

THE INFLUENCE OF ENTREPRENEURIAL ACTIVITY'S INNOVATION ON JOB CREATION

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ABSTRACT – The purpose of this study is to explore the influence of innovation in the total early entrepreneurial business activities (TEA) (i.e. nascent and new entrepreneurs) on job creation in the Sultanate of Oman. In other words, the objective of this research is to examine the extent to which current innovation types in entrepreneurial activities have an impact on creating jobs. The TEA innovation is measured by the ability of the enterprise to adopt new technology and the ability to create new products or services in the market. Based on the existing empirical studies, a conceptual model is developed accordingly. To achieve the research objective, this study applies the data collected from national Omanis at the individual level using the Global Entrepreneurship Monitor (GEM) data for the year 2020 to test the stated hypotheses. The sample of this study consist of 2000 Omani households who are involved in business entrepreneurial activities. Using structural equation modelling in PLS (SEM-PLS), the results reveals that the innovation in nascent and new entrepreneurs affects the level of created jobs in the Sultanate of Oman. The findings also demonstrate nascent and new entrepreneurs' innovativeness ability to create jobs reflected significantly on both current and expected creation of jobs.

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INTRODUCTION

Entrepreneurship is widely regarded as an engine that can contribute to the country's prosperity and economic growth (Ahmed, Rahim, Alabdullah, & Thottoli, 2019). Entrepreneurial activity plays a crucial role in both developed and developing countries represented mainly in its impact on economic development and growth (Luke et al., 2018; Urban & Muzamhindo, 2018; Badawi, Reyad, Khamis, & Hamdan, 2019). However, innovative small and medium enterprises (SMEs) have a greater influence on benefiting the country's economic growth (Alabdullah, Ahmed, & Ahmed, 2021). According to Zain et al. (2019), there is a significant difference in creativity and innovation among firms in three of the Gulf Cooperation Council (GCC) countries. The effect of context on the micro-processes of innovation and entrepreneurship has garnered little attention (Arabiyat et al., 2019). In effect, most literature has concentrated on the characteristics of individual cognitive of entrepreneurs with comparatively sparse research. Cognitive factors (i.e. finding opportunities, skills and abilities, and innovation and creativity) influence the development of entrepreneurship in developing countries (Al Mamari et al., 2020; Al-Madani, Fernando & Sin, 2022).

The theory of economic growth suggests that the growth of the countries' economic process is critically influenced by technical efficiency, technological progress, and capital accumulation (He et al., 2010; Ali & Oudat, 2021). Giotopoulou et al., (2017) highlighted the significance of new business' quality in supporting the growth of the economy. They determined high-quality entrepreneurship by the level of innovativeness and entrepreneurs' intentions to advance the growth of an enterprise. In the last decades, there are growing literature that acknowledges the link between entrepreneurship and innovation (Arabiyat et al., 2019; Aliasghar et al., 2020; Real, 2020). This has been encouraged by the data availability provided by the project of the Global Entrepreneurship Monitor (GEM), which distinguished between the rates of entrepreneurial activity and different types of these activities across countries (Estrin et al., 2016). Guerrero et al. (2018) mentioned that start-up business is less innovative because it does not create the number of jobs wished for economic growth. This business needs and requires a focus to have higher growth.

In Oman, the entrepreneurial activities faced some challenges and difficulties in different issues and various stages of entrepreneurial activities, especially in terms of the barriers to starting a business and the market failure (Al-Shukaili et al., 2018; Al-Kiyumi, Ahmed, Alabdullah, Shahrudin, & Putri, 2020; Al-Hattali, & Ahmed, 2021). The study conducted by Ataani et al. (2017) pointed out that there are some vital difficulties and challenges in the institutional environment concerning entrepreneurial activities in Oman. The set of problems and challenges above represents a call for scholars to research the economic growth in Omani entrepreneurial activities and the necessity of exploring issues that help enhance the performance of Omani entrepreneurial institutions. This is because enhancing the performance of the entrepreneurial business innovative activities ultimately leads to improving the economic performance of the country as a whole (Ahmed, Alabdullah, & Shahrudin, 2020; Mamari, Al-Ghassani, & Ahmed, 2022). One of the major topics to be investigated in

this field is the crucial influence of innovative entrepreneurial activity on enhancing citizens' employment opportunities (Kim et al., 2018; Malfense Fierro et al., 2018; Van Roy et al., 2018). According to Badawi et al. (2019), this topic is explored by very few studies and more importantly, a limited number of researchers used GEM data for the purpose of exploring the impact of business activity on the creation of jobs. Thus, with the limited previous evidence, the present study is a response to what was investigated in previous works and it aims at testing the impact of innovation in entrepreneurial activities and its impact on economic growth (job creation). In other words, this study aims to: i) examine the relationship between business activities innovation (i.e. new product, new process, and new technology) and its influence on current job creation, and ii) understand the relationship between business activities innovation (new product, new process, and new technology) and expected job that will be created in the future.

For this study, it was of interest to investigate the developed model that proposes the direct effect of innovative entrepreneurial activity on current and expected jobs. The current paper is expected to pivotally contribute to the existing literature by providing significant findings on the relationship between entrepreneurial business activity innovation and job creation in terms of current and expected jobs which will fill the knowledge gap. As few studies focused on investigating job creation predictors in the Omani context, this study will pave the way for policymakers and practitioners to identify and understand the critical factors affecting the effective creation of jobs and accordingly build plans, and short and long-term strategies.

In the next section, this paper presents the theoretical background on the relationship between innovative entrepreneurial activities and the creation of jobs. The third section depicts the method used in this study, followed by the results and discussion in sections four and five respectively. Implications and recommendations are presented in section six. Finally, the conclusion, limitations, and suggestions for future research are reported in sections seven and eight respectively.

Entrepreneurs' Activity

This part provides a brief overview of optimization algorithms followed by the application of OBL in optimization algorithms. Entrepreneurial activity is considered the key to any country's development and the heart of countries prosperity in terms of productivity and economic growth, innovativeness, and local and global market competitiveness (He et al., 2010; Kim et al., 2018; Lukeš et al., 2019; Shaharudin, Suhaimi, Fernando, & Husain, 2021; Shaharudin, Zulkifli, Gui, & Fernando, 2021). Moreover, the major role played by the entrepreneurial activities is concerned with the remarkable creation of employment opportunities (Marlow & Martinez Dy, 2018; Badawi, Reyad, Khamis, & Hamdan, 2019). Policymakers significantly focus on how policies can serve to strengthen the association between activated entrepreneurship ventures and economic growth. However, the enhancement of national and international competitiveness across countries all over the world is increasingly driven by entrepreneurial activities' quality level (Marlow & Martinez Dy, 2018; Liebrechts & Stam, 2019; Lukeš et al., 2019; Roundy & Fayard, 2019). The quality standards can be measured through indicators that represent the influence of entrepreneurial activities including innovation level, creativeness, and business capability in creating a high number of job opportunities (Fuentelsaz et al., 2018; Perenyi et al., 2018; Fazio et al., 2020). Fischer et al., (2019) investigated the effect of business activities on economic status improvement and found that the productivity generated from overall business activities has an essential impact on the entrepreneurship capacity to contribute to the country's output.

Job Creation and Entrepreneurs' Activity

The aspects of enhancing innovation and job creation focus on the importance of entrepreneurial activity as a driver factor (Cinar & Du, 2018; Fierro et al., 2018; Raza, Muffatto, & Saeed, 2019). The role of entrepreneurial activities in enhancing economic growth (job creation) was tested in the literature review based on institutional theory as a key dependent variable that might achieve and be strengthened as a significant goal as mentioned by Castaño et al. (2016), Arabiyat et al. (2019), and Lukeš et al. (2019). Several studies in the literature admit this reality; for example, there was a wave of studies done to investigate the role of entrepreneurial activities of institutions and their innovation instruments (He et al., 2010; Giotopoulos et al., 2017; Urban & Muzamhindo, 2018; Arabiyat et al., 2019; Tykkyläinen & Ritala, 2021; and Ali, & Oudat, 2021). The findings of Arabiyat et al., (2019) revealed the impact of specific institutional aspects on innovative entrepreneurship is enhanced. The results specify a significant positive impact on rates of entrepreneurial activity. For instance, He et al., (2010) focused to investigate the role of entrepreneurship in promoting technological progress of China's efficiency improvement. They find that the entrepreneurship level has promoted the level of technological progress and efficiency of resource allocation significantly in China. A study done by Cinar and Du (2018) examined the effect of comparing influential determinants of entrepreneurial activities in China with other countries. As a result, it provides an illustration that countries, including China, have to enhance knowledge and skill education if they want to promote small business entrepreneurship as a policy. Thereby, the authors proposed the following hypothesis:

H1: There is a positive relationship between business activity innovation and current job creation.

H2: There is a positive relationship between business activity innovation and expected job creation.

According to the above review of the literature, the following conceptual framework was developed based on previous studies:

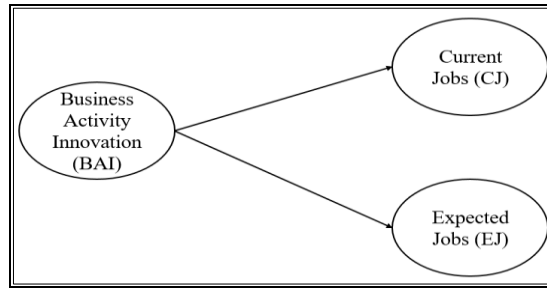


Figure 1. Conceptual Framework.

METHODOLOGY

A conceptual framework was developed in accordance with an extensive review of the literature with additional usage of Oman Global Entrepreneurship Monitor and GEM data for the year 2020. Our research sample includes Total-Early-Stage of Entrepreneurial Activity (TEA) who involved in the Oman 2020 GEM which comprises 2000 individuals and households. Quantitative research was implemented in this study to test the relationship between business activity innovation and job creation. The data were collected using questionnaires and structured interviews.

Table 1: Research Variables Measurements

Variables	Codes	Statement
Innovation	TEANEWPROD TEANEWPROC	Are any of your products or services new to people in the area where you live, new to people in your country, or new to the world? Are any of the technologies or procedures used for your products or services new to people in the area where you live, new to people in your country, or new to the world?
Current Jobs	TEA20JNW	Current number of jobs
Expected Jobs	TEA20J5Y	Expected number of jobs

As such, Smart Partial Least Squares Structural Equation Modeling (SmartPLS-SEM) was used in the analysis process. Furthermore, the descriptive analysis of the constructs and demographic characteristics of the respondents were described using SPSS software.

RESULTS

Summary of Response Rates

National Omanis at the individual level were asked about their demographic profile including their gender, age, education, and work status. The results demonstrate that most of the received responses were from Omani males (50.6%) with a slightly higher margin compared to females. The majority of Omani respondents were in the age brackets between 25 to 34 years old followed by the age brackets of 35 to 44 years old with 34.9% and 23.7% respectively. Most of the participants hold a secondary degree as an educational qualification with 42.9%. About 82% of the respondents are working either full or part-time.

Table 2. Demographic Characteristics

Category		Frequency	Percentage
Gender	Male	1012	50.6
	Female	988	49.4
Age	18-24	471	23.6
	25-34	698	34.9
	35-44	473	23.7

Education	45-54	226	11.3
	55-64	132	6.6
	None	248	12.4
	Secondary Degree	857	42.9
	Post-Secondary	737	36.9
	Expert Grade	138	6.9
Work Status	Working (Full/Part-time)	1644	82.2
	Not working	53	2.7
	Retired Students	4	.2

Descriptive Analysis

Table 3 shows the descriptive statistics of the study constructs. As per the following results, the dependent variables are current jobs and expected jobs with an average of 95.42 and a standard deviation of 18.27, while minimum and maximum results were 2.00 and 99.00 respectively for current jobs. Considering the results of the other dependent variable, expected jobs have an average of 92.77, and the standard deviation is represented in a value of 23.74. In addition, the minimum and maximum for expected jobs variables were revealed to be 2.00 and 99.00 respectively. The independent variable represented in business activity innovation has an average value of 83.20 and 36.06 for standard deviation.

Table 3. Descriptive Statistics

	Mean	Min	Max	Standard-D
BAI	83.20	0.00	99.00	36.06
EJ	92.77	2.00	99.00	23.74
CJ	95.42	2.00	99.00	18.27

Note: BAI: Business Activity Innovation; EJ: Expected Job; CJ: Current Job

Discriminant Validity

There are criteria applied in the PLS to set discriminatory power. The square root of each AVE for each structure should have a high correlation level including other combinations. Additionally, the measures of constructors should not, in theory, be closely related to each other to prove discriminatory validity through evidence. The results below indicate that the correlation of each construct with itself is higher than the correlation with others, demonstrating acceptable discriminant validity.

Table 4. Discriminant Validity Construct

	BAI	CJ	EJ
BAI	1.000		
CJ	0.447	1.000	
EJ	0.599	0.455	1.000

Note: BAI: Business Activity Innovation; CJ: Current Job; EJ: Expected Job

R Square

The structural model analysis was performed once the measurement model was analyzed and passed all criteria. The test associated with the coefficient of determination (R²) was completed. During this work, the dependent variable is job creation is shown to have an R² of 0.20 for the current job and 0.35 for the expected job.

Table 5. Explanation of the Variance

Matrix	R Square	R Square A
CJ	0.200	0.200
EJ	0.359	0.358

Note: CJ: Current Job; EJ: Expected Job

Hypothesis Testing

Table 6 shows the findings related to the structural model and the proposed hypotheses indicate that all hypotheses are supported. The results demonstrate that the business activity innovation positively and significantly affects the

creation of current jobs, where the results show $p < 0.001$, $t = 18.891$. This result indicates that the business activity innovation has a positive impact on job creation.

Furthermore, the findings show that the business activity innovation has a positive and significant impact on the creation of expected jobs where the results show $p < 0.001$, $t = 27.200$. This finding indicates that the business activity innovation has an influence on job creation.

Table 6. Path Coefficients

Hypotheses		Original Sample	Sample Mean (M)	Standard Deviation	T Statistics (O/STDEV)	P Values	Decision
H1	BAI -> CJ	0.447	0.447	0.024	18.891	0.000	Supported
H2	BAI -> EJ	0.599	0.598	0.022	27.200	0.000	Supported

Note: Significance levels: *** $P < 0.001$ ($t > 3.33$), ** $p < 0.01$ ($t > 2.33$), * $p < 0.05$ ($t > 1.605$)

Note: BAI: Business Activity Innovation; CJ: Current Job; EJ: Expected Job

Impact of Business Activity Innovation on Job Creation

Around the world, the creation of jobs witnesses a notable reliance on the entrepreneurship industry. Recently, a shift in the employment strategies and procedures takes remarkable place in most countries due to the activated role played by entrepreneurial enterprises. Moreover, the expectation of new creation of employment opportunities increasingly moved to the generation of entrepreneurship industry. Entrepreneurship-related activities are able to create new employment opportunities locally and internationally and the critical impact of innovative business activities on the creation of jobs consequently influences the overall economic growth.

Business activity innovation is considered one of the important tools in the entrepreneurship industry that controls the intentions of entrepreneurs to enhance the growth and performance of entrepreneurial institutions. The findings of the study reveal in there is a significant and positive link between the business activity innovation and job creation (current job: $P < 0.001$, $t = 18.891$), (expected job: $P < 0.001$, $t = 27.200$). These findings are in line with some previous studies that showed that business activity innovation is considered one of the key factors in job creation features. However, the results line the significant outcome on business activity indicating that the role of certain specific innovation practices aspects of micro-processes of innovative entrepreneurs has appeared in the case of Oman. Therefore, in terms of entrepreneurship, the establishment of an innovative activity will improve the accuracy and quality of job creation and will ensure the entrepreneurs and new investors that the business activity is on the right path.

This study fills the knowledge gap by investigating the effect and association between business activity innovation on both measures of job creation; current and expected jobs. After analysing the results according to the conceptual framework (see Figure. 1), it was found that there is a positive and significant effect of business activity innovation on the creation of current jobs. This direct and significant relationship is consistent with various prior researches that debated that an increasing number of jobs opportunities and a dynamic economy are linked to the extent of innovativeness standards generated from entrepreneurial activities (Hessels et al., 2016; Kim et al., 2018; Malfense Fierro et al., 2018; Van Roy et al., 2018). Furthermore, the findings manifest that a direct and significant association was found between the innovation of business activities and the expected creation of jobs, which is also supported by previous studies (Zamberi Ahmad & Xavier, 2012; Van Roy et al., 2018; Liebrechts & Stam, 2019; Lukeš et al., 2019; Tykkyläinen & Ritala, 2021).

IMPLICATIONS AND RECOMMENDATIONS

The current study has theoretical and empirical implications. A theoretical implication regarding the entrepreneurship industry is likely to focus on elements that faced mismanagement and simultaneously slack in creating the number of jobs through micro-processes of innovative entrepreneurs. An empirical implication mentioned by the current study is regarding the entrepreneurial activity's innovation in the Sultanate of Oman. Entrepreneurial activity innovation in the Sultanate of Oman has an effect on job creation belonging to the entrepreneurship industry. The recommendations for the future study lie in explaining several matters. First, the fact that entrepreneurial activity's innovation in the Sultanate of Oman environment has to experience debate over several issues: there is no research done in such context to deal with entrepreneurial activity's innovation in Oman. Second, innovation as an important tool was not sufficiently examined by scholars except by very few studies. Third, job creation is a convincing issue that must be taken into account by scholars specializing in the entrepreneurship industry.

CONCLUSION

Economic growth and development are significantly pertinent to the entrepreneurship industry improvement in various aspects, especially in terms of innovative enterprise development. The greater implementation of innovative ideas has a greater ability to enhance the number of created jobs by the activities embedded in the entrepreneurship industry. However, the current and expected jobs created by the entrepreneurship industry are driven by the overall competitiveness of this industry which is determined by business activities' innovativeness. Hence, this industry is facing multiple

challenges and difficulties that restrict the advancement of business activities. The better application of supporting strategies that encourage entrepreneurs' participation in the competitive environment is by utilizing the advantages of available opportunities. Moreover, developing national mechanisms that aim to provide an increasing number of employment opportunities will notably give an impact on the country's economic conditions.

LIMITATIONS AND DIRECTIONS FOR FURTHER STUDY

As the collected data contains individual households and entrepreneurs, this study needs a greater emphasis on gathering data from entrepreneurs to get more precise information on the challenges faced by Omani nascent, new, and established entrepreneurs. In the respect of the study limitation, avenues for future research were attained. It is highly recommended to conduct a future study based on data collected from Omani entrepreneurs solely. Furthermore, scholars are recommended to investigate the moderate impact of gender and education on the relationship between business activity innovation and job creation.

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REFERENCES

- Ahmed, E. R., Rahim, N. F. A., Alabdullah, T. T. Y., & Thottoli, M. M. (2019). An Examination of Social Media Role in Entrepreneurial Intention among Accounting Students: A SEM Study. *Journal of Modern Accounting and Auditing*, 15(12), 577-589.
- Ahmed, E. R., Alabdullah, T. T. Y., Shaharudin, M. S., & Putri, E. (2020). Further Evidence on The Link Between Firm'S Control Mechanisms and Firm Financial Performance: Sultanate of Oman. *Journal of Governance and Integrity*, 4(1), 6-11.
- Ahmed, E. R., Alabdullah, T. T. Y., & Shaharudin, M. S. (2020). Approaches to control mechanisms and their implications for companies' profitability: A study in UAE. *Journal of accounting Science*, 4(2), 11-20.
- Alabdullah, T. T. Y., Ahmed, E. R., & Ahmed, R. R. (2021). Organization features and profitability: Implications for a sample of Emerging Countries. *JABE (Journal of Accounting and Business Education)*, 5(2), 43-52.
- Ali, B. J., & Oudat, M. S. (2021). Board characteristics and intellectual capital performance: empirical evidence of bahrain commercial banks. *Academy of Accounting and Financial Studies Journal*, 25(4), 1-10.
- Ali, B. J., & Oudat, M. S. (2021). Accounting Information System and Financial Sustainability of Commercial and Islamic Banks: A Review of The Literature. *Journal of Management Information & Decision Sciences*, 24(5).
- Al-Madani, M., Fernando, Y., & Sin, P. W. (2022). Implications of Blockchain Deployment in Energy Supply Chain Management: Report Integrity. *International Journal of Industrial Management*, 13(1), 408-421.
- Al Mamari, F., Mondal, S., Al Shukaili, A., & Kassim, N. M. (n.d.). Effect of self-perceived cognitive factors on entrepreneurship development activities: An empirical study from Oman global entrepreneurship monitor survey. *Journal of Public Affairs*, e2363.
- Al Shukaili, A., Cucculelli, M., González-Pernía, J. L., & Peña, I. (2018). Entrepreneurship policy to overcome barriers to new firm growth in a developing economy: Evidence from Oman. *International Journal of Entrepreneurship and Small Business*.
- Aliasghar, O., Sadeghi, A., & Rose, E. L. (2020). Process innovation in small- and medium-sized enterprises: The critical roles of external knowledge sourcing and absorptive capacity. *Journal of Small Business Management*, 00(00), 1–28. <https://doi.org/10.1080/00472778.2020.1844491>
- AL-kiyumi, R. K., AL-hattali, Z. N., & Ahmed, E. R. (2021). Operational Risk Management and Customer Complaints in Omani Banks. *Journal of Governance and Integrity*, 5(1), 200-210.
- Arabiyat, T. S., Mdanat, M., Haffar, M., Ghoneim, A., & Arabiyat, O. (2019). The influence of institutional and conductive aspects on entrepreneurial innovation: Evidence from GEM data. *Journal of Enterprise Information Management*, 32(3), 366–389. <https://doi.org/10.1108/JEIM-07-2018-0165>
- Ataani, R. A. A. L., Ainwright, T. H. W., & Emirel, P. E. D. (2017). Hidden Entrepreneurs: Informal Practices within the Formal Economy. 14, 361–376. <https://doi.org/10.1111/emre.12115>
- Badawi, S., Reyad, S., Khamis, R., & Hamdan, A. (2019). Business education and entrepreneurial skills: Evidence from Arab universities Business education and entrepreneurial skills: Evidence. *Journal of Education for Business*, 0(0), 1–10. <https://doi.org/10.1080/08832323.2018.1534799>
- Badawi, S., Reyad, S., Khamis, R., Hamdan, A., & Alsartawi, A. M. (2019). Business education and entrepreneurial skills: Evidence from Arab universities. *Journal of Education for Business*, 94(5), 314–323. <https://doi.org/10.1080/08832323.2018.1534799>
- Castaño, M. S., Méndez, M. T., & Galindo, M. Á. (2016). Innovation, internationalization and business-growth expectations among entrepreneurs in the services sector. *Journal of Business Research*, 69(5), 1690–1695. <https://doi.org/10.1016/j.jbusres.2015.10.039>

- E. Mine Cinar, Yu Du, T. H. (2018). Chinese Entrepreneurship Attributes: A comparative GEM data analysis. *Journal of Entrepreneurship in Emerging Economies*.
- Estrin, S., Mickiewicz, T., & Stephan, U. (2016). Human capital in social and commercial entrepreneurship ☆. *Journal of Business Venturing*, 31(4), 449–467. <https://doi.org/10.1016/j.jbusvent.2016.05.003>
- Fazio, C., Guzman, J., & Stern, S. (2020). The Impact of State-Level Research and Development Tax Credits on the Quantity and Quality of Entrepreneurship. *Economic Development Quarterly*, 34(2), 188–208. <https://doi.org/10.1177/0891242420920926>
- Fischer, B. B., Moraes, G. H. S. M. de, & Schaeffer, P. R. (2019). Universities' institutional settings and academic entrepreneurship: Notes from a developing country. *Technological Forecasting and Social Change*, 147(July), 243–252. <https://doi.org/10.1016/j.techfore.2019.07.009>
- Fuentelsaz, L., Maicas, J. P., & Montero, J. (2018). Entrepreneurs and innovation: The contingent role of institutional factors. *International Small Business Journal: Researching Entrepreneurship*, 36(6), 686–711. <https://doi.org/10.1177/0266242618766235>
- Giotopoulos, I., Kontolaimou, A., & Tsakanikas, A. (2017). Drivers of high-quality entrepreneurship: What changes did the crisis bring about? *Small Business Economics*, 48(4), 913–930. <https://doi.org/10.1007/s11187-016-9814-x>
- Giotopoulou, I., Kontolaimou, A., & Tsakanikas, A. (2017). Drivers of high-quality entrepreneurship: What changes did the crisis bring about? April. <https://doi.org/10.1007/s11187-016-9814-x>
- Guerrero, M., Urbano, D., Cunningham, J. A., & Gajón, E. (2018). Determinants of Graduates' Start-Ups Creation across a Multi-Campus Entrepreneurial University: The Case of Monterrey Institute of Technology and Higher Education. *Journal of Small Business Management*, 56(1), 150–178. <https://doi.org/10.1111/jsbm.12366>
- He, B., Li, Z., & Vinig, T. (2010). Entrepreneurship, technological progress and resource allocation efficiency: A case of China. *Journal of Chinese Entrepreneurship*, 2(3), 242–254. <https://doi.org/10.1108/17561391011078730>
- Hessels, J., Rietveld, C. A., & Zwan, P. Van Der. (2016). Self-employment and work-related stress: The mediating role of job control and job demand. *Journal of Business Venturing*. <https://doi.org/10.1016/j.jbusvent.2016.10.007>
- Kim, K. C., ElTarabishy, A., & Bae, Z. T. (2018). Humane Entrepreneurship: How Focusing on People Can Drive a New Era of Wealth and Quality Job Creation in a Sustainable World. *Journal of Small Business Management*, 56, 10–29. <https://doi.org/10.1111/jsbm.12431>
- Liebrechts, W., & Stam, E. (2019). Employment protection legislation and entrepreneurial activity. *International Small Business Journal: Researching Entrepreneurship*, 37(6), 581–603. <https://doi.org/10.1177/0266242619836358>
- Luke, M., Cristina, M., & Zouhar, J. (2018). Technovation Do business incubators really enhance entrepreneurial growth? Evidence from a large sample of innovative Italian start-ups. July. <https://doi.org/10.1016/j.technovation.2018.07.008>
- Lukeš, M., Longo, M. C., & Zouhar, J. (2019). Do business incubators really enhance entrepreneurial growth? Evidence from a large sample of innovative Italian start-ups. *Technovation*, 82–83(June 2017), 25–34. <https://doi.org/10.1016/j.technovation.2018.07.008>
- Malfense Fierro, A. C., Noble, D., Hatem, O., & Balunywa, W. (2018). African portfolio entrepreneurship and the creation of jobs. *Journal of Small Business and Enterprise Development*, 25(5), 730–751. <https://doi.org/10.1108/JSBED-02-2017-0074>
- Marlow, S., & Martinez Dy, A. (2018). Annual review article: Is it time to rethink the gender agenda in entrepreneurship research? *International Small Business Journal: Researching Entrepreneurship*, 36(1), 3–22. <https://doi.org/10.1177/0266242617738321>
- Mamari, S. H. A., Al Ghassani, A. S., & Ahmed, E. R. (2022). Risk Management Practices and Financial Performance: The Case of Sultanate of Oman. *Journal of Accounting Science*, 6(1), 69-83.
- Perenyi, A., Zolin, R., & Maritz, A. (2018). The perceptions of Australian senior entrepreneurs on the drivers of their entrepreneurial activity. *International Journal of Entrepreneurial Behaviour and Research*, 24(1), 81–103. <https://doi.org/10.1108/IJEER-12-2016-0424>
- Raza, A. and Muffatto, M. and Saeed, S. (2019). The Influence of Formal Institutions on the Relationship Between Entrepreneurial Readiness and Entrepreneurial Behaviour: A Cross-Country Analysis (Vol. 44, Issue 0).
- Real, C. (2020). The role of innovation and institutions in entrepreneurship and economic growth in two groups of countries. 26(3), 485–502. <https://doi.org/10.1108/IJEER-06-2019-0336>
- Roundy, P. T., & Fayard, D. (2019). Dynamic Capabilities and Entrepreneurial Ecosystems: The Micro-Foundations of Regional Entrepreneurship. *Journal of Entrepreneurship*, 28(1), 94–120. <https://doi.org/10.1177/0971355718810296>
- Shaharudin, M. S., Suhaimi, S., Fernando, Y., & Husain, W. A. F. W. (2021). Improvement of Green Procurement Performance in the Global Supply Chain: Evidence from Enterprise Resource Planning and Social Network Analysis. *International Journal of Industrial Management*, 10, 173-194.
- Shaharudin, M. S., Zulkifli, W. N., Gui, A., & Fernando, Y. (2021). Drivers Human Resources 4.0: Technological, Organisational & Environmental of Human Resources 4.0 at Malaysian Private Companies. *International Journal of Industrial Management*, 12(1), 306-318.
- Tykkyläinen, S., & Ritala, P. (2021). Business model innovation in social enterprises: An activity system perspective. *Journal of Business Research*, 125(February 2019), 684–697. <https://doi.org/10.1016/j.jbusres.2020.01.045>
- Urban, B., & Muzamhindo, A. (2018). An Empirical Investigation into Institutions Unlocking Entrepreneurial Activity. *Journal of Entrepreneurship*, 27(1), 65–82. <https://doi.org/10.1177/0971355717738597>

- Van Roy, V., Vértesy, D., & Vivarelli, M. (2018). Technology and employment: Mass unemployment or job creation? Empirical evidence from European patenting firms. *Research Policy*, 47(9), 1762–1776. <https://doi.org/10.1016/j.respol.2018.06.008>
- Zain, M., Kassim, N. M., Khan, G. M., & Shukaili, A. M. A. (2019). A comparative assessment of firms' creative climate across selected Gulf countries (Oman, Qatar and Saudi Arabia). *Journal for Global Business Advancement*, 12(6), 839–859.
- Zamberi Ahmad, S., & Xavier, S. R. (2012). Entrepreneurial environments and growth: Evidence from Malaysia GEM data. *Journal of Chinese Entrepreneurship*, 4(1), 50–69. <https://doi.org/10.1108/17561391211200939>

CONFLICT OF INTEREST

None

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