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ARTICLE

Entrepreneurship and its link to corruption: Assessment with the most recent world and country-group data
Ahmed Driouchi and Alae Gamar

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Full Length Research Paper

Entrepreneurship and its link to corruption: Assessment with the most recent world and country-group data

Ahmed Driouchi* and AlaeGamar

Institute of Economic Analysis and Prospective Studies (IEAPS), Al Akhawayn University (AUI), Ifrane, Morocco.

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Entrepreneurship is an important intangible asset of nations. The relatively recent progress in its measurement, mainly with the Global Entrepreneurship Development Index (GEDI), suggests that previous questions related to its determinants and mainly its relationship to corruption, namely the Corruption Perception Index (CPI) needs to be re-addressed. The objective of the present paper is to assess the links between GEDI and CPI using the most recent (2013-2014) published data on world countries included in the GEDI. The relationships are estimated overall countries included in the GEDI and over groups of countries. The attained results show consistently the positive effect of corruption reduction on GEDI and thus the positive relationship between an intangible good that is entrepreneurship and an intangible bad that is corruption. These results confirm that the recent available data are supportive of anti-corruption policies that are likely to favor the growth of entrepreneurial activities with promoting market development and ensuring the growth of both tangible and intangible components of the wealth of nations.

Key words: Entrepreneurship, corruption, determinants, anti-corruption policies.

INTRODUCTION

Previous contributions have been addressing the nature and extent of the relationship between entrepreneurship and corruption. While most of the concerned publications have been showing that higher levels of corruption are limiting the expansion of entrepreneurship, some have been showing the opposite effect. Others have been considering the existence of a U shaped relationship between the two sets of variables. But most of these results have been attained under traditional measures of entrepreneurship and with series of datasets related to corruption. As the GEDI data is including larger numbers of countries by 2013-2014 and as the CPI covers more countries, it an opportunity for testing the links between these datasets to find out about the most recent trends.
towards the likely intensification of anti-corruption policies. This represents the main objective of the present paper and leads to the estimation of the determinants of GEDI with the identification of the likely role of the CPI.

The present paper is composed of four sections. The first one is a literature review while the second introduces the empirical method applied and he data used. The third section of the paper focuses on the results attained with the last section devoted to the discussion of the likely suggested policies.

LITERATURE REVIEW

When analyzing the links between entrepreneurship and corruption, previous papers have identified different types of results. While most of the concerned publications have been showing that higher levels of corruption are limiting the expansion of entrepreneurship, some have been showing the opposite effect. Others have been considering the existence of a U shaped relationship between the two sets of variables.

In their paper, Avnimelech et al. (2014) investigate the link between corruption and productive entrepreneurship and the participation of the institutional characteristics of a country. For this research, the authors have used data from 176 countries collected from professional websites. The results show that countries with high level of corruption have low levels of productivity and that the negative impact of corruption is more significant on the developed countries and depend on the country’s economic characteristics.

Tonoyan et al. (2010) investigate the determinants that drive small business owners to engage in corruption deals in transition economies in the Central Eastern Economies. The results show that the formal and informal institutional make-up, low efficiency of financial and legal institutions and the lack of their enforcements are the essential drivers of corruption. Moreover, closed social networks also provide background to corruption.

Sambharya and Musteen (2014) differentiate between two types of entrepreneurial activities, the opportunity driven entrepreneurship and the necessity driven entrepreneurship. They use data from 43 countries to test the link between the institutional environments on the two types of entrepreneurship. The results show that countries with less market openness, greater power distance and collectivism, a great power distance and collectivism have a necessity driven entrepreneurial activity. However, an opportunity driven entrepreneurial activity is characteristic of less open market and smaller power distance. The paper implies that the cognitive factors like culture are important to influence the entrepreneurial activity. Dheer (2014) uses data from 42 countries to investigate the factors affecting the Total Entrepreneurial Activity (TEA). He asserts that cultural and institutional factors affect the entrepreneurship initiatives over the countries. The individualism-collectivism dimension affects negatively the Total Entrepreneurial Activity (TEA) as well as the institutional factors like corruption and education. However, the impact of corruption and education on TEA is reduced by individualism-collectivism cultural dimension.

Anokhin and Schulze (2009) encourage the efforts of countries to control and reduce corruption. They use data from 64 countries to investigate the link between corruption, innovation and entrepreneurship. The increase on the reliability on enforcement of the laws guaranties a fair market and trade rules and a strict coordination of the economy. The results show that a better control of corruption participates in the increase of innovation and entrepreneurship.

Acemoglu and Verdier (1998) use a simple model to investigate the link between the property right and the allocation of talent. The research implies that hierarchy and bureaucratic control encourages entrepreneurship and innovation. On the other hand, the results show that high level of corruption affect negatively investments and growth. They quantify the cost and benefit of corruption and property right enforcement laws to reach equilibrium where corruption becomes benefic to entrepreneurship.

Poprawe (2014) studies the effect that corruption has on the tourism sector. The results showed that it negatively affects this sector and thus the whole economy. The study uses data from 100 countries over 16 years and revealed that as the corruption perception index increases (decrease in corruption) there is an increase in the tourism inflow by approximately 2 to 7%. This implies that the reduction of corruption leads to an increase of entrepreneurship in the tourism sector.

Vidović (2014) implies that the state has a major role in promoting entrepreneurship. The enforcement of good institutional laws to prevent corruption is important to increase the level of trust that facilitates the economic growth. The paper asserts that a better control of corruption will drive positive growth in innovation and entrepreneurship. This paper investigates the condition of entrepreneurship in Bosnia and Herzegovina. The results showed a need to have enforcement of laws against bribery and to educate youth for entrepreneurial attitude sustainability.

Wiseman (2014) measures the link between institutional quality measured using corruption, shadow economy size and entrepreneurship. The results imply that corruption affects the shadow economy size creating a negative relationship with entrepreneurship. This means that a productive migration toward shadow economy. The results show that there is evidence that corruption negatively affects the development of entrepreneurship.

Taslim (1994) claims that corruption has a positive impact on entrepreneurship and economic growth. The author claims that corruption has a positive effect as it redistributes the resources from businesses to public employees. It participates in improving income distribution...
as it helps to transfer wealth from wealthy individuals to employees with less income. The author claims that corruption is beneficial to the growth of economy and entrepreneurship.

Tonoyan (2003) differentiates between generalized trust which is global that we put in strangers and institutions and another one particularized that is specific to a situation and to a person. Corruption level increases as the particularized trust increases and decreases as generalized trust increases. Tonoyan claims that in an emerging economy trust has a positive impact on corruption and increases the entrepreneurial initiatives and their involvement in corruption activities. When the generalized trust is low, entrepreneurs develop particularized trust that involves them in corruption activities.

Szyliowicz and Wadhwani (2007) use a panel data from 175 countries to study the link between entrepreneurship, corruption and the institutional environment. The authors estimate that this relationship is complicated as it is positive. The authors claim that corruption positively affects entrepreneurship as it allows access to some markets blocked and difficult for access for entrepreneurs. Bribery saves time and provides opportunities to access new markets for entrepreneurs.

Ngunjiri (2010) claims that many projects have been aborted because of corruption. Entrepreneurship is an important component of the economic growth. However, it is subject to many factors like the cultural and social ones affected by corruption. This creates a negative impact on entrepreneurship. The results of the paper show that inefficiency of formal institutions creates background for corruption and thus harms the economy by discouraging entrepreneurial initiatives in Kenya.

Vivekananda et al. (2013) try to represent the leaks caused by bribery and the efforts of the government to set prices for the public services related to enterprise creation by creating welfare of the economy. The results of the study show that the corruption function is constant and does not participate to the economic prosperity function. Moreover, the findings show that in weak economies a control of corruption increases its level. However in strong economies the control of corruption reduces its level and impact on entrepreneurship.

Palifka (2006) links the economic growth to entrepreneurship prosperity. Entrepreneurship is subject to many social, psychological and economic factors that may be affected by corruption. The governmental institutions are affected by corruption in their judiciary system or taxes which discourage the entrepreneurial initiatives and investment. This clearly explains that corruption has a negative effect on entrepreneurship.

Festus et al. (2014) study the relationship between entrepreneurship, corruption and the challenges that face enterprises in Nigeria. Corruption is the main factor that inhibited the creation of enterprises either in the rural or urban areas of Nigeria. Corruption has many forms and uses the institutional infrastructure. The paper claims that entrepreneurship is a major indicator of development. The results showed that entrepreneurship is subject to many factors affected by corruption which negatively decreases the entrepreneurial initiatives.

Dreher and Gassebner (2013) study whether corruption is a positive factor to economy. For this purpose they investigate the impact of regulations on entrepreneurship and to which extent corruption participates into smoothing the procedures. The results showed that the number of procedures required to start a business and the minimum capital required have negative effects on entrepreneurship and discourages the entrepreneurial initiatives. The study uses data from 43 countries (highly regulated economies) to test the impact of corruption on entrepreneurship. It showed that corruption has a positive impact on entrepreneurship and ease the creation of enterprises.

Ihugba et al. (2013) relate the efforts of government to promote entrepreneurship. The authors claim that all the initiatives made by the government were aborted because of a number of factors like bureaucracy and corruption. The research implies that there is a need for policy making and the enforcement of laws in addition to providing the basic infrastructures to help the creation of enterprises.

Alvarez and Urbano (2011) use a panel data from Latin American countries over a period between 2004 and 2009 to study the influence of the environmental factors in entrepreneurship. The results show that factors like political instability, corruption control and role models affect entrepreneurship. In fact, there is evidence that there is a U-shaped relationship between political stability which is mainly affected by corruption and entrepreneurship. Another result explains that Latin American countries have an important informal sector which creates a problem for the entrepreneurship because of the proliferation of corruption. On the other hand, procedures and time required to start businesses do not have a significant impact on entrepreneurship in the Latin American countries.

But, with the development of more indices that measure global entrepreneurship development and mainly with the creation and enrichment of the Global Entrepreneurship Development Index as analyzed and promoted by Acs and Virgill (2009), Acs et al. (2009), Acs and Laszlo (2009), Acs (2006), Acs. and Varga (2005) and by Acs et al. (1994), it is now possible to link entrepreneurship to other variables such as those measuring corruption.

**EMPIRICAL METHOD AND DATA**

Given the diverse empirical findings provided in the literature about the link between entrepreneurship and corruption and given the new datasets available, it is important to find further evidence about these relationships.

This paper uses regression analysis where the dependent variable is GEDI with series of explanatory variables. The related data for the period 2013-2014 and for countries included in the
GEDI is in the Appendix. The regressions use original data where the only variable created is the product of GDP per capita and CPI for the subset of Arab countries. All countries besides the other subset of countries use non-transformed data at the exception of the subset of Arab countries. There are 59 variables and up to 118 countries or observations in total, with 25 observations for the subsample of Asian countries, 25 for America-Australia, 39 for Europe and 27 for Africa. In addition, there are respectively 31 observations for OECD and 14 for Arab countries.

All the sub-indexes of the Global Entrepreneurship and Development Index (GEI) are used. These latter are retrieved from the Global Entrepreneurship Development Institute (GEDI). These variables are global entrepreneurship and development index (GEI) that investigates the way each country allocates its resources to promote entrepreneurship, entrepreneurial attitude index that characterizes the entrepreneurial attitude in each country. Such sub-index has five components that are the opportunity perception, measuring “the capacity to discover and try new opportunities”, the startup skills and personal networks, the fear of failure that measures “the reluctance to start a business” and the cultural support that takes into account corruption. Another sub-index used is the entrepreneurial activity that measures the growth of a startup includes four sub-indexes like the opportunity startup motives, the technology sector index that measures the appurtenance to a technological sector, the quality of human resources and the competition of the market where the entrepreneurial activity takes place. The Third sub-index refers to the entrepreneurial aspiration that refers to the strategies related to the enterprises. This accounts for sub-indices like new products, new technologies, internationalization and the risk capital.

The research uses also variables from the World Bank like GDP per Capita to compare the performance of countries and the Generalized Inequality Index (GINI) that presents the income distribution inequalities. The Economic Freedom Index from the Heritage Foundation that measures the intensity of the regulations imposed on entrepreneurship. Other indices like the Ease of Doing Business that measures the ease of starting an entrepreneurial activity has been retrieved from doing business. Corruption Perception Index (CPI) is retrieved from the site of Transparency International. It measures the country’s level of corruption perception and defines the corruption as the misuse of power for private benefit.

The remaining thirty six variables were retrieved from the Global Competitiveness Reports. These variables include Availability of latest technologies that measure the use of new technologies by enterprises, Availability of research and training services, Availability of scientists and engineers, Brain drain that measures the departure of the educated people of a country, Capacity for innovation, Company spending on R&D, Ease of access to loans, Firm-level technology absorption, Domestic Competition that measures the competition within the domestic market, Business Sophistication, Innovation, Foreign Competition, Infrastructure, Higher education and training and Hiring and Firing Practices that measure the hiring and licensing of enterprises in a given country. These indicators are measured on a scale of one to seven as the best score. More variables like Broadband Internet subscriptions/100 pop that measures the use and subscription to the internet as a component for innovation, Technological readiness that senses the use of technology, Competition that measures the market competition, Domestic market size, Quantity of education perceived by the employees, Technological adoption, Foreign market size, ICT use, Quality of education, Global Competitiveness Index, Innovation and sophistication factors, Inflation, annual % change, Intellectual property protection, Intensity of local competition, Internet bandwidth, kb/s/capita, Internet users/100 pop. No of days to start a business that measures the number of days required to start a business, Prevalence of trade barriers, Production process sophistication, Quality of scientific research institutions that indicate the quality of researches and scientific findings produced in different countries and university-industry collaboration in R&D that describes the degree of collaboration between universities and industries for a given country.

RESULTS

When taking together all countries included in the 2013 dataset of the GEDI, entrepreneurship development appears to be driven by quantity of education, the level of CPI besides GDP per capita and the use of ICT. The coefficients of these explanatory variables are all statistically significant with an overall R squared of 0.89. This means that entrepreneurship development requires education, ICTs and revenue besides good business environment as indicated by the level of the intangible asset that is the perception of corruption. Low (respectively high) level of CPI induces according to the estimated model, low (respectively higher) entrepreneurship. Table 1 shows a summary of these results.

When disaggregating the data into groups representing countries in Asia, America (plus Australia), Europe and Africa, similar results are obtained for the importance of GDP per capita and for CPI.

Countries in Asia show that education quantity besides GDP and CPI, do have statistically significant effects on entrepreneurship development. These results are introduced in Table 2.

For the America (plus Australia) group, the only statistically significant coefficients are those of GDP and CPI. Table 3 summarizes the results. It shows that the higher the GDP and CPI, the better it will be for entrepreneurship as higher values for CPI imply that the country is clean.

For Europe, the “ICT use” variable becomes important as its coefficient is statistically highly significant. It adds to GDP and ICT while the coefficient of “education quantity” is not statistically significant. Table 4 provides the statistics related to this regression.

Countries in Africa are showing results (Table 5) similar to those in Europe which means that for a better entrepreneurship there is a need for a higher GDP, a higher CPI (less corruption) and a higher and better use of the ICTs.

Besides the results of the geographical groups shown above, the OECD group and a group of Arab countries are also considered in these regressions. The OECD group shows statistically significant coefficients for GDP and CPI as shown in Table 6. The results in the table show that among the variables used, the GDP and the CPI are the most significant variables that affect entrepreneurship. The higher the CPI (clean country) and GDP are beneficial for entrepreneurship.

For Arab countries and with only 14 observations the best estimated model includes GDP and CPI represented under their product besides the ICT use. From the table, the coefficients of the ICT use and the product of GDP
### Table 1. Entrepreneurship development in world economies.

**Dependent Variable: GEDI**

Method: Least Squares  
Sample (adjusted): 1 118  
Included observations: 111 after adjustments  

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### Table 2. Entrepreneurship development in Asia.

**Dependent Variable: GEDI**

Method: Least Squares  
Sample (adjusted): 1 25  
Included observations: 22 after adjustments  

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### Table 3. Entrepreneurship development in America (plus Australia).

**Dependent Variable: GEDI**

Method: Least Squares  
Sample (adjusted): 2 25  
Included observations: 21 after adjustments  

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Table 4. Entrepreneurship development in Europe.

Dependent Variable: GEDI
Method: Least Squares
Sample (adjusted): 1 40
Included observations: 39 after adjustments

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<tr>
<td>R-squared</td>
<td>0.924569</td>
<td>Mean dependent var</td>
<td>0.392308</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.918104</td>
<td>S.D. dependent var</td>
<td>0.129827</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.037153</td>
<td>Akaike info criterion</td>
<td>-3.650617</td>
<td></td>
</tr>
<tr>
<td>Sumsquaredresid</td>
<td>0.048313</td>
<td>Schwarz criterion</td>
<td>-3.479995</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>75.18703</td>
<td>Hannan-Quinn criter.</td>
<td>-3.589399</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>2.559905</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Entrepreneurship development in Africa.

Dependent Variable: GEDI
Method: Least Squares
Sample (adjusted): 1 27
Included observations: 27 after adjustments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP_PPP</td>
<td>6.17E-06</td>
<td>1.63E-06</td>
<td>3.788625</td>
<td>0.0009</td>
</tr>
<tr>
<td>CPI</td>
<td>0.001186</td>
<td>0.000518</td>
<td>2.290074</td>
<td>0.0311</td>
</tr>
<tr>
<td>ICT_USE</td>
<td>0.056152</td>
<td>0.013817</td>
<td>4.064005</td>
<td>0.0004</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.804612</td>
<td>Mean dependent var</td>
<td>0.148519</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.788329</td>
<td>S.D. dependent var</td>
<td>0.051717</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.023794</td>
<td>Akaike info criterion</td>
<td>-4.534347</td>
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</tr>
<tr>
<td>Sumsquaredresid</td>
<td>0.013587</td>
<td>Schwarz criterion</td>
<td>-4.390365</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>64.21368</td>
<td>Hannan-Quinn criter.</td>
<td>-4.491534</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>1.770224</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

and CPI are positive. This implies that the more ICT use is the better it is for entrepreneurship. Likewise the positive relationship with the product of GDP and CPI implies that the higher the CPI (the country is clean) the better it is for entrepreneurship. Again CPI appears as an explanatory variable (Table 7).

**DISCUSSION**

The most relevant explanatory variables to explain entrepreneurship development when accounting for the most recent data are CPI, GDP per capita, quantity of education and ICT use. This means that the intangible asset that is entrepreneurship is related to tangibles that are GDP, ICT use and quantity of education besides an intangible bad represented by CPI. This says that the enhancement of entrepreneurship accounts for education and use of information technologies with the importance of financial capital most of the time but a reduced level of corruption is necessary like it is confirmed by the findings of Taslim (1994) and Dreher and Gassebner (2013). Moreover, Szylowicz and Wadhwani (2007) add that fighting corruption has a positive effect as it allows entrepreneurs to access new markets and makes the procedures easier and faster. The intangible bad nature of corruption is confirmed in all models with the positive signs of the estimated coefficients of the CPI in all the models implying that higher corruption leads to lower entrepreneurship. These findings go in hand with those of Avnimelech et al. (2014) that state that corruption affects negatively the productivity which happens mostly in the developed countries. Similarly, Anokhin and Schulze (2009) encourage the control of corruption because it participates to the increase of innovation and entrepreneurship. On the other hand, Acemoglu and Verdier
### Table 6. Entrepreneurship in OECD countries.

<table>
<thead>
<tr>
<th>Dependent Variable: GEDI</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP_PPP</td>
<td>3.76E-06</td>
<td>1.63E-06</td>
<td>2.301771</td>
<td>0.0293</td>
</tr>
<tr>
<td>CPI</td>
<td>0.004495</td>
<td>0.001162</td>
<td>3.868696</td>
<td>0.0006</td>
</tr>
<tr>
<td>QUANTITY_OF_EDUCATION</td>
<td>0.004498</td>
<td>0.009124</td>
<td>0.492995</td>
<td>0.6260</td>
</tr>
<tr>
<td>ICT_USE</td>
<td>-0.001006</td>
<td>0.016931</td>
<td>-0.059420</td>
<td>0.9531</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.769586</td>
<td>Mean dependent var</td>
<td>0.467419</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.743985</td>
<td>S.D. dependent var</td>
<td>0.112278</td>
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<tr>
<td>S.E. of regression</td>
<td>0.056811</td>
<td>Akaike info criterion</td>
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</tr>
<tr>
<td>Sum squaredresid</td>
<td>0.087141</td>
<td>Schwarz criterion</td>
<td>-2.593243</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>47.06324</td>
<td>Hannan-Quinn criter.</td>
<td>-2.717958</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>1.881961</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 7. Entrepreneurship development in Arab countries.

<table>
<thead>
<tr>
<th>Dependent Variable: GEDI</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDPCPI</td>
<td>1.73E-08</td>
<td>4.81E-09</td>
<td>3.601382</td>
<td>0.0042</td>
</tr>
<tr>
<td>QUANTITY_OF_EDUCATION</td>
<td>0.018314</td>
<td>0.009227</td>
<td>1.984850</td>
<td>0.0727</td>
</tr>
<tr>
<td>ICT_USE</td>
<td>0.070299</td>
<td>0.017529</td>
<td>4.010389</td>
<td>0.0020</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.939139</td>
<td>Mean dependent var</td>
<td>0.286429</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.928073</td>
<td>S.D. dependent var</td>
<td>0.104042</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.027903</td>
<td>Akaike info criterion</td>
<td>-4.132745</td>
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</tr>
<tr>
<td>Sum squaredresid</td>
<td>0.008564</td>
<td>Schwarz criterion</td>
<td>-3.955804</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>31.92921</td>
<td>Hannan-Quinn criter.</td>
<td>-4.145421</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>2.429459</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1998) found in their research that hierarchy impacts positively entrepreneurship. They believe that rigorous bureaucratic control is benefic for entrepreneurship and corruption.

When taking together all countries included in the 2013 dataset of the GEDI, entrepreneurship development appears to be driven by quantity of education, the level of CPI besides GDP per capita and the use of ICT. This means that entrepreneurship development requires education, ICTs and revenue besides good business environment as indicated by the level of the intangible asset that is the perception of corruption. Low (respectively high level of CPI) induces according to the estimated model, low (respectively higher entrepreneurship).

When disaggregating the data into groups representing countries in Asia, America (plus Australia), Europe and Africa, similar results are obtained for the importance of GDP per capita and for CPI. Likewise, Palifka (2006) and Festus et al. (2014) believe that corruption aborts entrepreneurship initiatives and investments. Countries in Asia show that education quantity besides GDP and CPI, do have statistically significant effects on entrepreneurship development.

For the America (plus Australia) group, the only statistically significant coefficients are those of GDP and CPI. The quantity of education besides the use of ICTs have no more explanatory power as this is may be related to the low of levels of heterogeneity in these variables in these subsets of countries. For Europe, the “ICT use” variable becomes important as its coefficient is statistically highly significant. It adds to GDP and ICT while the coefficient of “education quantity” is not statistically significant. Here again, education does not exhibit higher heterogeneity while ICT does.

Besides the results of the geographical groups shown
above, the OECD group and a group of Arab countries are also considered in these regressions. The OECD group shows statistically significant coefficients for GDP and CPI. For Arab countries and with only 14 observations the best estimated model includes GDP and CPI represented under their product besides the ICT use. Again CPI appears as an explanatory variable.

Conclusion

This paper has attempted to assess the link between entrepreneurship development and other variables with focus on corruption. For that purpose, GEDI and CPI with the most recent data are used in linear regressions with other explanatory variables.

The results attained confirm that entrepreneurship is likely to be favored by economic policies that focus on education, the use of information technologies besides access to financing within a less corrupted business environment. While large and medium enterprises could develop through accessing specific creation needs, small and very small enterprises could benefit from public information guided by the results attained in this paper. But issues related to the sustainability and to the dynamics of entrepreneurship require further monitoring through ensuring data flows on all variables that pertain to the area of entrepreneurship. The contribution of the Global Institute of Entrepreneurship and Development (GIED) to the promotion of knowledge and information on entrepreneurship is recognized here as important pillar for the present paper. Further monitoring needs to be ensured through the use of the GEDI and other indices produced by the GIED. Transparency International with the CPI is also another contributor. Under such framework, anti-corruption policies in addition to education, credit and advancement of information technologies could be monitored as likely means to promote small business entrepreneurship and thus employment, market expansion and overall development.

Conflict of Interests

The author has not declared any conflict of interests.

REFERENCES


Journal of African Studies and Development

Related Journals Published by Academic Journals

- African Journal of History and Culture
- Journal of Media and Communication Studies
- Journal of African Studies and Development
- Journal of Fine and Studio Art
- Journal of Languages and Culture
- Journal of Music and Dance