community-consultations-on-investment-programs-on-the-nile-case-of-the-merowe-dam-sudan
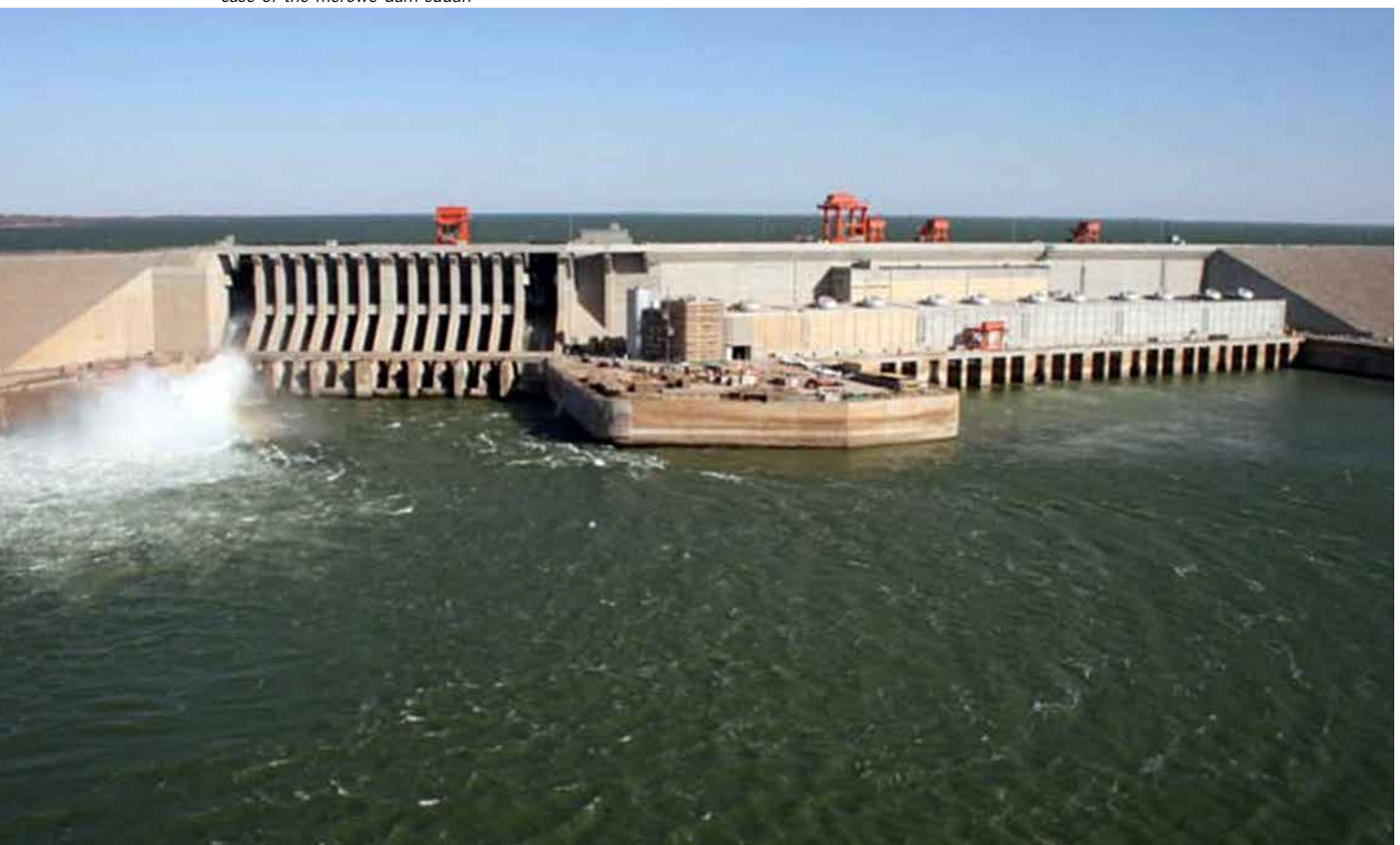
Figure 5.8
International Position
of TEA entrepreneurs
by Gender

	18–64 population	
	TEA Male (%)	TEA Female (%)
GEM	14.7	10.4
Low income countries	20.0	15.9
Egypt	14.1	5.4
Iran	12.9	6.5
Lebanon	31.3	17.4
Morocco	9.2	4.3
Qatar	8.6	8.4
KSA	14.8	8.5
Sudan	27.5	17.1
Turkey	20.0	8.4
UAE	11.0	10.1
USA	17.7	13.6
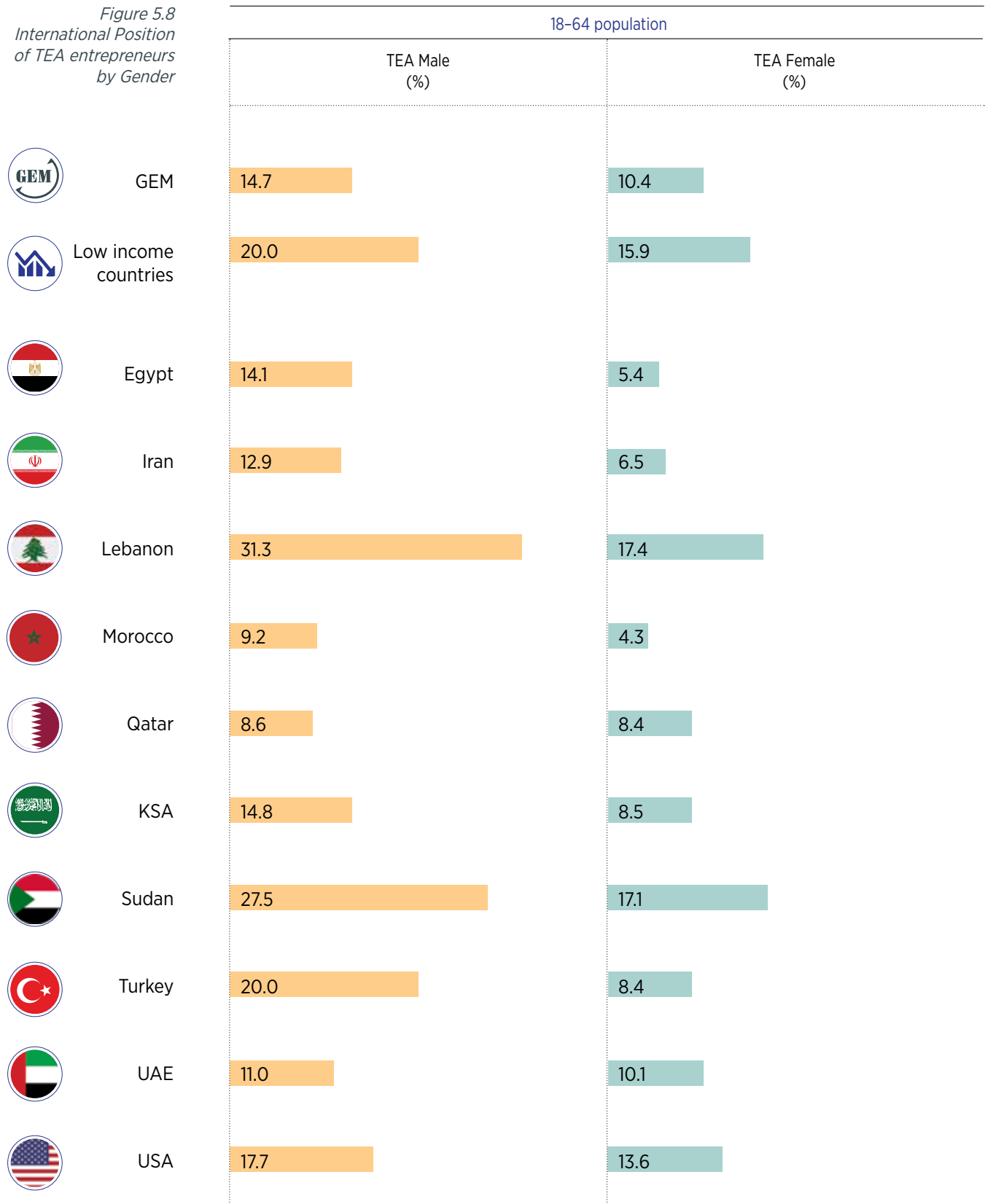
Figure 5.9 reflects the percentage of populations' aged 18–64 involved in early-stage entrepreneurial activities. In Sudan TEA entrepreneurs aged 45-54 represents more than one fifth (27.8%) of those involved in TEA activity. The same applies to Qatar (11.6%) and UAE (12.9%), while in most other countries the age group 25-34 represents the highest percentage of TEA entrepreneurs (Figure 5.9), while in low-income countries the age group 25-34 represents 21.2% of TEA entrepreneurs.

*Figure 5.9
International Position
of TEA entrepreneurs
by age*
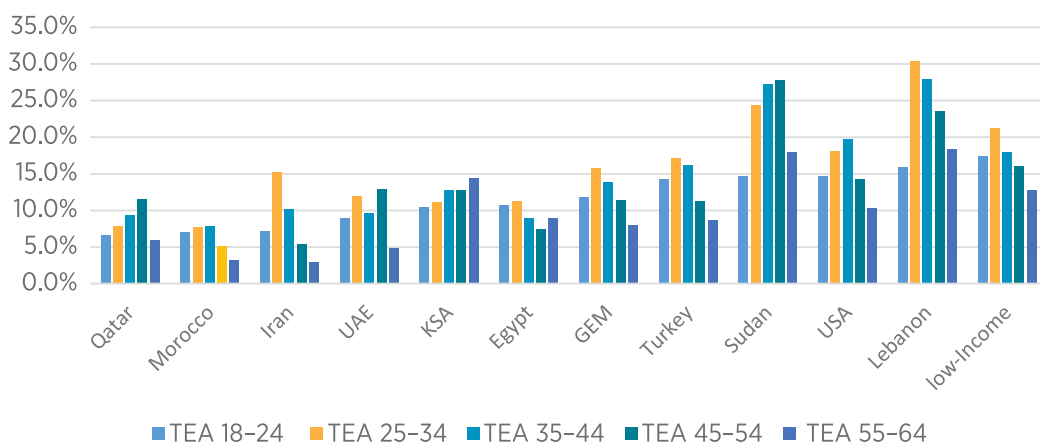
The GEM survey examines the work status of the proportions of adult population involved in TEA entrepreneurial activities along three work-status categories: working, not working, or studying/retired as shown in the distribution in Figure 5.10. In Sudan, like in most other countries, the distributions do not show significant rates of people who are either not working or studying/retired and involved in early-stage entrepreneurial activities. However, in all countries the highest proportion of people involved in early-stage entrepreneurial activities are already working with Lebanon indicating the highest percentage of working TEA entrepreneurs (32.5%), followed by Sudan (32%). This can be attributed to economic conditions, which push many people to seek a second complementary income through entrepreneurial activities (as observed in Sudan). Qatar and Morocco show the least percentage of working TEA entrepreneurs (8.9%) and (9.6%) respectively.

*Figure 5.10
International Position
of TEA entrepreneurs
by work status*
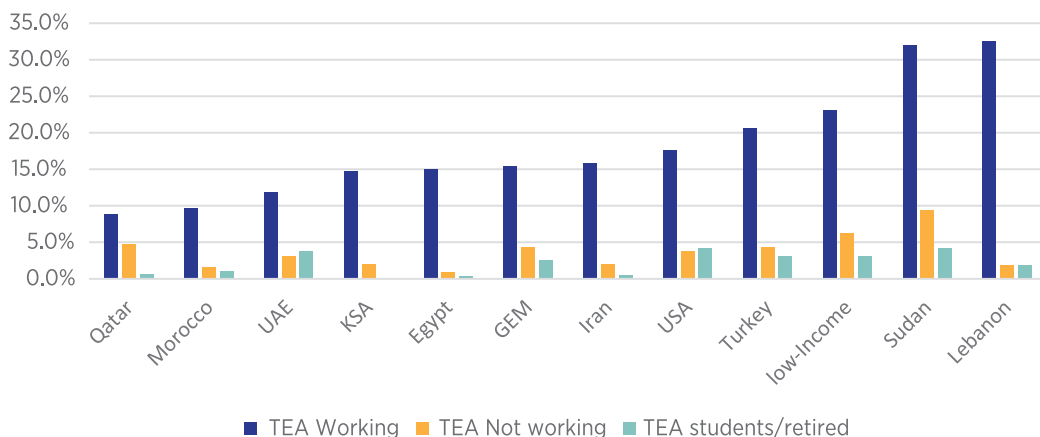
Figure 5.11 exhibits the percentage of populations aged 18–64 involved in early-stage entrepreneurial activities based on four educational levels: some secondary, secondary, post-secondary degree, and graduate experience. In Sudan 23% of TEA entrepreneurs hold post-secondary degree, a proportion higher than low-income countries but similar to those in Turkey, UAE, Qatar and Morocco. With the exception of Sudan, most TEA entrepreneurs in all other countries enjoy a Graduate experience, with Lebanon showing the highest percentage of almost (30%).

Figure 5.11
International Position
of TEA entrepreneurs
by level of Education
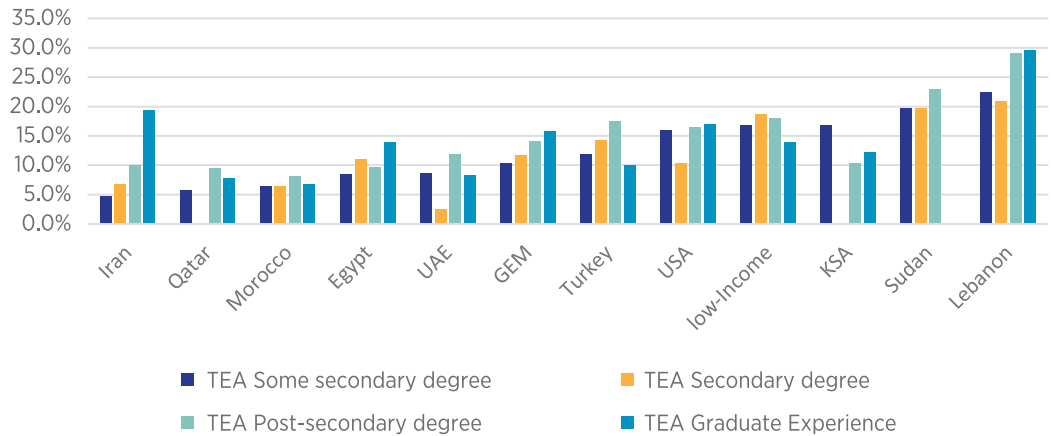
Figure 5.12 classifies the proportions of adult populations involved in early-stage entrepreneurial activities according to three categories of income level: lower, middle and upper third. The results show that the distribution of TEA entrepreneurs in all countries, fall under the highest income percentile. Sudan has the second highest proportion of TEA entrepreneurs who fall into the upper third annual income level (25%) preceded by Lebanon (26.3%). These results may explain the relative success of the entrepreneurial practice and to some extent indicate the influence of income on the TEA activity. Considering the representation of entrepreneurs within the low-income level it may indicate that entrepreneurs may be motivated to innovate despite the limitations of income availability, and prove their risk-taking propensity as entrepreneurs entering into the nascent stage regardless of the level of resources available to them.

Figure 5.12
International Position
of TEA entrepreneurs
by level of income
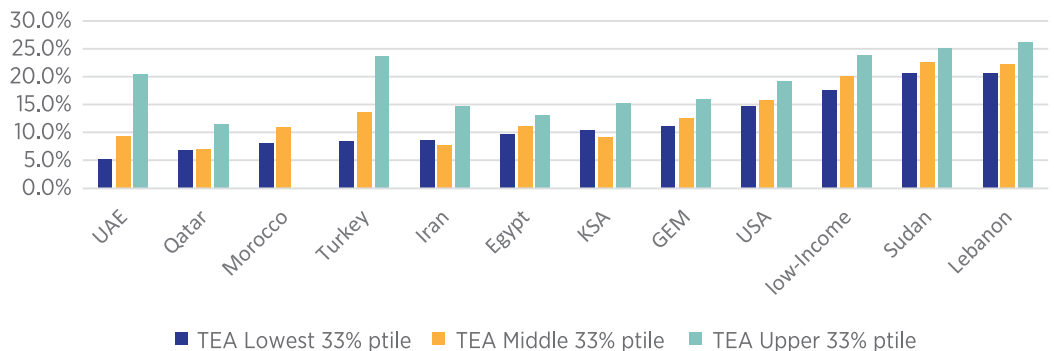
6.
Informal Investment Activity

6.1
Introduction

The literature on financing for entrepreneurs informs that the capital structure for starting entrepreneurial ventures, in a considerable number of cases, includes informal sources of funds especially at the start-up stage. Informal investment or what is known as 'gift financing' consists of funds provision to entrepreneurs by family, relatives, friends, work colleagues, neighbors, strangers, or any other informal financing channel (Investopedia, 2018). Thus it is relevant to monitor informal investment activity by estimating the proportion the adult population acting as an informal investor, the average amount they invest, the relationship between informal investors and their beneficiaries, and other details. GEM generates unique data on informal investment and identifies how much contribution these informal channels and sources of finance make to support entrepreneurship development.

6.2
Estimated proportion of informal investors in Sudan

GEM 2018 estimates the participation of Sudan's adult population in informal investment by measuring an indicator based on the percentage of adult individuals who positively answer, at a given moment, the question: "Have you, in the past three years, personally provided funds for a new business started by someone else, excluding any purchases of stocks or mutual funds?"

The results exhibited in Figure 6.1 along with the TEA rates reveal that the percentage of people who declared that they had acted as an informal investor in the past three years was 18.0% while 22.2% acted as TEA. In 2018, the relationship between these two indicators may be taken to point out that the engagement of near to one fifth (18%) of the population in informal investment supports early stage activities especially in a context where many adult populations fall in a resource - tight status.

Figure 6.1 Estimated percentage of adult population acting as an informal investor and TEA in Sudan
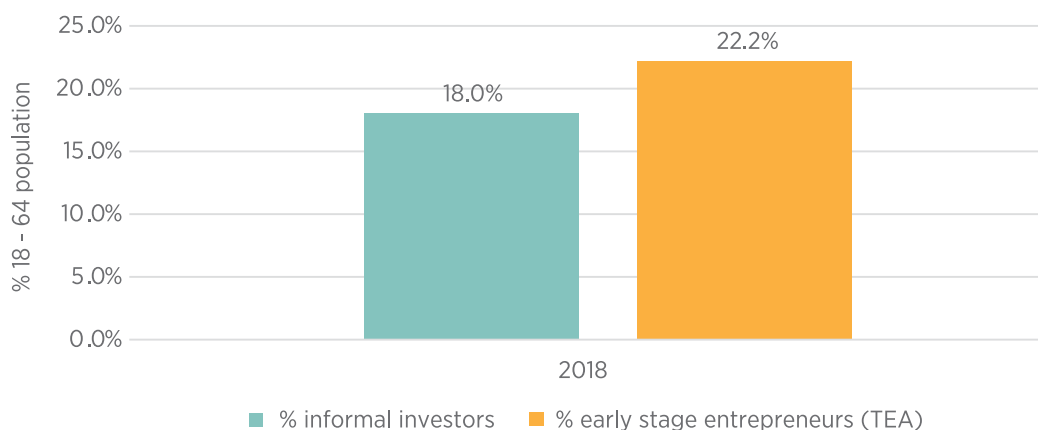
6.3
Estimated amount of informal investments in Sudan

The results in Table 6.1 reveal the average amounts of funds from informal investments provided by 85% of informal investors in Sudanese pounds (SDGs) and USD along with their respective standard deviations, medians, and modes. The most robust indicator is the median, as the average is affected by extreme values (whether low or high). So, in terms of medians, the average individual contributions of informal investors show considerable variation between the SDG (5000.0) and USD (100.0) values. The low percentage of the dollar value is compatible with the overall economic situation and foreign currency circulation in the economy. The mode (the amount most frequently invested) follows a similar pattern as the median. However, these figures need to be carefully interpreted since many factors, such as sensitivity of financial information and lack of proper record keeping, influence the level of accuracy of these results.

Year 2018	
Indicators	Amounts
[•] % of informal investors who provided the amount	89.5%
[•] Invested amount average (SDG)	15174.2
[•] Invested amount standard deviation (SDG)	164,005.5
[•] Invested amount average (USD)	303.5
[•] Invested amount standard deviation (USD)	3280.1
[•] Invested amount median (SDG)	5000.0
[•] Invested amount median (USD)	100.0
[•] Invested amount mode (SDG)	4000.0
[•] Invested amount mode (USD)	80.0

To estimate roughly the impact of informal funds on early-stage entrepreneurial activity financing during 2018, the GEM adult survey in Sudan reflects the contributions of informal financing over the past three years of early-stage activities (Table 6.2).

Year 2018	
Concepts	Amounts
[•] Sudan's population aged 18–64 (persons)	11,875,666
[•] Point estimate of informal investors in the population over the last 3 years (%)	18.08%
[•] Point estimate of the number of informal investors in the population over the last 3 years (persons)	2,147,120
[•] Estimate of total funds invested in 3 years, by applying the median (SDG) to each informal investor	10,735,600,000
[•] Estimate of total funds (SDG) invested each year, by dividing the previous amount by 3 (period 2015–2017)	3,578,533,333
[•] Estimate of total funds invested in 3 years, by applying the median (USD) to each investor	214,712,000
[•] Estimate of total funds (USD) invested each year, by dividing the previous amount by 3 (period 2015–2017)	71,570,667

*Note: these results constitute a rough approximation, as they are calculated under the imprecise assumption that in each of the three years, the number of investors was the same, and the medians remained constant. Also, one should bear in mind that the results are based on a sample and under an estimation error at 95% of confidence. Nonetheless, the result is a realistic, if rough, approximation of the impact of informal funds on entrepreneurship financing.

**6.4
Characteristics of
informal investors
in Sudan**

A brief description of the characteristics of the adult population who engage in informal investment in Sudan is exhibited in Table 6.3. The year 2018 results show a gender disparity in favour of male adults 58.0% compared to 42.0 % females. Informal investors' mean age is 34.75 years with 11.7 standard deviation. In terms of the educational level of informal investors, most of them are concentrated in the higher levels of post-secondary education; a result that is compatible with their levels of income and average age.

The year 2018 results reveal that most of the informal investors (50%) belong to the highest third of income. Most informal investors work full or part-time. A very high proportion of them know entrepreneurs that started up businesses in the last two years. The majority of the informal investors (77.6%) see good entrepreneurial opportunities for the next six months, which make them alert and stand good chances as potential entrepreneurs. The proportion of informal investors involved in early-stage entrepreneurial activities is presented as 35.4% while those in established business activities count to 18.1% (Table 6.3).

*Table 6.3
Main indicators on
informal investors'
characteristics*

Gender

Age

Educational
level

Annual
income

Work status
(reduced)

Year 2018	
Characteristic	Figures
[•] Male (%)	58.0
[•] Female (%)	42.0
[•] Mean age and standard deviation	34.75(11.7) years
[•] None (%)	3.4
[•] Some secondary (%)	2.3
[•] Secondary (%)	16.0
[•] Postsecondary (%)	78.4**
[•] Lowest 33% percentile	19.7
[•] Middle 33% percentile	30.3
[•] Highest 33% percentile	50.0
[•] Works full time or part time (%)	76.2
[•] Not working (%)	20.5
[•] Retired/student (%)	3.3
[•] Knows recent entrepreneurs (%)	74.7
[•] Sees good opportunities (%)	77.6
[•] Involved in TEA (%)	35.4
[•] Involved in EB (%)	18.1

Note: the basis of calculating these indicators is the total sample of informal investors in each year.
**Note: the year 2018 a new coding has been applied to educational categories

**6.5
Relationship ties
between informal
investors and
entrepreneurs in
Sudan**

Informal investors are usually part of the social networks of entrepreneurs connected by different types of relationships. GEM provides a description of the relationship between informal investors and their beneficiaries, entrepreneurs. The results from the adult survey 2018 in Figure 6.2 show the distributions of the different categories of relationship connecting informal investors and entrepreneurs.

From Figure 6.2 it is noticeable that half of the responses indicate the type of relationship between informal investors and beneficiaries as close family members. This is followed by the category of friends and/or neighbors, while relationship category of stranger with good business ideas (private investors) stands as the least relationship category.

It is important to assess these results within the overall societal values and attitude towards social networks obligations, and the social change dynamics, which shape these types of relationships.

*Figure 6.2
Distributions of
categories of
relationships
between informal
investors and early-
stage entrepreneurs*
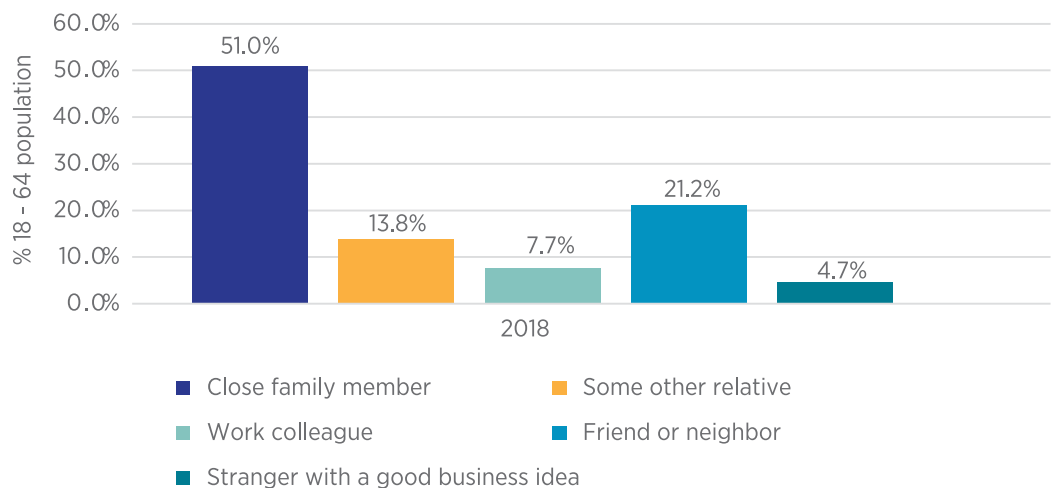
**6.6
Sudan's
international
position
regarding
informal
investment in
entrepreneurial
firms**

Figure 6.3 shows that the proportion of Sudan's population committed to informal investment is the highest (18.3%) in the zones of comparison, followed by Saudi Arabia 11.8%. This must be understood within a holistic social and contextual situation of social support to necessity and survival entrepreneurs especially those within the micro-small (MSEs) entrepreneurial ventures.

However, looking at Figure 6.4, which shows the average funds (USD) provided by informal investors, one can see that the average for the UAE and Qatar are the highest of the group, while Sudan's average is the lowest. Thus, proportionally speaking, the impact of informal investment in the UAE and Qatar is expected to be higher than it is in Sudan. The modernization of this investment requires an accurate analysis from the governments' side to design tax benefits that could aim more informal investors to act in favour of innovative entrepreneurs in the short term.

Figure 6.3
Estimated
percentage of
population acting as
an informal investor

	18–64 population	
	Positive response as informal investor (%)	Positive response giving an investment amount (%)
GEM	6.2	4.4
High income countries	5.9	4.0
Low income countries	7.5	5.1
Egypt	2.5	2.3
Iran	7.3	6.4
Lebanon	6.0	5.9
Morocco	10.7	4.5
Qatar	5.4	1.4
KSA	11.8	8.4
Sudan	18.1	16.2
Turkey	5.7	4.8
UAE	9.0	5.5
USA	7.9	6.5
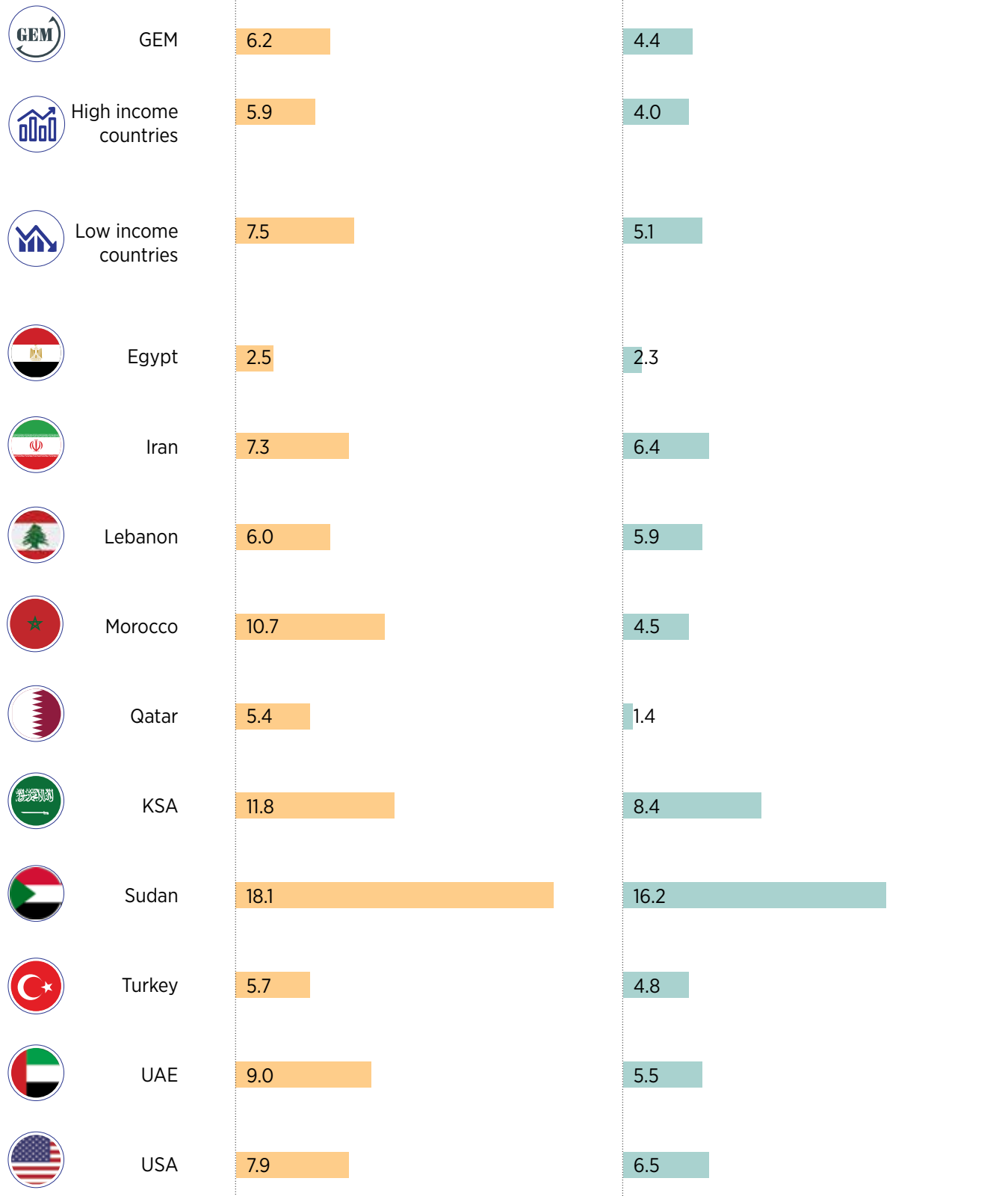
*Figure 6.4
Estimated average
funds invested by
informal investors –
average in
(Thousands) USD*

Average in (Thousands) USD

GEM	$22,345.56
High income countries	$30,243.89
Low income countries	$3,268.40
Egypt	$10,715.03
Iran	$2,115.30
Lebanon	$19,406.34
Morocco	$2,671.25
Qatar	$66,735.63
KSA	$9,239.58
Sudan	$875.24
Turkey	$14,418.56
UAE	$75,958.22
USA	$24,607.30
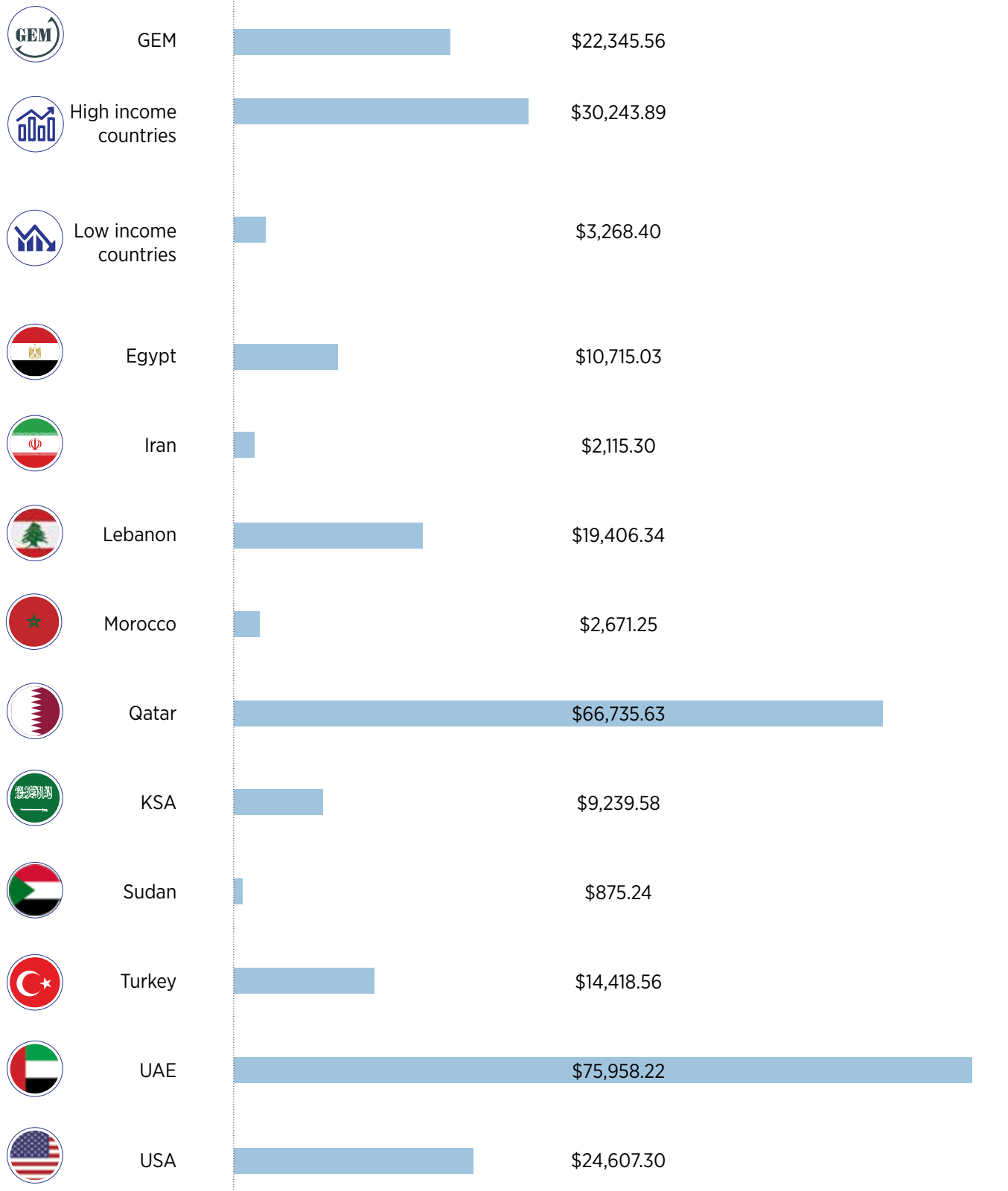
7. Entrepreneurship and Family Business

7.1 Introduction

This section of the Sudan 2018 adult survey enables to distinguish between family businesses and non-family businesses, and thereby understand how family businesses and non-family businesses differ in their prevalence in Sudan. The results in this section highlight the difference between the two types of business in their conditions, organization, ambitions, performance, and impacts. It also identifies how many nascent, new and established businesses involved in the entrepreneurial process are based on a family business model.

GEM 2018 shows interest to analyze the prevalence of the application of a family business model. It depicts how many nascent, new and established businesses involved in the entrepreneurial process are family businesses, a practice which is well acknowledged by the Sudanese business society. The analysis of the family business model focuses on factors such as managerial models, ownership, financing, succession and other aspects that are inherent to this model and critical to the correct development and growth of this type of business. The value of understanding this sector gives an idea of its scope, characteristics, performance, and challenges, thus policymakers can design adequate measures to give support to this type of entrepreneurial activities. The GEM survey provides information, for the first time, on the scope of this model in the entrepreneurial process in Sudan for the year 2018.

7.2 Family Business (FB) in Sudan

GEM focuses on additional topics in the year 2018. The involvement of family in business has been addressed using newly added questions to the adult survey. These questions are designed to capture the family business involvement covering three areas: business ownership, business management and the work developed within family firms. Responses to these questions draw the general picture about the proportional involvement of the population (age 18-64) in different types of family business fully or partially applying the model.

[•] **Full family business model:** the family has most of the ownership, most of the control on its management and all or several family members are working at the business.

[•] **Partial family business models:** when the family just has the ownership, or the management or is involved in the work or meets a combination of ownership and management, ownership and work or management and work.

The statistical results (Figure 7.1) reveal that the year 2018, 9.3% of the 18-64 aged population in Sudan is involved in at least one of these types of family business at any stage of the activity, that is, nascent, new or established.

Figure 7.1 Estimated percentage of Sudanese adult population involved in any type of family business

Involved or not involved in any FB model, (%)

[•] Not involved in any FB model	90.7
[•] Yes involved in one type of FB model	9.3

With the assumption of the 9.3% of proportional family business as 100%, we can draw a detailed distribution of the types of model considered in the family business. Figure 7.2, gives detailed distribution of these firms in the different types of models where the majority (62.6%) are considered to be full model, that is, a business where one family has most (or all) the ownership, the management control and all or several family members are working in the family firm. The percentage of those partially applying the model makes up 15.5% where the family has just the ownership and its management but not involved in the work process. Those two groups added together represent the majority (78.1) of the family involvement in ownership and management, which is a significant proportion within the total. The remaining percentages are distributed between 7.5% and 2.1% of partial model of ownership, management, or work separately or a combination of two of them.

Figure 7.2 Estimated distribution of types of family business in Sudan

Full model

Partial model

Types of family business, (%)	
[•] Ownership & Management & Work	62.6
[•] Ownership & Management	15.5
[•] Just Management	7.5
[•] Management & Work	4.8
[•] Just Ownership	4.3
[•] Just family members work	3.2
[•] Ownership & work	2.1
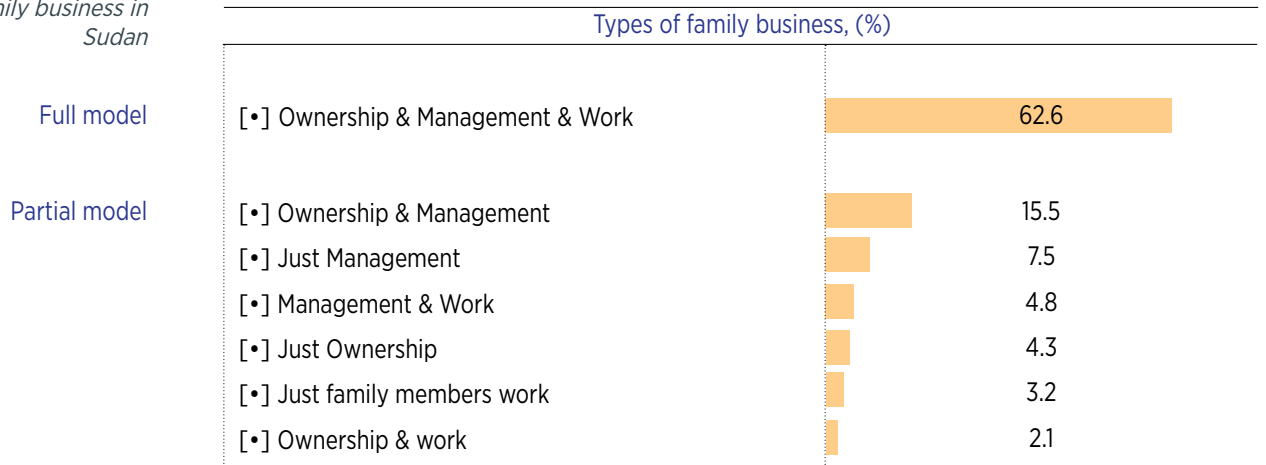
The full family business model is traditional in Sudan and is the one that meets all the requirements for a complete family control and development. Considered over the Sudanese adult population, 6.0% of people between 18 and 64 years old involved in this type of activity (Figure 7.3).

Figure 7.3 Estimated percentage of Sudanese adult population involved in a full family business model (family has most ownership, management and work)

Involvement in family business full model (ownership, management and most of workers)

94.0%

6.0%

Not involved in a full FB model

Yes, involved in a full FB model
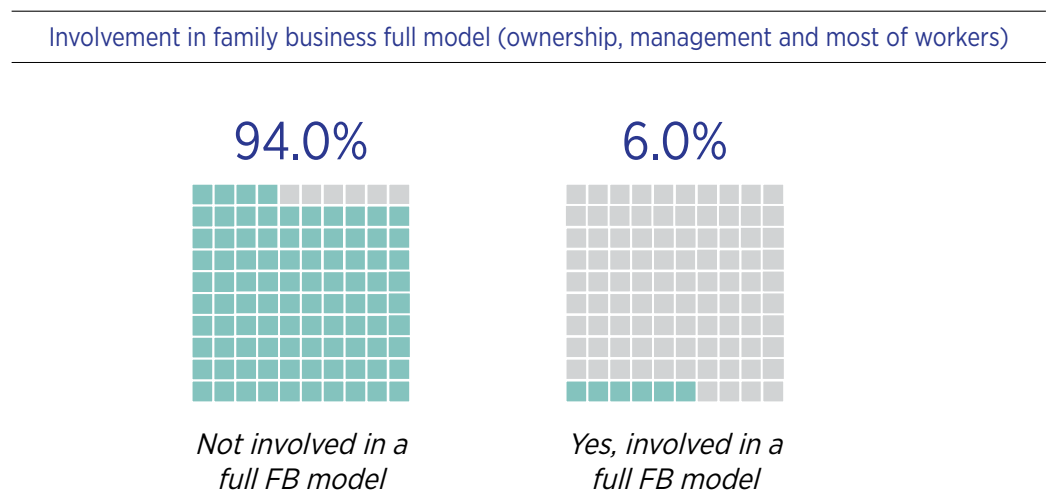
7.3
Personal characteristics of family business owner-managers in Sudan

The year 2018 adult survey in Sudan, GEM registered a dominant level (68.4%) of men's involvement in family businesses, while women present 31.6% (Figure 7.4). Most family business owner-managers are between 35 and 44 years old, but more than a quarter of this collective are in the age group 25-34 years. The result points out that the sector is mostly in young hands in Sudan with 31.1% in the age group 25-34 years. Additionally, 49.4% of these individuals belong to the upper third of income, and 81.3% hold a post-secondary degree. Finally, as expected, these owner-managers live in relatively big families: the average size of their households is 6.27 persons.

Figure 7.4
Personal characteristics of Sudanese family businesses' owner-managers

Average of age = 35.21 years	Average household size = 6.27 persons

Gender

31.6%
68.4%

■ Male ■ Female

Age group

55-64	8.6%
45-54	18.3%
35-44	20.4%
25-34	30.1%
18-24	22.6%

0.0% 10.0% 20.0% 30.0% 40.0%

Income in thirds

20.7%
49.4%
29.9%

■ Lowest 33%tile ■ Middle 33%tile
■ Upper 33%tile

Educational attainment

POST SECONDARY	81.3%
SECONDARY...	15.0%
SOME SECONDARY	1.6%
NONE	2.1%

0.0% 50.0% 100.0%
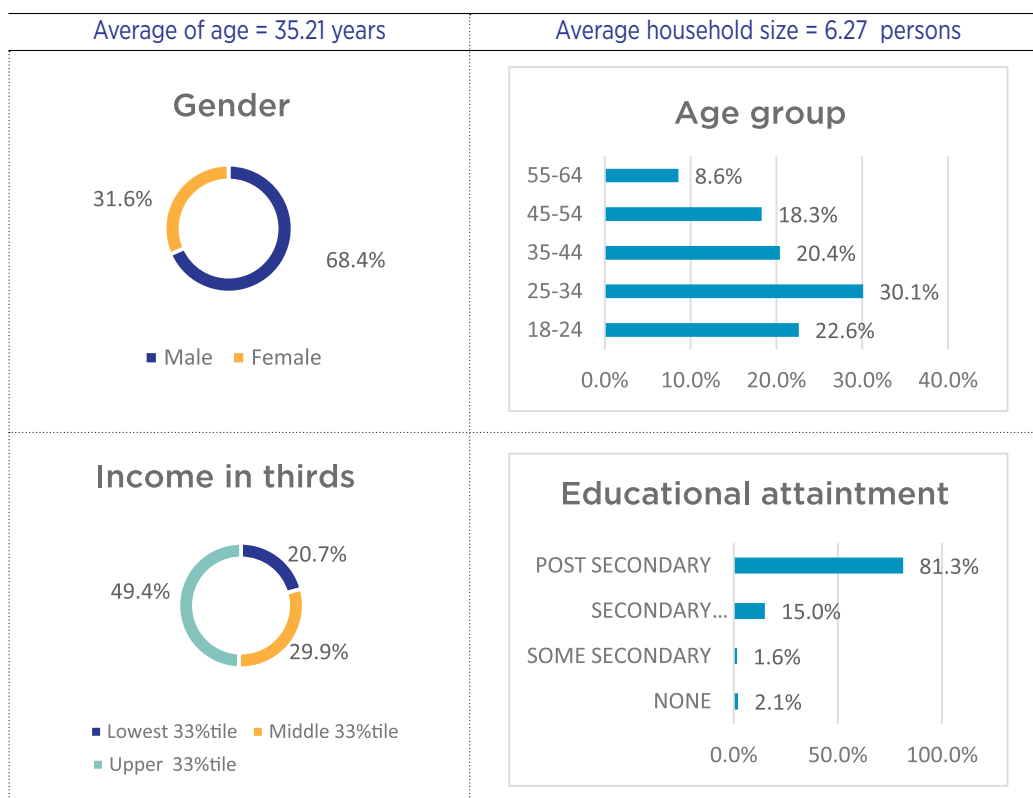
7.4
Individual perceptions of FB Owner-managers about social support to entrepreneurship and entrepreneurial values in Sudan

Figure 7.5 shows the results of comparing family business' owner-managers with the rest of the population (including other types of individuals involved in other business' models) regarding perception and social support to entrepreneurship in Sudan. Most of the family business' owner-manager show the same level of convincement about that most people would prefer that everyone had a similar standard of living and consider starting a business in Sudan as an easy activity. Significantly most (84.3%) family business' owner-manager are convinced that most people in Sudan consider starting a business as a desirable career choice, as there are many well communicated successful new business stories available in media. They are also convinced that it is easy to start a new business and that you can often see businesses whose primary aim is to solve social problems. In addition, they perceive those successful at starting a new business have a high level of status and social respect.

The individual perception of entrepreneurial values in terms of knowledge of entrepreneurs who have already started a business within the past two years, sense of opportunities and future prospects to start a business, having the needed knowledge and skill to start a business and considering fear of failure as a hindrance to starting a business is reflected in Figure 7.6. The results show that individual perception of these entrepreneurial values appears to be higher among family business owner-managers than among the rest of the population. Thus, one can see that family business owner-managers show significantly higher proportions of individuals that know recent entrepreneurs, that perceive good opportunities to start-up in the next six months and that indicate being in possession of the skills, knowledge, and abilities to start and run a standard business. An important result that needs focus is that 72.6% of those who are not involved in any family business model consider themselves to have the knowledge and skills necessary to start a business. This may indicate a considerable level of potential entrepreneurs, part of whom may be family business owner-managers. In turn, family business owner-managers, show a significantly smaller proportion of cases that perceive fear of failure as a burden to start a new business. In conclusion, family business owner-managers appear to be more positive about entrepreneurial activity based on their perception of the specified values associated with entrepreneurship.

Figure 7.6
Comparison between the family business owner-managers and the rest of the adult population of Sudan on their individual perception on entrepreneurial values
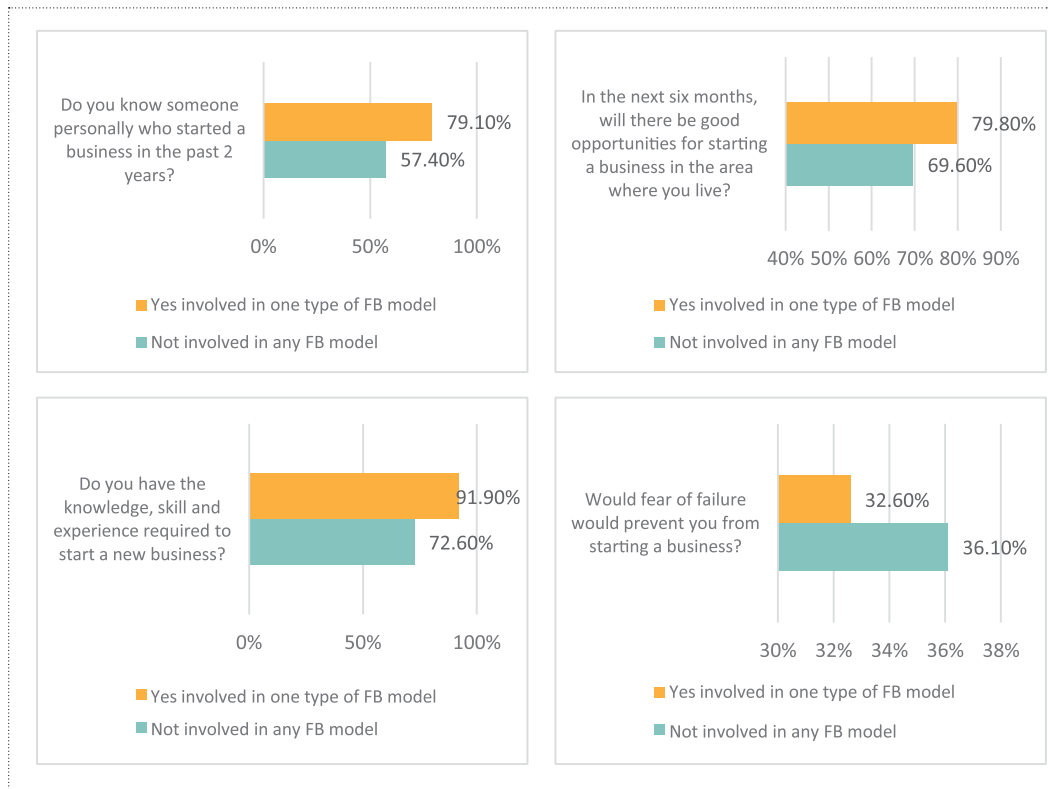
7.5 Main features of family businesses in Sudan

In this section the results from the 2018 adult survey show the distributions on main features of the family business of Sudan, considering all types together.

Sudan adult survey covered 12 areas (States) within the country and the results draw interesting distribution on main features of the family business considering all type together full and partial models. The highest representation of family business is recorded in Blue Nile state (15.71%), while Khartoum, Red Sea and N. Darfur states reported lower levels of involvement in family businesses by the adult population, the least (5.87%) being in Khartoum state (Figure 7.7). The low level of engagement in family business in Khartoum state may be attributed to the fact that being the central state with the capital city shapes the labor market and \peoples' engagement in formal paid jobs in governmental and administrative jobs more than self-employment and entrepreneurship. In addition, the capital city, Khartoum, is observed to include two contrasting situations; one is that and due to internal migration many individuals enter into survival/necessity entrepreneurship as individuals. The other is that the city is to an extent attractive to modern entrepreneurial firms that build on models different from family business.

*Figure 7.7
Comparisons
of Representation of
family businesses
of all types among
the adult population
by State*

States
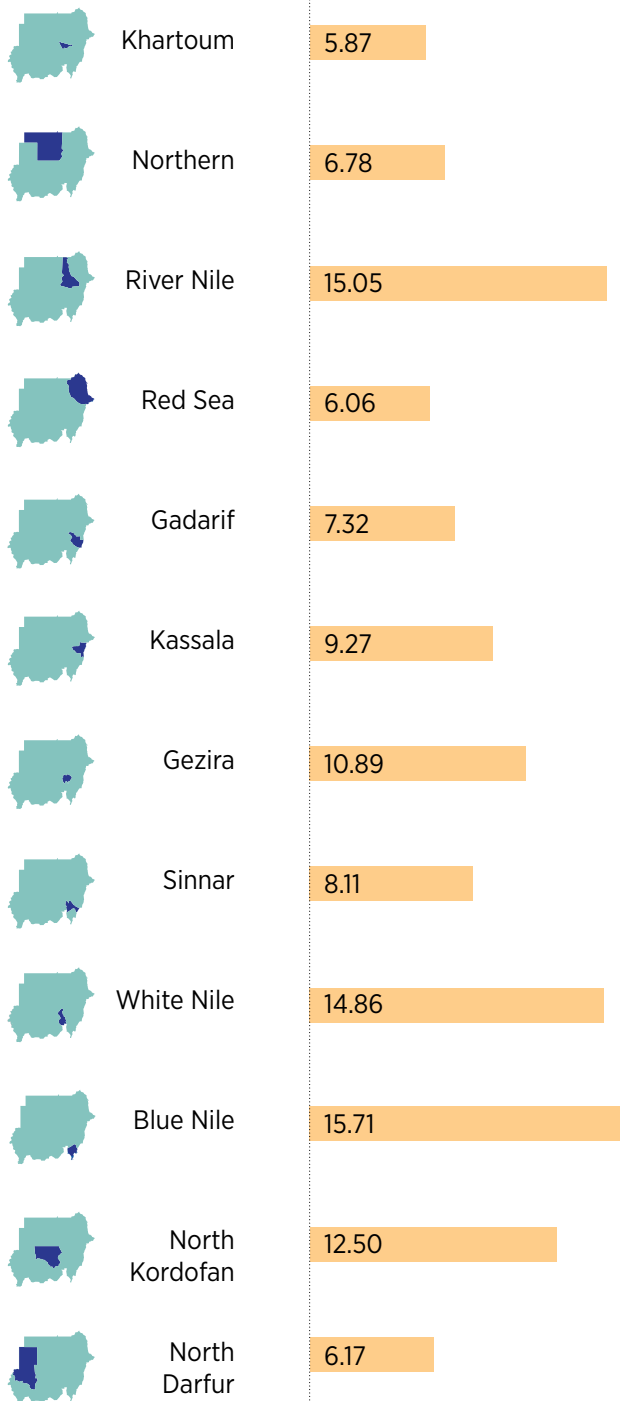
main features of family business of all types together, (%)

State	Value
Khartoum	5.87
Northern	6.78
River Nile	15.05
Red Sea	6.06
Gadarif	7.32
Kassala	9.27
Gezira	10.89
Sinnar	8.11
White Nile	14.86
Blue Nile	15.71
North Kordofan	12.50
North Darfur	6.17

Figure 7.8 shows the estimated distribution of the Sudanese family business by activity stage the year 2018 as almost equal distribution of one third for each of the firms stage: 33.6 % consolidation process, that is, they are new firms operating in the market between 3 and 42 months when the GEM survey was commenced, 32.2% in the nascent period with less than 3 months operating at the market and, 34.2% of the cases were consolidated or established firms with more than 42 months active in the market.

Figure 7.8 Estimated distribution of the Sudanese family business by activity stage
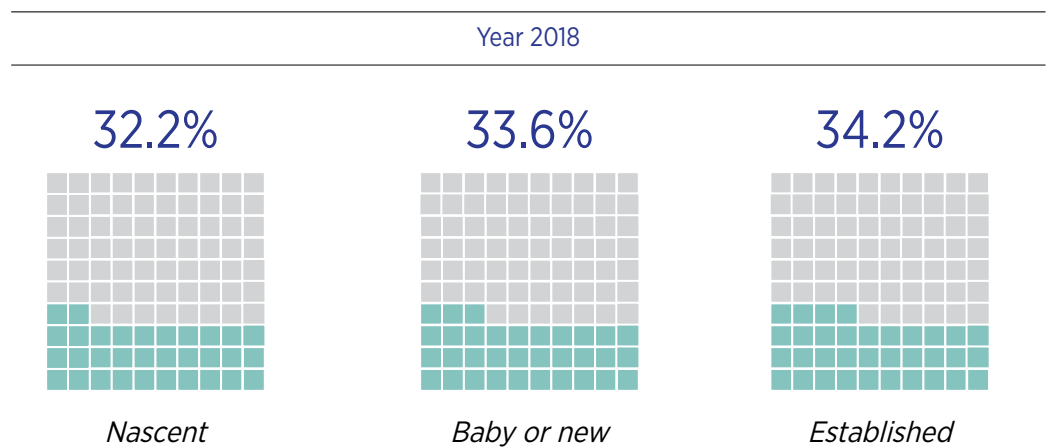
Figure 7.9 shows the estimated distribution of the Sudanese family business by activity sector the year 2018. The big part of these firms operate in the consumer-oriented sector (almost 52.7%), while a 28.2% operate in the transforming sector, 15.8% in the extractive sector and only a 3.3% in the business services sector.

Figure 7.9 Estimated distribution of the Sudanese family business by sector
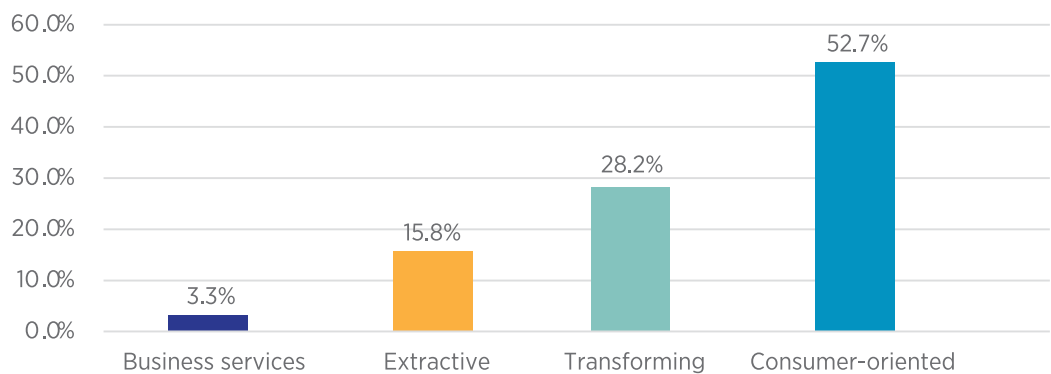
Figure 7.10 shows the estimated distribution of the Sudanese family business by technological level of the activity sector the year 2018. The results are compatible with the sectorial distribution where most family business work in the consumer-oriented sector, and shows a very low participation of these firms in medium or intensive technological sectors.

Tech level of the sector, (%)

[•] No or low-tech sector — 98.4

[•] Medium or high-tech sector — 1.6

Figure 7.11 shows the estimated distribution of the Sudanese family business by degree of innovation of the activity. The result points out that 24.7% of the family business have a noticeable level of innovation as offering products or services which are completely new to their current or potential customers and 19.4% of these firms indicated that some of their customers will find their products unknown or new, which mean that they are offering innovative products or services at least for some segments of the population. However, more than half of the family business indicated that none of their customers consider their products as unknown or new indicating a lesser level of innovation.

Number of potential or current customers who consider your business's product new or unfamiliar, (%)

[•] All — 55.9

[•] Some — 19.4

[•] None — 24.7

Figure 7.12 shows the estimated distribution of the Sudanese family business by level of competitiveness. The majority (70.4%) shows that the firms face a situation where many businesses are offering the same product or service, which is in line with the analysis of levels of innovation, while 9.1% do not face businesses that offer the same products or services, and the rest (20.4%) face a few businesses that offer the same products or services.

Number of businesses offer the same products, (%)

[•] Many — 70.4

[•] Few — 20.4

[•] None — 9.1

Figure 7.13 shows the distribution of the Sudanese family business by antiquity of the technologies and procedures applied in the production process. It is indicated that 57.0% of Sudanese family businesses do not use recent or latest technologies to produce their products or services. A little more than a quarter of the family business use new technologies one to 5 years, while only 17.2% use the very latest technology newer than one year. This is coherent with the distribution by sector where the majority operates in the consumer sector with little use of technology.

Figure 7.13 Estimated distribution of the Sudanese family business by antiquity of the technologies and procedures applied in the production process

Were the technologies or procedures available more than a year ago? (%)

[•] Very latest technology newer than one year	17.2
[•] New technology one to 5 years	25.8
[•] No new technology more than 5 years	57.0
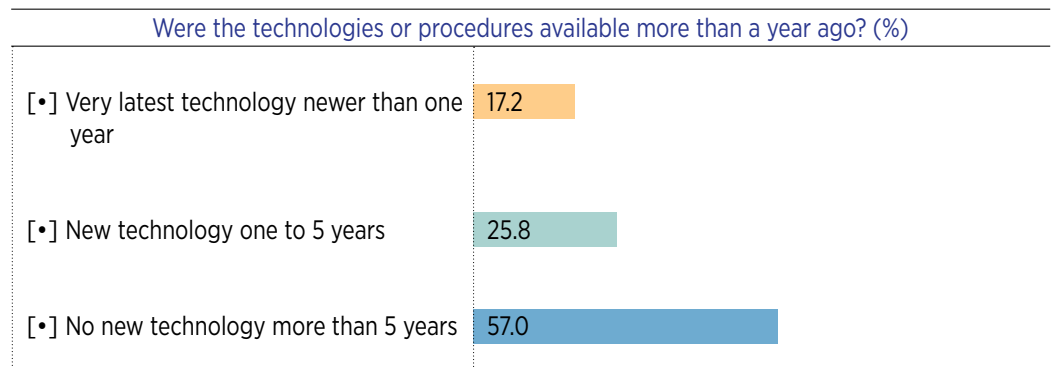
Figure 7.14 shows distribution of the Sudanese family business by level of internationalization. More than half (58.8%) of Sudanese family businesses are not involved in internationalization activities, and only a few (9.7%) make intensive internationalization, while the rest show moderate levels of internationalization.

Figure 7.14 Estimated distribution of the Sudanese family business by level of internationalization

More than 75%	25 to 75%	Under 25%	None
9.7%	18.8%	13.1%	58.5%
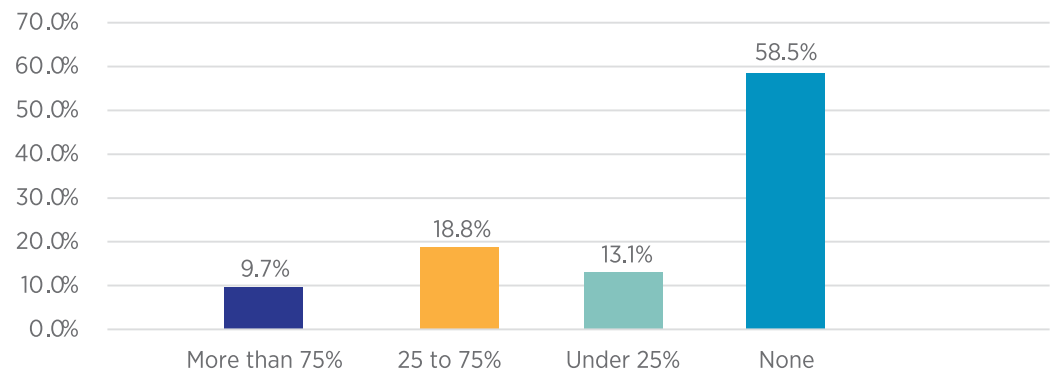
Figure 7.15 shows distribution of the Sudanese family business by current level of employees within these firms. Generally, family businesses in Sudan tend to be operated by a few number of employees. The majority (69.7%) has between one and five employees, while only 5.1% have twenty or more jobs. This can be attributed to the size of business, type of activity and the sector within which these firms operate. Most are known to be micro-small enterprises (MSEs) working in the customer service sector (Figure 7.16).

*Figure 7.15
Estimated
distribution of the
Sudanese family
business by current
level of employees*
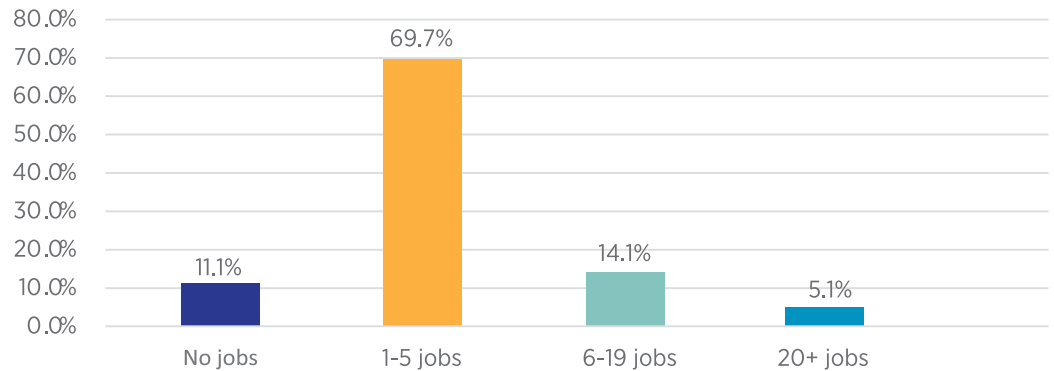
Figure 7.16 shows that the estimation of employees within the coming five years indicates a decrease in the firms that have 0-5 employees but a considerable increase in the percentage of firms that have 6-20 jobs.

*Figure 7.16
Estimated
distribution of the
Sudanese family
business by expected
level of employees in
five years*
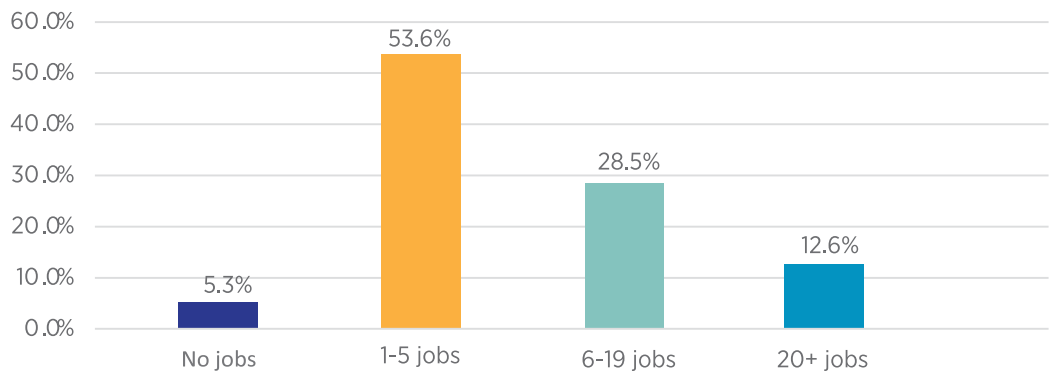
**7.6
The context of
family businesses
in Sudan**

Sudanese experts who contributed to the GEM study 2018 have made opinions on the state of the context for family business evaluating the legal frame, the social support towards this model of business, the implication of specific associations and the degree of modernization of the mechanisms for succession and generational transmission. The results are shown in Figure 7.17 and they reveal that the context in average is just satisfactory. The best score (6.94) shows that good level of people trusts family businesses more than non-family businesses, followed by 6.84 score made by the Associations of Family Businesses which play an important role for promoting family business. The two scores constitute the best-scored part of the family business context. The scores for succession and transfer of family business to next generation are average. The perception of the help of legal experts in succession and transfer matters, and the role of laws and regulations to specifically promote family business are the worst scores denoting a problematic situation regarding legal advice and support to family businesses in Sudan.

Figure 7.17
The family business'
average context in
Sudan

6.82%	3.72%	5.76%	6.94%	3.71%
Associations of family-businesses have been very important for promoting conditions for family businesses.	Laws and regulations exist specifically to promote succession and transfer of a family business to the next generation.	Succession and transfer of a family business to the next generation is often helped by legal experts and other professionals with expertise in family business.	People trust family businesses more than non-family businesses	Laws and regulations exist to specifically promote family business

Figure 7.18 shows the international comparison of family businesses regarding the state of the legal frame and government support, UAE is the country that stands out as the one that has the best evaluation (6.74) on the state of the legal frame and government support for family businesses. In turn, Turkey shows the lowest scoring and Sudan is a little below the GEM average (3.95). On the other hand, Sudan comes second, after the Turkish society that shows the highest score on the perception that the society has higher trust for family rather than non-family companies. And, finally, the UAE and Sudan show the highest scores on the average perception on professional versus family management of family businesses. In turn, in Iran and Lebanon, the society appears as more comfortable with family management instead of professional management of these types of firms: the tradition remains more stable.

Figure 7.18 International comparison of family businesses regarding; the average state on legal frame and government support, populations' trust of family businesses and average perception of family business management

	International comparison of the average state ...		
	... of legal frame and government support for Family Businesses (%)	... on societies/population's trust on family businesses compared to non-family businesses (%)	... of average perception on professional versus family management of family businesses (%)
GEM	4.47	5.41	5.72
High income contries	5.53	5.55	5.86
Asia	5.26	5.96	6.50
Egypt	4.11	5.70	5.61
Iran	4.16	4.59	4.32
Lebanon	4.35	5.35	5.03
Morocco	3.78	4.27	6.15
Qatar	5.80	5.98	5.79
KSA	4.58	4.91	5.97
Sudan	3.95	6.94	6.17
Turkey	3.11	7.11	5.17
UAE	6.74	5.96	6.28
USA	5.22	5.73	5.50

8. Entrepreneurship and GIG Economy in Sudan

The 'gig economy' has been defined as "involving exchange of labour for money between individuals or companies via digital platforms that actively facilitate matching between providers and customers, on a short-term and payment by task basis." (Department for Business, Energy & Industrial Strategy,2018).In a GIG economy, temporary, flexible jobs are commonplace and companies tend toward hiring independent contractors and freelancers instead of full-time employees. A GIG economy undermines the traditional economy of full-time workers and put threat on workers' benefits and welfare.

The expansion of GIG economy is to a great extent enhanced by the rise of the digital age, which is leading to progressive utilization of the technological advancements in different aspects of human life one of which is shaping the options of conditions around work, the labour market and job opportunities.

8.1 Introduction

Other consequences of the digital age are the decreasing of some types of jobs as software replaces employees and the financial pressure on business leading to further staff reductions and the entrance of the millennial generation into the workforce.

Due to the large numbers of people willing to work part-time or temporary positions, the result of a GIG economy is cheaper, more efficient services, such as Uber or Airbnb, for those willing to use them. Those who don't engage in using technological services such as the Internet tend to be left behind by the benefits of the GIG economy. Cities tend to have the highly developed services and are the most entrenched in the GIG economy. While not all employers tend toward hiring contracted employees, the GIG economy trend often makes it harder for full-time employees to develop fully in their careers since temporary employees are often cheaper to hire and more flexible in their availability.

Economic reasons also factor in to the development of a GIG economy. Most times, employers cannot afford to hire full-time employees to do all the work they need done, so they hire part-time or temporary employees to take care of busier times or specific projects. On the side of the employee, people often find they need to be moved around or take multiple positions to afford the lifestyle they want. People also tend to change careers many times throughout their lives, so the GIG economy is the reflection of this occurring on a large scale.

GEM Survey 2018 introduces indicators about GIG economy for the first time by including in its APS and NES surveys sets of questions on GIG economies. This part is dealing with the trend towards digital platforms and the GIG economy. GEM is focusing on this topic to capture information on the extent to which (and how) individuals are actively involved in digital platforms, as well as the interplay with their entrepreneurial attitudes, intentions and behavior (using the regular APS questions). The results of this exploration are shown in the next sections.

8.2 Prevalence and main features of those engaged in work based on digital platforms in Sudan

During the year 2018, the Sudanese adult population survey included a section on GIG economy and examined certain aspects related to work based on digital platforms in Sudan. 5.5% of the population stated that they have received income from paid work obtained via some digital platform (Figure 8.1). This figure may be reflective of a somewhat premature GIG dependent economy for the business and entrepreneurial activity. The complementary graph shows that most paid work has been completed with the use of personal computers in 61.1% of cases, while 31.6% complete tasks on-site, and 7.4% of responses use a combination of both.

In the past 12 months, have you received income from paid work obtained via a digital platform? (%)

[•] Yes	5.5
[•] No	94.5

Did you complete this paid work online with the use of your computer or on-site at the place of the customer, or both?

[•] Online	61.1
[•] On-site at the customer	31.6
[•] Both: online and on-site	7.4
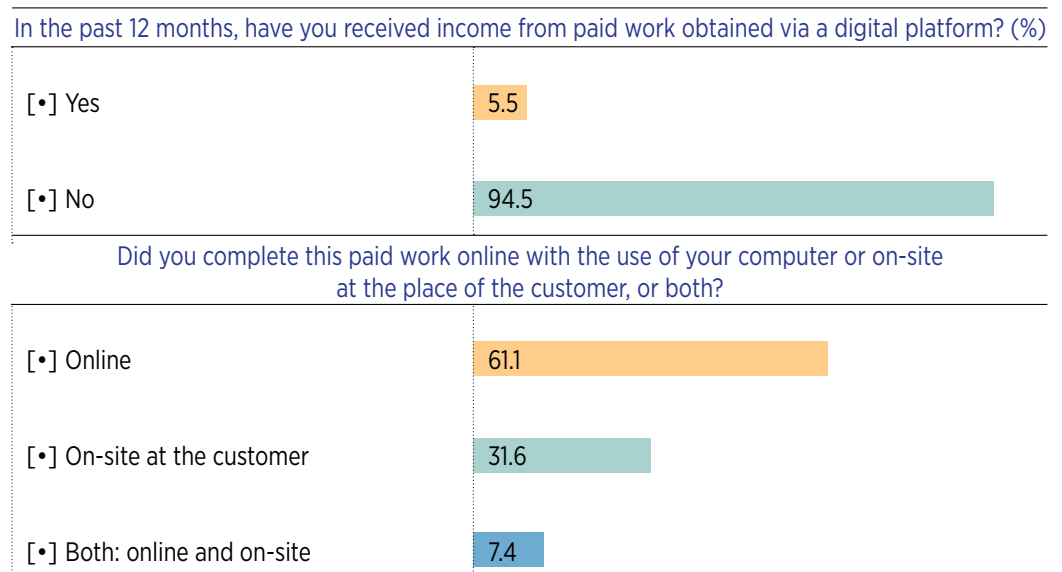
Figure 8.2 the 2018 survey indicates that 3.1% of the Sudanese adult population acquired income from renting or leasing out some of their own goods, property or granting access to own services provided via digital platform. This indicates that there is low development of GIG economies and implies also a low level of adoption of new business modalities through digital platforms. Sudan is still premature in the use of digital platform by the population, business and customers; however, observations suggest a good potentiality for future development and more income perceptions via digital platform.

In the past 12 months, have you received income from renting or leasing out some of your own goods, property or granting access to services you provide through a digital platform? (%)

[•] Yes	3.1
[•] No	96.9

In order to know the involvement of the population in digital platforms, how many hours they spend on it, to establish how significant this work is for them it is useful to look at the time allocated for activities through digital platforms. Figure 8.3 shows the average time allocated by people involved in GIG activities in Sudan; as high as 55.8% of those individuals allocate less than ten hours per month to these activities, while almost equal percentages (21.2% and 23.1%) to represent those who allocate between 10 and 40 hours per month, and more than 40 hours, for the use of digital platforms. The general average is 30.76 hours making a minimum of 1 hour per day estimated as invested in average in these types of activities.

*Figure 8.3
Average time per
month allocated to
paid-work activities
through digital
platforms in Sudan*

In the past 12 months, on average, how many hours per month did you allocate to paidwork activities through digital platforms

55.8%   **21.2%**   **23.1%**

< 10 hours   10-40 hours   > 40 hours

Average = 30.76h   St. Dev. = 43.54h
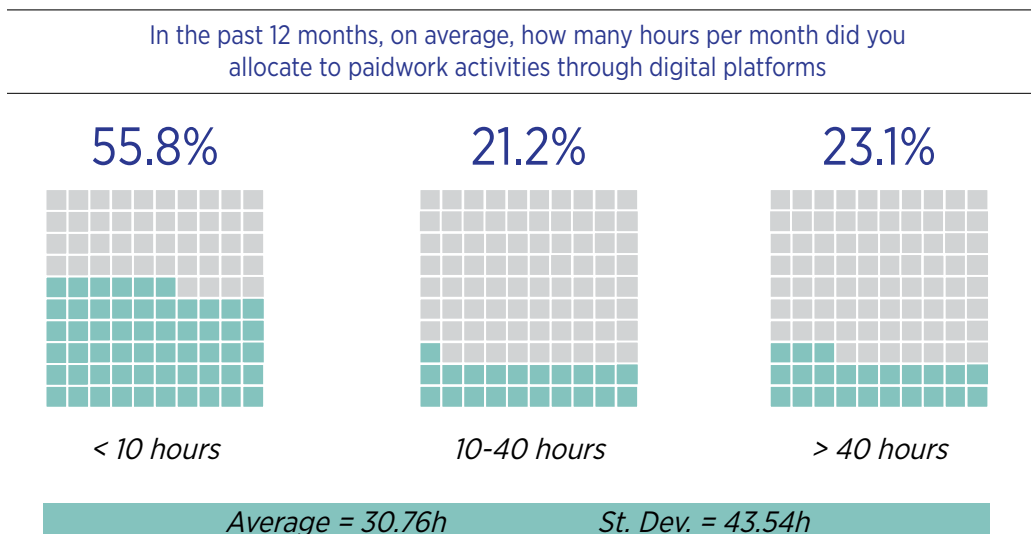
Figure 8.4 shows the reception of the monthly household income and the financial transactions made via a digital platform in Sudan. 40.2% of the people involved in GIG economies' activities receive, in average, an income that represents more than 25% of the monthly household's total income. More specifically, a 33.6% of these individuals receive less than a 10% of their monthly income, while 26.2% receive between 10 and 25% of their total income.

*Figure 8.4
Average percentage
per month over the
monthly household
income, perceived
from paid-work
activities through
digital platforms in
Sudan*

What percentage of your monthly household income comes from your paid activities via digital platforms?

33.6%   **26.2%**   **40.2%**

< 10%   10-25%   > 25%

Average = =26.88   St. Dev. = 24.47
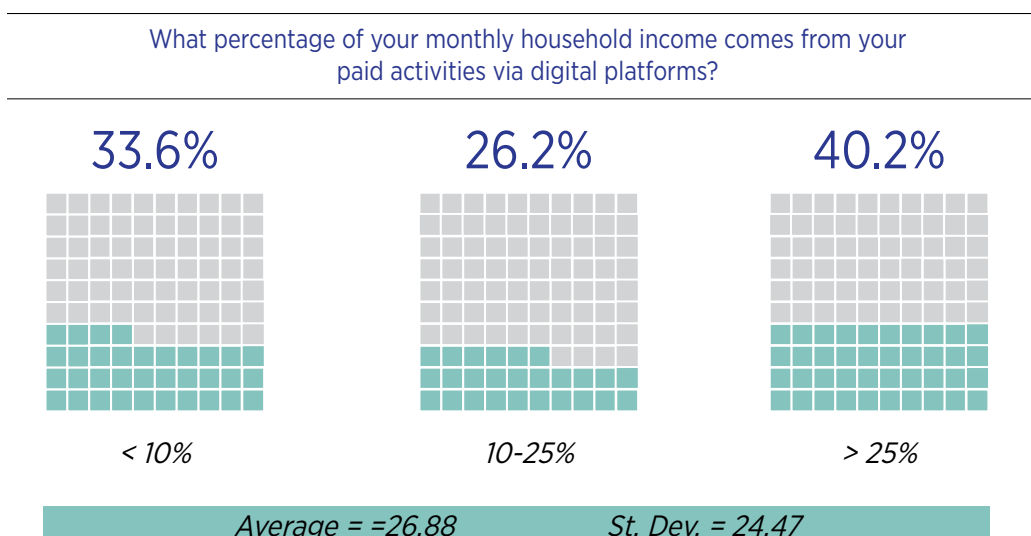
The most popular application used by people involved in work activities through digital platforms has been Facebook alone or combined with other applications (55.8%) (Figure 8.5). WhatsApp is the second most popular application (21.1%), used alone or combined with other applications, followed at some distance by other platforms and systems which are very marginal.

Most popular apps used by people involved in gig activities (2018) (%)

[•] facebook (3.8% combined with others)	55.8
[•] Whatsapp (5.0% combined with others)	21.1
[•] Google	14.7
[•] Instagram	1.1
[•] Twitter	1.1
[•] Tirhal	1.1
[•] Questnet	1.1
[•] Qatar's auction "Mazad Qatar"	1.1
[•] Opera	1.1
[•] Email	1.1
[•] Edmark	1.1
[•] Alsouq.com	1.1

Figure 8.6 shows the distribution of types of possibilities of activities undertaken through digital platforms in Sudan 2018. The results indicate that most activities (81.1%) are undertaken through more conventional work arrangements such as becoming a freelancer, a part-time worker and the like, and only 18.9% of the work activities were developed digital platforms. These results determine that conventional forms are offering more opportunities in many sectors in Sudan. In fact, the utilization of digital platforms is still premature yet it is promising. With more training of entrepreneurs and businesses in addition to orientations for the customers to effectively utilize these platforms, it is expected that digital platforms will offer solutions for many business challenges in the near future.

Considering the activities on the digital platform you just mentioned, can they only be pursued on digital platforms or could they also be undertaken through more conventional work arrangements such as freelancing, part-time and other? (%)

[•] Only on the digital platform	18.9
[•] Also through more conventional work arrangements	81.1

Figure 8.7 shows that the main motive to use digital platforms to create businesses or paid-work in Sudan, as mentioned by those involved in, is getting a supplementary income for their households- 41.5%. A similar percentage (40.6%) indicated that they use digital platforms to run business activities, while 13.2% considered both options. The second part of Figure 8.7 shows that among this group of digital entrepreneurs, 44.2% of them had the intention to start their own businesses before joining the online platform, while more than half of the group (55.8%) were inspired by the online platform after joining it and having seen its unlimited potentialities.

Figure 8.7
Main motive to use digital platforms to make businesses or paid-work in Sudan

Do you use digital platforms primarily for receiving a supplemental income or as a means to run your business?

Supplementary income	41.5%
Run your business	40.6%
Both receiving income and running business	13.2%
Other	4.7%

What came first, joining the platform or the intention to run your own business? (%)

[•] Joining platform	55.8
[•] Intention to run your own business (or expected start of own business)	44.2

It is important to see to what extent people active in digital platforms see it as useful and to what extent they would also prefer it for the future. Figure 8.8 shows the preference of those involved in businesses or paid-work through digital platforms regarding three options of employment modality. The result indicates that 39.6% of the population involved in GIG economy would prefer to work in digital platforms, 35.8% prefer to be employed in a firm holding a specific job, and 24.5% prefer a combination of both modalities.

Figure 8.8
Preferences on employment modality for the people involved in GIG activities in Sudan

What would you prefer, being employed in a firm doing the same work activities, working on one or more digital platforms or a combination of these two?

Being employed in a firm	35.8%
Working for digital platform	39.6%
Combination	24.5%
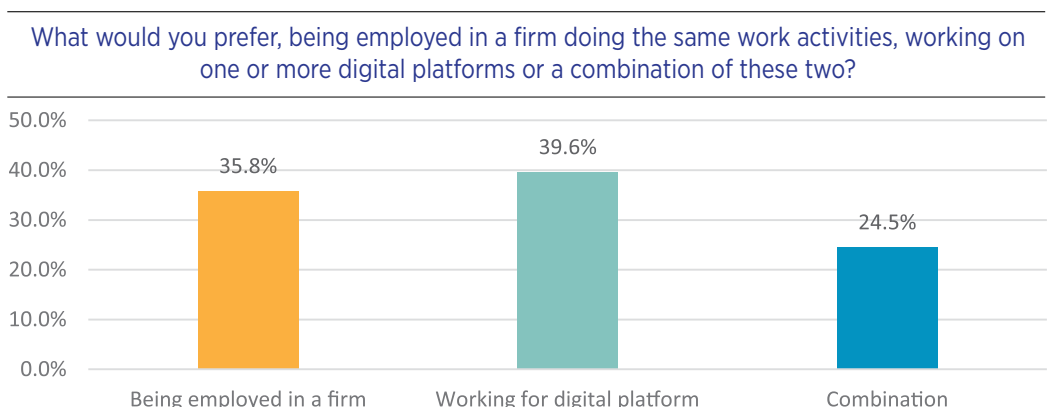
At the age of technological advancement and the expansion of business digitalization it is worth having a view on GIG activities in Sudan. Despite the limited involvement in GIG economy and use of digital platforms, high potentiality of more dependence on these platforms is an argument supported by the level of preference (39.6%) to work over digital platforms than working as employee. Therefore, it is expected to have a totally different picture in the upcoming near future about the GIG economy in Sudan.

> Despite the limited involvement in GIG economy and use of digital platforms, high potentiality of more dependence on these platforms is an argument supported by the level of preference (39.6%) to work over digital platforms than working as employee.
>
> *GEM SUDAN-2018*

8.3
The National context and impact of GIG economies in Sudan

Using Likert scales of 9 points where 1 means completely false and 9 completely true, GEM Sudanese experts scored different items related to GIG economies. The average results (Figure 8.9) suggest that a considerable portion of the national experts who contributed to the GEM study in 2018 perceive digital platforms as an important element of the national economy. The highest representation of responses (7.88 points) stresses that the use of digital platforms by entrepreneurs is going to experience a big expansion in the next decade.

One of the perceived implications of the relative expansion in use of digital platforms by businesses and organizations to acquire services or obtain access to services is the pressure placed on the social protection systems of employees and retirees. Finally, the experts have considered as quite true that digital platforms are enabled by national policies. In summary, GIG economies gained a significant relevance in Sudan in record time and it is expected that it will continue to increase in the near future.

Figure 8.9 Experts' perception on the context, impact and relevance of GIG economies in Sudan

In my country, ...

... digital platforms are currently an important element in the national economy	4.83%
... businesses or organizations frequently use digital platforms to acquire services or obtain access to services	5.4%
... digital platforms are putting the social protection of employees and retirees under pressure	4.61%
... digital platforms are enabled by national policies	4.07%
... I expect the use of digital platforms by entrepreneurs to increase over the next decade	7.88%
Gig economies' socio-economic average relevance	4.68%

**8.4
The International
context and
impact of GIG
economies**

From an international perspective, GIG economies have a significant impact. Although not all countries of the zone added the special questions on this topic to their GEM surveys, the results for those participants regarding the key issues are high. Thus, the experts from Qatar and the UAE stand out, giving a high score for digital platforms as important elements in their national economies with an average score close to the US average and above the Asian, High-income and GEM averages as well (Figure 8.10). Sudan reports a low score regarding the importance of digital platforms to their economies. The same can be said about the use of digital platforms from businesses and organizations to acquire or get access to some services. The digital platforms are putting some pressure on the social protection of employees and retirees, especially in Iran and Qatar whose average scores are close to the USA's regard this issue. The rest of the countries show a moderate but significant level of impact on this. National policies are enabling digital platforms in all countries, but the pace is slow in both Sudan and Morocco. In fact, these two countries show a certain delay with respect to the rest in the implementation and impact of the GIG economies except for the expectation of their development in the next decades. Sudan's experts gave a high average score (7.88 points) within the zone to this expectation, which means that a quick and relevant development of this type of economy is going to happen in Sudan.

Photo credit - Developing Sudan-Khartoum, https://upload.wikimedia.org/wikipedia/commons/

	In my country, ...					
	... digital platforms are currently an important element in the national economy (%)	... businesses or organizations frequently use digital platforms to acquire services or obtain access to services (%)	... digital platforms are putting the social protection of employees and retirees under pressure (%)	... digital platforms are enabled by national policies (%)	... I expect the use of digital platforms by entrepreneurs to increase over the next decade (%)	Gig economies' average socio-economic relevance (%)
GEM	6.28	6.23	4.98	5.32	7.92	5.88
High income contries	6.29	6.25	5.08	5.36	7.97	5.86
Asia	7.00	6.76	5.41	6.09	7.95	6.50
Iran	6.81	6.81	6.19	6.30	7.73	6.39
Morocco	4.98	4.98	4.26	4.50	7.54	4.49
Qatar	7.46	7.46	6.00	6.98	7.84	7.40
KSA	7.08	7.08	5.29	6.19	8.35	6.43
Sudan	4.83	4.83	4.61	4.07	7.88	4.68
UAE	7.14	7.14	4.84	6.52	8.31	6.81
USA	7.83	7.83	6.93	5.23	8.37	7.01

Photo credit - On-field technical support to agropreneurs, UNIDO Sudan

The National Expert Survey (NES) Results

Photo credit - https://pixabay.com/images/search/technology/
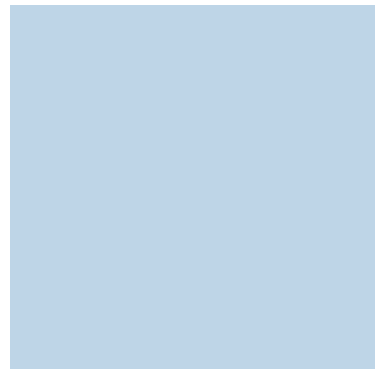
9. Perception of the Quality of the National Entrepreneurship

An entrepreneurship framework represents the combination of conditions that shape the national context in which entrepreneurial activities take place. GEM assesses the following entrepreneurship conditions: financing, government policies, taxes and bureaucracy, government programs, school-level entrepreneurship education and training, post-school entrepreneurship education and training, R&D transfer, access to commercial and professional infrastructure, internal market dynamics, internal market burdens, access to physical and services infrastructure, and social and cultural norms.

This year, GEM introduces a composite index, the 'National Entrepreneurship Context Index' (NECI), which assesses the environment for entrepreneurship in an economy. The NECI is derived from the twelve framework conditions and weights the ratings on these conditions by the importance experts place on them. The NECI results in the global and national reports therefore represent an inaugural effort to inform policy, practitioner and other key stakeholder audiences about the strength of their overall environment for entrepreneurship.

9.1 The NECI: General view of the NECI conditions

How the NECI is calculated

At least 36 experts in each economy, including entrepreneurs and those involved in entrepreneurship in various aspects such as finance, government, and education, score statements (answer questions) about the twelve framework conditions, using a 9-point Likert scale. They are also asked about the importance of each factor in stimulating and supporting entrepreneurship in their economy. The survey responses are compiled, and factor ratings and importance values are generated for each framework condition. Next, each factor's ratings (re-scaled into 10 points) are multiplied by its importance. The sum of these results over all the factors are then divided by the sum of the importance ratings, articulating a weighted average, to generate NECI individual values. These values are then used to calculate national averages that are the results to rank the participating economies on a 10-point scale.

GEM Global Report 2018/2019

9.2 International position of Sudan's entrepreneurial context

The ranking from the National entrepreneurship context index (NECI) is presented by GEM for the first time this year (Table 9.1). This index is expressed in a Likert scale of 10 points. A value of one point represents a very bad general entrepreneurship context and ten points means that a country has a very good context for entrepreneurship.

The values of the index for the countries that participated in the 2018 cycle point out that near 26% of countries have a national entrepreneurial framework in bad state, while 5.5% show a moderately good state, 20.4% a sufficient or just good state and 48.1% an intermediate state that is neither good nor bad. So, there are no countries showing very good or excellent contexts for entrepreneurs: all countries have weak pillars among those that make up the state of the framework.

As mentioned before the year 2018 is the first time Sudan participates in the GEM study thus having a good chance to identify where it stands among the 54 participating countries. Sudan ranks 45 in the list, with an overall score of 4.29 indicating a bad context average. The value of the index is lower than the GEM average (5.03 points), which implies that the context for entrepreneurs is not in good state. This may be attributed to the very poor economic performance and overall deficiencies in government policies in many aspects that directly impact on entrepreneurial practice. Despite acknowledging the role entrepreneurship can play especially for poverty alleviation, effort to support this sector is still not sufficient. More needs to be done to create a conducive environment that supports innovation, technological advancements and modernised entrepreneurship sector that leads social and economic development to stand a better place within a globalized, innovative, and competitive world.

Table 9.1
Countries ordered by national entrepreneurship context index (NECI)

Country

	Rank position	NECI Average	Std. Dev.	Context: average state	Income stage (GCR)
Qatar	1	6.69	1.01	Moderately good	High
Indonesia	2	6.57	1.52	Moderately good	Lower Middle
Netherlands	3	6.51	0.86	Moderately good	High
Taiwan	4	6.33	1.30	Good	High
India	5	6.19	1.42	Good	Lower Middle
USA	6	5.98	1.23	Good	High
UAE	7	5.92	1.42	Good	High
Luxembourg	8	5.70	1.04	Good	High
Switzerland	9	5.68	1.06	Good	High
France	10	5.62	0.75	Good	High
China (PRC)	11	5.61	0.88	Good	Upper Middle
Canada	12	5.54	0.81	Good	High
Austria	13	5.54	0.89	Good	High
South Korea	14	5.49	0.98	Neither bad nor good	High
Thailand	15	5.48	1.29	Neither bad nor good	Upper Middle
Spain	16	5.38	0.96	Neither bad nor good	High

NECI, year 2018

	Rank position	NECI Average	Std. Dev.	Context: average state	Income stage (GCR)
NECI, year 2018					
Country					
Ireland	17	5.38	0.97	Neither bad nor good	High
Sweden	18	5.37	0.68	Neither bad nor good	High
Germany	19	5.36	0.88	Neither bad nor good	High
Japan	20	5.28	0.87	Neither bad nor good	High
Argentina	21	5.24	0.75	Neither bad nor good	High
Latvia	22	5.21	0.98	Neither bad nor good	High
Mexico	23	5.21	1.12	Neither bad nor good	Upper Middle
Poland	24	5.21	0.74	Neither bad nor good	High
Slovenia	25	5.18	0.79	Neither bad nor good	High
Chile	26	5.09	0.90	Neither bad nor good	High
Cyprus	27	5.09	1.05	Neither bad nor good	High
Israel	28	5.08	0.84	Neither bad nor good	High
Turkey	29	5.05	1.17	Neither bad nor good	Upper Middle
GEM	**Average**	5.03	0.99	Neither bad nor good	
United Kingdom	30	4.94	0.81	Neither bad nor good	High
Kazakhstan	31	4.93	1.14	Neither bad nor good	Upper Middle
Colombia	32	4.79	1.17	Neither bad nor good	Upper Middle
Uruguay	33	4.72	1.00	Neither bad nor good	High
Egypt	34	4.72	1.00	Neither bad nor good	Lower Middle
Lebanon	35	4.67	0.69	Neither bad nor good	Upper Middle
Bulgaria	36	4.66	1.24	Neither bad nor good	Upper Middle
Russia	37	4.63	1.04	Neither bad nor good	Upper Middle
Dominican Republic	38	4.57	0.99	Neither bad nor good	Upper Middle
Peru	39	4.54	1.12	Neither bad nor good	Upper Middle
Italy	40	4.52	1.01	Neither bad nor good	High

	Rank position	NECI Average	Std. Dev.	Context: average state	Income stage (GCR)
NECI, year 2018					
Country					
Saudi Arabia	41	4.40	0.75	Bad	High
Greece	42	4.34	1.17	Bad	High
Slovak Republic	43	4.34	0.77	Bad	High
Guatemala	44	4.33	1.03	Bad	Upper Middle
Sudan	45	4.29	1.16	Bad	Lower Middle
Iran	46	4.29	1.02	Bad	Upper Middle
Morocco	47	4.26	0.97	Bad	Lower Middle
Brazil	48	4.18	0.99	Bad	Upper Middle
Madagascar	49	4.14	0.87	Bad	Lower
Angola	50	4.13	0.95	Bad	Lower Middle
Puerto Rico	51	4.07	0.98	Bad	High
Panama	52	4.01	0.86	Bad	High
Croatia	53	3.83	0.96	Bad	High
Mozambique	54	3.15	0.65	Moderately bad	Lower

Source; GEM Global Report 2018/2019

As has happened in other plots studied by GEM, the analysis of the context for entrepreneurs' shows that one size does not fit all. The values of the NECI correspond to very different models of countries. Thus, by one hand, there are countries with high-income and strong economies where entrepreneurs are a relevant complement to the big actors of the economy, making a key contribution, and enjoying a relative favourable context to operate and innovate (the USA, Netherlands, Taiwan, Switzerland, Saudi Arabia, and others fit this pattern, for example). On the other hand, there are countries with high or upper-middle income and strong economies where entrepreneurs are not seen as the principal actors of the economy but perceived as making a moderate contribution. They enjoy a more discrete context that needs several adjustments and specific improvements in regulations to make easier their operations. In these countries, entrepreneurs must continuously fight to get governmental and financing entities' attention to get better conditions and regulations because they are not the priority compared to other social necessities (Spain, Ireland, the United Kingdom, Germany, Greece, and others fit this pattern).

Also, there are countries with diverse income levels, where the entrepreneurs make a big contribution to the economy but are affected by internal or close external conflicts that affect the entrepreneurial context because they impact the government priorities and the market dynamics (Iran, Turkey, Thailand, Colombia, Mexico, and others fit this pattern). The list of models that we can build around the context is diverse.

That is why the NECI must be interpreted with caution: behind each value there is a concrete set of specific features that justify the current value of this indicator, and it is not in any case a figure that can be taken as a proxy for economic development. The organization of the NECI by geographical regions of the world (Figure 9.1) provides a more comprehensive picture about patterns and relative positions of countries' contexts within every big region.

Figure 9.1 National Entrepreneurship Context Index (NECI) results for 54 economies, grouped into four geographic regions
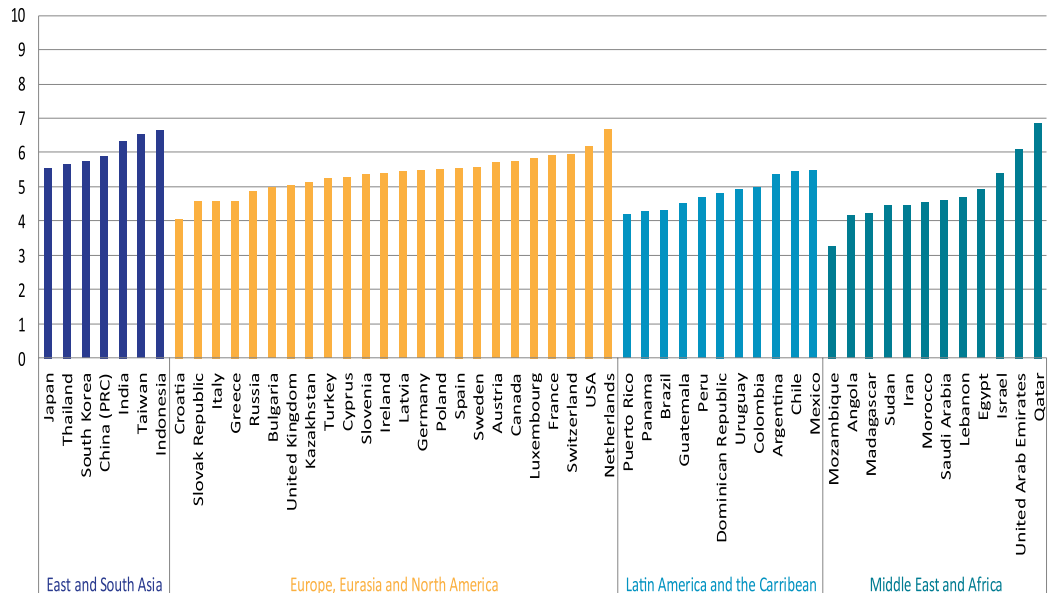
Source; GEM Global Report 2018/2019

Thus, as Figure 9.1 exhibits, NECI results are consistently high in the East and South Asia region. Three of the economies in this region are ranked in the top five for NECI results—Indonesia (2), Taiwan (4), and India (5). Conversely, the Latin America and Caribbean region shows consistently low results, with no economies making the top 20 (Argentina holds the highest ranking at 21), and with two economies among the lowest five ranked—Panama (52) and Puerto Rico (51).

Considerable variation is reported in the Middle East and Africa, which contains both the highest ranked country (Qatar) and the lowest (Mozambique). Similarly, diverse results are reported in Europe where Netherland's number 3 ranking contrasts with Croatia at number 53.

The observation around the conditions of the top-ranked economies illustrates that it is important that all aspects of the environment affecting entrepreneurship should enjoy healthy conditions. The entrepreneurship context thus requires attention to the range of factors; it could be argued that poor conditions in a few areas could limit the willingness and ability of people to start businesses, despite strengths in other parts.

Qatar and Taiwan show high ratings on every framework condition, while Indonesia, India, and Netherlands have high ratings on all except one factor that exhibits moderate ratings-on physical infrastructure in Indonesia and India, and internal market dynamics in Netherlands.

An examination of entrepreneurship results for the top-five economies suggests that strong contexts for entrepreneurship may have differing effects on entrepreneurship profiles. Three of these economies (Qatar, Indonesia, and Taiwan) are among the six that have equal TEA levels between men and women. This could suggest that women especially benefit from strong entrepreneurship contexts.

One practical application of the NECI results lies in identifying areas where there are gaps between the ratings on the framework conditions, particularly in relation to the importance placed on them. Figure 9.2 shows examples of ratings and importance values of the entrepreneurship conditions in Sudan.

*Figure 9.2
Ratings and
importance values for
12 entrepreneurship
framework conditions
in Sudan*

Entrepreneurship framework conditions		
EFCs	Importance	Ratings
[•] Entrepreneurial Finance	8.76	4.32
[•] Government Policies: Support and Relevance	8.45	2.77
[•] Government Policies: Taxes and Bureaucracy	7.00	2.99
[•] Government Entrepreneurship Programs	7.91	2.95
[•] Entrepreneurial Education at School Stage	8.36	2.74
[•] Entrepreneurial Education at Post School Stage	7.73	4.35
[•] R&D Transfer	7.73	3.26
[•] Commercial and Legal Infrastructure	8.42	5.37
[•] Internal Market Dynamics	9.00	8.28
[•] Internal Market Burdens or Entry Regulation	8.32	5.47
[•] Physical Infrastructures	8.58	5.47
[•] Cultural and Social Norms	8.31	4.83
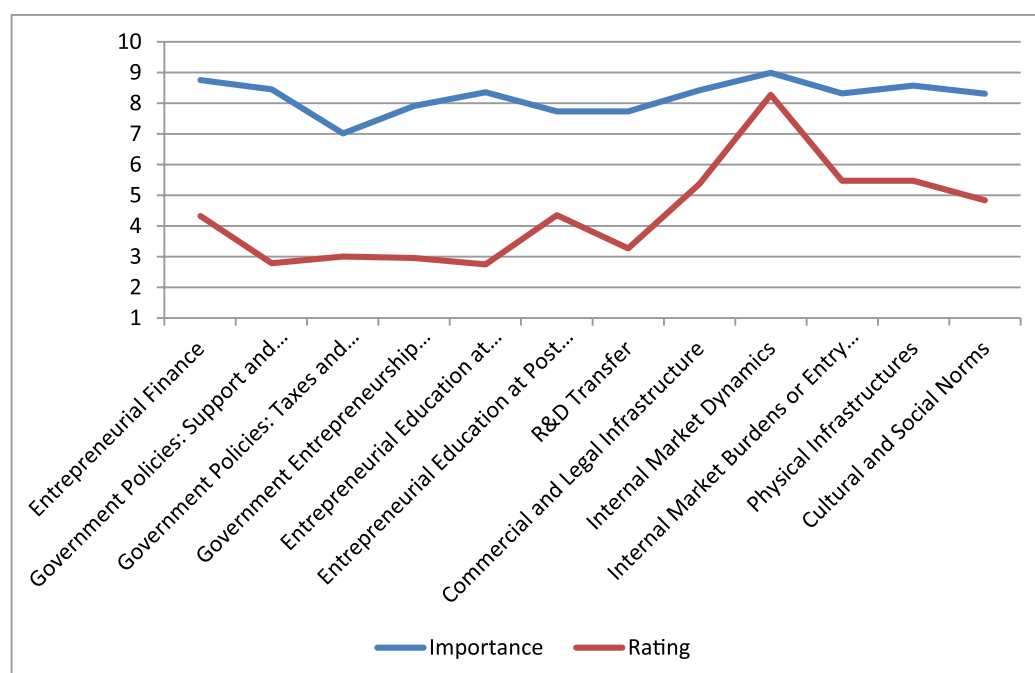
The results for Sudan show a clear gap in the reported levels of significance / importance and the ratings associated with It by experts. The most apparent gap is recorded for entrepreneurial education at school stage, which scored 8.36 points for importance compared to 2.74 points for ratings. A second significant gap is recorded by the condition of government policies, support and relevance, which scores 8.45 points for importance, against 2.77 points for ratings. This implies that attention has to be placed on these conditions to improve and score higher values for ratings. Internal market dynamics reported similar scores 9 points for importance compared to 8.28 for rating denoting an insignificant gap.

9.3
Average state of the NECI for Sudan

In this section, concrete information is presented to reflect the average status of the twelve pillars of the NECI in Sudan for the year 2018 as expressed by national experts who contributed to the GEM study. The results measured on the (1-9) points Likert scale depict that in average, the state of the national entrepreneurial framework conditions is not good in Sudan, and the context shows much more weaknesses than strengths (Table 9.2). Most critical is the condition of entrepreneurial education and training at schools (2.47 points) followed by Government Policies: support and relevance (2.49 points) (Table 9.2). Back to education as a core condition within the context, it is equally poor at after school stage, which indicates a serious problem regarding this component. The lack of socializing and providing knowledge through the implementation of entrepreneurship subjects in the curriculums, at all educational levels, is conditioning the evolution of future generations to regard their entrepreneurial spirit, their innovation capacities, their willingness to become entrepreneurs as one of their future career options. It also impacts on shaping the overall societal perception on entrepreneurship consequently influencing youth motivation to engage in entrepreneurial activities.

The face-to-face approach to collect data on the NES in Sudan offered an opportunity to have an insight of the experts' ratings of the different conditions; Experts have shown great concern on entrepreneurial education and training are claiming for more entrepreneurial education. Their evaluation indicates that entrepreneurial education has not spread sufficiently across all levels and types (vocational education considered as a forgotten area despite its importance), nor over the different States.

National entrepreneurship framework conditions (EFCs) selectec by GEM, year 2018	
EFCs	Ratings
[•] Entrepreneurial Finance	3.89
[•] Government Policies: Support and Relevance	2.49
[•] Government Policies: Taxes and Bureaucracy	2.69
[•] Government Entrepreneurship Programs	2.66
[•] Entrepreneurial Education at School Stage	2.47
[•] Entrepreneurial Education at Post School Stage	3.92
[•] R&D Transfer	2.94
[•] Commercial and Legal Infrastructure	4.83
[•] Internal Market Dynamics	7.46
[•] Internal Market Burdens or Entry Regulation	3.17
[•] Physical Infrastructures	4.92
[•] Cultural and Social Norms	4.34

Scores are offered in a Likert Scale: from 1 = extremely bad to 9 = extremely good (see below)

1	2	3	4	5	6	7	8	9
Extremely bad	Very bad	Moderately bad	Bad	Neither bad nor good	Good	Moderately good	Very good	Extremely good

Another core condition that is relatively perceived at a less desirable level is financing for entrepreneurs. In general, lack of variation of sources of finance through channels different from banks, which are not very friendly to new start-ups, created this low score of the financing conditions. The financial systems within Sudan offer almost no opportunities for financing from business angles, crowd funders, informal investors and other channels different from banks.

However, it is important to mention the availability of options of funding availed through microfinance policies introduced by the Central Bank of Sudan and few initiatives by other stakeholders especially targeting youth. Innovative channels of financing need modernization and incentives to operate properly and support entrepreneurs in the different activity phases especially the start-up phase.

Research and development transfer appear as another weak section whose evaluation score is bad (2.94 points). It needs diligent efforts to offer incentives for universities, research centres and the business sector to collaborate their efforts to play a positive role in R&D and technology transfer. This transfer is critical to push innovation and put new and competitive products and services in the market as well as offering them to other businesses and industry. It is also necessary to enhance the capacity of entrepreneurs to move towards internationalization.

Entrepreneurs need good and accessible professional services in the commercial and legal areas to help them to manage and consolidate their initiatives. This condition does not show a good state in Sudan, accordingly special attention needs to be paid to better understand and improve the state of this condition. All those concerned, should consider that they could improve this condition by analysing what types of services are needed in the business sector and identify the means to provide them at competitive prices. The new digital technologies offer lots of possibilities to modernize this area.

The NECI results for Sudan 2018 indicate that the internal market dynamics has recorded the best score (7.46 points) of all the conditions. This is a good sign for the sustainability of new start-ups and for paving the way for businesses towards consolidation. If the markets are not dynamic, it will not be easy to enter or compete within these markets. However, this needs complementary enhancing conditions otherwise it may negatively impact on entrepreneurial activities. For example, the condition of market burdens or regulation to enter the market, which scores somewhat a moderate level (Table 9.2), can be a barrier that may erase gains from favourable market dynamics.

The physical infrastructure for entrepreneurs is perceived as in the case of Sudan. This means that basic services (water, gas, electricity, communications, etc.) are less than adequate and that physical communications (roads, logistics, transports etc.) are also not well implemented and constitutes a burden to initiate and maintain a business activity.

Finally, experts in Sudan perceive that the cultural and social norms stand as hindrances for entrepreneurship activity to a considerable extent, and they reflect this fact in the scoring of this condition. As mentioned before government policy implication (such as with education) play a role in pushing entrepreneurship by impacting the social-cultural norms and perceptions of it. Lots of messages related with the benefits of promoting the entrepreneurial spirit have and are observed to be continuously adopted by programs and events during the last five years, which is gradually having an impact on societal perceptions on entrepreneurial activities. A vibrant environment is developing especially within youth NGOs and social groups, (a good example here is IEC group - one of the partners of GEM-Sudan project) which is pushing youth initiatives in entrepreneurship.

Within the international arena, Sudan shows unfavourable rank positions for most entrepreneurial framework conditions considered individually. The detailed rank (Table 9.3) shows that the relative state of cultural and social norms, government support and internal market dynamics are the best three components of the framework regarding their scores and positions within the 2018 international GEM context (including 54 participating countries).

Table 9.3
Sudan rank position of main entrepreneurial framework conditions within the 2018 GEM context

GEM ranking over 54 economies, year 2018	
EFCs	Rank
[•] Entrepreneurial Finance	32
[•] Government Policies: Support and Relevance	27
[•] Government Policies: Taxes and Bureaucracy	26
[•] Government Entrepreneurship Programs	25
[•] Entrepreneurial Education at School Stage	23
[•] Entrepreneurial Education at Post School Stage	28
[•] R&D Transfer	31
[•] Commercial and Legal Infrastructure	30
[•] Internal Market Dynamics	23
[•] Internal Market Burdens or Entry Regulation	27
[•] Physical Infrastructures	31
[•] Cultural and Social Norms	27

Source; GEM Global Report 2018/2019

Compared to GEM average state, Sudan shows variation in the reported scores with differences in the distance from the GEM state (Figure 9.3). The commercial and legal infrastructure scored an equal average to GEM's, entrepreneurial finance, cultural norms, and entrepreneurial education are close in distance to the GEM average while the Internal market dynamics recorded the biggest distance from GEM average in favour of Sudan. The rest of conditions fall below GEM averages, with variation in the recorded scores.

Compared to the state of averages recorded by low-income countries to which Sudan belongs, Figure 9.3 shows a picture very similar to the previous one comparing to the GEM average: slightly better relative position for the social and cultural norms condition and somewhat lower average scores for physical infrastructure (Figure 9.4). Again the rest of conditions show resemblance to the averages in the previous one (Figure 9.3).

Figure 9.3
Positioning of Sudan regarding GEM a verage in relation to the state of the 12 main entrepreneurial framework conditions
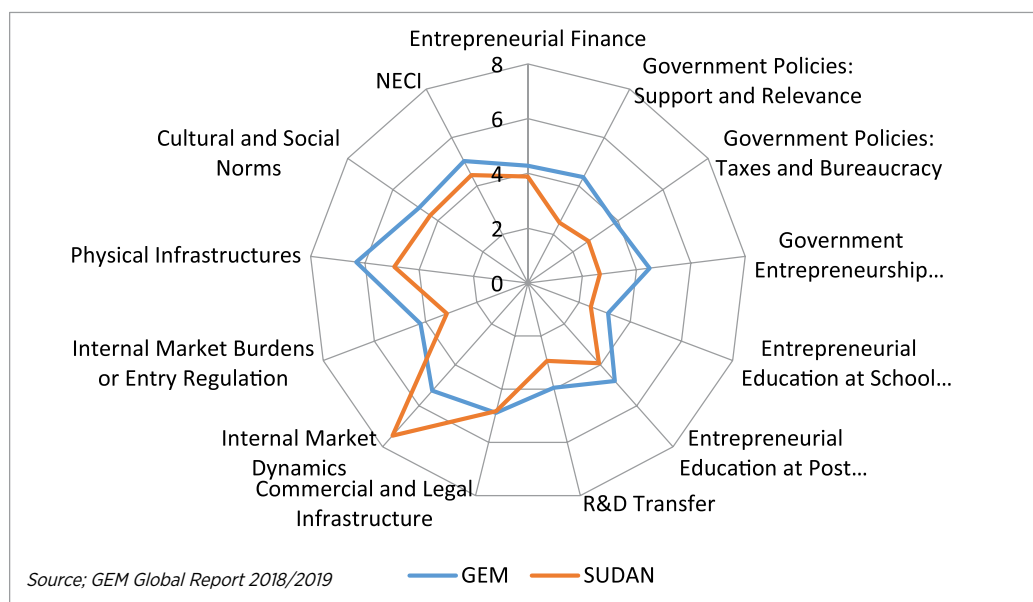
Figure 9.4
Positioning of Sudan regarding low-income countries average in relation to the state of the 12 main entrepreneurial framework conditions
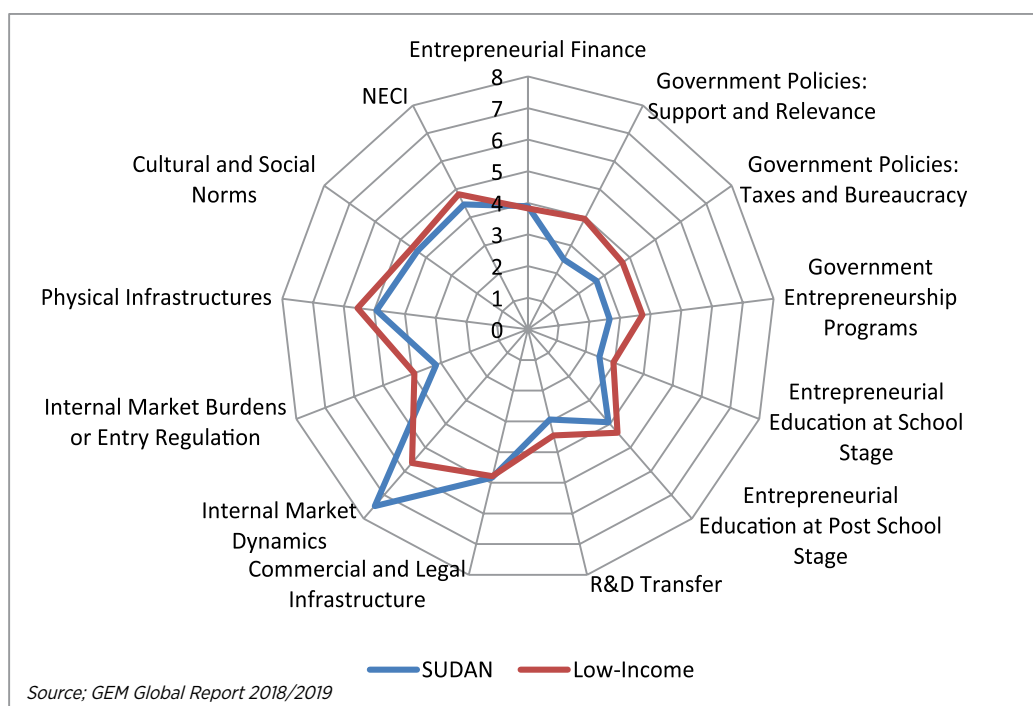
Finally, compared to the African countries average state Sudan, which belongs to this region of the world, in total shows a state closer to the African average in a variety of its entrepreneurship framework conditions (Figure 9.5). Sudan is almost aligned with all regional averages except for entrepreneurial finance, government policies and internal market dynamics where some distances from the region's average are recorded.

Figure 9.5
Positioning of Sudan
regarding Africa
average in relation
to the state of the 12
main entrepreneurial
framework conditions
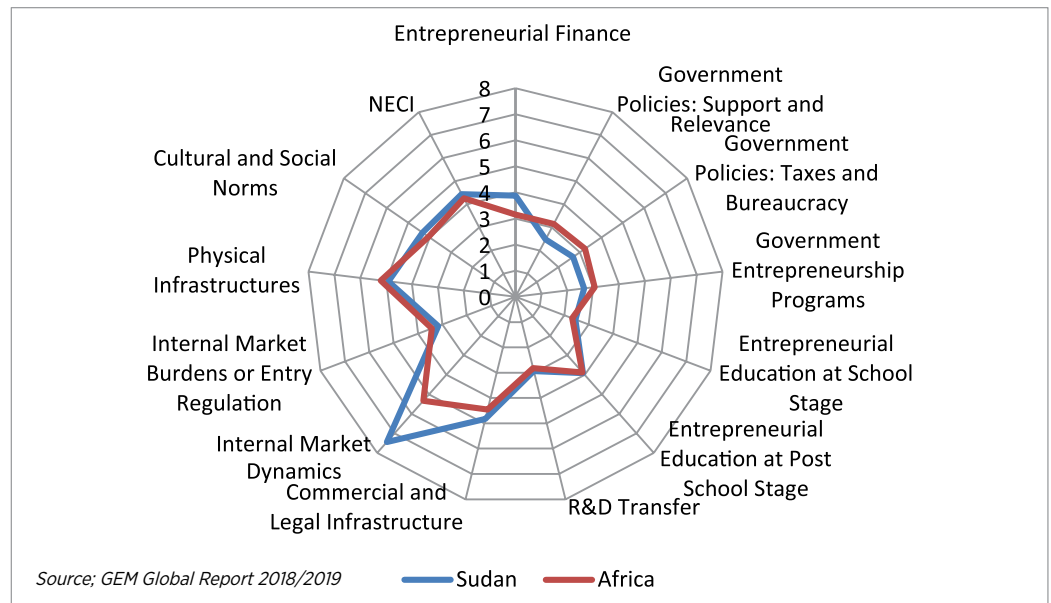
9.4
Detailed
information on
the components
of the National
Entrepreneurial
Framework
Conditions

The pillars that compose the twelve conditions presented in the previous section are variables that summarize the scores provided by experts in the blocks of items devoted to each topic. In this section, detailed tables showing the average values on these blocks are offered for the year 2018. The analysis of the detailed expert evaluation refines the general view and makes possible the detection of strong and weak specific points of the entrepreneurial context in every section.

The results are offered in original Likert scales of 9 points where 1 = completely false and 9 = completely true: use this scale (by number) to interpret the results.
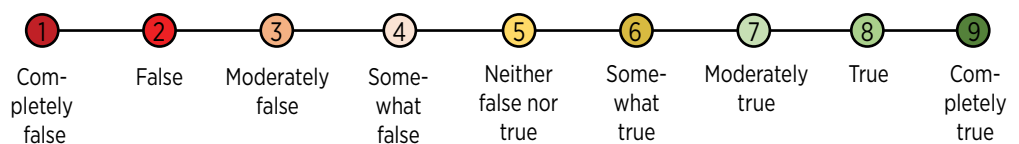
In the case of Sudan, the results of Table 9.4 reveal that in the financing section, only the informal investment gets an average score of sufficient state among the usual financing channels used by entrepreneurs at early stages.

Average scores and standard deviations on financing for entrepreneurs, year 2018		
Financing for entrepreneur block: in my country Sudan	Average Score	Std. Dev.
[•] Sufficient equity funding available for new and growing firms	3.9	3.13
[•] Sufficient debt funding available for new and growing firms	4.97	2.86
[•] Sufficient government subsidies available for new and growing firms	2.59	1.76
[•] Sufficient funding available from informal investors (family, friends and colleagues) who are private individuals (other than founders) for new and growing firms	5.58	2.36
[•] Sufficient funding available from professional Business angels for new and growing firms	4.00	2.44
[•] Sufficient funding available from venture capitalists for new and growing firms	4.09	2.9
[•] Sufficient funding available through initial public offerings (IPOs) for new and growing firms	3.8	2.57
[•] Sufficient funding available through private lenders' funding (crowd funding) available for new and growing firms	4.53	2.77

Scores are offered in a Likert Scale range: 1 = Completely false to 9 = Completely true (See scale details page 153)

The results of Table 9.5 show that in the Government section, the perception on the national experts for coping with government bureaucracy, regulations, and licensing requirements it is not unduly difficult for new and growing firms although not sufficiently good. All the other components scored very similar averages.

Average scores and standard deviations on government policies, bureaucracy and taxes for entrepreneurs, year 2018		
Government policies' block: in my country Sudan there is …	Average Score	Std. Dev.
[•] Government policies (e.g., public procurement) consistently favour new firms	2.19	1.80
[•] The support for new and growing firms is a high priority for policy at the national government level	2.58	2.25
[•] The support for new and growing firms is a high priority for policy at the local government level	2.91	2.53
[•] New firms can get most of the required permits and licenses in about a week	2.18	1.47
[•] The amount of taxes is NOT a burden for new and growing firms	2.97	2.75
[•] Taxes and other government regulations are applied to new and growing firms in a predictable and consistent way	2.91	2.48
[•] Coping with government bureaucracy, regulations, and licensing requirements it is not unduly difficult for new and growing firms	3.00	2.80

Scores are offered in a Likert Scale range: 1 = Completely false to 9 = Completely true (See scale details page 153)

Table 9.6 exhibits the results on Government programs in Sudan and indicates that the experts' views on this component are generally not good. There are some public programs, but they are not enough to meet the needs and expectations of potential entrepreneurs. Bureaucratic processes are weak and experts point out that there are no supportive services or assistance offered to new and growing firms by competent agencies or consultancy business centres. The same applies to personnel working at the agencies devoted to these matters. In addition, the experts find that there is a lack of business incubators to serve potential entrepreneurs and equip them with the needed knowledge, skills and technology. Also government programs lack coordination efforts for R&D transfer from universities and research centres to the business and industrial sectors.

Table 9.6
Average scores and standard deviations for the items evaluated by experts on the block on government programs for entrepreneurs in Sudan

Average scores and standard deviations on government programs for entrepreneurs, year 2018		
Government programs' block: In my country Sudan	Average Score	Std. Dev.
[•] A wide range of government assistance for new and growing firms can be obtained through contact with a single agency	2.28	2.28
[•] Science parks and business incubators provide effective support for new and growing firms	3.82	2.56
[•] There are an adequate number of government programs for new and growing businesses	2.97	2.35
[•] The people working for government agencies are competent and effective in supporting new and growing firms	2.61	2.21
[•] Almost anyone who needs help from a government program for a new or growing business can find what they need	2.46	1.96
[•] Government programs aimed at supporting new and growing firms are effective	2.57	2.20

Scores are offered in a Likert Scale range: 1 = Completely false to 9 = Completely true (See scale details page 153)

Entrepreneurial education and training are the worst scored blocks of the experts' questionnaire all over the world and experts strongly agree in their evaluations. Experts' views confirm the same results for Sudan as they show a weak entrepreneurial education system as well (Table 9.7). Overall, school educational system does not offer curriculum or subjects on entrepreneurship, thus it is not encouraging enough creativity, self-sufficiency and personal initiative, some key pillars of entrepreneurial spirit. However, some colleges put more emphasis on entrepreneurship at graduate and postgraduate levels besides research. In general, the perception on the scope of training across the country is not good and the lack of training on business and managerial skills will have an impact on younger generations and their preparedness as potential entrepreneurs. This will create a great challenge if they are to enter a highly competitive, technological and global market.

Average scores and standard deviations on entrepreneurial education and training, year 2018		
Government programs' block: In my country Sudan	Average Score	Std. Dev.
[•] Teaching in primary and secondary education encourages creativity, self-sufficiency, and personal initiative	2.46	2.41
[•] Teaching in primary and secondary education provides adequate instruction in market economic principles	2.6	2.19
[•] Teaching in primary and secondary education provides adequate attention to entrepreneurship and new firm creation	2.34	2.21
[•] Colleges and universities provide good and adequate preparation for starting up and growing new firms	3.28	2.19
[•] The level of business and management education provide good and adequate preparation for starting up and growing new firms	3.6	2.6
[•] The vocational, professional, and continuing education systems provide good and adequate preparation for starting up and growing new firms	4.53	2.35

Scores are offered in a Likert Scale range: 1 = Completely false to 9 = Completely true (See scale details above)

The results on R&D transfer (Table 9.8) show a weak centre for the transfer of knowledge from universities to the new business sector and a weak platform for engineers and scientists to have their ideas commercialized through new and growing firms. Firms have not good access to results of research and the latest technologies and there is a lack of public programs to facilitate these types of processes.

Average scores and standard deviations on R&D transfer, year 2018		
Research and development's block: in my country …	Average Score	Std. Dev.
[•] New technology, science, and other knowledge are efficiently transferred from universities and public research centers to new and growing firms	3.09	2.16
[•] New and growing firms have just as much access to new research and technology as large, established firms	3.50	2.62
[•] New and growing firms can afford the latest technology	2.40	1.63
[•] There are adequate government subsidies for new and growing firms to acquire new technology	2.34	2.21
[•] The science and technology base efficiently supports the creation of world-class new technology-based ventures in at least one area	3.10	2.63
[•] There is good support available for engineers and scientists to have their ideas commercialized through new and growing firms	3.06	2.15

Scores are offered in a Likert Scale range: 1 = Completely false to 9 = Completely true (See scale details above)

The results that reflect the average scores for items on commercial and professional infrastructure (Table 9.9) inform that, generally, experts in Sudan consider that the commercial and professional infrastructure is not strong enough to support entrepreneurial activities. There are not enough subcontractors, suppliers, and consultants to support new and growing firms and that access to commercial and professional support is too costly for the majority of entrepreneurs to access. Two areas within this section that show relatively better averages are finding good legal and accounting services, and banking services.

However, it is worth mentioning that within Sudan the context is witnessing great dynamics by different a variety of institutions that are developing special programs that are improving entrepreneurship education and training to create the needed mass of professionals who can offer integral attention to potential entrepreneurs. These trained individuals are accommodated in private, public agencies and National NGOs devoted to offering professional services to entrepreneurs, even at the States' level, at competitive prices or sustained by the government, so they can be more reachable and affordable.

Table 9.9
Average scores and standard deviations for the items evaluated by experts from Sudan on the block on commercial and professional infrastructure

Average scores and standard deviations on commercial and professional infrastructure, year 2018

Commercial and professional's block: in my country Sudan …	Average Score	Std. Dev.
[•] There are enough subcontractors, suppliers, and consultants to support new and growing firms	4.78	2.71
[•] New and growing firms can afford the cost of using subcontractors, suppliers, and consultants	3.82	2.17
[•] It is easy for new and growing firms to get good subcontractors, suppliers, and consultants	4.55	2.67
[•] It is easy for new and growing firms to get good, professional legal and accounting services	5.81	2.34
[•] It is easy for new and growing firms to get good banking services (checking accounts, foreign exchange transactions, letters of credit, and the like)	5.00	2.71

Scores are offered in a Likert Scale range: 1 = Completely false to 9 = Completely true (See scale details above)

Table 9.10 shows that the average scores of the internal market's section are moderately good regarding the items devoted to market dynamics reflecting dramatic changes from year to year for consumer goods and services as well as for business-to-business, although at lower level. New and growing firms have difficulties to afford the cost of market entry, to compete with consolidated firms and to trust in the anti-trust legislation as represented by the lowest scores along the scale (Table 9.10).

Table 9.10
Average scores and standard deviations for the items evaluated by experts on the block on internal market in Sudan

Average scores and standard deviations on internal market, year 2018

Internal market's block: in my country Sudan	Average Score	Std. Dev.
[•] The markets for consumer goods and services change dramatically from year to year	7.71	1.83
[•] The markets for business-to-business goods and services change dramatically from year to year	7.21	2.25
[•] New and growing firms can easily enter new markets	3.94	2.27
[•] The new and growing firms can afford the cost of market entry	3.57	1.6
[•] New and growing firms can enter markets without being unfairly blocked by established firms	2.78	1.79
[•] The anti-trust legislation is effective and well enforced	2.5	1.54

Scores are offered in a Likert Scale range: 1 = Completely false to 9 = Completely true (See scale details above)

The expert views on the physical infrastructure block within Sudan show good scoring, especially for the items related to communication and utilities services which are evaluated as fast and less costly to obtain by for new and growing firms (Table 9.11).

Average scores and standard deviations on physical infrastructure and services, year 2018		
Physical infrastructure and services' block: in my country Sudan	Average Score	Std. Dev.
[•] The physical infrastructure (roads, utilities, communications, waste disposal) provides good support for new and growing firms	3.00	2.39
[•] It is not too expensive for a new or growing firm to get good access to communications (phone, Internet, etc.)	5.42	2.82
[•] A new or growing firm can get good access to communications (telephone, internet, etc.) in about a week	6.69	2.49
[•] New and growing firms can afford the cost of basic utilities (gas, water, electricity, sewer)	5.08	2.68
[•] New or growing firms can get good access to utilities (gas, water, electricity, sewer) in about a month	4.33	2.65

Scores are offered in a Likert Scale range: 1 = Completely false to 9 = Completely true (See scale details page 153)

Table 9.12 shows results on the experts' views on the cultural and social norms. It represents items on this block that generally indicate modest cultural support to concepts necessary to entrepreneurial behaviour such as individual success achieved through own personal efforts, self-sufficiency, autonomy, and personal initiative and creativity and innovativeness. The weakest point in this section is referred to lack of culture that encourages risk-taking.

Average scores and standard deviations on social and cultural norms transfer, year 2018		
Social and cultural norms' block: in my country Sudan	Average Score	Std. Dev.
[•] The national culture is highly supportive of individual success achieved through own personal efforts	5.11	2.71
[•] The national culture emphasizes self-sufficiency, autonomy, and personal initiative	4.44	2.70
[•] The national culture encourages entrepreneurial risk-taking	3.8	2.82
[•] The national culture encourages creativity and innovativeness	4.31	2.9
[•] The national culture emphasizes the responsibility that the individual (rather than the collective) has in managing his or her own life	4.03	2.85

Scores are offered in a Likert Scale range: 1 = Completely false to 9 = Completely true (See scale details above)

To sum up the overall reflections of the experts about the conditions in which entrepreneurs operate in Sudan indicate that most of the highlighted components of these conditions are, to this moment, not very conducive for entrepreneurial activities. However, despite the fact that some improvements are expected to result from the efforts recently put in place, more and solid actions need to be strategically considered to improve the conditions in the short and long term.

From the information provided by experts about the national entrepreneurial framework state in Sudan and the analysis of the main areas considered as pillars for that framework, the inevitable question to consider would be what stands as a priority for action to improve the context for entrepreneurs to successfully start and sustain entrepreneurial activities.

The expert questionnaire, which is part of the GEM study, contains two key sections so that they provide some information to address this issue: an open-ended questions section where experts indicate what the main constraints, supports and recommendations about the context are, and a section that evaluates the importance of the 12 pillars that compose the NECI on the current state of the context (Tables 9.13 and 9.14).

Table 9.13
Distribution of topics
cited by experts on
constraints, supports
and
recommendations
about the
entrepreneurship
context in Sudan

Distribution of topics on constraints, supports and recommendations, year 2018			
Topic	Factors that Constraint (%)	Factors that Support (%)	Recommended Action (%)
[•] Financial support	51.61	39.39	38.24
[•] Government policies	70.97	24.24	52.94
[•] Government programs	9.68	6.06	5.88
[•] Education &Training	12.9	27.27	41.18
[•] R&D transfer	3.23	21.21	14.71
[•] Commercial Infrastructure	16.13	9.09	14.71
[•] Internal Market Openness	22.58	6.06	20.59
[•] Physical Infrastructure Access	25.81	9.09	14.71
[•] Cultural & Social Norms	16.13	12.12	11.76
[•] Capacity for Entrepreneurship	12.9	24.24	2.94
[•] Economic climate	16.13	6.06	5.88
[•] Work Force Features	0	12.12	5.88
[•] Perceived Population Composition	0	0	0
[•] Political, Institutional and Social Context	0	6.06	0
[•] Economic Crisis	0	6.06	0
[•] Corruption	3.23	0	0
[•] Different performing of small, medium and large companies	0	9.09	2.94
[•] Internationalization	0	15.15	2.94
[•] Labor costs, access and regulation	3.23	9.09	0
[•] Information: all responses related to this issue	0	0	8.82
[•] Other, don't know	0	1.37	1.37

The analysis of the distribution of topics cited by experts in the open- ended questions section reveals that the top constraints faced by entrepreneurs in the national context in Sudan include: Financial support, Government policies, Physical Infrastructure Access, Internal Market Openness and education and training. The implication of this result is that the mentioned items are to be identified as crucial components which needs appropriate action and may be research and further investigation from the entrepreneurial perspective.
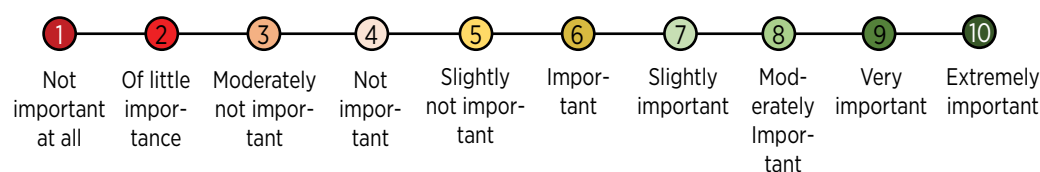
The components of the framework that are considered as supporters for entrepreneurs in Sudan for the year 2018 have been: financial support, government policies, entrepreneurial education and training, capacity for entrepreneurship, and research and Technology (R&T) transfer. The five top mentioned components that appear as constraints and support to entrepreneurs may reflect the experts' view that each of these factor is to a great extent playing a supportive role, yet a level of deficiency necessitates considering each component as an area for intervention for improvement. Accordingly, the same components are mentioned as areas for recommendation for action. In the case of Sudan experts mentioned top priority areas for action as: financial support, government policies, entrepreneurial education and training, commercial infrastructure, and internal market openness (Table 9.13).

Table 9.14
Average scores of the importance of the 12 pillars that compose the NECI for Sudan

Average scores of 12 pillars, year 2018				
National entrepreneurial framework conditions	Importance	St.Dv.	State	St.Dv.
[•] Financing for entrepreneurs	8.76	1.74	4.32	1.54
[•] Government policies and support	8.45	1.40	2.77	2.10
[•] Bureaucracy and taxes	7.00	3.06	2.99	1.70
[•] Government programs	7.91	1.99	2.95	1.81
[•] Entrepreneurial education at school stage	8.36	1.75	2.74	2.38
[•] Entrepreneurial education at post-school stage	7.73	2.35	4.35	2.19
[•] R&D transfer	7.73	2.38	3.26	1.65
[•] Commercial and legal infrastructure	8.42	1.43	5.37	2.27
[•] Internal market dynamics	9.00	1.39	8.28	2.05
[•] Internal market burden	8.32	2.20	5.47	1.82
[•] Physical infrastructure	8.58	1.88	5.47	1.82
[•] Cultural and social norms	8.31	1.68	4.83	2.72

Scores are on a 10 points Likert scale where 1 = not important at all, 10 = extremely important) compared to their average state (10 points Likert scale where 1 = very bad state, 10 = very good state)

Importance scale

1	2	3	4	5	6	7	8	9	10
Not important at all	Of little importance	Moderately not important	Not important	Slightly not important	Important	Slightly important	Moderately Important	Very important	Extremely important

State scale

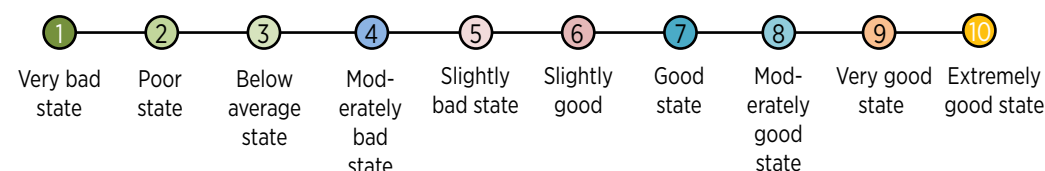| 1	2	3	4	5	6	7	8	9	10
Very bad state	Poor state	Below average state	Moderately bad state	Slightly bad state	Slightly good	Good state	Moderately good state	Very good state	Extremely good state

Table 9.14 shows that experts in Sudan consider all entrepreneurial framework pillars as important with variation in the levels of scores. The highest score in importance and state is recorded for internal market dynamics, while the second highest score for importance is recorded for financing entrepreneurs but this component recorded a lower level of state, which indicates a gap in access to entrepreneurial finance. This justifies the high score of financing as an area recommended for action. The core pillars that are perceived by experts necessary to sustain entrepreneurial activity in Sudan at this moment are; government policies and support, education and training, commercial and legal infra structure and physical infrastructure complemented by the rest.

Table 9.15 presents a matrix, which summarises the performance of the entrepreneurial framework conditions by comparing the importance average scores with those on the state of each condition.

From this matrix a set of recommendations on what conditions need urgent attention to improve the entrepreneurial context in Sudan can be identified.

The matrix is similar to those used in DAFO analyses: in the rows there is the importance divided in low and high and in the columns, there is the perceived performance level or average state of the pillars divided in low and high as well. Now, considering low values less than 5 points and high values more than 5 points, we place the 12 pillars or conditions where their average scores on importance and state indicate. Thus, for example, Financing has an average score of 8.76 points about its importance in the current context, while its state gets just an average score of 4.32 (Table 9.14). This means that it has high importance and low performance so, it has to be placed in the first quadrant. The same applies for all conditions except for internal market dynamics, which gets high-high average scores. The interpretation of this type of matrix can be consulted on the table below. From Table 9.14 Sudan does not have conditions at a low priority score level (under 5 score points), however, a considerable number of pillars are in low state score levels. Thus, at this moment, the conditions in the first quadrant are those that require more attention from those stakeholders in Sudan and its government to improve the context for entrepreneurs.

*Table 9.15
Performance of
entrepreneurial
framework conditions
measures-importance
matrix in Sudan*

Importance of
EFCs measured by
experts

	Perceived performance level	
	Low	Importance
High	[•] Financing for entrepreneurs [•] Government policies and support [•] Bureaucracy and taxes [•] Government programs [•] Entrepreneurial education at school stage [•] Entrepreneurial education at post-school stage [•] R&D transfer [•] Commercial and legal infrastructure [•] Internal market dynamics [•] Internal market burden [•] Physical infrastructure [•] Cultural and social norms	[•] Commercial and legal infrastructure [•] Internal market dynamics [•] Internal market burden [•] Physical infrastructure
Low		

Matrix
Interpretation

Importance of
EFCs measured by
experts

	Perceived performance level	
	Low	Importance
High	Improve	Maintain
Low	Low priority (Ignore?)	Possible overkill (waste?)

As mentioned before the face-to-face interviews conducted by Sudan's GEM Team with the sample of experts in the entrepreneurial context components have yielded a wealth of open ended responses which have been organized as constraints, supporters and recommendations for the year 2018 (Table 9.16).

Table 9.16 Sample open responses provided by GEM entrepreneurial conditions experts of Sudan, topics organized as constraints, supports and recommendations

Constraints

Open responses citing **constraints** to entrepreneurship in Sudan, year 2018
[•] Government systems and governance
[•] Government policies related to permissions; regulations and governmental laws; constraints related to licensing and registration; policies and regulations.
[•] Dependence on traditional financial services and lack of insurance services
[•] Government policies and control of the Central Bank of Sudan
[•] Government regulations in dealing with start-ups and give them the chance to execute government projects.
[•] Lack of supporting governmental programs that are sustainable to support accelerators and incubators to start new companies.
[•] Financial constraints; lack of funding; access to funding; access to finance with low banking costs; availability of funding.
[•] Foreign currency availability and increase in exchange rates; impact on local currency; inflation
[•] Disadvantages of the free market policies
[•] Taxes not supportive to new start-ups
[•] Poor infrastructure
[•] Difficulties when starting new business
[•] Lack of transparency, monopolization and control of the big companies
[•] Poor contribution of the private sector in supporting entrepreneurship initiatives
[•] Discrimination and nepotism when offering support (finance) to new businesses based on political affiliation.
[•] Poor entrepreneurial Risk Averse Culture
[•] Poor access to market due to lack of know-how
[•] Regulations and Taxes & Fees
[•] Lack of clarity in legal regulations and succession rules - particularly in regard to family businesses.
[•] Technology and talent shortage
[•] General and higher education does not promote an entrepreneurial culture
[•] Poor and limited training programs
[•] Lack of experience and technical know-how especially in marketing
[•] Lack of Talent; Lack of highly qualified founders; Experience of Founders (Backgrounds) Lack of R&D based start-ups related to education, training and technology
[•] Legal entities: there are not enough, and they need a profound update
[•] Instability of the markets conditions
[•] The difficulty of market entry and registration for foreign companies Lack of market Data; Ease of Doing Business
[•] Social, cultural constraints

Supports

Open responses citing **supporters** to entrepreneurship in Sudan, , year 2018

[•] Government policies considering entrepreneurship as a poverty reduction mechanism

[•] Inspired youth who are globally focused and exposed to international experiences especially technology supported ones

[•] Good communication technology support

[•] Use of social media in creating business platforms

[•] Necessity among big groups push them into self-employment

[•] The mind-set of entrepreneurship in the entrepreneur's mind

[•] Lack of job opportunities for graduates; high overall unemployment rates;

[•] Some supportive regulations and policies by local governments in some States

[•] Migration and people's mobility created more ethnic and immigrant entrepreneurs

[•] Government entities / big corporation competing with start-ups

[•] Availability of national resources-Agriculture

[•] Microfinance policies and support

[•] New perspectives on entrepreneurship and exposure to success stories and role models

[•] Ecosystem Stakeholders Alignment

[•] New focus of Higher Education Institutions on entrepreneurship development

[•] New initiatives from social institutions and National development oriented NGOs; Mashrooy is one example

[•] Early stage funding supported by informal resources for new start-up

[•] Lack of conducive environments that support innovation created sense of need to search for feasible imitations

[•] Empowering outsource firms

[•] Ease of access to market

[•] Mentorship and Role Models

[•] Access to Finance despite the regulatory restrictions

[•] Support to establishing incubators and accelerators

[•] More focus on technology supported business ideas

Recommenda-tions

Open responses citing **recommendations** to improve the entrepreneurship context in Sudan, year 2018

[•] Supportive policies and regulations for start-ups and business sustainability

[•] Introduce appropriate educational and training programs

[•] Improve and update technical infrastructure

[•] More focus on research and development (R&D)

[•] Government procurement policies to support small and new firms

[•] New supportive investment policies

[•] Special market outlets for new businesses

[•] Access to market: new regulations; analyse how to decrease burdens

[•] More incubators with new perspective to create 'sector balance'

[•] Improve cultural perception about self-employment

[•] Tax exemption/reduction for small & new firms

[•] Create a vibrant environment: more networking, forums, events, competitions and prizes

[•] Avail and encourage business consultancy offices and experts

[•] Focus on improving vocational training

[•] Offer logistical support and improve infrastructure.

[•] Media programs to reflect success stories, raise awareness and change perception towards entrepreneurship

[•] Focus on agriculture and agro-industries

[•] Create a balance of business services and entrepreneurship development effort over ALL States; not only focus on centre cities

[•] Enable sufficient seed funding

[•] Hiring of top Talented people

[•] Economic diversification - Including new economical businesses to ecosystem and to governmental support
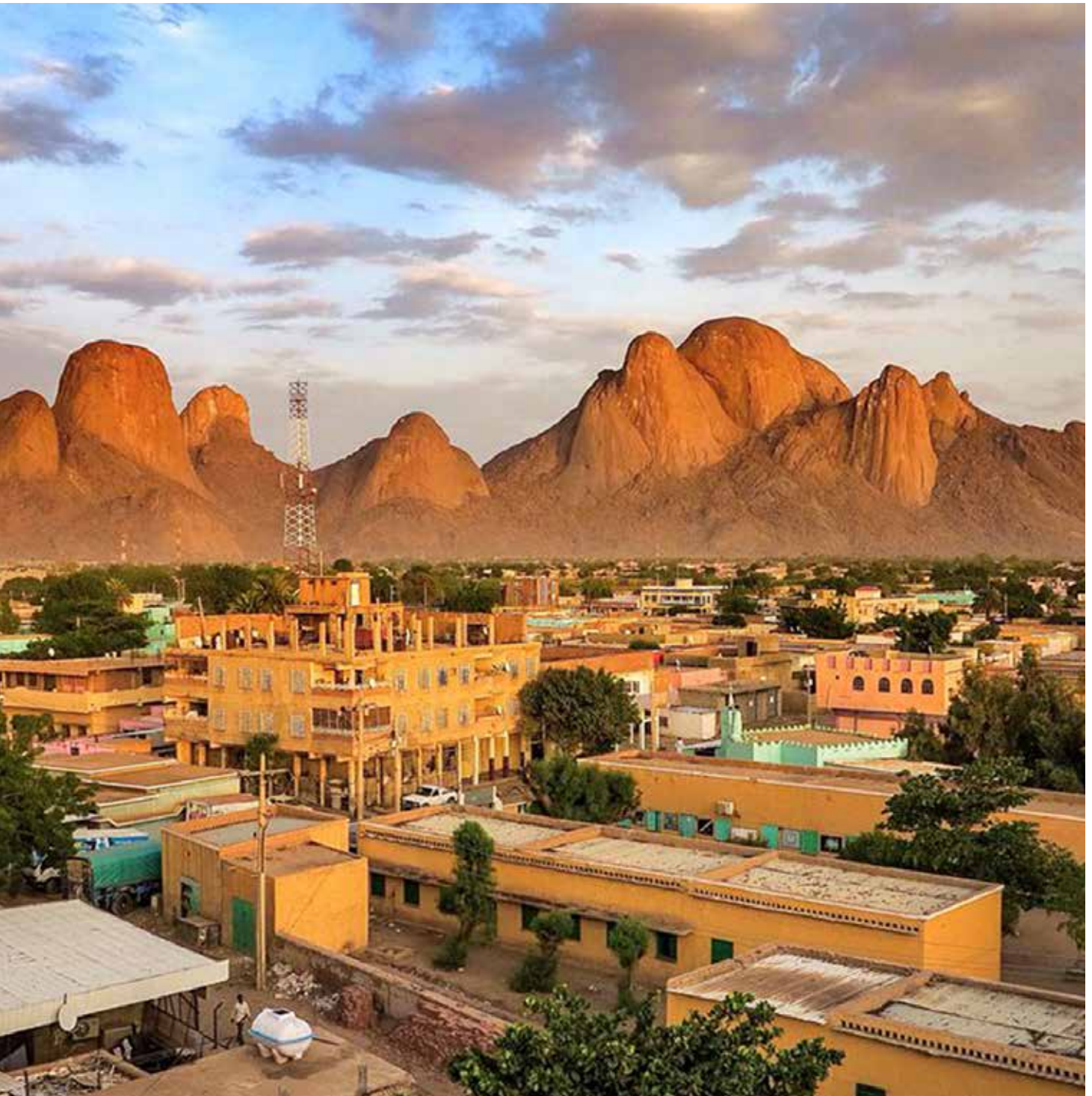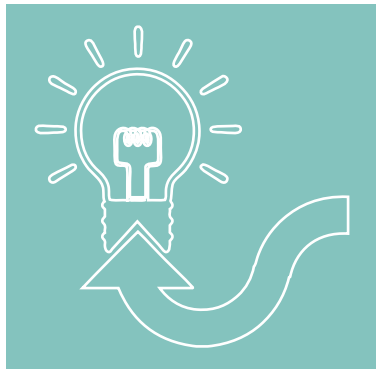
[•] Improve public private partnerships

Photo credit - Al Taka Mountains rising behind Kassala, www.pinterest.com
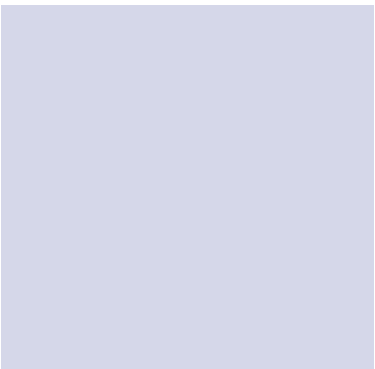
PART 4

Recommenda-tions

Photo credit - Port Sudan, Red Sea State, www.pinterest.com

Based on the GEM 2018 survey and performed analysis, with special consideration for the experts' views expressed in the NES component (which highlighted the enablers, the challenges and recommendations to improve the entrepreneurial ecosystem), the following detailed recommendations are important outcome of the GEM study and are brought to focus to allow further analysis and interpretation to guide policy and future action to improve the overall conditions for entrepreneurship development in Sudan.

For Policy-makers

[•] Reform the regulatory environment and reduce bureaucracy in order to make it easier for new businesses to register and operate.

[•] Reducing costs involved, such as licensing requirements from local municipalities, labor and tax registrations.

[•] Women entrepreneurs face specific challenges, due to gender stereotype and a disadvantage status, thus it is imperative to provide women-centred, policies, support structures and mentorship to help them successfully engage in entrepreneurial activities.

[•] Networks to provide women with access to experienced people who can inspire, mentor and coach them through the entrepreneurial journey.

[•] A national database of funders – with a mechanism to match mandates with potential businesses and vice versa – should be created. Access to finance must be linked to vigorous business plan review and entrepreneur capability assessment.

[•] Government policies related to the control imposed by the Central Bank of Sudan in the monetary and currency allowances to secure some of the production inputs and business requirements needs to be revised in favour of entrepreneurship development.

[•] The information required by SMEs should be made easily accessible to all potential entrepreneurs. Comprehensive and regularly updated government web resources should be set up – somewhere that entrepreneurs can get clear information about business registration, HR legislation, insurance, etc. All the information that someone needs to start a business should be easily available in one central place.

[•] Increase awareness about government entrepreneurship programs and initiatives that support MMSEs and use more accessible channels to reach target people and businesses.

[•] Increase supportive sustainable services such as business accelerators and incubators to start new businesses.

[•] Government program design should be based on needs assessment to differentiate what specific groups/types of business and entrepreneurs are to be targeted by these programs. This will help offering customized services according to the needs of the businesses based on size, type of activity, stage of business and physical approximation.

[•] A more supportive tax system should be introduced, such as tax exemption/reduction to target MSEs and new firms.

[•] Update and improve physical and technical infrastructure.

[•] New supportive investment policies with focus on provision of seed funding with flexible repayment policies especially for small and new firms.

[•] Introduce appropriate educational and training program that enhance entrepreneurship and apprentice competencies. Educational facilities need to improve their capacity to provide the education and job skills that will be needed to develop greater productivity and technology-intensive industries.

[•] Create a vibrant environment that encourages networking, forums, events, competition and prizes.

[•] Government procurement policies to support dealing with small and new firms.

[•] Support women and youth entrepreneurs and introduce specific training in areas that are identified as gaps in the knowledge, skills and capabilities of these groups. Marketing, accounting and book-keeping, product development and use of advanced technology are areas commonly perceived as problematic to these groups where support is needed.

[•] Improving IT infrastructure would allow for a reduction in the cost of technology – this, as well as the potential to reach new markets, could have a significant impact on the sustainability of businesses.

[•] High tech entrepreneurial firms should be supported to enhance their competitive capacity to move towards internationalization, and science and technology centers should be established to enhance innovation.

[•] Media programs to reflect success stories, raise awareness and change perception towards self-employment.

Photo credit - SocEnt in Sudan | Blog | Social Enterprise Academy, https://socialenterprise.academy/za/socent-in-sudan

For the Private Sector

[•] Engage in financing entrepreneurs through modalities such as capital ventures to facilitate access to a variety of options and reduce dependency on the rigid banking sector and /or informal investors.

[•] More focus on research and development (R&D) to give a competitive advantage by product development.

[•] Avail and encourage business consultancy offices and experts' services.

[•] Direct investments to agriculture and agro-industries with focus on external trade and export production.

[•] Create a balance of business services and entrepreneurship development over all States not only focus on center cities.

[•] Establish some mentoring programs, incubators, business clinics and special market outlets for new businesses. Students' internships should be provided to offer the opportunity to learn from the professional world while still students.

[•] Investors, funders and the government should accept that there is a high chance of failure, especially among new start-ups, but should recognise that this is a necessary part of the entrepreneurial journey. This approach to funding is particularly important in encouraging youth entrepreneurship.

[•] Encourage and engage in public private partnerships.

For Academic and Research Institutions

[•] Experts' recommendations for enhancing entrepreneurship practice in Sudan strongly stress the need to develop an educational system that considers entrepreneurial education a priority. Entrepreneurship theoretical and practical curricula should start at least at secondary school level to equip learners with key business skills and motivate youth to enter this field.

[•] Formal education systems often have the tendency to foster professional advancement and higher education as the path for success. In the current job climate, education systems should proactively incorporate labour market's needs in the diverse paths and include technical, vocational and apprenticeship education and training.

[•] Many of those who are potential or business- owners are of post-secondary school level which implies the need to increase investment in training programmes in entrepreneurship outside of the traditional higher education institutions.

[•] Academic and research centers should contribute to create business related data-base, which is supported by scientific research, on the overall ecosystem, internal and external markets and the different industry sectors.

[•] A high rate of business discontinuity/failure entails the need to conduct in-depth rigorous scientific research to understand the reasons behind that, and avail data to guide policy regarding the support for business sustainability.

[•] Support for entrepreneurs on the R&D function especially for those with limited resources, to help them be competitive and sustain their ventures.

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Annexes

Sudan map
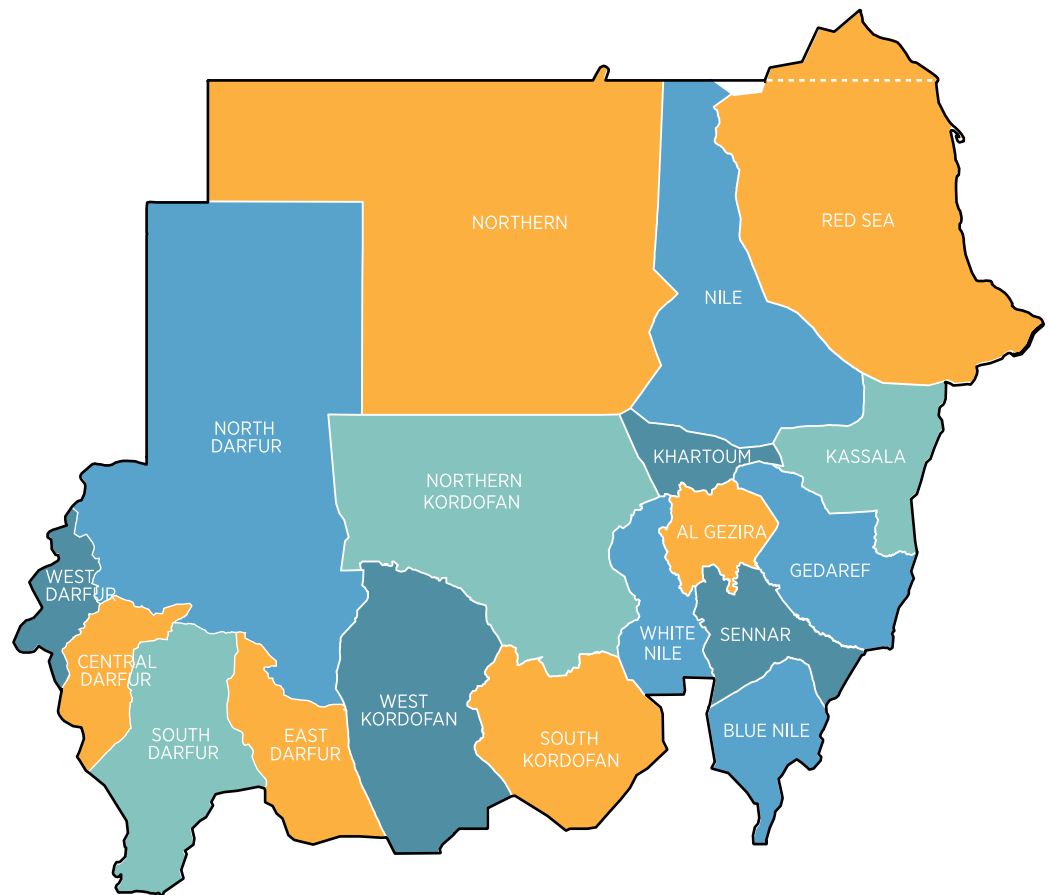
GEM – Sudan

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