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**The Annual Conference of Economic Forum of Entrepreneurship &  
International Business  
ACEFEIB**

The 7<sup>th</sup> Annual Conference of the Economic Forum of Entrepreneurship &  
International Business

June 28th & 29th, 2018

**Venue:** Hughes Hall, Cambridge University, Cambridge, United Kingdom

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**The 7<sup>th</sup> Annual Conference of the Economic Forum of Entrepreneurship &  
International Business**

June 28th & 29th, 2018

**Venue:** Hughes Hall, Cambridge University, Cambridge, United Kingdom

**Conference Proceeding**

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**Ottawa, Ontario, Canada**

**2018**

**The 7th Annual Conference of Economic Forum of Entrepreneurship &  
International Business**

June 28th & 29th, 2018

**Venue:** Hughes Hall, Cambridge University, Cambridge, United Kingdom

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**The Annual Conference of Economic Forum of Entrepreneurship &  
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(ACEFEIB)**

**The 7th Annual Conference of Economic Forum of Entrepreneurship &  
International Business**

June 28th & 29th, 2018

**Venue:** Hughes Hall, Cambridge University, Cambridge, United Kingdom

**Conference Chairs**

**Ghada G. Mohamed, Morrison H. Schaler & Daniel May**

**Conference Organizer**

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# The 7th Annual Conference of Economic Forum of Entrepreneurship & International Business - (SACEFEIB)

The Second Day of the Conference: ISBN: 978-1-988081-06-9: The Fourth Annual Conference of Agricultural Economics and Agribusiness: Library & Archive Canada

## Presenters/ Abstracts/ Program

### Day 1: June 28th, 2018

#### Waheed Junaid

**Title:** PhD Candidate

**Institution:** School of Finance and Economics, Xian Jiaotong University, China *and*

Anser M. Khalid

*(Co-author & co-presenter)*

**Title:** PhD Scholar

**Institution:** College of International Business, Shaanxi Normal University, China

**Paper (1-1):** *"Residential Asset Prices and Consumption: A Case Study of Urban Household's of Pakistan"*

**Abstract:** "Over the past few years, residential assets prices are increasing rapidly in the urban areas of major cities of Pakistan. There may be so many reasons for this increase in prices but our question is how these prices effect the household's consumption decision. This study examines the impact of residential assets prices on household's consumption through estimating the residential wealth effect. Using the panel data of 103 households for past five years (2012 to 2016) obtained from an independently conducted household level survey in selected areas of Rawalpindi and Islamabad, different models were estimated through pooled and fixed effect regressions with cluster and Driscoll and Kraay (1998) standard errors. The results show significantly positive total residential and housing wealth effects. The paper concludes increase in residential assets prices raises the household consumption."

#### Tugba Dayioglu

**Title:** Associate Professor and Head of Management and Information System

**Institution:** Nisantasi University, Istanbul, Turkey

**Paper (1-2):** *"Determinants of Sovereign Ratings in Emerging Countries with Panel PROBIT Analysis"*

**Abstract:** "The aim of this paper is to study determinants of sovereign ratings of emerging countries. The ratings are analyzed with panel ordered probit model. The economic indicators are used and these variables of the countries are independent from the sovereign ratings. In this study we determined the effective factors on ratings and we check the effects of current account deficits, external debts, gross domestic product per capita, real exchange rates, inflations, unemployment and political qualities on sovereign ratings that are exported by three large rating agencies' (S&P, Moodys and Fitch). The credit agencies are taking attention some economical and political indicators of the countries on their credit limits. These sovereign credit scoring probability is estimated with panel ordered probit model in our study."

#### Ramchandra Bhusal

**Title:** PhD Candidate

**Institution:** Accounting Finance and Operations Management Department (Ethnic Minority Businesses Financing) Lord Ashcroft International business School, Anglia Ruskin University, Cambridge, United Kingdom *and*

Ying Wang

*(Co-author & co-presenter)*

**Title:** Senior Lecturer

**Institution:** Anglia Ruskin University, Cambridge, United Kingdom

**Paper (1-3):** *"The Impact of Perceptual Attributes on Entrepreneurs' Preferences to External Financing"*

**Abstract:** "The aim of this study is to examine the implications of type of 'discouragement', 'discrimination' and 'risk-taking' perception in external financing preferences of the business owners from five major ethnic groups (Indian, Pakistani, Bangladeshi, Black African and Afro-Caribbean) in England. A five-point Likert-Scale questionnaire was used to collect data. Questionnaire was distributed via e-mail, post and face-to-face survey was conducted to enhance representation and sample size. Multiple regression was performed to assess the impacts of perceptual attributes on entrepreneurs' preferences to external financing. Findings suggest that the discouragement perception has a significant impact in shaping external financing preferences particularly for other than bank financing sources. Discrimination feeling to apply for bank financing has significant implication in preferences to alternative financing. Whilst risk-taking propensity has implication in preferences to bank financing. Furthermore, this study also established the order of the discouraging factors: financing cost, financing history and fear of prejudice to apply for bank financing among ethnic minority business owners. The practical and theoretical implications are discussed, and future research directions are presented."

### Ismi Rajiani

**Title:** Senior Lecturer

**Institution:** STIA Dan Management Kepelabuhan Barunawati, Surabaya, Indonesia

**Paper (1-4):** *"Identifying the Cultural Proximity as Barriers of Carbon Economy in Southeast Asia : An Exploratory Study from Indonesia and Malaysia"*

**Abstract:** "REDD+ (Reducing Emissions from Deforestation and forest Degradation) is a planned performance-based model in which developed country donors, corporations, non-governmental organizations, and individuals will pay developing countries for forest emissions decrease. This policy echoes "new carbon economy" - the arising business in carbon emissions accompanied with the sets of market-based policy instruments developed to decrease global greenhouse gas (GHG) emissions through the invention of markets for carbon. Southeast Asia hosts some early REDD+ type projects. However, there have been succinct differences between countries that have been successful in running REDD+. By referring to frameworks of national culture, this article is investigating the employability of REDD+ in the developing country of Malaysia which has been recognized amongst the highest globally in the growth of greenhouse gases (GHG), but the participation in the REDD+ project is so limited compared to Indonesia which is leading in REDD+ implementation. Using Hofstede's construct of national culture, social units in Malaysia and Indonesia are examined where REDD+ is proposed as a culturally dependent strategy. It is recommended that the successful implementation of REDD+ as new carbon economy demands compliance between the strategies that are adopted and the country's cultural characteristics. This study argues that the ability of the "new carbon economy" to provide real benefits for sustainable development may ultimately be obstructed by the nature of the society itself."

**Tamer Koburtay**

**Title:** Assistant Professor

**Institution:** University of Petra, Amman, Jordan

**Paper (1-5):** *"Workplace and Individual Spirituality Congruence: Insights from Jordan"*

**Abstract:** "Person - Organization fit theory concerns how people flourish in a workplace that is congruence with their values and other traits. While much work has been done on how this fit is linked with behavioural and attitudinal outcomes, it evolves a framework with much left to be comprehended about what does this (fit) comprise. As seen in recent literature, workplace spirituality is a nascent area that needs further in-depth research not only on religiosity literature, but also on management and organizational studies. This paper seeks to highlight the theoretical relevance that workplace spirituality may add to the existing theory development of the P-O fit. In specific, it aims to test the emerged framework that encompasses how workplace and self spirituality match may enhance the perceived P-O fit, and how such a fit can enhance both employees' ethical behaviour and spiritual leadership behaviour. The novelty of this paper is by generating, beyond the already vast literature on P-O fit, a new concept (i.e., P-O spirituality fit) to the literature."

**Rasha S. Hassan**

**Title:** Assistant Professor

**Institution:** The German University in Cairo, Egypt

**Paper (1-6):** *"Entrepreneurship Barriers among University Students" - Over-Skype Presentation*

**Abstract:** "The aim of this study is to examine the factors affecting students' intention to start their business. The target population of this research were students from various private universities in Egypt. A questionnaire was distributed among students across different faculties using online and direct methods. Respondents' perception towards barriers to entrepreneurship (fear of failure, lack of skills and experience, start-up logistics, lack of confidence, lack of general knowledge, lack of finance, lack of network, lack of personal/family support, lack of idea/awareness of the market, and time constrained) and their entrepreneurial inclination were assessed. Data were analyzed using SPSS to generate descriptive statistics, T-test, correlation, and regression analyses. This research provides interesting insights into the entrepreneurship barriers faced by university students from a developing country such as Egypt, where such research is lacking."

**Rana Hassan**

**Title:** Lecturer

**Institution:** Mass Communication Department, College of Arts and Sciences, Qatar University, Qatar

**Paper (1-7):** *"Womenpreneuers and Social Media: Impact of Social Media in Empowering Women Entrepreneurs in Qatar" - Over-Skype Presentation*

**Abstract:** "This research investigates the effect of social media in encouraging women entrepreneurs in Qatar and explores the usage of new media technology in marketing and consumer relations. In addition, it reflects the role of both governments in encouraging and facilitating women entrepreneurship. Surveys were distributed to Qatari consumers to understand their social media buying behaviour and their opinion towards women empowerment in addition to intensive interviews with entrepreneurship experts in Qatar."

**Faza Fakiha Taqwa**

**& Maulana Ihsan Al Ghifari** (Co-author)

**Title:** PhD Candidate

**Institution:** University of Indonesia, Indonesia

**Paper (1-8):** *"The Effectiveness of Endorsement on Instagram as Marketing Tool Theme: Marketing"*

**Abstract:** "The aim of the paper is to understand how effective endorsement on Instagram is as a marketing tool of digital advertising and examine the extent of endorsement on Instagram as the platform of digital advertising which helps consumers in buying decision making.

The paper carries out empirical research to understand the effectiveness of endorsement on Instagram as marketing tool of digital advertising and an effort made to analyze the extent of endorsement on Instagram that helps consumers in buying decision making. Various statistical tests were applied to support the research hypothesis."

**Umami Rahma Shehu**

**Title:** PhD Candidate

**Institution:** Department of Business Administration and Entrepreneurship, Faculty of Social and Management Sciences, Bayero University Kano, Nigeria

**Paper (1-9):** *"The Relevance of Marketing in Effecting Women Entrepreneurship Development as a Solution to the Problem of Female Youth Illegal International Migration in Africa: The Case of Northern Nigeria"*

**Abstract:** "The paper seeks to propose a conceptual framework on how entrepreneurship development can serve as a solution to the problem of female youth migration to other countries for economic reasons. The first part of this article gives a background of migration as a front burner issue facing Nigeria and the world and at large, emphasizing on the push and pull factors for international migration, and the advantages and disadvantages of international migration. The second part discusses the problem of the study The third part discusses the theoretical underpinnings between the variables highlighting on vocational education, literacy training, skill acquisition, startup business acceleration and innovation facilities, and the relevance of simple marketing techniques in convincing these youth to remain in their home country and earn a decent living, because in Nigeria, the dream for international migration is well embraced by the psychology and is imprinted on the belief and value system of an average vulnerable person. Then the next part proposes a conceptual framework and the final section proposes the methodological approach for an empirical study of a sample 350 vulnerable females aged between 18-30."

**Day 2: June 29th, 2018**

The Second Day of the Conference: ISBN: 978-1-988081-06-9: The Fourth Annual Conference of Agricultural Economics and Agribusiness: Library & Archive Canada

**Daniel May**

**Title:** Senior Lecturer

**Institution:** Harper Adams University, United Kingdom

**Paper (2-1):** *"Understanding the Effects of the Young Payment on Young Farmers' Intention to Exit the Farm"*

**Abstract:** "It is well known the fact the number of young farmers has decreased over the last decades in several countries across the world. A recent strategy adopted by the EU to address the resulting age imbalance is the young payment which corresponds to an additional payment on top of the average basic payment introduced in the last CAP reform. The objective of this article is to determine by means of a behavioural approach how this payment influenced the incentives of

young farmers to stay in the farm. Using an extended version of the theory of planned behaviour and the structural modelling technique, we found that the payment affected young farmers' willingness to stay through its influence on non-economics motivational goals. However, we also found that there are other factors that can be even more influential such as pessimism about farming, community and family integration, participation in decision making, and the opinion of neighbours, among others. Based on the results, we argue that similar policies could be adopted in other countries. Nonetheless, they would be more effective in addressing age imbalance if they are accompanied with complementary strategies aimed to deal with these social and psychological considerations. Here you can find all updates about the conference:"

### **Ourania Tremma**

**Title:** Lecturer

**Institution:** Harper Adams University, United Kingdom

**Invited Speaker**

**Paper (2-2):** *"Price Dependence in Major EU Pork Markets"*

Co-authored with **Anastasios Semos**; the Sristole University of Thessaloniki, Greece

**Abstract:** "The objective of this study is to identify the structure of price dependence within the four dominant EU pork markets; Germany, France, Spain and Denmark. This is pursued using monthly wholesale prices over the period 1991:01 to 2016:01. Pair – wise analysis is followed and the non-parametric granger causality test proposed by Diks and Panchenko (2006) is applied along with the nonlinear autoregressive distributed lag model (NARDL), allowing for asymmetries both in the long-run and the short run. Results suggest that market integration exists between the examined pairs and the Law of One price holds for the majority of the EU pork markets. In the short run though, results show that the speed of adjustment is asymmetric in almost all cases, indicating that the possession of market power and the fact that Denmark has not adopted the Euro may cause the speed of price transmission to be low. Therefore, the present study underlines the need to adopt more targeted policies in order to isolate any form of market inefficiency-even in the short- run."

### **Najeh Mzoughi**

**Title:** Assistant Professor

**Institution:** College of Business Administration, Jazan University, Kingdom of Saudi Arabia

**Paper (23):** *"Competitiveness of Selected Agro-Food Value Chains in Some Emerging Countries"*

**Abstract:** "In this research we involve the selection of agro-food value chains some emerging countries that are analyzed, and more specifically the sub sector or product focus. The proposed methodology distinguishes between export and domestic value chains since the basis and criteria for chain selection differ. Two objectives are suggested: The Export growth potential; this would suggest the selection of key value chains contributing to EC export growth strategy. The Poverty alleviation/rural development potential, this would suggest the selection of value chains with potential to reduce poverty and generate (rural) employment.

The idea is to select some export and domestic oriented chains and ask many questions included in two attached surveys. A multi- criteria selection methodology is developed and includes parameters such as: sector's contribution to GDP, export propensity and earnings, attractiveness for private investment, policy relevance, job creation, poverty alleviation, local value added, sector's readiness for reform and change, support for policy reform, etc. Some relevant stakeholders (industry representatives, trade representatives, universities, government, etc.) will provide after answers to the questionnaire, so the value chains will be subject for further analysis.

Methodically, a score will have emerged from collected results of the questionnaire for export and domestic sectors. For each sector a mean average rank is calculated from two sections; potential and constraints, which are calculated such that for each sector the mean average of potential – mean average of constraints = final sector score.

Answers should consider the likelihood of global market growth, the scope for increased market share, and the source of growth (volume and/or value). Primary collected data provide a pertinent background information related to the business environment, which is useful in interpreting value chain results where firm/sector performance is linked to value-adding activities and public sector policies and responsibilities.”

### **Eiman Eissa**

**Title:** Assistant Professor

**Institution:** Mass Communication Department, College of Arts and Sciences, Qatar University, Qatar

**Paper:** *"Exploring Differences in Online Consumer Behaviour: Qatar as a Case Study"*

**Abstract:** “This research aims to explore the online shopping platform in Qatar in relation to gender differences. It investigates the types of advertisements that appeal to males and females; moreover, it examines whether the advertisements affect their buying decisions and their perceived value of the commodities.

This research compares the types of products that male and female consumers buy online and study the reasons they do so. The research also examines their satisfaction rates with the purchases that they made. The research is conducted using an online questionnaire and the results are comparatively analyzed to reveal if there is a correlation between gender and consumer behaviour.”

### **Saimir Osmani**

**Title:** PhD Candidate

**Institution:** Institute of European Studies, University of Tirana, Albania

**Paper (2-5):** *"Sustainable Development Factor in the Albanian Security Strategy"*

**Abstract:** “The paper reviews the sustainable development stated in the Security Strategy of Albania as an important factor of Albania’s future and the country’s integration in the European Union and its aspirates of Euro-Atlantic values. The structure of the paper discusses all those aspects in details.”

### **Zhenzhen Ye**

**Title:** Senior Economist and Data Analyst, Policy and Research

**Institution:** Policy and Research Information and Communications Technology Council, Ottawa, ON, Canada

**Paper (2-6):** *"What Role Does Investment Climate Play in Attracting High-Quality Foreign Direct Investment (FDI): Evidence from Canada"*

**Abstract:** “From 2010 to 2016, Canada's global inward FDI share had decreased by 1%, totalling 3.6% in 2016. At the same time, a closer analysis of the FDI that Canada did receive showed a high favourability for traditional industries such as oil and gas, mining, manufacturing and others. While many of these industries saw minimal to negative growth in recent years, they still accounted for nearly half of all FDI [UNCTAD, 2018]. What does this mean for Canada as a potential market for high-quality foreign capital, and what message does it send to would-be investors? This study investigates Canada's capacity for competitiveness when it comes to attracting FDI, and sets out key parameters to boost FDI in the short and medium term. Using a pooled cross-section time series model, and incorporating a number of variables including inward FDI stock among G7

countries, investment climate, market size and others, the study analyzes the link between a strong investment climate and inward FDI stock. With the understanding that the state of a local investment "climate" is a strong factor influencing investors' decisions on where and why to invest, this study will provide an evidence-based foundational framework for measuring and enhancing Canada's capacity to attract quality FDI in high growth sectors.”

### **Najla KAMERGI**

**Title:** PhD Candidate

**Institution:** LEAD (Development Economics Laboratory), University of Toulon, France

**Paper (2-7):** *"The Impact of the Environmental Policies' Stringency on the Mediterranean Agricultural Trade - New Evidence from a Gravity Model"*

**Abstract:** “This research addresses the evolution of agricultural trade SEMCs in a context of multilateralism while analyzing the impact of environmental policies and their heterogeneity on agricultural trade flows between SEMCs and their main trade partners.“

### **Tarig Mohamed Ali Malik Taha**

**Title:** PhD Candidate

**Institution:** Edinburgh Business School Heriot Watt University, Khartoum, Sudan

**Paper (2-8):** *"Analysis of the Competitive Dynamics within the Oil and the Gas Industry using Porter's Five Forces Model"*

**Abstract:** “The Structure-Conduct-Performance(S-C-P) Model suggests that the structure of an industry has more bearing on the performance of the firms operating in an industry. In view of the S-C-P model this paper investigates the rivalry forces that function within the oil and gas industry using Porter’s Five Forces Model, the paper also attempts to assess the potential impact of these competitive dynamics on the profitability of the key players operating within this industry based on annual financial data for the period (2011-2017), The results show that the oil and gas industry has high barriers to entry, and there are both intensive rivalry and evidence for collaboration among existing players. Furthermore, analysis have shown that in periods of economic boom/crises oil majors tend to create negative/positive economic rents.”

### **Dimitrios Paparas**

**Title:** Senior Lecturer

**Institution:** Harper Adams University, United Kingdom

**Paper (2-3):** *"Is There a Significant Change in the Price Transmission Between Producer and Retail Prices within the British Pork Industry?"*

Co-authored with: Thomas Pickering, Ourania Tremma and Luis De Aguilar

**Abstract:** "The purpose of this study is to examine price transmission between the producer and retail in the UK pork industry. It aims to find the direction of causality in the long and short-run, and whether there is a long-run relationship between producer and retail prices. This study used monthly time series data for producer and retail prices ranging from 1988-2016. Econometric tests were used such as the Augmented Dickey-Fuller (1979) and Phillips-Perron (1988) Unit Root tests; Bai-Perron (1998) Unit Root test allowing for multiple structural breaks; Johansen (1991) and Engle-Granger (1987) Co-integration tests; Granger (1988) Causality, and the Error Correction Model showing the speed of recovery in the long-run relationship after a shock.

The results of the Unit Root tests found both producer and retail prices to be integrated of order one I(1). Three structural breaks were found occurring in the years of 1996, 2002 and 2012. The Co-integration tests found that there is one long-run relationship between producer and retail prices.

The Error Correction Model showed the return to a new equilibrium after a shock was 9% per month totalling over 11 months for a full recovery from a shock. The Granger (1988) Causality test indicated that producer prices do Granger cause retail prices in the short-run. In this study the latest econometric techniques were used including structural breaks which some previous studies overlooked. This study into the producer and retail prices in the UK pork industry is the latest study of this kind since the Brexit decision."

**Ghada G. Mohamed**

**Title:** Conference Chair

**Institution:** ECO-ENA: Economics & ECO-Engineering Associate, Inc.,® Canada

**Closing**

**The 7th Annual Conference of Economic Forum of Entrepreneurship &  
International Business  
(SACEFEIB)**

**The Second Day of the Conference: ISBN: 978-1-988081-06-9: The Fourth Annual Conference of Agricultural  
Economics and Agribusiness: Library & Archive Canada**

**Conference Program**

**First Day Symposium  
June 28th, 2018**

Venue: Hughes Hall, Cambridge University, Cambridge, United Kingdom

**Conference Room**: Gresham Court Study Room

**Entrepreneurship & International Business**

*(The 7th Annual Conference of Economic Forum of Entrepreneurship & International Business)*

8:30 am - 9:00 am Registration & Refreshments

Program: From 9:00 a.m to 5:20 p.m

Duration/ Presentation: 40 Minutes

**Session 1**

From 9:00 am to 11:40 pm

***Financial Economics & Sustainability - Macro/ Micro perspectives: Case Studies &  
Econometric Analysis***

**Paper (1-1)**: From 9:00 am to 9:40 am

Waheed Junaid & Answer M. Khalid "Residential Asset Prices and Consumption: A case Study of  
Urban Household's of Pakistan"

**Paper (1-2)**: From 9:40 am - 10: 20 am

Tugba Dayioglu: "Determinants of Sovereign Ratings in Emerging Countries with Panel PROBIT  
Analysis"

**Paper (1-3)**: From 10:20 am to 11:00 am

Ramchandra Bhusal & Ying Wang "The Impact of Perceptual Attributes on Entrepreneurs'  
Preferences to External Financing"

**Paper (1-4)**: From 11:00 am to 11:40 am

Ismi Rajiani: "Identifying the Cultural Proximity as Barriers of Carbon Economy in Southeast  
Asia: An Exploratory Study from Indonesia and Malaysia"

From 11:40 am to 12:20 pm:

Evaluating the first 4- papers' Econometric Analysis and Open Discussions

**Paper (1-5)**: From 12:20 pm to 1:00 pm

Tamer Koburtary: "Workplace and Individual Spirituality Congruence: Insights from Jordon"

**1:00 - 2:00 pm**

***(Lunch Break - All delegates are invited)***

**Session 2**

**From 2:00 pm to 5:00 pm**

Entrepreneurship, Workplace Adoption, Social Barriers, Human Mobility and Social Marketing -  
Case Studies

*(Coffe, Tea and Refreshments will be presented to all delegates at 3:30 during the discussions)*

**(Paper 1-6):** From 2:00 pm to 2:40 pm

Rasha S. Hassan: "Entrepreneurship Barriers among University Students"

**Paper (1-7):** From 2:40 pm - 3: 20 pm

Rana Hassan: "Womenpreneurs and Social Media: Impact of Social Media in Empowering  
Women"

**Paper (1-8):** From 3:20 pm - 4: 00 pm

Faza Fakiha Taqwa: "The Effectiveness of Endorsement on Instagram as Marketing Tool Theme"

**Paper (1-9):** From 4:00 pm - 4: 40 pm

Ummi Rahma Shehu: "The Relevance of Marketing in Effecting Women Entrepreneurship  
Development as a Solution"

**From 4: 40 am to 5:00 pm**

Discussion and Closing by Dr. Ghada Mohamed

**Second Day Symposium**

**June 29th, 2018**

Venue: Hughes Hall, Cambridge University, Cambridge, United Kingdom

**Conference Room:** Gresham Court Study Room

**Agricultural Economics, Agribusiness and Sustainable Development**

*(The 4th Annual Conference of Agricultural Economics & Agribusiness)*

8:30 am - 9:00 am Registration & Refreshments

Program: From 9:00 a.m to 5:20 p.m

Duration/ Presentation: 40 Minutes

**Session 1**

From 9:00 am to 1:00 pm

Agribusiness, Retail Prices, Payment, Consumers' Behaviour and Market Analysis: Case Studies

**Paper (2-1):** From 9:00 am to 9:40 am

Daniel May: "Understanding the Effects of the Young Payment on Young Farmers' Intention to Exit  
the Farm"

**Paper (2-2):** From 9:40 am - 10: 20 am

Ourania Tremma: "Price Dependence in Major EU Pork Markets"

**Paper (2-3):** From 10:20 am to 11:00 am

Najeh Mzoughi: "Competitiveness of Selected Agro-Food Value Chains in Some Emerging  
Countries"

**Paper (2-4):** From 11:00 am to 11:40 am

Eiman Eissa: "Exploring Differences in On-line Consumer Behaviour: Qatar as a Case Study" -  
Over-Skype Presentation

**From 11:00 am to 11:40 am**

**Panel Discussion:** From 11:40 am to 12:20 pm

The first 4-papers evaluation --- Open Discussion

**(Paper 2-5):** From 12:20 pm to 1:00 pm

Saimir Osmani: "Sustainable Development Factor in the Albanian Security Strategy"

1:00 - 2:00 pm

***(Lunch Break - All delegates are invited)***

Session 2

From 2:00 pm to 5:00 pm

Environmental Policy and Foreign Capital Flows and Competitiveness

Micro/ Macro analysis: Case Studies

*(Coffee, Tea and Refreshments will be presented to all delegates at 3:30 during the discussions)*

**(Paper 2-6):** From 2:00 pm - 2: 40 pm

Shenzhen Ye: "What Role Does Investment Climate Play in Attracting High-Quality Foreign Direct Investment (FDI): Evidence from Canada"

**Paper (2-7):** From 2:40 pm - 3: 20 pm

Najla Kamergi: "The Impact of the Environmental Policies' Stringency on the Mediterranean Agricultural Trade - New Evidence from a Gravity Model"

**Paper (2-8):** From 3:20 pm - 4: 00 pm

Tarig Mohamed Ali Malik Taha: "Analysis of the Competitive Dynamics within the Oil and the Gas Industry using Porter's Five Factor Model"

**Paper (2-9):** From 4:00 pm - 4: 40 pm

Dimitrios Paparas: "Is there a Significant Change in the Price Transmission between Producer and Retail Prices within the British Pork Industry" - Over-Skype Presentation

**Discussion and closing with Dr. Daniel May:**

From 4: 40 am to 5:00 pm

## **Acknowledgements**

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ECO-ENA, Inc.® would like to thank all participants at the conference.

**ECO-ENA, Inc. ® Organizing team**

# **Conference E-Proceedings**

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## **Entrepreneurship Barriers among University Students**

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**Abstract:** Entrepreneurship plays a major role in the economic growth of developed and developing countries. It is a major source of job opportunities and innovation activities. Moreover, entrepreneurship allows people to do what they want and to follow their passion. However, students face various barriers that hinder their ability to start their own business. Thus, the aim of this study is to examine the relationship between perceived barriers to entrepreneurship and entrepreneurial intention. The target population of this research were students from a private university in Egypt. A questionnaire was distributed among students across different faculties using online and direct methods. Data was collected from a sample of 362 students and analyzed using SPSS to generate descriptive statistics, correlation, and regression analyses. Respondents' perception towards barriers to entrepreneurship (fear of failure, lack of skills and experience, lack of confidence, lack of general knowledge, lack of finance, lack of network, lack of personal/family support, time constrained, and lack of idea and market awareness) and their entrepreneurial inclination were assessed. Among the most important factors that were found to create barriers are: fear of failure, lack of self-confidence, lack of skills and experience, lack of knowledge, and lack of idea and market awareness. This research provides interesting insights into the entrepreneurship barriers faced by university students from a developing country such as Egypt, where such research is lacking.

**Keywords:** Entrepreneurial intention, university students, barriers to start-up, Egypt

### **1. Introduction**

Considerable agreement about the importance of promoting and fostering entrepreneurship activities in developed and developing countries is growing and has captured the attention of both scholars and policy makers during the last decades (Acs, Desai, & Hessels, 2008; Karadeniz & Göçers, 2007). The main reason of that is due to their contribution towards the gross domestic production (GDP) in countries. Entrepreneur, defined as the founder, owner, and manager of small business (Rauch & Frese, 2007) can change the way people live and work through their successful innovations that lead to better standard of living and economic wealth. The entrepreneurial activities has been considered as a source of innovation, job opportunities and economic growth (O'Connor, 2013). Researchers found that entrepreneurship growth is positively correlated with employment and economic growth (Mojica, Gebremedhin, & Schaeffer, 2010). Their role as incubators of technological innovation, catalyst for competitiveness and source of employment are widely supported (Reynolds, 1987; Zahra, 1999). As a result, there is growing need for entrepreneurs who accelerate economic development through generating new ideas and developing it to profitable venture. Thus, it becomes relevant to understand how young people might develop into entrepreneurs and the barriers that hinder their intention of becoming self-employed and setting up their own business. The growing viability of entrepreneurship has fostered individual

career options in entrepreneurship that is why it became one of the fastest growing subjects in undergraduate education (Brooks et al., 2007). The importance of start-ups cannot be underestimated and the role of government to stimulate their growth is vital. Previous studies focused on barriers facing students in developed countries with very few covering developing ones. Barriers facing entrepreneurs in developed countries might differ than those in developing countries, especially in Egypt. Thus, the main objective of this study is to determine the influence of perceived barriers on students' entrepreneurial intention. It is important to understand the difficulties that young entrepreneurs face in starting their business and their intentions.

The research question posed in this study is: "What barriers mostly discourage university students in Egypt from engaging in entrepreneurial activities". The result will contribute to developing appropriate strategies to remove and mitigate these barriers to foster entrepreneurship among youth. While providing policymakers with recommendation to support youth in developing their skills.

To address the research question, this paper is organized as follows. Section 2 will presents a review on the barriers to business start-up. Section 3 introduces the methodology used. Section 4 presents the key findings and discussion pertaining to business start-up barriers. Finally section 5 presents a conclusion, recommendation and limitations.

### ***1.1 Importance of Entrepreneurship in Egypt***

Entrepreneurship plays an important role in Egypt and around the world. According to the Global Enterprise Monitor (GEM), 57.3% of entrepreneurs in Egypt are driven by 'opportunity' while 42.4 % are 'necessity entrepreneurs' which is considered to be below the global level of 72% (GEM, 2016). As the country's socioeconomic and political situation is turning it into a burden, with its inability to provide the jobs required for Egypt's youth, the unemployment rate reached 12.5% in 2018 (CAPMAS, 2018). This is because the government and large companies have failed to provide job opportunities for youth. However, young people were forced to start their own firm as a 'necessity'. The "youth bulge" has motivated policymakers to support the entrepreneurship ecosystem and study the barriers to small business growth.

## **2. Literature Review**

Entrepreneurship literature suggests that entrepreneurial opportunities are affected by enterprising individuals and environment (Shane & Venkataraman, 2000). In the light of previous studies, there are different paths to entrepreneurship. First, there is the economic opportunity path, whereby entrepreneurs search for opportunities in the market and trends (Aldrich & Yang, 2012). Secondly, there is the reaction path, whereby entrepreneurs decide to start their business due to internal desire, society, being unemployed (Chrysostome, 2010). Finally, there is the cultural path, whereby starting their venture becomes the accepted norm (Aldrich & Yang, 2012). Regardless of which path individuals take, they all face barriers that hinder their inclination to start their new venture. Previous studies identified the most important and frequent barriers to start-up are: fear of failure (Kebaili et al., 2015); finance (Baron & Shane, 2007; Olawale & Garwe, 2010); management skills and experience (Longenecker et al., 1997; Smith & Smith, 2007), idea and market awareness (Joubert, 2004; Gray, 2006); self-confidence (Turker & Selcuk, 2009); time constrained (Lee & Wong, 2004); social network (Stuart & Sorenson, 2005); entrepreneurial knowledge (Jebarajakirthy & Thaichon, 2015).

## **2.1 Fear of Failure (Fear)**

One of the main barriers that affect potential entrepreneurs from starting their own business is fear of failure. The negative reaction of the society to those who fail hinders their intention to start their business (Kebaili et al., 2015). However, this might differ from culture to culture. A study done on Qatari entrepreneurs found that respondents were afraid to fail due to their culture perception. Those who fail are seen as incapable and incompetent that's why they do prefer guaranteed and regular income jobs (Kebaili et al., 2015). Moreover, a study conducted in Pakistan found that about 28% of the working population identified fear of failure as the main factor preventing them from starting their own business and to be their own boss (Mian & Qureshi, 2010). Based on this proposition it is hypothesized that:

*H1: Fear of failure is negatively related to university student's entrepreneurial intention.*

## **2.2 Self-Confidence (SLF)**

Self-confidence is an important aspect which plays an important role in personal success and development. It is defined as 'believing in oneself' which may have a positive impact on entrepreneurial inclination to start business. People with high level of self-confidence were found to have an optimistic self-view which makes them feel happier and able to convince others easier (Bè nabou & Tirole, 2002). As a result, individuals are more motivated to pursue their objectives and goals. It was suggested that people with high self-confidence are more optimistic and perceive their environment more favourable than those with low self-confidence (Turker & Selcuk, 2009). Based on the above discussion, it is hypothesized that:

*H2: Lack of self-confidence is negatively related to university student's entrepreneurial intention.*

## **2.3 Skills and Experience (Skill & Exp)**

Productivity is increasingly driven by skills which forms a core component of the country's economic strategy (Chevalier & Lindley, 2009). It is argued that graduates have the potential to build enterprise capabilities and fulfil skills gaps (Holden, Jameson, & Parsons, 2002) however, there is a deficiency in research addressing the lack of graduate skills. Young people face many difficulties that hinder their intention to start their business. They need enterprising skills and attitudes to be able to set and run the business while building their career (Davies, 2002). They need experience and managerial skills prior their engagement in setting-up their own business (Schamp & Deschoolmeester, 1998). Thus, many views stressed on the importance of encouraging young people to start their business and gain the required skills and experience. Therefore, it is hypothesized that:

*H3: Lack of skills and experience are negatively related to university student's entrepreneurial intention.*

## **2.4 Idea and market awareness (Idea & MK)**

Market awareness and access to information are regarded as an important element for the success of any business. It is crucial to have an epic idea and find a way to get people to pay for it. To know your customers' needs and wants facilitate the success of the product/service. Idea validation is likely to be a business success. Firm idea is the most difficult stage to acquire but the most important for the success of the venture (Vesper, 1990). Many successful new businesses enjoy longevity because their owners conduct regular market research to understand their target. Moreover, access to information enables entrepreneurs to identify consumer problems and pinpoint realistic competitors. A major barrier facing entrepreneurs to starting a new business is the lack of information (Pruett et al., 2009) as well as fierce competition from large firms (Ahmad, 2012). It was found that through the exploration of idea, individuals were motivated to start their new venture. Thus, it is hypothesized that:

*H4: Lack of idea and market awareness are negatively related to university student's entrepreneurial intention.*

## **2.5 Time Constraint (Time)**

Time constraints, among other situational factors such as task difficulty, is considered as one of the situational factors that affect the entrepreneurial intentions (Ajzen, 1987; Lee & Wong, 2004). Entrepreneurs involved in the creation of new ventures complain of lack of time. They need time to search and gather information regarding the market, opportunities, customer's needs and wants (Gray, 2002). However, it was suggested that further studies addressing channels whereby individuals can access information and communications technologies is required. Moreover, time is required for training, information scanning and developing ideas. Thus, it is regarded as one of the barriers hindering entrepreneurship. Therefore:

*H5: Time constraint is negatively related to university student's entrepreneurial intention.*

## **2.6 Finance (Finance)**

The literature on access to finance has confirmed a positive relationship between finance and entrepreneurial growth. Although accessing finance is key to the foundation of any business, particular concerns have been expressed about the ability of entrepreneurs to obtain external finance. There are many forms whereby start-ups can access capital: such as family and friends lending, credit card finance, banks, angel investors, and mutual guarantee schemes. However, the non-availability of fund and lack of cash that is necessary to run day-to-day operations affects negatively the decision to start new business. Thus, entrepreneurial finance became the most widely researched area and initiatives were made to investigate the impact of access to finance on start-ups (Cassar, 2004; Franke et al., 2008). Those who were not self-employed reported that the main reason constraining their decision was the lack of capital even if there was an opportunity (Blanchflower & Oswald, 1998). Supported by the work of Elston & Audretsch (2011), who found a negative impact of access to finance on US high- technology

entrepreneurs decision. Moreover, a study done among Tanzanian university graduates found that lack of finance was one of the most serious barriers to business start-up (Katundu & Gabagambi, 2016). Accordingly, the following hypothesis is formulated:

*H6: Lack of finance is negatively related to university student's entrepreneurial intention.*

## **2.7 Entrepreneurial Knowledge (Know)**

In modern economies, knowledge is arguably the most strategically important resource of a firm. The knowledge to establish and run a business is one of the most important factors affecting the creation of new ventures. The managerial know-how and operation is highly necessary for entrepreneurial initiatives, success, and economic sustainability (Widding, 2005). It constitutes the heart of entrepreneurship (Jebarajakirthy & Thaichon, 2015) and significantly affects entrepreneurial intention to start a new venture (Kor, Mahoney, & Michael, 2007). It is commonly understood that knowledge and proper access to it are the most important resources in entrepreneurship. Recent research found that individuals who possess prior knowledge about the market, the customers' needs, and their ability to serve markets affects significantly their entrepreneurial behavior (Shane, 2000). Another study conducted in the creative and digital industries in UK on seven graduates, found that the lack of knowledge hindered their attempt to start a business (Smith & Beasley, 2011). Additional support for this argument was demonstrated by Kolvereid & Moen (1997) who examined the effect of entrepreneurial knowledge on Norwegian university students. The results showed that entrepreneurial knowledge significantly impact entrepreneurial intention. Therefore, it might be expected that entrepreneurial knowledge would be directly related to entrepreneurial intention thus:

*H7: Lack of entrepreneurial knowledge is negatively related to university student's entrepreneurial intention.*

## **2.8 Personal/Family support (PFS)**

Family background plays an important role in shaping the career choice of their children and thus, their entrepreneurial intention. Previous studies found that family experience constitute a powerful socializing influence on the behaviors people adopt over the course of their lives. A study done by Carr & Sequeira (2007) found that family support affected the entrepreneurial intention of the respondents. Moreover, a study done on university hospitality students in the UK found that the family tradition influenced their intention to start a new business (Altinary et al., 2012). Therefore, it is hypothesized that:

*H8: Lack of personal/family support is negatively related to university student's entrepreneurial intention.*

## **2.9 Social Network (Network)**

Social networking has long been considered as an important catalyst for entrepreneurship (Burt, 1992) as it facilitates identification of opportunities thus, new venture chances (Elfring & Hulsink,

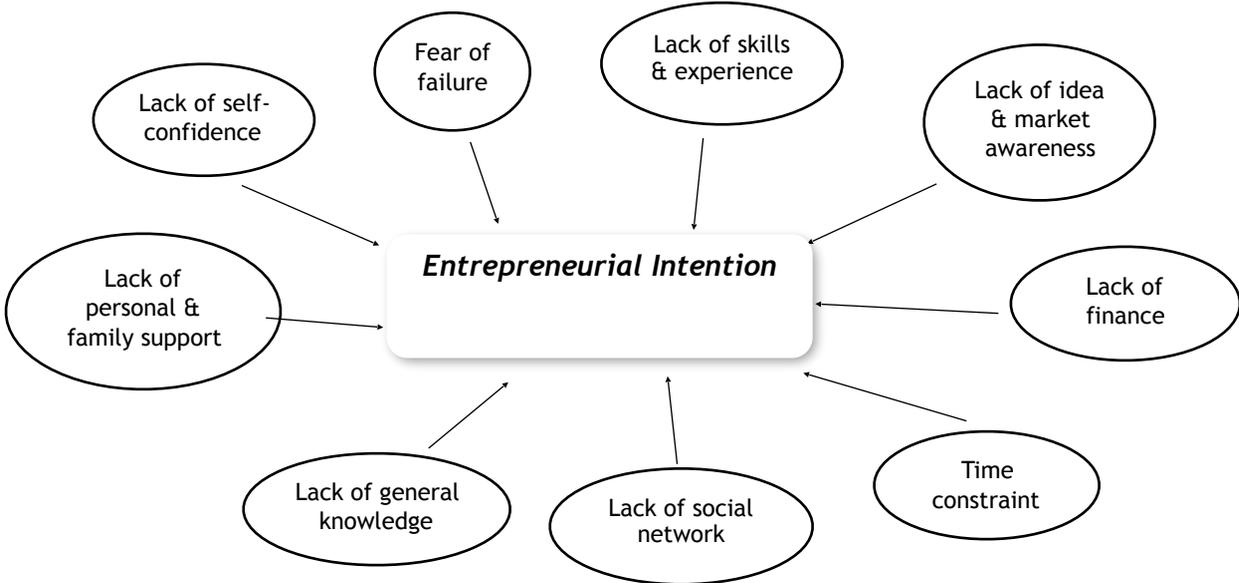
2003; Shane & Venkataraman, 2000). In addition to that, through networks entrepreneurs can access wide range of resources such as financial capital, skills, experience, market and technological information (Stuart & Sorenson, 2005; Garnsey, 1998). As a result, social network plays an important role in opportunity recognition and resource mobilization which motivates entrepreneurs to start their new venture. Those who are well connected are encouraged to set-up a new business. Therefore it is hypothesized that:

*H9: Lack of social network is negatively related to university student’s entrepreneurial intention.*

**2.1. Conceptual Model**

From the reviewed studies, the following conceptual model is developed. The model demonstrated in Figure 1 illustrates the possible impact of start-up barriers (fear of failure, lack of skills and experience, lack of confidence, lack of general knowledge, lack of finance, lack of social network, lack of idea and market awareness, time constraint, and lack of personal/family support) on university students’ entrepreneurial intention. Accordingly, nine hypotheses were formulated to examine their impact on youth inclination to start their own business.

**Figure 1- Conceptual Model**



### **3. Methodology**

The main aim of this study is to assess the barriers affecting entrepreneurial inclination among university students. The importance of studying a sample of university students is that it includes both tomorrow's entrepreneurs and those with no intention to get involved in entrepreneurial activities. The study examined graduates from a private university in Egypt based on convenience and accessibility. Efforts were made to collect data from all students across all faculties. As a result, the sample of 362 was obtained from undergraduate students covering business/management, engineering, and pharmacy faculties during the academic year 2017/2018.

#### ***3.1 Instruments and Measures***

This study adopted the quantitative research approach whereby a self-administered survey was filled out both online and personally. The survey was distributed using the university online system and was administered in classrooms before classes. The study applied a convenience (non-random) sampling method to select and recruit research participants. All individuals who were approached were assured that their names will not be disclosed and confidentiality will be strictly maintained. There was no obligation for the subjects to answer the survey online or in person. The total number of questionnaire collected reached 379 however, 17 questionnaire were non-usable due to missing important information. Thus, the final valid count reached 183 prints and 179 electronic surveys, totaling 362 respondents. The survey took 15 min to complete and data were collected between March and May 2018. It was constructed in English and was voluntary and anonymous.

The survey investigated the barriers to business start-up with a self-assessment of their entrepreneurial intentions. Entrepreneurship intention is defined as the behavioral intention to become an entrepreneur (Bird, 1988) and is derived from the theory of reasoned action (Fishbein & Ajzen, 1975). It was measured using 7 items reflecting one's willingness to do anything to start a business. The items were borrowed and validated from Davidsson (1995), Liñán & Chen (2006) and Solesvik et al. (2012) work. Students were asked to rate the extent to which they agree with each item in this scale in a 5-point Likert-type scale, where 1= "strongly disagree" and 5= "strongly agree". To measure the barriers, several factors were identified from the literature and measured using a dichotomous nominal scale where 0= "No" and 1= "Yes". Students were asked whether the list of barriers affect their intention to start their business or not.

### **4. Results and Discussion**

The data was analyzed with SPSS 25. In the first step, some descriptive results of the university students are presented. In the second step, the study examines the relationship between barriers to start-up and entrepreneurial intention among university students.

#### ***4.1 Respondent's background***

Table 1 reports the demographic characteristics of the respondents. The results indicate that 44.2% of the respondents were males and 55.8% females. The majority of respondents (62.4%) were

between the ages of 18-21. Out of the 362 respondents, 65.5% were in management/business, 24% engineering and 10.5% science faculties. An analysis on the overall responses of university students found that the most frequent barriers are: lack of finance 70.2%; lack of skills and experience 65.2%; lack of idea and market awareness 60.5%. On the other hand, not many students perceive family support 19.6% and self-confidence 24.9% as major barriers for starting their firm (see appendix 1).

**Table 1- Demographic characteristics of respondents**

		Frequency	%
<b>Age</b>	18-21	226	62.4
	22-25	123	34.0
	26-29	10	2.8
	Below 18	3	0.8
<b>Gender</b>	Female	202	55.8
	Male	160	44.2
<b>Study Major</b>	Business/Management	237	65.5
	Engineering	87	24.0
	Science (Medical/ Dentistry/Pharmacy)	38	10.5
<b>Study Year</b>	Year 1	63	17.4
	Year 2	38	10.5
	Year 3	96	26.5
	Year 4	137	37.8
	Year 5	28	7.7

#### 4.2 Entrepreneurial Intention (EI)

The internal consistency of the entrepreneurial intention scale was assessed through computing Cronbach's alpha. It indicates how well the items are positively correlated to one another (Sekaran, 2003). The closer Cronbach alpha is to 1, means that the internal consistency is high. Table 2 shows that the reliability analysis  $\alpha \geq 0.9$  which is considered to be excellent internal consistency.

**Table 2- Reliability Test**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.901	0.902	7

Table 3 shows the mean values and frequency values of the items used in the scale for measuring entrepreneurial intention among university students. The percentage of respondents that answered "SA" = strongly agree and "A" = agree reveal that university students hold a moderate-high level of entrepreneurial intention.

**Table 3- Entrepreneurial Intention**

Items	Mean	% SA and A
I am ready to do anything to be an entrepreneur	3.6	53.0
My professional goal is to become an entrepreneur	3.6	55.2
I will make every effort to start and run my own firm	3.9	66.0
I am determined to create a business venture in the future	3.9	71.0
I have very seriously thought about starting a firm	3.8	62.1
I intend to start a firm within five years of graduation	3.4	44.2
I have thought of entrepreneurship as a career option	3.8	65.8

Furthermore, a comparison between females and males were conducted to see if there is any difference towards perceived barriers. It was found that they have almost the same concerns regarding barriers to setting-up their business. Only fear of failure and lack of finance were reported higher in females 57%, 72% compared to males 46%, 67%, respectively.

#### 4.3 Testing the hypotheses

It was hypothesized that the fear of failure, lack of skills and experience, lack of self-confidence, lack of general knowledge, lack of finance, lack of social network, lack of personal and family support, time constraint and lack of idea and market awareness are negatively related to university student's entrepreneurship intention in Egypt. Thus, a correlation analysis was run with all nine barriers and entrepreneurial intention.

Table 4 presents the correlation analysis for the variables used in the study. The results showed that entrepreneurial intention of university students is negatively and statistically significant and related to fear of failure ( $r = -.256, p < 0.01$ ), lack of skills and experience ( $r = -.110, p < 0.05$ ), lack of self-confidence ( $r = -.238, p < 0.01$ ), lack of knowledge ( $r = -.104, p < 0.05$ ), and lack of idea and market awareness ( $r = -.126, p < 0.01$ ). However, lack of finance, lack of social network, lack of personal/family support, and time constraint were found to be insignificant. The negative correlations indicate that fear of failure, lack of skills and experience, lack of knowledge and lack of idea and market awareness create barriers to start-up. The first hypothesis was supported and the finding was supported by the work of Kebaili et al. (2015), Mian & Qureshi (2011) that fear of failure hinders the students' entrepreneurial intention. Students are afraid to take the risk and fail, which draws attention to the importance of supporting students to overcome their fear. As for the lack of self-confidence, it was found to be negatively and significant related to entrepreneurial intention thus, the second hypothesis is supported. On the other hand, the findings show a negative significant relationship between lack of skills and experience and entrepreneurial intention, thus, the third hypothesis is supported. The results is supported by the work of (Davies, 2002) where starting a business often requires entrepreneurs to have or obtain a wide variety of business skills.

Furthermore, the fourth hypothesis suggesting that lack of idea and market awareness to be negatively related to entrepreneurial intention is supported. Students who lack the idea and opportunity will not be able to compete in the market. They need to have an epic idea and aware of the market needs to be able to reap the benefit of their idea. Finally, the seventh hypothesis is supported and the finding indicates a negative significant relationship between lack of entrepreneurial knowledge and entrepreneurial intention. The results are supported by the work of Smith & Beasley (2011) and Kolvereid & Moen (1997). Knowledge is power and without that power entrepreneurs will not be able to start their business and operate it. The knowledge about the market is essential for the growth of entrepreneurship. On the other hand, hypotheses 5, 6, 8, and 9 were not supported.

**Table 4: Correlations among variables**

	EI	Fear	Skills & Exp.	SLF	Know	Finance	Network	PFS	Time	Idea & Market
EI	1.000									
Fear	-.256**	1.000								
Skills&Exp	-.110*	0.021	1.000							
SLF	-.238**	.282**	.165**	1.000						
Know	-.104*	0.081	.300**	.176**	1.000					
Finance	-0.037	-.116*	0.031	-0.002	0.055	1.000				
Network	-0.049	0.094	0.089	0.070	.212**	.164**	1.000			
PFS	-0.033	0.067	0.049	.157**	0.049	0.102	.125*	1.000		
Time	-0.071	-0.007	0.036	0.032	0.080	0.034	0.038	0.100	1.000	
Idea & Market	-.126*	0.030	.240**	0.060	.233**	-0.021	0.082	.110*	.179**	1.000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Furthermore, regression analysis was employed to further understand the impact of the barriers on university student's entrepreneurial inclination towards starting their business (see Table 5).

Note that around 10.4 % ( $R^2 = .104$ ) of the variance in the degree of entrepreneurial intention can be explained by the fear of failure, lack of skills and experience, lack of self-confidence, lack of entrepreneurial knowledge, lack of finance, lack of social network, lack of personal and family support, time constraint and lack of idea and market awareness. The model was found statistically significant at 0.001. The variables predicted the entrepreneurial intention of university students are fear of failure ( $\beta = -.355$ ,  $p < 0.001$ ) and lack of self-confidence ( $\beta = -.320$ ,  $p < 0.05$ ). The analysis of variance (ANOVA) test is also significant at 0.00.

**Table 5-Regression Coefficient**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.193	.124		33.793	.000
	Fear	-.355	.091	-.207	-3.890	.000
	Skills & Exp	-.026	.097	-.014	-.267	.790

SLF	-.320	.107	-.162	-2.997	.003
Know	-.053	.095	-.031	-.561	.575
Finance	-.131	.097	-.070	-1.346	.179
Network	.018	.090	.011	.201	.841
PFS	.069	.111	.032	.618	.537
Time	-.069	.088	-.040	-.777	.438
Idea & market	-.133	.094	-.076	-1.411	.159
Observations	362				
Adjusted R <sup>2</sup>	.104	F= 4.56	p<0.001		

a. Dependent Variable: EI

## 5. Conclusion, Recommendation & Limitations

Entrepreneurship intention is considered as the first step towards the creation of new venture. Although extensive research has been conducted to examine the entrepreneurial intention, few were found to address the barriers that hinders youth in establishing their business, especially in Egypt. Thus, the main purpose of this paper was to examine the barriers to entrepreneurial intention among university students in Egypt. This was done by surveying a sample of undergraduate students in one of the private universities. These students' perceptions and judgments are the basis of the research findings that fear of failure, lack of skills and experience, lack of self-confidence, lack of knowledge, and lack of idea and market awareness were negatively correlated with their entrepreneurial intention. The results of the regression analysis only found a significant effect of fear of failure and lack of self-confidence on the entrepreneurial intention of students. The model explains only 10.4 % of the variance of the dependent variable. The overall ranking of the factors that create barriers to start-up are as follows:

- Fear of failure (Beta= -.355 );and
- Lack of self-confidence (Beta= -.320).

Some recommendations can be made to policymakers as well as to education institutions to promote entrepreneurship in Egypt. Entrepreneurship is valued as a career option and every opportunity should be taken to recognize the role of policymakers and education institutions in promoting its activities among youth. Reforms that facilitate the creation of new venture helps in sending message that becoming an entrepreneur is important. On the other hand, universities play an important role in reducing the gap between theoretical and practical life. One way to overcome the fear of failure and lack of self-confidence is to create a healthy culture that promotes and encourages entrepreneurship. Provide training programs tailored to the need of young students. The need to strengthen entrepreneurship in universities and partnership with associations. The need for

thematic study on the subject of barriers for university students to understand in-depth the impact of barriers on their willingness to start their business.

However, this study has some limitations. Respondents who participated in this study are undergraduate students from one of the private universities in Egypt thus, it is highly recommended to include respondents from other private and public universities in the country. Moreover, the study focuses on intentions which might not turn into behaviors in the future. That is, the students who were found to have a high level of entrepreneurial intention might choose a different path in the future. There is a need for an accurate measurement for the entrepreneurial tendency. Moreover, since this study addressed students, there might be a difference in perception compared to reality. Another limitation is that the barriers factors were measured as a dichotomous variable.

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## Appendix 1

		Frequency	Percent	Valid Percent	Cumulative Percent
Fear	No	173	47.8	47.8	47.8
	Yes	189	52.2	52.2	100.0
	Total	362	100.0	100.0	
Skills&Exp	No	126	34.8	34.8	34.8
	Yes	236	65.2	65.2	100.0
	Total	362	100.0	100.0	
SLF	No	272	75.1	75.1	75.1
	Yes	90	24.9	24.9	100.0
	Total	362	100.0	100.0	
Know	No	196	54.1	54.1	54.1
	Yes	166	45.9	45.9	100.0
	Total	362	100.0	100.0	
Finance	No	108	29.8	29.8	29.8
	Yes	254	70.2	70.2	100.0
	Total	362	100.0	100.0	
Network	No	179	49.4	49.4	49.4
	Yes	183	50.6	50.6	100.0
	Total	362	100.0	100.0	
Family	No	291	80.4	80.4	80.4
	Yes	71	19.6	19.6	100.0
	Total	362	100.0	100.0	
Time	No	175	48.3	48.3	48.3
	Yes	187	51.7	51.7	100.0
	Total	362	100.0	100.0	
Idea & market	No	143	39.5	39.5	39.5
	Yes	219	60.5	60.5	100.0
	Total	362	100.0	100.0	

## **Workplace and individual spirituality congruence: Empirical evidence from Jordan**

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**Abstract:** Person Organization fit theory concerns how people flourish in a workplace that is congruence with their values and other traits. This paper seeks to highlight the theoretical relevance that workplace spirituality may add to the existing theory development of the P-O fit. In specific, it aims to empirically test the emerged framework that encompasses how workplace and self-spirituality match may enhance the perceived P-O fit. Drawing on a survey of the private and public sectors in Jordan, the results reveal that increasing the match in workplace and employees' spirituality positively enhances the perceived P-O fit. The importance of this paper is by generating a concept (i.e., P-O spirituality fit) beyond the already vast literature on P-O fit.

**Keywords:** Congruence, Person-Organization fit, Spirituality

### **1. Introduction**

Person-Organisation fit is the value congruence of person and organization (Afsar and Rehman, 2015). Kristof (1996) defines Person–Organization (P–O) fit as: “the compatibility between people and organizations that occurs when: (a) at least one entity provides what the other needs, or (b) they share similar fundamental characteristics, or (c) both” (p. 4–5). The literature touches on how the P-O fit relates to some behavioural (Hoffman and Woehr, 2006) and attitudinal (Verquer et al., 2003) outcomes, thus the exclusion of how to increase this fit leaves important gaps and “many important questions about the nature of person–organization congruence remain unanswered” (Hoffman and Woehr, 2006, p. 390). Hence, as Verquer et al. (2003) note, the P-O fit appears to be promising as an important determinant of employee attitudes and behaviours, however there are many intriguing questions yet to be understood.

The literature indicates various dimensions of P-O fit. For example, goal congruence, value congruence, needs-structure match and personality-climate fit (Kristof, 1996). As shown in the literature, there are other dimensions of the congruence between workers and their organisations which matter a great deal. For example, while much research has explored organization-level and individual-level factors that increase the P-O fit, far less attention has been made on how workplace spirituality may enhance the perceived P-O fit. Hence, this paper attempts to extend the classical dimensions of P-O fit by scrutinising ‘P-O spirituality fit’.

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<sup>1</sup> Tamer Koburtay is the first author

## **2. Theory and research foundations**

### ***2.1. Person-Organisation Fit***

The P-O fit concerns the consequences of the congruence between people and organisations in which they work (Kristof, 1996). The P-O fit includes various dimensions as follows: values, goals and personality of people as compared to the values, goals and climate of the organisation. Another paradigm is the needs-structure fit, which reflects a congruence between the needs of people and organisation in terms of processes (e.g., promotion and pay plans) (Verquer et al., 2003). The P-O fit has been assessed in relation to some behavioral (Hoffman & Woehr, 2006) and attitudinal (Verquer et al., 2003) outcomes. This paper, beyond these dimensions in the P-O fit, seeks to examine linkages between workplace spirituality and P-O fit.

The measures of P-O fit could be categorised as one of three ways; objective, subjective and perceived fit. Evaluating fit by incorporating someone else's perceptions of the organisation is labelled as objective fit. If the P-O fit includes a comparison of two sets of scores as assessed by the same person, to include his/her perception of him/herself and the organisation, it is labelled as perceived fit. Finally, if the individuals are asked to rate how they fit in with the organisation directly, the measure will be considered as subjective (Verquer et al., 2003).

The subjective fit procedure will be used by asking participant to rate how they fit in with the organisation directly. In addition, the perceived fit procedure will be utilised to assess people's perceptions about how they perceive themselves and their organisations in terms of spiritual fit or misfit. The justification for using the perceived fit is supported since this procedure allows researchers to test the value match at a perceptual level (Afsar & Rehman, 2015). Therefore, given that workplace spirituality assessment is based on perception-based evaluation of fit and because this field of research is more humanistic and philosophical (Milliman et al., 2017), the researcher deems that applying the perceived fit procedure is worthy.

### ***2.2. Spirituality at organisational and individual levels***

While classical theories of P-O fit emphasise the importance of fit in relation to objective and tangible job elements (e.g., pay, and job stability), workplace spirituality concerns fit (e.g., the interaction between an individual and his or her work environment) from a humanistic view to recognise "the more intangible human experience of work" (e.g., fulfilling deeply personal and spiritual needs for growth, and connection to a higher power) (Milliman et al., 2017, p.2). Thus the field of spirituality requires further empirical investigation to capture the theoretical constructs underlying ethical behaviours (Vitell et al., 2007).

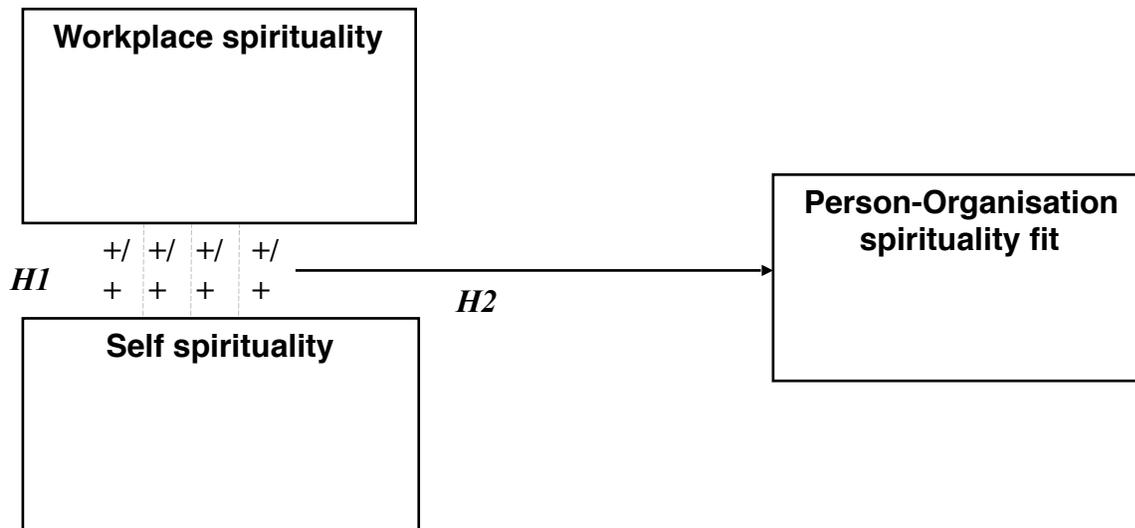
In relation to linkages between spirituality and the P-O fit, Afsar and Badir's (2017) results show that workplace spirituality is positively linked with P-O fit. Likewise, in their research that seeks to illustrate commonalities between workplace spirituality and P-O fit, Milliman et al. (2017) proposes that workplace spirituality is an important factor to enhance the perceived P-O fit.

In similar approach, Vallabh and Singhal (2014) propose a framework using P-O fit theory to enhance spirituality in the workplace. They suggest that spirituality can be described on a continuum ranging from high to low at both organisational and individual levels, and this interaction is then can be used to measure the (in)compatibility between them. Vallabh and Singhal (2014) recommend to empirically examine their framework. Following these arguments and in light of the foregoing discussion, this paper posits:

*H1. There is a fit between workers' evaluation of self-spirituality and organizational spirituality.*

H2. The match between self and workplace spirituality affects (+) the perceived P–O spirituality fit.

Figure 1. Theoretical framework



### 3. Method

This study contributes to the literature by collecting (and analysing) numerical data to examine the emerged theoretical framework. Given that a survey-based strategy is beneficial to reach large sample (Saunders et al., 2012) and to test a hypo-theoretical model (Gray, 2013), data was collected by the use of online self-completion questionnaire. This section discusses the instrumentation process, sampling protocol, procedure, data analysis and results.

#### 3.1. Measures

*Person-Organisation Spirituality Fit:* The measures of P-O fit are grouped into objective, subjective or perceived fit. Assessing the fit by including someone else’s perceptions of the organisation is considered as objective fit. When the P-O fit contains a comparison assessed by the same person, it is categorised as perceived fit. Finally, subjective fit measures ask the person/employee, in a straightforward manner, the extent to which they think their own characteristics match the characteristics of the organization (Verquer et al., 2003).

In the present study, the subjective and perceived fit was used. The subjective P-O fit scale was adopted from Cable and Judge (1996) to measure the P-O spirituality fit (see hypothesis 2). As shown below, slight changes have been made on the original scale to reflect participant’s perceptions of the P-O fit in terms of spirituality. Participant’s subjective perceptions of the fit between their spirituality and the workplace spirituality was measured with the questions, to what extent do you agree with the following statements: “The spirituality and religious facilities of your organization satisfy your own spiritual and religious needs; My personal religiosity and spirituality match my organization’s values and culture; My organization’s values and culture provide a good fit with the things that I value in life in terms of religion and spirituality”. Responses were anchored on a 5-point scale ranging from 1 strongly disagree to 5 strongly agree.

*Workplace Spirituality:* This study uses workplace spirituality scale (WSS) to examine the extent to which the workplace offers and values spiritual beliefs and practices. The WSS developed by Sheng and Chen (2012) as follows. In light of the aim of this study, the author selected 13 relevant items that mostly reflect a spiritual workplace. Some examples are as follows: At work, I'm willing to influence others with positive attitude and care; At work, I know how to mediate on myself; At work, I recognize myself and establish my career. For a full access to the scale, see Sheng and Chen (2012).

*Self-Spirituality (Self-Evaluation):* This study adopts Fetzer's (1999) Multidimensional Measure of Religiousness/Spirituality (MMRS). This measure is the standard measure of religiousness and spirituality (Koenig, 2008 cited in Freeman, 2011). There are long and brief forms of the MMRS which consist of 128 and 38 items respectively (Freeman, 2011). The brief measure includes a subset with 23 statements relevant to spiritual beliefs (spiritual beliefs, experiences and coping domain) and spiritual practices (Freeman, 2011). It also contains an overall self-ranking statements.

In light of the objectives of the present study, which mainly concern the congruity in employees-workplace spirituality, Fetzer's (1999) subsets of spiritual practices and overall self-ranking were selected. In addition to the brief MMRS scale, this study uses the intrinsic/extrinsic religious orientation scale adopted from Allport and Ross (1967). The scale would not appear to be measuring any specific religion, but rather a general religious orientation.

### **3.2. Procedure and demographic facts**

Following a convenience sampling protocol, an online questionnaire was used and respondents were approached through personalized email invitations as well as posting the questionnaire on social networks. This is justified since the aim of this paper is to test the framework in private and public sectors in Jordan. Therefore, due to this broad population, the sample was covered online. The questionnaires were distributed to employees during February 2018. In total, 132 questionnaires were received.

Some facts about the sample are as follows. The majority of the employees who participated in the survey work in the private sector (71.4%) and hold bachelor degree (75%). Also, 49.2% of the respondents are aged between 25-34. Half are males (50.8%) while females constitute 49.2%. Finally, regarding the religion, the percentages for Muslim and Christian employees were 99.2% and 0% respectively. About .08% stated that they are classified as other.

### **3.3. Reliability**

A reliability test was done by computing *Cronbach's Alpha* to confirm the internal consistency of all scales. Evidently, the reliability for all scales exceeds the cut-off point as follows (Workplace spirituality = 0.832; Self spirituality = 0.642; Person-Organisation fit = 0.806).

## **4. Analysis and results**

### **4.1. Paired t-test for testing hypothesis number one**

In comparison to workplace spirituality (M= 3.71, SD=.564), self spirituality received lower rating (M=3.59, SD=.487). In statistics, this variance between means reflects a non significant difference ( $p=.026$ ) by which the first hypothesis was supported by showing a congruence in how people evaluate workplace and their own spirituality.

### **4.2. Regression test**

To test how the match in workplace and employees' spirituality may enhance the perceived P-O fit (H2), we first calculated the interaction between workplace and employees' spirituality variables. Then a direct relationship was tested between the interaction and the perceived P-O fit variable. The result supports hypothesis two by showing that the congruence between participants'

perceptions of the workplace spirituality and their perceptions of their own spirituality significantly (+) affects the perceived P–O spirituality fit ( $\beta=.397, P=.000$ ).

## 5. Discussion

“The definition of P-O fit has been subject to confusion due to its multiple conceptualizations” (Kristof, 1996, p. 2). This confusion about what falls under the rubric of P-O fit requires further research to precisely determine what does this fit comprise. Since the most frequently used operationalization on P-O fit is the congruence between individual and organisational values, goals and climate (Kristof, 1996), this paper seeks to highlight the theoretical relevance that “people and workplace spirituality fit” may add to the P-O fit literature.

Our results show that when employees evaluate their workplace spirituality and their own spirituality in the same way (i.e., both high), the perceived P-O spirituality fit significantly increased ( $\beta=.397, P=.000$ ). This results supports Milliman et al.’s (2017) research that seeks to illustrate commonalities between workplace spirituality and P-O fit that shows that workplace spirituality is an important factor to enhance the perceived P-O fit.

Overall, this study goes beyond the extant literature (e.g., Kristof et al., 2014) that touches on the importance of fit in relation to objective and tangible job elements (e.g., pay, and job stability) through concentrating on the intangible human experience of work i.e., P-O spirituality fit.

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## **Competitive Analysis of the Global Oil and Gas Industry using Porters Five Forces Model**

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### **6. Abstract:**

The Structure Conduct Performance (SCP) model suggests that the structure of an industry has more bearing on the performance of firms operating in an industry (Mason, 1939, 1949; Bain, 1951 as cited in Lipczynsk et al 2013, p. 6; Bain 1956; Bain 1968). In view of the SCP model this study investigates the fundamental competitive drivers, that function within the global oil and gas industry -more specifically Exploration and Production (E&P) segment<sup>2</sup>- using Porter's (1979) Five Forces model, the study also attempts to assess the likely impact of these fundamental drivers on the profit potential of the industry. The results showed that, while customers bargaining power appears to be low, the power of suppliers might be of moderate strength and that the threat substitute products is still, far off, and less credible in the short run, it is also observed that the industry has high barriers to entry, Finally, the study revealed that there are both intensive rivalry and evidence for collaboration among existing players in the oil and gas industry.

**Key words:** Competitive Structure, Oil and Gas Industry, Porter's Five Forces, Profit Potential.

### **7. Introduction:**

In agreement with SCP advocates, Barney and Zajac (1994) strongly believed that, the market in which a company operate is a key factor that determine its profitability. If one accept this widely held view, competitive analysis would therefore expected to uncover a set of contextual underpinnings that act to inform companies strategic positioning based on an enlightened view of the external forces operating within the industry, to this, certainly, oil and gas industry is no exception. Caves and Porter (1977) (Porter, 1979; Porter, 2008) have strongly supported this SCP nation.

Therefore, this study is set to examine critically the market dynamics within the oil and gas industry and, to assess the profit potential of the industry in light of various competitive drivers.

On the basis of the overall objectives of the study five major issues will be addressed: To begin with, an assessment of whether there are threats of new firms entering the oil and gas industry will be investigated. Secondly, the study will try and review the seriousness of various attempts of substituting petroleum products with other alternative energy sources. Furthermore, is there a threat

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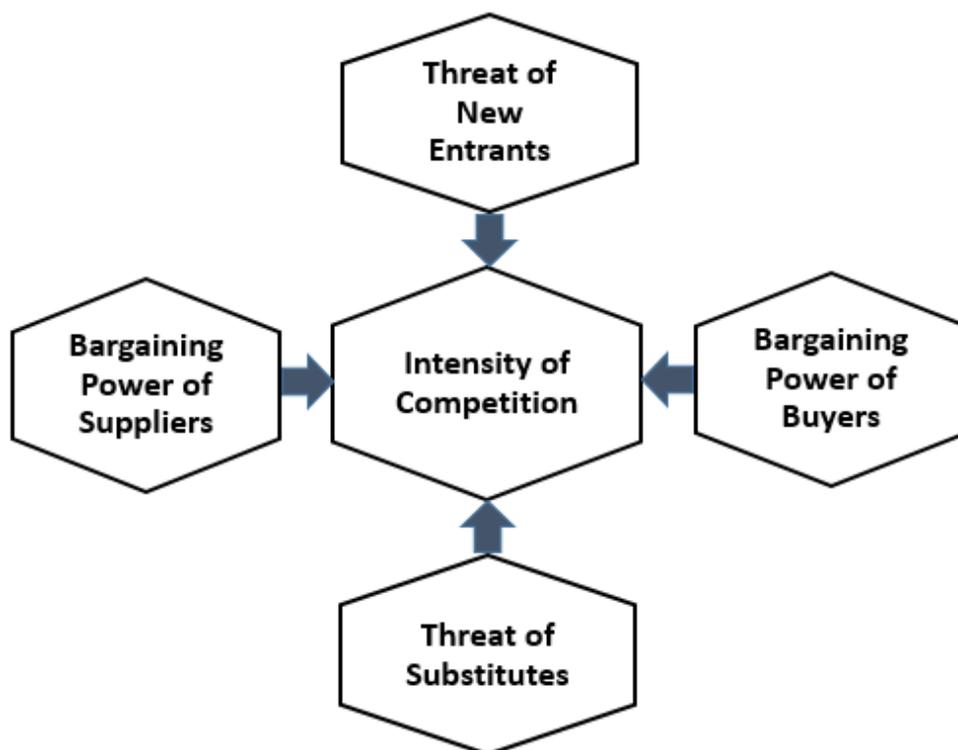
<sup>2</sup> For the purpose of this study the terms E&P industry and or oil and gas industry shall be used interchangeably to mean the global E&P sector of the industry.

of buyer's ability to negotiate lower prices? Similarly, are suppliers able to dictate own terms and conditions on oil and gas producers? The intense of rivalry among existing major players in the industry will be examined as well. Essentially, the study will try and highlight likely impact of each of these forces on the oil and gas industry profit potential.

## 8. Research Methodology:

Porter produced his pioneering (1979) Five Forces model to be used for industry structure analysis using five generic factors: Threat of new entrants, threat of substitutes, bargaining power of buyers, bargaining power of suppliers, and intensity of rivalry among existing firms (See figure-1 below).

It worth noting that, after almost three decades, in which the Five Forces model have been used widely by academics and practitioners alike, Porter stated that "Industry structure drives competition and profitability, not whether an industry is emerging or mature, high tech or low tech, regulated or unregulated" (Porter, 2008: 30). This model is still operational as a generic framework for competitive analysis of any industry, thanks to the degree of business image clarity provided by the model across the value chain (Brandenburger, 2002) and, the emphasis that the analysis results can be used for positioning the company in order to gain competitive advantage (Aktouf *et., al.*, 2005).



Porter (2008), Harvard Business Review

### Figure-01: Competitive Forces that Shape Strategy:

Threat of new entrants' means that there is a risk that new companies could enter the industry and compete with incumbents by gaining some share of the market, which may negatively impact on industry profit potential (Porter, 2008). However, barriers to entry could prevent new entrants from entering the industry. Barrier to entry includes: high capital requirements (Bain, 1956; Porter, 1979), high sunk costs and experience curve (Porter, 1979).

Porter (1979) rightly pointed out that substitute products as a competitive force has more strategic bearing, and should be taken more seriously in industries that are characterized by high profit rates and or when substitute products are experiencing positive trend in their price-performance ratio.

Bargaining power of suppliers is low when the suppliers’ financial viability is dependent on the industry they are serving. The relative size of suppliers and their monopoly power compared to industry clients is another factor to be considered (Grant, 1991).

Similar to bargaining power of buyers, various factors come into play when sizing the bargaining power of suppliers. As identified by Porter (1979) if buyers are organized in groups they could demand lower prices for products or services. Another factor is the size of the buyers and volume of their purchase. The availability of close substitutes and low degree of product differentiation could also make switching from one product to another much easier for buyers, which might increase the bargaining power of customers and hence dilute industry profitability (Peteraf, 1993).

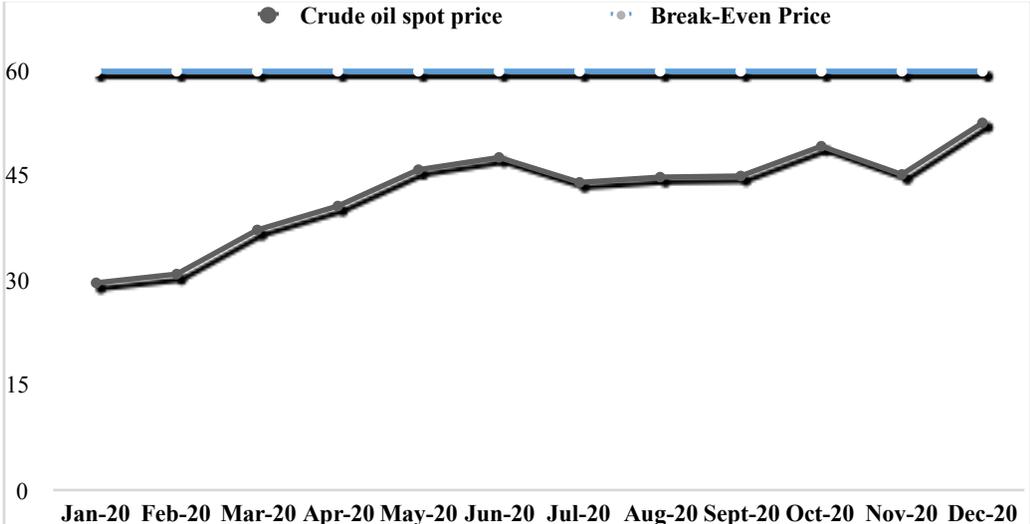
Porter (2008) cited various factors for signaling the degree of rivalry among incumbents, comprising: barriers to exit, high assets specificity and high fixed and sunk costs, this is particularly so when profitability is declining or when firms are making losses. The Degree of commitment of the incumbents and the prevalence of other non-profit making objectives tend to intensify the competition as well.

**9. Results and Discussion**

This section shows the resultant analysis from the application of the underline generic five forces of Porter to the oil and gas industry.

**9.1. Threat of new entrants:**

Oil and gas industry have various characteristics in regards to barriers to entry. For instance, this industry is highly costly and technical. As presented in figure-2 below, the breakeven price for deep-water Gulf of Mexico oil projects are higher than \$60/barrel (U.S. EIA, 2016) whereas, the weighted average crude oil spot price of Brent, Dubai and West Texas Intermediate was \$42.8/barrel in 2016 (Index Mundi, 2016). This indicates that given the current state of technology, event some of the most entrenched companies are making losses which could obviously deter aspirants.



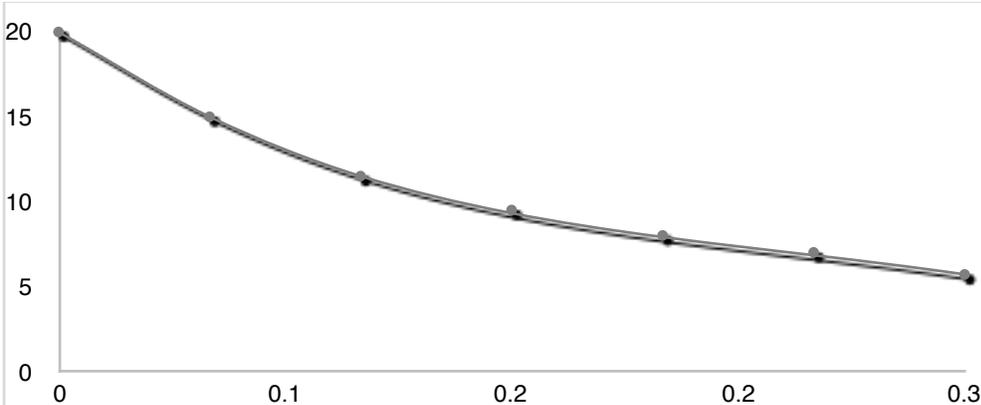
Source: Indexamundi.com and US EIA

**Figure-2: Crude oil average spot price (2016) vs breakeven price for a deep-water Gulf of Mexico oil project**

In the technical side, the possession of advance technology in the part of existing players can boost productivity while reducing costs (Santos *et al.* 1999 as cited in Hokron, 2014), making it more difficult for new contestants to operate at the same cost curve.

Moreover, for firms to enter into this industry they need to have strong ability to raise funds, which becomes rather difficult, in the presence of substantial sunk costs and high assets specificity (Worthington, 1995). Another barrier to entry in the extractive oil and gas business is high exit costs. By way of illustration, Campbell and Smith (2013) reported that in the UK it costs around \$10 million to plug and abandon a semisubmersible platform. These high exit costs may increase the incumbent commitment to fight, thus, deter the potential entrants from entering the industry.

There are many evidences to suggest that learning curve in oil and gas wells drilling is a source of competitive advantage that is hard to overcome by new entrants (Chi, 1978: and Bondy, 2015). Figure-3, illustrates that while it could take an operator with zero learning up to 20 years to breakeven, it might only take on average 5 years for an experienced operator to do, which is almost 4 folds advantage, this again another entry deterrence factors, emerging from the very unique characteristic of the oil and gas industry.



Source:

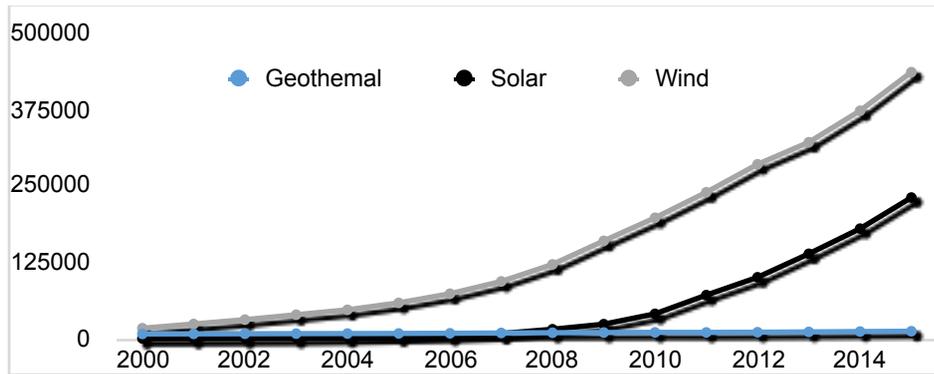
**Figure-3: Oil drilling projects breakeven time and learning rate**

First move, is another source of competitive advantage that incumbents enjoy over potential rivals. For instance, the majority of the most preferable and lucrative oil and gas fields might have already been occupied by major oil and gas players. Quigley (2014) report implied that these oil majors are holding on these strategic assets quite tightly.

The above mentioned factors represent massive barriers to entry to oil and gas industry, which may limit the pool of likely entrants. Consequently, making it possible for firms already operating in the industry to generate economic profit other things being equal.

**9.2. Threat of substitutes:**

As depicted in figure-4, the consumption of oil and gas alternative sources, such as wind, solar and geothermal are increasing at an increasing rate over time for the period from 2000- 2015 (BP Statistical Review, 2016). However, their expansion to the degree of significant substitution is faced by various challenges, a possible explanation for this might be that renewable energy production is linked with weather conditions. For example, sun light availability and limited dust are necessary for optimal solar energy production, this make alternative energy sources more of a locational specific.



**Figure-4. Historical trend of renewable energy sources**

Source: BP Statistical Review of World Energy June 2016  
 Non-hydro renewable electric energy might be cited as another potential substitute product to oil and gas. Davis and Owens (2003) using real options calculated that, the current annual funding for US non-hydro electric energy R&D program was only \$300 million, whereas the program requires around \$1.2 billion per year. Their study concluded that;

‘The optimal policy is to delay deploying RE and continue R&D funding until RE technologies become more competitive, which will take about 25 years according to the DCF model’ (Davis and Owens, 2003: 18).

This could possibly implies that, the US research and development program for non-hydro renewable electric energy was still in its early stages.

In terms of marketability, Sayigh (1999) claimed that renewable energy products penetration rate of the energy market have beaten expectations, and may represent around 10-15% energy of consumption by the year 2020. Conversely, McVeigh *et. al* (2000) found that these energy source have not been successful in achieving the expected US energy market penetration rate, although their production costs were cheaper than expected. The later point has been supported by Varma (2016), who argued that the price performance-ratio of various substitute products is improving. Nevertheless, switching costs from fossil to non-fossil fuel could be high, since the current machinery were predominately designed to operate on the earlier.

That being said, the challenges of threats of substitute products although highly likely in the longer terms seems to be less credible at least in the short to medium terms.

**9.3. Bargaining Power of buyers:**

The bargaining power of buyers depends to a large extend on the degree to which buyers are concentrated on organized groups. Although buyers of hydrocarbons are generally powerful countries such as the Chinese, American and Japanese governments which imports 18.6%, 15.9% and 7.3% of world crude oil respectively (Workman, 2018), this represents a massive 41% of the global oil market. However, despite their big size, the lack of a unified formation for oil buyers, could possibly, reduce the degree of hassles caused to producers. As pointed in the earlier discussion, the lack of credible substitutes to oil and gas products and the actuality of high switching costs to other alternatives, the bargaining power of customers might be low.

On top of this, the producers of oil and gas are big multinational companies (see table-1), this might at least, expectedly, restrain the ability of buyers to bargain and force prices down.

**Table-1: Top 10 Oil and Gas Producers**

Company	2017 Revenue in \$billion (as a proxy of size)	Nationality
Saudi Aramco	455	Saudi Arabia
Sinopec	488	China
China National Petroleum	428	China
ExxonMobil	268	USA
Royal Dutch Shell	265	Netherlands/UK
Kuwait Petroleum Corporation	251	Kuwait
Eni	131	Italy
Chevron Corporation	129	USA
BP	222	UK
Total	212	France

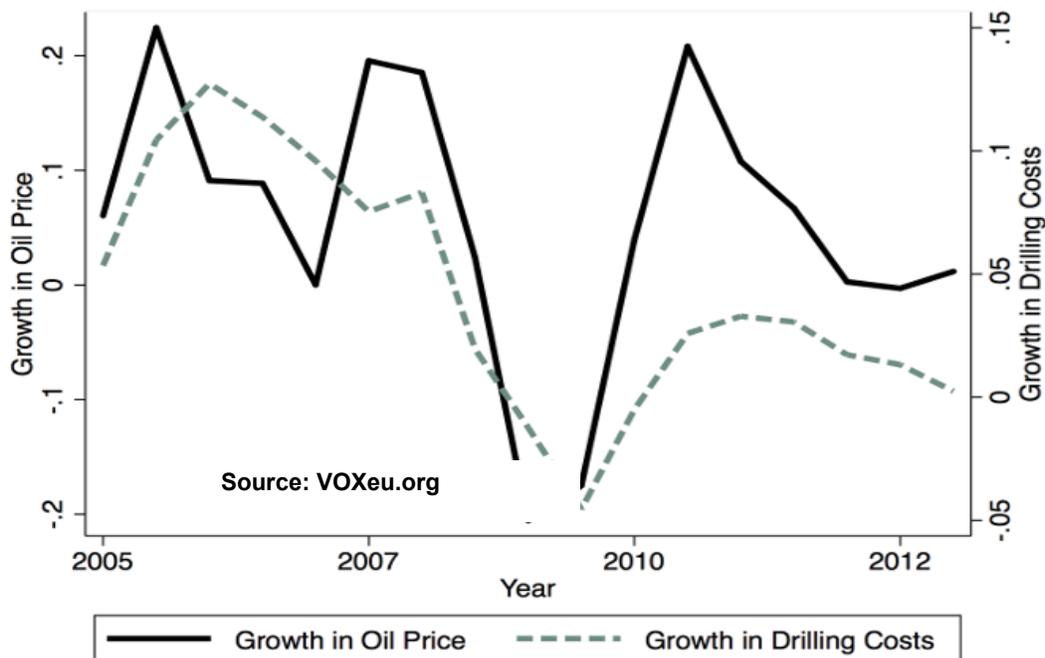
**Adapted from (Oil & Gas IQ.com)**

But, sellers’ ability to charge higher prices could still be low, because all products are homogenous with slight quality variations. Nevertheless, a group of the largest sellers of crude oil have organized themselves into the ‘Organization of the Petroleum Exporting Countries’ (OPEC), which could again weight down the ability of buyers to negotiate lower prices, and at the same time enable OPEC members to limit the chances of price collapse, primarily, through the determination of production quota. However, Dichristopher (2016) pointed out that OPEC members fight for market share among themselves, which is expected behaviour in any cartel, because there is tendency from some members to maximize own interests at the expenses of other members.

It follows then, neither buyers nor sellers have sufficient bargaining power to be forced upon each other. Overall, the prices of products sold by firms operating in this industry can be claimed to be largely determined by the interplay of supply and demand.

**9.4. Bargaining Power of Supplier:**

In the oil and gas industry some supplier are well established firms such as Schlumberger, Weatherford International, or China Oilfield Services Ltd, which suggests an ability to bargain. In a recent study Naumov and Toews (2016) found a strong relationship between oil prices and upstream capital costs (See figure-5).



**Figure-5; Growth in three-year moving average of the real oil price and drilling costs (2005-2012)**

The positive correlation between growth in oil prices and growth in drilling costs over the period from (2005 to 2012) could indicate that oil and gas service companies are very flexible, as they adjust their costing system to match oil prices fluctuations. This entails suppliers' ability to negotiate higher prices when economic conditions are good. On the other hand, and despite the high E&Ps dependence on their suppliers for execution of key operational activities across the oil and gas value chain, services companies are forced to lower their prices, in the environment of low oil prices (Marcel, *et al.* 2016). Further, Marcel *et al.* (2016) claimed that having their margin squeezed, the services companies are forced to move towards more integrative, collaborative and partnership operational models with their clients, sharing both risks and rewards with E&Ps, which means oil and gas companies are giving up part of the industry profit to top suppliers.

On balance, the bargaining power of suppliers is not strong to the degree that it affects firms' performance in a significant way. Nevertheless, the new trend of supplier-client partnership operational model may mean that part of the profit pie might cross the E&P industry boundaries.

**9.5. Intensity of competition:**

There are some evidences to suggest that rivalry in the oil and gas industry is very intensive, because the incentives to fight are rather high. By way of example, Quigley (2014) reported that, in 2012 the Chinese oil giant Sinopec have facilitated an extension of \$7.5 billion credit line to Angola in which it was producing more than 1.7 million barrels per day with projection to reach 2.0 million barrel per day starting 2014. In the same year Sinopec have paid \$2.5 billion to acquire 20% of OML 138 field in Nigeria. These are multibillion dollar projects, with huge future cash flow expectations, which have clearly incentivize Sinopec to try and cement its presence in West African region. Let alone other political motives for these multi-nationals.

It is also observed, the industry sales and residual income are very sensitive to economic situation. As demonstrated in figure (6 and 7) below, ExxonMobil and Chevron sales growth rate and residual income are negative for the period from (2013-2015). The negative growth in sales volume and the inability to generate economic rent by major players such as these, coupled with the high sunk costs and exist barriers in the industry- see section 4.1- represents entry barriers, but may also

signal a pre-commitment strategy, therefore, leading firms to compete more fiercely to recover these costs, in a somewhat harsh economic environment.

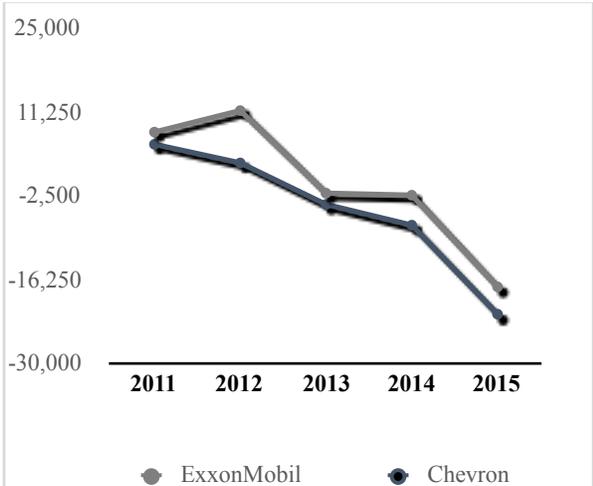


Figure-6: Residual Income at 10% level of Equity Charge for ExxonMobil and Chevron

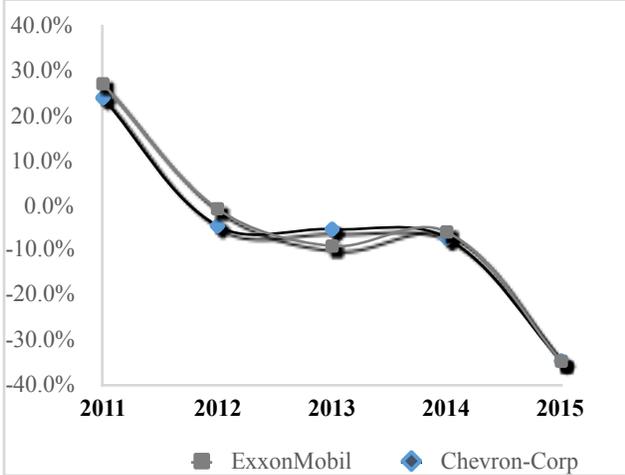


Figure-7: Sales Growth Rate for ExxonMobil and Chevron (2011-2015)

However, Hokron (2014) and Brogan *et. al* (2015) reported that oil and gas companies have various reasons to collaborate and operate jointly, in the form of joint venture for instance, this collaboration is driven by desire to share risks, get access to capital and technological capabilities and gain more market power.

Although, there is intense competition among rivals in the oil and gas industry, which might not be good for the industry profitability, there is tendency for oil and gas giants to collude, may somehow dilute the adverse effect of zero sum competition.

**Conclusion:**

The competitive analysis of the oil and gas industry has revealed that; this industry is hard to enter, possibly because of high capital requirement, high sunk costs and incumbents competitive advantage. Substitutes products started to penetrate the energy market with an increasing rate, but might only affect profitability of the industry in the distant future. The barraging power of buyers seems to be limited, primarily due to the relatively big size of producers and the organization of them in a cartel, and the fact that buyers are not organized in groups. Suppliers’ bargaining power seems to be moderate, although there are evidences of high dependence on them by E&P companies, thus posing some risk on industry profitability. The study found signs of intensive rivalry among existing players, because there are political interests and the desire to protect and

control of rich oil and gas assets, yet there is scope for collaboration driven by (high risk-high costs) nature of the oil and gas business. Finally, although, most oil majors are making accounting profit, the economic profit was negative for some of these companies at least in the last 3 to 5 years.

Despite the insights provided by Porter's 5-Forces model about the oil and gas industry competitive landscape, the analysis ignores the characteristics of individual firms operating in the industry, a limitation inherited from the model used. In reality, however, along with market structure what equally matters for companies' success is the possession of distinctive capabilities that help in creating and sustaining competitive advantage Wernerfel (1948).

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