Business Sciences Review
ISSN : 1112-3818 /EISSN : 2602-5396

Special Issue: June 2021
Pages:7-24

THE IMPACT OF ENTREPRENEURSHIP ON ECONOMIC GROWTH: EMPIRICAL EVIDENCE FROM SELECTED AFRICAN COUNTRIES.

Abdelhadi BENGHALEM*
MECAS Laboratory, Faculty of Economics and Management, Tlemcen University, Algeria.
abdelhadi.benghalem@univ-tlemcen.dz

Samir baha-eddine MALIKI
MECAS Laboratory, Faculty of Economics and Management, Tlemcen University, Algeria.
samir.maliki@univ-tlemcen.dz

Date of reception :	*Date of acceptance :*	*Date of publication :*
16/06/2020	*19/11/2020*	*07/06/2021*

Abstract:
This paper aims to investigate whether entrepreneurship is of any relevance to Africa's economic growth processes. Using the Arrelano-Bond GMM-SYS technique and balanced panel data for 13 African countries (Algeria, Morocco, Tunisia, Egypt, South Africa, Zambia, Senegal, Rwanda, Nigeria, Botswana, Mauritius, Namibia, and Lesotho) over the period (2006-2017). The analysis shows that economic growth is positively influenced by the rate of new firm's creation; however, it is still inefficient to create a significant number of jobs for the continent's booming population. We turn these results to many discussed factors in our analysis, such as the lack of adequate business environment, skills and training programs gap, infrastructure fragility, demographics and culture. Therefore, policymakers must consider these results when designing economic policies.

Keywords: Entrepreneurship, Economic growth, African countries, longitudinal data.

*Author Corresponding

1- Introduction

In the last four decades, high unemployment rates and stagflation caused the urgency to reevaluate factors that determine the economic growth of nations. In the meantime, the perception toward small businesses was gaining growing attention from both governments and policymakers alike. This interest was due to entrepreneurs' contribution to their successful innovations in improving the standard of living, creating jobs, and enhancing favorable conditions for the well-being of societies. Nevertheless, the role of entrepreneurship in generating economic growth remains uncertain and ambiguous in most developing countries (Marcotte 2014)Several researchers turn this unclear position of entrepreneurship to a long list of economic issues such as immature legal, political and financial institutions. It is also a fact that is creating new businesses in a low economic development environment, could be taken by necessity or by the need to survive. Which would limit the capacity of entrepreneurs, restrict them dependents on traditional industries that may hinder the success of entrepreneurship in being the engine of economic and human development (Ács and Varga 2005; Wong, Ho, and Autio 2005).

As mentioned above, having a developed economy represents both an issue and a goal for countries. In Africa, the interest in development is rising fast in parallel to the continent's rapid growth population, which accounts for nearly one-third of the world's population by 2050. Nigeria will become the fourth most populous country in the world by 2040, after India, China, and the United States (Source: UN). Furthermore, the new deterioration of oil and gas prices and the wave of Arab spring (2011) has also caused many disturbances in all branches of the economy and social status.

However, according to the World BankGroup and the African Development Bank, African countries have a real potential for enormous growth opportunities. Through a considerable youth population and the largest arable landmass (about 30% of all mineral reserve) plus the second biggest rainforest in the world (the Congo rainforest) in addition to 8% of oil reserves and 7% of natural gas (African Development Bank 2018)that supposed to be an immense engine to boost entrepreneurship, job creation, and economic development as well, if used in the right way. These given facts prompt us to take African countries as a sample of our

study and arise again the question that was a part of some previous researches on the case of the reality of entrepreneurship in Africa and its contribution to global growth.

From another side, the existing literature shows very little empirical researches that formally tests the impact of entrepreneurship on economic growth in African developing countries. Thus, In the present paper, we aim to analyze the effect of entrepreneurship on economic growth in 13 African developing countries in an attempt to figure out the role played by entrepreneurship in economic growth processes. The remainder of the paper is structured as follow: section 2 set out the theoretical background highlighting the relationship between entrepreneurship and economic growth in different contexts, section 3 describes the methodology, data applied and empirical estimation, study's main conclusion, and discussion are given in the end.

2- Linking Entrepreneurship to Economic Growth

Despite the persistent focus bestowed on economic growth and entrepreneurship, researchers are still facing several difficulties in affirming entrepreneurship's role in economic growth processes and which road entrepreneurship should take to become more productive. In this regard, results are still inconsistent, especially when it turns to developing economies that are characterized by a lower level of economic development compared to developed countries and have relatively immature legal, political and financial institutions, resulting in a complex and uncertain business environment (Marcotte 2014). To provide a global insight of precedent works on this crucial topic, we will expose some critical studies that have linked entrepreneurship to economic growth in different contexts.

To determine the extent to which entrepreneurship and economic growth are interconnected, Toma et al. (2014)designed a theoretical model as a base to highlight this relationship. Basing on a set of literature review they have derived the same result shared by (Audretsch 2007; Naudé 2013) who assert that the interest toward entrepreneurship is growing fast by both academics and practitioners and the connection between entrepreneurship and economic growth is stronger than ever. However, this connection might be positive as it could be negative depending on several eco-environment components such as

(entrepreneurial culture, government policies, education, institutions, and legal framework).

In studying how entrepreneurship could be practical for growth,Naudé (2011)asserts that institutions play an essential role in the success of entrepreneurship; however, only innovative entrepreneurship matters at the macro-economic level. In contrast, Iyigun and Rodrik (2004)come to argue that even institutional and policy reforms could have negative impacts on growth if pre-existing entrepreneurship is booming and vice versa. Stel, Carree, and Thurik (2005)seem to share the above position: Although entrepreneurship generates a positive relationship with per capita GDP growth in developed economies, its relationship with growth in developing nations could be negative. This result was not unique where many other researchers have asserted that replicative entrepreneurship, the low quality of entrepreneurs and embracing entrepreneurship by necessity phenomena, drive entrepreneurship to be immaterial for growth (Wong, Ho, and Autio 2005; Acemoglu 1995; Mehlum, Halvor; Moene, and Torvik 2000; Ács and Varga 2005; Baumol and Strom 2007).

Considering the postulation that only opportunity entrepreneurship can lead to economic growth, Urbano et al. (2019)have conducted an empirical investigation on institutional factors that can lead to higher rates of opportunity entrepreneurship. As a result, they found a positive relationship exists between both informal and formal institutions and opportunity entrepreneurship. These results are consistent with many others that assert the role of institutions in boosting productive entrepreneurship.

Many other vital studies (Farinha, Ferreira, and Nunes 2016; Aparicio, Urbano, and Audretsch 2016; Audretsch and Keilbach 2008) suggested that not all types of entrepreneurship was beneficial to growth. However, knowledge-based entrepreneurship "opportunity entrepreneurship» impacts economic growth more than other types of entrepreneurship, not based on knowledge. With this as context, Acs et al. (2008)concluded through empirical evidence that countries with a higher degree of entrepreneurship as a conduit for spillover knowledge exhibit systematically higher rates of economic growth. WhileMartínez-Fierro et al.(2016)asserted that the connection between knowledge spillover and entrepreneurship is still limited in developing economies

compared with the conventional linkage studied in the (KSTE) the knowledge spillover theory of entrepreneurship literature.

From another perspective, it was reported in the literature that entrepreneurial intention represents the key for successful entrepreneurship (Gielnik, Bledow, and Stark 2019); however, intuition has been shown to play an important role in executive problems solving and (Leung, Franken, and Thurik 2020). In this regard, Fritsch and Wyrwich (2017)conducted empirical research investigating the effect of a high level of regional self-employment in 1925 on Germany's economic growth for the period 1976-2010. As a result, they confirm a positive impact of new business formation on regional growth, turning that to the entrepreneurial culture, where more than 50 years later, regions bestowed with high self-employment in 1925 tend to continue experiencing high levels of new business formation. These results are aligned with many others, which consider entrepreneurial culture as an essential element for development.

At the African level, Adusei (2016)has succeeded in showing the opposite by investigating whether entrepreneurship is of any relevance to the growth processes of twelve African developing countries (Algeria, Ghana, Botswana, Egypt, Gabon, Lesotho, Mauritius, Senegal, South Africa, Togo, Nigeria, and Zambia). As a result, he confirmed that even if the quality of existing entrepreneurship in developing economies remains too low compared with developed ones, entrepreneurship in Africa is still instrumental to growth. However, in a comparative analysis of entrepreneurship between Africa and other developing countries, Munemo (2012)found that the impact of entrepreneurship on economic growth in Africa is much lower than in other developing countries, turning that to the lack of adequate business environment. These results are consistent with the one carried by (Brixiová, Ncube, and Bicaba 2015)who asserted in research paper on the subject of skills and youth entrepreneurship in Africa that young entrepreneurs are facing several obstacles in creating their own businesses in Africa including high costs of searching for business opportunities, immature legal and the lack of adequate training programs. Same results were exposed by (Sriram and Mersha 2010), where through a Survey data collected, they have deduced that although most African entrepreneurs have the necessary passion, energy, and determination required to start and rule new businesses, they

are still constrained by the lack of skills training, weak infrastructures, and difficulty in finding adequate facilities to start their business. Furthermore and in the same context, Adom et al. (2018)consider that the failure of entrepreneurship contribution in Africa might be attributed to the inadequacy of entrepreneurial orientation, the lack of finance, and inadequate business environment.

Although previous literature greatly enhances our understanding of how entrepreneurship could affect economic growth in different contexts, we still face the lack of empirical evidence about the impact of entrepreneurship on economic growth in African countries. The focus of the next section is to answer this question.

3- Empirical estimation

Our study aims to investigate the influence of entrepreneurship on economic growth in 13 African (Algeria, Morocco, Tunisia, Egypt, South Africa, Zambia, Senegal, Rwanda, Nigeria, Botswana, Mauritius, Namibia, and Lesotho) over twelve years (2006 -2017). The selection of countries is based on the availability of the metrics required for the study and the restriction of study duration to (2006–2017) has been dictated by the limited data on the number of newly registered firms in a fiscal year. The entrepreneurship variable is lagged for the logic that it takes time for entrepreneurship to influence growth.

This paper proceeds with utilizing different estimation strategies to evaluate the effect of entrepreneurship on growth. This is done starting from naïve OLS estimation, fixed effect, and random effect estimation. Our first equation will be built as follow:

$$GDP\_GR = \alpha 0 + \alpha 1 \ln E(it-2) + \alpha 2\, FDI + \alpha 3\, GS + \alpha 4\, GCF + \alpha 5 MS + \alpha 6 \ln HC + \alpha 7 \ln POP$$

3-1. Data

The data applied refers to aggregate data at the country level based on official statistics collected by the Organization for Economic Co-operation and Development, World Bank database, Global Entrepreneurship Monitor (GEM) data, and International Monetary Fund.

Table 1: Definition of Variables

Variable	Source	Authors
Economic growth (GDP_GR) : GDP Growth (annual %)	World Bank national accounts data	Acs, Audretsch, and Evans (1994), Wennekers and Thurik (1999), Ferreira et al (2016).
Entrepreneurship (E): New businesses registered in a country in a fiscal year. (number)	International Monetary Fund Global Entrepreneurship Monitor (GEM)	Reynolds et al (1999), Wong et al (2005) Klapper et al (2007).
Private Investment (GFCF): Gross fixed capital formation.	Organization for Economic Co-operation and Development and World Bank	Bleaney and Nishiyama (2002) Galindo and Méndez (2014).
Foreign Direct Investment (FDI) : % of GDP	World Bank database	Sundqvist, Kylaheiko, and Cadogan (2012), Ferreira et al (2016).
The Money Supply (MS): % GDP	World Bank database	Galindo and Méndez (2014).
The Government Spending (GS): General government final consumption expenditure. % of GDP	World Bank database	Apergis et al (2007).
Human capital (HC): % of Gross primary education enrolment ratio.	World Bank database	Adusei (2016).

Source: Author's compilation.

Table 2: Descriptive statistics

Variables	Observations	Mean	Std.dev.	Min	Max
GDP_GR	156	5.702409	5.387873	-7.65231	25.51104
Ln E	156	9.185646	1.529753	6.361302	12.84872
GFCF	156	24.46613	6.645541	8.265865	42.89893
FDI	156	3.18202	2.21418	60.2431944	9.934408
Ln POP	156	16.36832	1.509413	14.02577	19.06719
MS	156	13.67701	10.72979	65.702272	64.934408

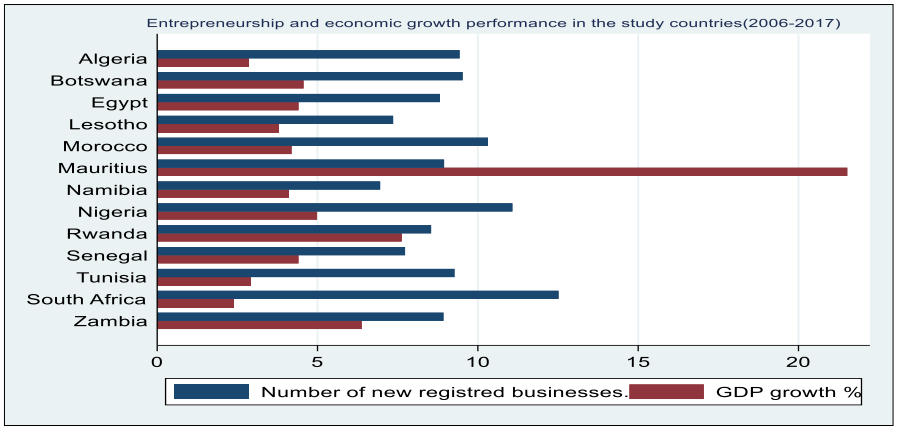
GS	156	17.45718	7.045729	4.624482	40.44422
Ln HC	156	4.664284	0.1216508	4.372309	4.998051

Source: Author's calculation.

Table 2 presents the descriptive statistics for all variables used in the empirical study. As can be readily seen from this data, the average growth of the 13 studied countries during (2006 – 2017) indicated a value of 5.7%and a maximum amount of 25.51.compared with the average growth of OCDE countries for the same period we can declare that growth in Africa is still low. Also, the regular number of newly registered businesses in a fiscal year in the study countries during the period under examination is 9.18, compared to 483.003 as an average number of firms registered in the United Kingdom during (2006-2017). Thus we can report that entrepreneurship is extremely low in our study sample, this probably explains the apparent break between developed and developing economies.

Figure 1 displays the performance of Entrepreneurship and economic growth in the study countries; South Africa recorded the highest number of new firms during the study period followed by Nigeria, where Namibia recorded the lowest quantity of new firms. However, Mauritius recorded the highest rate of GDP growth, followed by Rwanda, and South Africa has recorded the lowest rate of GDP %. Furthermore, Figure 1 shows us that countries with higher rates of new firms do not necessarily have greater GDP growth. These results have increased our doubts about the relationship between newly registered businesses and economic growth in African countries; therefore, in the next step, both entrepreneurship and economic growth will be subjected to econometric scrutiny.

Figure 1: Trend of Entrepreneurship and Economic Growth Performance in 13 African countries (2006-2017)



Source: author's construction via Stata 15.1. Data collected from WDI and GEM databases.

3-2. Estimation Results

Table 3 reports the correlation among the explanatory variables; we thus find that there is no multicollinearity problem in our data since the correlations are within acceptable limits (Bryant and Javalgi 2018).

Table 3: Correlation Matrix

	GDP_GR	Ln E	GFCF	GS	FDI	LnPOP	MS	Ln HC
GDP_GR	1.0000							
Ln E	-0.1358	1.0000						
GFCF	-0.1126	-0.3243	1.0000					
GS	-0.2361	-0.3243	0.3393	1.0000				
FDI	0.1546	-0.3354	0.1013	-0.0250	1.0000			
Ln POP	-0.4056	0.5896	-0.3218	-0.5321	-0.2948	1.0000		
MS	0.0190	-0.1423	-0.2632	-0.1764	0.2572	0.1067	1.0000	

Ln HC	0.0349	-0.1693	0.2634	0.2214	0.0312	-0.2563	0.0372	1.0000

Source: Author's calculation

Table 4: Regression Results for 13 Africa Countries. Fixed versus Random Effects

Dependent Variable GDP-GR. Coefficient Estimates (P-value)		
Independent variable	Fixed effects model	Random effects model
Constant	137.898 (0.042)**	36.52052 (0.282)
Ln E(-2)	-.0780221 (0.697)	-.0276298 (0.890)
GFCF	.0958202 (0.169)	.0478975 (0.465)
GS	-.2320631 (0.095)*	-.3721985 (0.001)***
FDI	.2323734 (0.086)*	.2700458 (0.036)**
Ln POP	-9.776798 (0.005) ***	-2.454736 (0.002)***
MS	.0045243 (0.843)	.0156995 (0.478)
Ln HC	6.301189 (0.411)	2.981481 (0.629)
R-squared	0.1910	0.3723
Prob(F-statistic)	(0.000000)***	(0.0001)***
Hausman test : (0.1079)		
Breusch & Pagan LM test for random effects : (0.0000)***		
Modified Wald test for groupwise heteroskedasticity for fixed effect: (0.0000)***		
Significant at: 1% (***), 5 %(**), 10 %(*).		

Source: Author's calculation using Stata 15.1.

The Hausman specification test for the GDP growth equation yields a value of p= (0.1079), then this result fails to reject the null hypothesis of an absence of correlation between the individual country effects and the explanatory variables.

The Modified Wald test for GroupWise heteroskedasticity in the fixed effect regression model yields a value of Prob>chi2 = (0.0000) which leads us to conclude the presence of heteroskedasticity in our model.

Breusch and Pagan Lagrangian multiplier test for random effects show a value of Prob > chibar2 = (0.0000) which leads us to reject the null hypothesis that the variances across entities are zero.

According toPiva and Vivarelli (2005), The Arellano-Bond (1991) and Blundell-Bond (1998) dynamic panel estimators are general estimators designed for situations with:

- N>T small T, large N panels, that means lots of individuals and few periods.
- Heteroscedasticity and Autocorrelation within panels of groups.
- A single left-hand-side variable that is dynamic, depending on its own past realizations.
- Endogeneity of the lagged dependent variable in dynamic panel data when there is a correlation between the explanatory variable and the error term in a model.

As can be seen in table 4 the random effects model shows a poor performance due to the use of weak instruments, furthermore in our case of study we have T<N: the number of years is shorter than the number of countries and the dependent variable is persistent, this means that the GMM is the best method to use to introduce more instruments, improve efficiency and For better control for endogeneity of the lagged independent variable (lnE) and omitted variables (Blundell and Bond 1998). Our equation will be transformed into the general specification of panel data with GMM effects as follow:

$$GDP\_GR = \alpha 0 + \alpha 1\ GDP\_GR\ (it-1) + \alpha 2\ ln\ E\ (it-2) + \alpha 3\ FDI + \alpha 4\ GCF + \alpha 5\ MS + \alpha 6\ ln\ HC + \alpha 7\ ln\ POP.$$

Table 5: Regression results for 13 African developing countries. Generalized Method of Moments.GMM

Dynamic panel-data estimation, one-step system GMM. Dependent Variable: GDP-GR	
Independent variables	P>|z|
GDP_GR | [Lagged GDP growth]	.28839135 (0.010)**
Ln E (-2) [Entrepreneurship]	.7700569(0.035)**
GFCF [Private Investments]	.4413682 (0.009)***
Gs [Government Spending]	-.775486 (0.065)**
FDI [Foreign Direct Investment]	-.4797429 (0.271)
Ln POP[Total Population]	-2.997309 (0.020)**

MS [Money Supply]	.0791655 (0.076)*
Ln HC[Human Capital]	-.8691751 (0.973)
Observations	142
Groups	13
Instruments	6
AR(1)[1] no autocorrelation p-value	0.034**
Hansen p-value[2]	0.669
Endogenous variables	Ln E
Significant at: 1 % (***), 5 %(**), 10 %(*).	

Source: Author's calculation using Stata 15.1.

The result of GMM effects calculation in Table 4 shows that entrepreneurship measured via the number of newly registered firms in a fiscal year displays a positive significant impact on GDP growth at the level of 5%, this result differs with the general position of previous studies which argue that entrepreneurship does not support growth in developing countries, (Ács and Varga 2005; Wong, Ho, and Autio 2005; Naudé 2011; Acemoglu 1995; Mehlum, Halvor; Moene, and Torvik 2000; Almodóvar-González, Fernández-Portillo, and Díaz-Casero 2020), Whilst POP (Total Population) returns negative effects, it means that countries with higher populations do not necessarily produce higher levels of GDP growth.

Private investments proxied by the gross fixed capital formation (GFC), statistically returns a positive impact on GDP growth. This result corroborates with the findings of research conducted by(Uneze 2013) for 13 sub-Saharan countries and the one by (Afonso and St. Aubyn 2019)for 17 OECD economies. However, the FDI net inflow didn't show any effects on economic growth. Government spending (GS) displays a negative impact on GDP growth; however, human capital (HC) fails to return any statistically significant effect.

4- Discussion and Conclusion

[1] We report AR (1) in levels; the null hypothesis is no serial correlation, which should be not rejected in order for Arellano-Bond estimates to be consistent (Roodman 2015)
[2] By construction, the Hansen test is appropriate for the case of one-step GMM estimation technique (Roodman 2015). The null hypothesis of Hansen tests is joint validity of the full instrument set.

The above section examined whether entrepreneurship promotes economic growth in 13 African countries (Algeria, Tunisia, Morocco, Egypt, South Africa, Zambia, Senegal, Rwanda, Nigeria, Botswana, Mauritius, Namibia, and Lesotho) over a defined period (2006-2017). The motivation of our study has been started from the general results of current literature, which argues that entrepreneurship exhibits different positions in different stages of economic development, where it might display a negative impact on GDP growth for developing economies(Stel, Carree, and Thurik 2005).Our findings indicate that African countries' growth is positively influenced by the new firm's creation, whereas the population has shown a negative effect on GDP growth. These results lead us to suggest that entrepreneurship support economic growth in the study countries.However, our descriptive statistics show that entrepreneurship in the study countries is still low compared to developed countries, Since African entrepreneurs continue to face substantial domestic challenges that impede their efforts, including a lack of adequate start-up capital, stiff competition, lack of workers with the right skills, and difficulty in finding sufficient facilities in a good location (Sriram and Mersha 2010).

Another notable result shown in our analysis is that the money supply is positively related to economic growth in the study countries. We can explain this by; An increase in the supply of money typically lowers interest rates, which in turn generates more investment. Furthermore, it represents a group of safe assets that households and businesses can use to make payments or to hold as short-term investments, thereby stimulating spending. Entrepreneurs respond by ordering more raw materials and increasing production. The increased business activity raises the demand for labor. The opposite can occur if central banks diminish the supply of money.

We also found that gross fixed capital formation returns statistically positive effects on GDP growth. These results lead us to conclude that countries under investigation are more likely to implement reforms that encourage private investment, which remains necessary preconditions for enabling rapid economic growth. According to the World Bank report (2011), developing economies often dedicate a higher % of GDP to investment; even countries with high rates of economic growth are heavily investing in more fixed assets to sustain rapid

economic growth. The best example of these countries is China, which has one of the highest rates of gross fixed capital formation. On the other hand, our findings indicate that government spending has a reverse effect on economic growth.This could hamper economic growth by "crowding out"3private investment in areas such as home building and productive capacity, which includes the facilities and infrastructure used to contribute to the economy's output.

Our test yields no evidence for FDI to stimulate economic growth; we turn this result to the nature of foreign investment in Africa. However, we take the same position of (Susilo 2018), which argues that not all forms of foreign investment seem to be beneficial to host economies. FDI in some sectors such as manufacturing, wholesale trade, retail trade and real estate, rental, leasing sector are found negatively correlated to economic growth. In this regards, African countries must implement a bunch of policies that aim to attract the right category of FDI inflows or foreign investors. The right category of foreign direct investment inflows can comprise market-seeking FDI, and FDI hosted in connection with the participation of the country in the global value chain (GVC).

In sum, Africa is increasingly catching its position on the global stage as a continent of development and opportunity. Yet critical challenges persist, particularly the need to generate a significant number of jobs for the continent’s booming population, and the need to build a stable business environment which allows promoting all kind of entrepreneurship and driving growth sustainably and inclusively. For this purpose, African entrepreneurship is necessary to Africa’s future prosperity. Prosperity in the coming decade will be created by Africans who undertake entrepreneurial innovations, generate jobs and wealth, and capture growth opportunities. Therefore, governments and policymakers should focus on the following underlying elements:

- Support training programs to reduce entrepreneurial search costs rather than simply subsidize existing efforts (Brixiová, Ncube, and

[3]An expansion in government spending raises the tax burden on citizens which leads to a reduction in private spending and investment. This effect is known as "crowding out."

Bicaba 2015), and focus on investing more in human capital and skill to build a solid entrepreneurial ecosystem.

- Although the fact that Africa has experienced considerable economic development during the last century, Our results imply that is important to implement reforms to create a business environment conducive for new innovative firm creation beginning with improving access to education and enhancing skills, address the demographic issues including early motherhood, eliminating bureaucracy and reducing the minimum capital requirement to register a business, upgrading infrastructure to improve the start-up environment and the business environment in general, welcoming new ideas and engage domestic and foreign entrepreneurs to encourage a free flow of expertise and business, setting up a one-stop-shop that makes it possible to complete business start-up procedures at a single location, simplifying the documents needed for registration, and supporting all kinds of entrepreneurs.

Bibliography

1. ACEMOGLU, DARON. "*Reward Structures and the Allocation of Talent."* European Economic Review, vol. 39, no. 1, 1995, pp. 17–33.
2. ACS, ZOLTAN J., ET AL. *"Growth and Entrepreneurship."* Small Business Economics, vol. 39, no. 2, 2012, pp. 289–300.
3. ÁCS, ZOLTÁN J., AND ATTILA VARGA. *"Entrepreneurship, Agglomeration and Technological Change."* Small Business Economics, vol. 24, no. 3, Apr. 2005, pp. 323–34.
4. ADOM, KWAME, ET AL. *"An Assessment of Entrepreneurial Disposition and Culture in Sub-Saharan Africa: Some Lessons from Ghana."* Journal of Developmental Entrepreneurship, vol. 23, no. 1, World Scientific Publishing Co. Pte Ltd, Mar. 2018.
5. ADUSEI, MICHAEL. *"Does Entrepreneurship Promote Economic Growth in Africa?"* African Development Review, 2016.
6. AFONSO, ANTÓNIO, AND MIGUEL ST. AUBYN. *"Economic Growth, Public, and Private Investment Returns in 17 OECD Economies."* Portuguese Economic Journal, vol. 18, no. 1, Springer Verlag, Feb. 2019, pp. 47–65.
7. AFRICAN DEVELOPMENT BANK,*"African Economic Outlook."* Annual Yearly Review Study, 2018.
8. ALMODÓVAR-GONZÁLEZ, MANUEL, ET AL.*"Entrepreneurial*

Activity and Economic Growth. A Multi-Country Analysis." European Research on Management and Business Economics, vol. 26, no. 1, 2020, pp. 9–17.

9. APARICIO, SEBASTIAN, ET AL. *"Institutional Factors, Opportunity Entrepreneurship and Economic Growth: Panel Data Evidence."* Technological Forecasting and Social Change, vol. 102, 2016, pp. 45–61.
10. AUDRETSCH, DAVID B.,*"Entrepreneurship Capital and Economic Growth."* Oxford Review of Economic Policy, 2007.
11. AUDRETSCH, DAVID B., AND MAX KEILBACH,*"Resolving the Knowledge Paradox: Knowledge-Spillover Entrepreneurship and Economic Growth."* Research Policy, vol. 37, no. 10, North-Holland, Dec. 2008, pp. 1697–705.
12. BAUMOL, WILLIAM J., AND ROBERT J. STROM,*"Entrepreneurship and Economic Growth."* Strategic Entrepreneurship Journal, vol. 1, no. 3–4, Wiley, Dec. 2007, pp. 233–37.
13. BLUNDELL, RICHARD, AND STEPHEN BOND,*"Initial Conditions and Moment Restrictions in Dynamic Panel Data Models."* Journal of Econometrics, vol. 87, no. 1, 1998, pp. 115–43.
14. BRIXIOVÁ, ZUZANA, ET AL.,*"Skills and Youth Entrepreneurship in Africa: Analysis with Evidence from Swaziland."* World Development, vol. 67, 2015, pp. 11–26.
15. BRYANT, C., AND R. G. JAVALGI,*"Motivating Entrepreneurial Activity in the MENA Region: Do Human Capital and Corruption Matter?"* KnE Social Sciences, vol. 3, no. 10, Aug. 2018, p. 39.
16. FARINHA, LUIS, ET AL.,*"Linking Innovation and Entrepreneurship to Economic Growth"*Competitiveness Review. 2016.https://www.emerald.com/insight/content/doi/10.1108/CR-07-2016-0045/full/html
17. FRITSCH, MICHAEL, AND MICHAEL WYRWICH, *"The Effect of Entrepreneurship on Economic Development-an Empirical Analysis Using Regional Entrepreneurship Culture."* Journal of Economic Geography, vol. 17, no. 1, Oxford Academic, Jan. 2017, pp. 89-157.
18. GIELNIK, MICHAEL M., ET AL., "*A Dynamic Account of Self-Efficacy in Entrepreneurship."* Journal of Applied Psychology, vol. 105, no. 5, 2019, pp. 487–505.
19. IYIGUN, MURAT, AND DANI RODRIK.,*"On the Efficacy of Reforms: Policy Tinkering, Institutional Change, and Entrepreneurship."* National Bureau of Economic Research Working Paper Series, vol. No. 10455, no. October, 2004, p. ALL.

20. LEUNG, Y. K., ET AL., *"Psychiatric Symptoms and Entrepreneurial Intention: The Role of the Behavioral Activation System."* Journal of Business Venturing Insights, vol. 13, Elsevier Inc, June 2020, p. e00153.
21. MARCOTTE, CLAUDE,*"Entrepreneurship and Innovation in Emerging Economies: Conceptual, Methodological and Contextual Issues."* International Journal of Entrepreneurial Behaviour and Research, vol. 20, no. 1, Emerald Group Publishing Limited, Feb. 2014, pp. 42–65.
22. MARTÍNEZ-FIERRO, SALUSTIANO, ET AL.,*"Entrepreneurship and Strategies for Economic Development."* Small Business Economics, vol. 47, no. 4, Dec. 2016, pp. 51-835.
23. MEHLUM, ET AL.,*"Predator or Prey? Parasitic Enterprises in Economic Development"*. 2000, www.econstor.eu.
24. MUNEMO, JONATHAN, "*Entrepreneurship in Developing Countries: Is Africa Different?"* Journal of Developmental Entrepreneurship, vol. 17, no. 1, World Scientific Publishing Company, Mar. 2012.
25. NAUDÉ, WIM,*"Entrepreneurship and Economic Development: Theory, Evidence and Policy"*. http://hdl.handle.net/10419/80532www.econstor.eu. Accessed 15 June 2020.
26. NAUDÉ, WIM,"*Entrepreneurship Is Not a Binding Constraint on Growth and Development in the Poorest Countries."* World Development, vol. 39, no. 1, Jan. 2011, pp. 33–44.
27. PIVA, MARIACRISTINA, AND MARCO VIVARELLI.,*"Innovation and Employment: Evidence from Italian Microdata."* Journal of Economics/ Zeitschrift Fur Nationalokonomie, vol. 86, no. 1, Springer, Oct. 2005, pp. 65–83.
28. ROODMAN, DAVID,*"XTABOND2: Stata Module to Extend Xtabond Dynamic Panel Data Estimator."* Statistical Software Components, Boston College Department of Economics, 25 Dec. 2015, http://ideas.repec.org/c/boc/bocode/s435901.html.
29. SRIRAM, VEN, AND TIGINEH MERSHA, *"Stimulating Entrepreneurship in Africa."* World Journal of Entrepreneurship, Management and Sustainable Development, vol. 6, no. 4, 2010, pp. 72-257.
30. STEL, ANDRE VAN, ET AL., *"The Effect of Entrepreneurial Activity on National Economic Growth."* Small Business Economics, vol. 24, no. 3, Apr. 2005, pp. 21-311.

31. SUSILO, DONNY,*"THE IMPACT OF FOREIGN DIRECT INVESTMENT ON ECONOMIC GROWTH (A CAUSAL STUDY IN THE UNITED STATES)."* BISE: Jurnal Pendidikan Bisnis Dan Ekonomi, vol. 4, no. 1, Universitas Sebelas Maret, June 2018.
32. TOMA, SORIN-GEORGE, ET AL., "*Economic Development and Entrepreneurship."* Procedia Economics and Finance, vol. 8, no. 14, Elsevier B.V., 2014, pp. 43-436.
33. UNEZE, EBERECHUKWU.,*"The Relation between Capital Formation and Economic Growth: Evidence from Sub-Saharan African Countries."* Journal of Economic Policy Reform, vol. 16, no. 3, Routledge, Sept. 2013, pp. 86-272.
34. URBANO, DAVID, ET AL.,*"Twenty-Five Years of Research on Institutions, Entrepreneurship, and Economic Growth: What Has Been Learned?"*Small Business Economics, vol. 53, no. 1, 2019, pp. 21–49.
35. WONG, POH KAM, ET AL.,*"Entrepreneurship, Innovation and Economic Growth: Evidence from GEM Data."* Small Business Economics, vol. 24, no. 3, Springer, Apr. 2005, pp. 50-335.