
Crime Rate and Firm Entry in Nigeria

Folorunsho M. Ajide¹ and Rufus A. Ajisafe²

¹ Department of Economics, Faculty of Social and Management Sciences, Southwestern University, Nigeria

² Department of Economics, Obafemi Awolowo University, Ile Ife, Nigeria

One of the important areas that have not received much attention is the influence of crime rate on new firm entry. Therefore, this paper examined the effect of crime rate on firm entry using Nigeria as a case study. We used ARDL methodology to analysis data covering the period of 1986 to 2013 which were sourced from Central Bank of Nigeria (CBN) statistical bulletin, National Bureau of Statistics, World Bank Development Indicator and Nigerian Police Force. After controlling for economic condition, human capital development and financial development, our results showed that in the short run, lagged two of crime rate significantly influenced the firm entry negatively while current and one-lagged crime rate significantly and positively influenced firm entry. In the long run, crime rate had positive effect on firm entry. This implies that as crime rate increases; the level of entrepreneurial activities would reduce which would eventually has negative effect on economic activities because the presence of criminal activities has raised the cost of doing business and business uncertainty level has become unbearable to entrepreneurs. However, in the long run as crime rate increases, firm entry also increases because the entrepreneur has realized that the cost of crime can be overcome in the long run through tax evasion and poor institutional quality in the system.

Keywords: Crime rate, firm entry, bound test, Nigeria

JEL Classification: L11, L26, O55

INTRODUCTION

Nowadays, crime and its detrimental effects have received wide attention in research. In the field of economics, many researchers have related crime rate to macroeconomic variables such as economic growth, unemployment, poverty, institutions, regulations while little attention is given to the effect of crime on microeconomic variables. For instance, Detotto and Otranto(2010) note that the detrimental effect of crime to the legal economic activity such as business activities is still neglected. Crime can act like a tax on the entire economy. It may discourage investments, reduces the competitiveness of firms(by reducing firm entry), and reallocates resources, creating uncertainty and inefficiency in an industry. This is possible in a country where the rule of law is weak, and high level of corruption also creates uncertainty and non-consistency, which can deter the firms' prosperity in that country.

Consequently, there would be absence of confidence in investment environment which may deter foreign and domestic investment with several impacts on development and growth. High crime rate leads to higher cost of doing business, because of the need to employ different forms of security by incumbent firms, and diverts investment away from business expansion and productivity improvement, and may lead to a less than optimal operating strategy. Crime rate increases business uncertainty due to business losses, arising from looting, arson, theft, extortion and fraud. It leads to loss of output because of reduced hours of operation. It can also cause a permanent shut-down of firms or relocation to less

crime-prone countries. This eventually leads to reduction in firms' entry.
as a result, firms' entry decreases.

The above description can be attributed to Nigerian business environment where the main problem faced by businessmen is illegal practices such as bribery and corruption. The fatality of being involved in corruption activities constitutes the main pervasive and self-reinforcing entry barrier(Iwasaki, Maurel & Meunier, 2016).The current trend shows that investment opportunities and the level of firm entry in Nigeria have stifled by the increasing levels of uncertainties in the macroeconomic environment coupled with high level of corruption. Nigerian business environment has moved backwards in terms of investor protection and the ease of starting a business (Nigeria was rated 133rd out of 183 countries in doing business). The country exhibits various level of criminal activities; which include armed robbery, murder, rape, car theft, burglary, fraud, bribery and corruption, food and drug adulteration, gambling, smuggling, human trafficking, kidnapping, drug trafficking, money laundering, internet scam, advanced fee fraud (419) and other illegal activities (Adebayo, 2013).

In Nigeria, the youth are the major teaming population that engages in criminal activities due to high rate of unemployment among others. As of 2009, the youth population is about 46.4 million especially between the age group of 15-39 years (National Population Commission, 2009). It was declared by the National Bureau of Statistics (2009) that the national unemployment rates for Nigeria between 2000 and 2011 showed that the number of unemployed persons constituted 31.1% in 2000. Meanwhile, some youths practice self-employment, but find it difficult to survive in their business operation due to; political instability in the country, high level of corruption, poverty, poor governance, increasing population without adequate policy

initiatives among others. These phenomena contributed enormously towards high crime rate in the country which includes kidnapping, armed robbery, formulation of militant group among others which has negative effect on birth of new firms. By implication, foreign and even domestic investors will be discouraged to make investment because of uncertainties in the country surrounded by high crime rate.

The main objective of this study is to investigate the effect of crime rate on firm entry in Nigeria for the period 1986 - 2013. The study on the effect of crime rate on firm entry in African continent is relatively scarce with exception to the work of Mahofa, Sundaram and Edwards (2016) who examine the relationship between crime and the entry of firms across local municipalities in South Africa. Our paper complements their findings by empirically examining the effect of crime rate on firms' birth in Nigeria. We deviate from the previous work in a number of ways. Firstly, we study the crime-firm entry nexus using time series data spanning from year, 1986 to 2013, by adopting the recently developed autoregressive distributed lag (ARDL) approach to co-integration test by Pesaran, Shin and Smith, (2001), Pesaran and Shin (1995, 1999).The time series approach seems to have several advantages in terms of the interpretation of results and its application because it allows the identification of dynamic processes and the forecasting analysis. In addition, this methodology allows firm entry variations to be explained by its past history and the crime rate. It also allows us to examine both short and long run effects of crime rate on firm entry in Nigeria. Our study uses crime data which is rarely available in the country. The study is country specific because what is defined as a crime in country is not a crime in another due to underreporting of certain offences which they believe are social stigma to the victims. The rest of this paper is organized as follows: section 2 review literature, section 3 entails the methodology, section

4 discusses the results and findings of the paper while section 5, concludes the study.

LITERATURE REVIEW

The entry and exit process of firms can be coined from the creative destruction of Schumpeterian preposition. In his view, a firm enters a market with new technology, and competes with an incumbent firm that uses conventional technology. Sönmez (2013) noted that if the new innovating firms cope with the competition, it would be able to replace the incumbent firms. If not, they will fail to survive and exit from the market. In this process, only successful firms can survive in the market, and resources are transferred from inefficient firms to efficient firms. The entry and exit of firm based on innovation and new technology can be further classified into passive and active learning models. When we assume that firms do not know their productivity when they enter the market, and they learn it over time we are referring to passive learning system. However, if firms' productivity is too low compared to its competitors, it would decide to exit the market. If firms enter the market, and invest in order to increase their productivity, cope with the competition, and survive in the market. It is called active learning system. If not, they decide to exit the market (Cincera&Galgau, 2005).Melitz (2003) proposed a dynamic model with heterogeneous firms to analyze the intra-industry effects of international trade. He proposed that firm entry increases in as much as the expected discounted value of profits equals the cost of entry. It is believed that higher productivity leads to higher profitability and consequently increases the entry of firms in an industry.

Analyzing the process of new firm entry and its determining factor can be considered as an important element in an economic setting. This is because it helps to transfer resources from inefficient activities to more productive activities and helps to reduce monopoly rents(Caves, 1998; Iwasaki et al et,

2016). In investigating the ways by which crime rate affect business activities, Bates and Robb (2008) concluded that the effect of crime on firm performance might be indeterminate. Low crime areas offer higher returns than high crime areas. If high-crime locations are riskier than low-crime areas, investments flows should be driven towards the high-crime area, only if firms operating in that area earn above-average profits that exceed the cost of crime because of the disutility or decreased production up to a point where expected returns to capital are equalized across the two areas.

Garrett and Ott (2009) examined the influence of city-level business cycle fluctuations on crime in 20 large cities in the United States. Their monthly time-series analysis considers seven crimes over an approximately 20-year period: murder, rape, assault, robbery, burglary, larceny, and motor vehicle theft. Short-run changes in economic conditions, as measured by changes in unemployment and wages, are found to have little effect on city crime across many cities, but property crimes are more likely to be influenced by changes in economic conditions than are more violent crimes.

Bruno, Bychkova and Estrin(2008) examined a three-year panel data set of Russian firms spanning from 2000 to 2002. They investigated the effect of regional institutional and economic factors on entry rates across time, industries and regions. The study was built on a novel database and exploited inter-regional variation in a large number of institutional variables. The authors found that entry rates in Russia are not especially low by international standards and are correlated with natural entry rates, institutions and firm size.

Rosenthal and Ross (2010) analyzed the effects of crime on business location in five US cities. Combining crime data and business survey and assuming that land bids differ monotonically with violent crime, they found that while firms tend to disproportionately locate in high-crime areas, an increase in 100 violent crimes would reduce the

retail share of employment by 22% and reduce the high-end share of local restaurants by 4.4 percentage points.

Kerr and Nanda (2010) examined the effect of U.S. branch banking deregulations on the entry size of new firms, using micro-data from the U.S. Census Bureau. They found that the average entry size for startups did not change following the deregulations. However, among firms that survived at least four years, a greater proportion of firms entered either at their maximum size or closer to the maximum size in the first year. Their results highlight that this large-scale entry at the extensive margin can obscure the more subtle intensive margin effects of changes in financing constraints.

By referring to a model on the relationship between, production function, level of crime and self-protection, Kimou and Gyimah-Brempong (2012) tested empirically the impact of crime on business activity in Cote d'Ivoire. Using a recent World Bank enterprise survey data set and a quasi-experimental methodology, they controlled for the direction of effects of crime on profitability and investment. As predicted by their theoretical framework, they found a mixed effects of crime through the channel of private provision of security: self-protection increases the profitability of contracted firms while hampering their level of investment.

Dougherty (2014) used the variation in legal system quality across states in Mexico to examine the relationship between judicial quality and firm size over the course of the 2000s, when systemic changes were taking place. Using economic census microdata and survey-based measures of legal institutions, a robust effect of judicial quality is observed on the firm size distribution and efficiency, instrumenting for underlying historical determinants of institutions. Indicative evidence is found that the effect is strongest in more capital intensive industries. Market size and distance-to-market are also found to matter for firm size outcomes.

Iwasaki, Maurel and Meunier (2016) empirically analyzed the determinants of firm entry and exit in Russia using a regional-level panel data for the years of 2008–2014, with special emphasis on institutional failures and the politico-economic impact of external crises. They found that these two elements exhibit statistically significant and economically meaningful effects both on the creation and destruction of Russian firms, controlling for potentially explanatory factors. Their empirical results also suggest that the process of firm entry and exit is manifold across Russian regions due to their heterogeneity. Nevertheless, a surprisingly robust estimate of the world oil price (irrespective of the difference in target regions) suggests a possible high exposure of each Russian region to a global crisis. This comes from the importance of oil trade with the world and, accordingly, the ongoing crisis may bring a harmful influence to regeneration of Russian businesses.

Mahofa, Sundaram and Edwards (2016) analysed the relationship between crime and the entry of firms across local municipalities in South Africa. They used data on the incidence of crime, sourced from the South African Police Service, and a unique database of business registrations over the period 2003 to 2011, to show that crime reduces business entry. Their results were robust as they used rainfall shocks as an instrumental variable for crime, in order to control for potential bias arising from the fact that crime might be a consequence, rather than a cause of the entry of firms. Their paper highlighted the importance of strong local institutions that can lower the costs of doing business for business dynamism.

DATA AND METHODOLOGY

Data

Starting from year 1985, the crime rate in Nigeria and other illegal practices continue to be at higher level. Corruption was perceived to be a legalized deal along with other business activities. Since then, the

business climate in Nigeria continues to experience uncertainties which might have drastically affected new firm entry. In order to effectively capture this phenomenon, this study uses time series data covering the period of 1986–2013. Our study is based on secondary data which were sourced from Central Bank of Nigeria (CBN) statistical bulletin; National Bureau of Statistics, World Bank Development indicator and Nigerian Police Force.

Based line specification

We situate our study on the theoretical preposition of Melitz (2003) who developed a framework that firm entry (FM) increases in as much as the expected discounted value of profits equals the cost of entry. It is believed that higher productivity leads to higher profitability, consequently, the higher the entry of firms in an industry. However, we can take higher crime rate (CR) as a shock to the system. This is because, higher crime rate would increase the cost of doing business, hence higher crime will lead to low firm entry in an industry. Therefore, it is only the highly productive firms that will have expected profits high enough to justify paying the entry costs (Mahofa et al, 2016).

We further include a set of control variables, thus: economic condition (EC), human capital development (HD) and financial development (FD). This is because general economic condition is also a factor that affects the decisions of firms in terms of entry and exit the market. A favorable economic condition negatively affects exit decisions of firms from a market.

Human capital development also has relationship

with firm entry. A country with skilled labour has the tendency to attract high level of firm entrance. A good human development system can produce higher level of entrepreneurial activities.

Ghosal (2003) noted that initial capital and the financial structure of the firm serve as one of the main determinants of firm entry into an industry. He proposes that the firms that encounter financial constraints have lower survival probability, and higher exits. Generally, smaller and younger firms face financial difficulties, and they borrow more and have higher probability of failing to pay back. Also, it has been documented that a significant effect of the interest burden from debt-servicing costs on firm survival. Therefore, we include in our model; the financial development variable to capture the effect of financial development on firm entry. Following our discussion, we specify that:

$$FM = f(CR, EC, FD, HD) \quad (1)$$

In specific form, we transform equation (1) and adopt autoregressive distributed lag (ARDL) framework by Pesaran and Shin (1995, 1999), Pesaran et al. (1996) and Pesaran (1997). This approach does not involve pre-testing variables, which means that the test on the existence relationship between variables in levels is applicable irrespective of whether the underlying regressors are purely I(0), purely I(1) or mixture of both. Fundamentally, the ARDL approach to cointegration (Pesaran, Shin & Smith, 2001) involves estimating the conditional error correction version of the ARDL model for firm entry and its relative determinants:

$$\begin{aligned} \Delta FM_t = & \alpha_0 + \sum_{i=1}^k \pi_i \Delta FM_{t-i} + \sum_{i=0}^k \gamma_i \Delta CR_{t-i} + \sum_{i=0}^k \theta_i \Delta EC_{t-i} + \sum_{i=0}^k \psi_i \Delta FD_{t-i} \\ & + \sum_{i=0}^k \delta_i \Delta HD_{t-i} + \alpha_1 FM_{t-1} + \alpha_2 CR_{t-1} + \alpha_3 EC_{t-1} \\ & + \alpha_4 FD_{t-1} + \alpha_5 HD_{t-1} + \epsilon_t \end{aligned} \quad (2)$$

Where Δ is first-difference operator and k is the optimal lag length, Firm entry(FM), Crime (CR),economic condition (EC), human capital development (HD) and financial development (FD)while ε_t is the white noise. It is used to capture other factors that can affect poverty reduction which are not accounted for in the study.The F test is used for testing the existence of long-run relationship. The null hypothesis for no cointegration among variables in equation (2) is $H_0: \alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5 = 0$ against the alternative hypothesis $H_1: \alpha_1 \neq \alpha_2 \neq \alpha_3 \neq \alpha_4 \neq \alpha_5 \neq 0$. Given a relatively small sample size in this study of 28 observations, the critical values used are as reported by Narayan(2004). The test involves asymptotic critical value bounds, depending whether the variables are $I(0)$ or $I(1)$ or a mixture of both. Two sets of critical values are generated which one set refers to the $I(1)$ series and the other for the $I(0)$ series. Critical values for the $I(1)$ series are referred to as upper bound critical values, while the critical values for $I(0)$ series are referred to as the lower bound critical values. If the F test statistic exceeds their respective upper critical values, we can conclude that there is evidence of a long-run relationship between the variables regardless of the order of integration of the variables. If the test statistic is below the upper critical value, we cannot reject the null hypothesis of no cointegration and if it lies between the bounds, a conclusive inference cannot be made without knowing the order of integration of the underlying regressors. Therefore, if the results show the existence of co- integration, we can then proceed to estimate the Error correction

Table 1: Descriptive statistics					
	FM	CR	EC	FD	HD
Mean	0.000783	12.04933	6.133374	17.90060	4.204869
Median	0.000686	12.12149	6.215510	13.76152	4.188113
Maximum	0.009091	12.64857	30.70928	36.89332	8.402582
Minimum	8.20E-05	10.03452	0.200000	8.828019	0.320180
Std. Dev.	0.001667	0.529786	5.933957	8.014265	2.037654
Observations	28	28	28	28	28

model (Pesaran et al,2001). The essence of error correction model is to show the speed of adjustment back to long run equilibrium after shock.

Variable measurement

Firm entry (FM) is measured as number of new business registration divided by working population (within age of 16-64) in Nigeria for various years. Crime (CR)is proxied as first difference of natural Log of total crime reported, economic condition (EC) is proxied as growth rate of real gross domestic product(GDP), human capital development (HD) is taking as government expenditure on education as a percentage of GDP and financial development (FD) is the credit to private sectors as a percentage of GDP.

EMPIRICAL RESULTS AND DISCUSSION

Descriptive statistics

Table 1 reports the descriptive features of our variables. It shows that the average firm entry rate in Nigeria is about 0.0008 per working population with maximum value of 0.0091 and minimum value of 0.00008 per working population. Crime rate is 12 on average with maximum rate of 13 and minimum rate of 0.2. The growth rate of GDP is 6% on average with minimum value of 0.2%. Also, the human capital development is 4.2 % on average with standard deviation of 5.9%. It shows the level of volatility of the variable. Financial development is 17.9% on average. Its maximum amount is 36.89%.

It can be confirmed in the Table 1 that financial development records the highest rate of volatility follow by economic condition. The least volatile variable is firm entry rate. The Table 2 reports the correlation between the variables. As can be seen, there is no evidence of multicollinearity among the variables.

Properties of the data

Table 3 shows the unit root results of the variables after conducting Augmented Dicky-Fuller (ADF) test. This pre-test is necessary to know the properties of the variables and to further determine if the methodology adopts is appropriate for the study. As

can be seen in the Table 3, we can confirm that crime rate and financial development are stationary at first differencing while firm entry, growth rate of GDP and Human capital development are stationary at level.

Since some variables are stationary at level while others are stationary at first differencing, we proceed to test for the existence of long run relationship among the variables.

Bounds Test

We the results of co-integration using bound test as reported in Table 4. It shows that long run relationship exists among the variables.

Table 2: Correlation Matrix					
	FM	CR	EC	FD	HD
FM	1.000000				
CR	0.249107	1.000000			
EC	-0.033315	-0.000412	1.000000		
FD	-0.178199	0.181508	0.038728	1.000000	
HD	0.241536	-0.423142	0.283323	-0.074081	1.000000

Table 3: Unit Root test results			
Variables	ADF statistics	Critical value @ 5%	Remarks
CR	-6.545464	-2.981038	I(1)
EC	-4.598774	-2.976263	I(0)
FD	-3.807716	-2.986225	I(1)
FM	-4.494843	-2.976263	I(0)
HD	-3.900223	-2.976263	I(0)

Table 4: Bounds Test (Null Hypothesis: No long-run relationships exist)		
F=11.22902	K=4	
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.45	3.52
5%	2.86	4.01
2.5%	3.25	4.49
1%	3.74	5.06

The F-statistic is greater than both upper and lower bound of the critical value. Hence, we confirm the evidence of long run relationship among the variables.

Interpretation of estimated results

Table 5 report the short run effect of crime rate on firm entry. After controlling for economic condition, human capital development and financial development, we confirm that the lagged two of crime rate negatively and significantly influences firm entry in Nigeria. Also, last year and current year crime rate positively influence firm entrant. It means on average as crime rate increases firm entry decline in the short run.

A two-lag effect of crime rate has negative effect on firm entry. This result is consistent with the result of

Mahofa, et al (2016). This means that a one –percent increase in the last two years crime, crime rate would reduce firm entry by 0.43% on average. By implication, if increase in last two years crime rate deters firm entry then business investment would reduce hence, a negative impact on economic growth in Nigeria. Crime, like corruption, should reduce growth by raising the cost of doing business and increasing uncertainty.

Availability of skilled labour seems to increase the level of firm entry in Nigeria as reported in Table 5 in the short run. A bad economic condition especially recession period tends to reduce the level of firm

Table 5: Short-run results using ARDL ^a Dependent variable: <i>Firm Entry(FM)</i>			
Variables	Coefficients	t-statistic	Prob.
ΔFM(-1)	-0.408310	-1.815742	0.1291
ΔFM(-2)	-0.184144	-1.266256	0.2612
ΔCR	0.000180	0.345216	0.7440
ΔCR(-1)	0.002831*	4.874944	0.0046
ΔCR(-2)	-0.004341**	-3.835678	0.0122
ΔEC	0.000351*	4.112538	0.0092
ΔEC(-1)	0.000085***	2.326295	0.0675
ΔEC(-2)	-0.000050	-1.623451	0.1654
ΔFD	-0.000359*	-5.034846	0.0040
ΔFD(-1)	0.000320***	2.388204	0.0625
ΔFD(-2)	-0.000179***	-2.169319	0.0822
ΔHD	0.000152	1.153408	0.3009
ΔHD(-1)	0.000317	1.897194	0.1163
ΔHD(-2)	0.000557**	3.353006	0.0203
ΔCointEq(-1)	-0.821893**	-3.654450	0.0147
Adj. R ²		0.8201	
D.W. Stats		2.527	
F-statistic		6.758268	
Prob(F-statistic)		0.021788	
Breusch-Godfrey Serial Correlation LM Test[F(3,2)= 0.563880, Prob. =0.6898]			
Heteroskedasticity Test: Breusch-Pagan-Godfrey[F-statistic=0.574279, Prob.(19,5)=0.8625]			

^aSelected Model: ARDL (3, 3, 3, 3, 3), *significance at 1%, ** significance at 5%, ***significance at 10%

entry. While the level of financial development may not necessary support the firm entrance into the economy in the presence of significant high crime rate. The coefficient of error correction term confirms the validity of short run relationship among the variables. The coefficient is 82.1%, negative and significant. It shows that the adjustment to equilibrium is corrected by 82.1 percent in the following year.

However, in the long run, the crime rate increases the firm entry but not significant as reported in Table 6 after controlling for human capital development, economic condition and financial development. In the long long run a good economic condition increases firm entry in Nigeria. We perform series of diagnostic tests as reported in Table 5. Our results pass serial correlation test and heteroskadescity test. We also perform stability test as reported in the appendix. It is very clear that our estimate is stable when replicate.

DISCUSSION OF FINDINGS

Our long run and partly short run result shows that the current and last year crime rates increase firm entry. This supports the hypothesis of Leff (1964) and Huntington (1968), who state that when there are pervasive regulations that limit potential gains for firm entrance into trading activities, corruption as well as crime commitment (such as certificate forgery) would allow entrepreneurs to bypass official regulations and further capitalize on growth

opportunities. Also, the two lagged crime rate significantly reduces firm entry as reported in the Table 5(short run). This implies that if the crime rate continues to discourage firm entry entrepreneurs would find alternatives, in the long run especially in a country like Nigeria where property rights are notwell defined and enforced, people have to resort to violence crime to enforce contracts rather than the court system. So lack of rule of law would tend to increase crime. Therefore, entrepreneurs gain an entrance into an industry by paying bribes in the short run and committing other forms of criminal activities in order to break the bureaucratic bottle neck of the government. The intuition is that with an expanding bureaucratic system of government there will be decreasing opportunity cost of committing crime in order to gain an entrance into an industry. Hence, the higher the crime rate, the high the firm entry in the long run. As opined by Powell, et al (2010) corruption can be legal, such as making campaign contributions to secure a grant of monopoly privilege, or it can be an illegal payment of a bribe. It was stated that not all forms of corruption are crime; some activities are both corrupt and criminal. Crime includes not only some forms of corruption but also a wide range of other activities such as larceny, burglary, theft, murder, rape, 'organized crime', drug possession and distribution and tax evasion. For instance, Nigeria tax collection system is weak. Foreign and domestic firms may operate for years and continue to commit tax evasion which is a form of crime. This type of

Table 6: Long-run results using ARDL ^b Dependent variable: Firm entry(FM)			
Variable	Coefficient	t-Statistic	Prob.
CR	0.001265	1.008635	0.3594
EC	0.000613**	3.195228	0.0241
FD	-0.000077	-1.732917	0.1437
HD	-0.001695***	-2.222528	0.0769
C	-0.009553	-0.550731	0.6055

^bSelected Model: ARDL (3, 3, 3, 3, 3), ** Significance at 5%, *** significance at 10%

system encourages firm entry in the long run especially where it is not check. The size of government in Nigeria is large. The country operates the three system of government with high level of bureaucratic problems and regulations. When the size of government is large or when there are many regulations, corruption is a beneficial way to circumvent growth-retarding government presence and regulations that would otherwise hinder productivity as discussed by Heckelman and Powell(2009).

CONCLUSION AND POLICY IMPLICATION

We examine the effect of crime rate on firm entry in Nigeria from 1986 to 2013 using ARDL methodology. Our results show that in the short run, lagged two effect of crime rate significantly influences the firm entry negatively while current and one-lagged effects of crime rates have positive effect on firm entry. Also, in the long run crime effect is positively influenced firm entry. This implies that as crime rate continues to decrease firm entry; private business investment would reduce which has negative effect on economic growth because the presence of criminal activities has raised the cost of doing business and business uncertainty level has become unbearable to entrepreneurs. However, in the long run, crime rate increases the firm entry. This is because firm commit crime in order to break bureaucratic bottleneck of gaining entrance into an industry at the same time since Nigerian tax collection system is weak, the firms realize that the cost of high crime rate can be overcome in the long run by practicing tax evasion and avoidance. Also, the entrepreneurs can also gain an entrance into an industry by paying bribes and committing other forms of criminal activities because of the large size of Nigerian government. According to Goedhuys, Mohnen & Taha(2016), payment in form of bribes may be more efficient in the allocation of business licensing and government contracts as only the more efficient firms are able to pay the highest bribes and gain a new entrance into a new industrial climate. It

may as well decrease business uncertainty for firms by given them informational advantages and lobbying power, providing incentives for business investment and firm entry into innovative activity in the economy. The most arguments of Lui (1985) provide that crime and corruption can be taking as a means to overcome bureaucratic obstacles, even where it is morally undesirable. Bureaucracy and red tape are major barriers to firm entry into an industry and innovative activities aspect of an economy (Damanpor 1996). Nigeria serves as a special case with centralized governments as described by Qian and Xu (1998). Innovating firms need to obtain special documents and permits in order to gain entrance into an industry and secure a market advantage in an industry. Hence propel panel of policies need to be channeled to address the crime and corruption practice in the country so as to reduce the cost of doing business which would eventually reduce the level of business uncertainties.

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BRIEF PROFILE OF THE AUTHORS

Folorunsho M. Ajide, is a Lecturer in the Department of Economics, Faculty of Social and Management Sciences, Southwestern University, Nigeria. He is an alumnus of Lagos State Polytechnic, Lagos (Dipl., Accountancy), University of Ilorin, Ilorin (B.Sc. Economics) and Obafemi Awolowo University, Ile-Ife, (M.Sc. Economics).Currently; he is a PhD student in the Department of Economics, Obafemi Awolowo University, Nigeria where he concentrates on Financial Economics and Economics of Entrepreneurship. He is an Associate Member of both the Institute of Chartered Accountants of Nigeria (ACA) and Chartered Institute of Public Management (ACPM). He has authored several articles published in local and international academic journals in the area of Business, Industrial, development and Financial Economics. He has contributed to several books in the field of economics and finance. In addition, he has been relevant in the field of accounting which is evidenced from his books written in co-authorship namely: Audit practice and Assurance Services(2015), Auditing and Investigations(2014); and Ethics in Accounting(2015).

Rufus A. Ajisafe is an Associate Professor in the Department of Economics, Obafemi Awolowo University, Ilife, Nigeria. He holds a B. Sc. Economics from Ondo State University, Ado Ekiti. M. Sc and Ph.D degree in Economics from Obafemi Awolowo University, Ile Ife.

His area of interest include monetary and development economics where he has published widely in both local and international journals of repute. He has had about twenty three years of teaching experience in the university and has taught courses in the area of monetary economics, mathematics, statistics, and microeconomic theory.