

Asymmetric information, business environment, and transactions costs among business owners in Nigeria: Implications for female entrepreneurial sustainability transitions

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Abstract

This article assesses the link between asymmetric information and transaction cost and how this can enhance or hinder female business owners from attaining entrepreneurial sustainability transitions in the Nigerian business space. The concept of information dissemination, business environment, and ease of doing business were scrutinized as a subdivision of asymmetric information and transaction cost theory among female entrepreneurs in Nigeria using the Enterprise Survey Data of the World Bank. Key indicators like regulations and taxes, gender, firm characteristics, finance, and infrastructure were highlighted as major business obstacles limiting female entrepreneurs. These were found to limit female entrepreneurs in accessing information, which can help them adequately flourish in the Nigerian business environment, as well as the attainment of entrepreneurial sustainability transitions.

KEYWORDS

asymmetric information, business environment, entrepreneurial sustainability transitions, female business owners, transaction costs

1 | INTRODUCTION

The Nigerian government has been seeking ways to improve the activities of actors involved in small and medium sized businesses. However, successes recorded is in no wise commensurate to the efforts proclaimed to have been put in (Aworinde and Akintoye, 2019). Available statistics has shown that majority (>50%) of active participators in start-up small- and medium-sized businesses are females (Hart, Bonner, & Levie, 2015). The Global Entrepreneurship Monitor's annual survey-GEM-2013 annual monitoring survey as used by Amoros and Bosma in 2013 has showed that women were well represented when it comes to starting up any form of business, however, the sustained ability or the transition of such businesses into the near future is always questionable (GEM, 2013). The report further showed that, 41% of the early stage businesses were ran by females while 39% were ran by men (GEM, 2013). The National Bureau of Statistics—NBS (2019) showed that over

50% of Nigerian's population were men (from a population of 200,963,599), however, those involved in informal sector businesses compared to the females were fewer. Furthermore, although, women play important roles in entrepreneurship, female entrepreneurs are still lower and fewer when compared to men (Rubio-Banon & Esteban-Lloret, 2016). Consequently, there are a lot of common attributes and dissimilarities when discussing entrepreneurial role of males and females (Rubio-Banon & Esteban-Lloret, 2016), however, the average growth rate of enterprises ran by women is still far below that run by men (National Bureau of Statistics—NBS, 2013). It is worthy to note that both sexes become entrepreneurs based on information gathered from previous experiences, other peoples' experiences, social norms, ages of would be entrepreneurs, self-confidence and self-efficacy to mention but a few (Boldureanu, Ionescu, Bercu, Bedrule-Grigoruta, & Boldureanu, 2020).

Self-employment used interchangeably with entrepreneurial ability is a substitution to professional or business activity which has been

adjudged adequate and appropriate for workers who are dynamic and willing to take on risks thereby giving them the capacity to create their own job prospects and specifications with its stability therein (Escribano & Casado, 2018). Entrepreneurship or self-employment based on this definition could further be interpreted as the ability of persons to direct, organize, and engage in profit-oriented ventures and activities based on their risk-taking ability with the principal aim of making profit.

Entrepreneurship or self-employment has been researched focusing on both men and women. Research has also been conducted on the dissemination of information among business owners, employers of labor, and male business owners. And the direction of information linkages obtainable by entrepreneurs either male or female in taking economic decisions have been found to determine the level of success recorded short or long run (Boldureanu et al., 2020; Camelo-Ordaz, Dianez-Gonzalez, & Ruiz-Navarro, 2016; Schneor & Jenssen-Jan, 2014). This information linkage could be asymmetrical in nature where *to be* entrepreneurs has more information on the business in view or the business activities than other parties in a situation tagged or referred to as an *adverse selection decision*. There are instances where would be entrepreneur takes on costly activities in a bid to convince others of their tactfulness in business called *signaling*. However, the self-employed or would be entrepreneur could be fed with half-backed information which is the information used in launching into the business activity/environment. A situation referred to as *screening* while *incentives* and *moral hazard* are information attributes an entrepreneur takes up based on unobservable actions taken on by other parties involved with the entrepreneur one way or the other (Cardon & Hendel, 2001; Nikolaeva & Pletnev, 2016). This direction of information is not exclusive to male entrepreneurs; it is found intrinsic in a female business owner as well. However, the success in handling this informational direction varies widely among the two sexes, with the males having the upper hand in handling and management in most cases. Furthermore, information asymmetry occurs when an individual or group of people has better information than other parties with regard to features of a business, goods, or services.

There have been diverse policies and government actions that have influenced the creation and establishment of businesses in Nigeria. Which has been adjudged as fair to businesses while others have been seen as detrimental to the business environment of the nation. Furthermore, there have also been a wide range of actions carried out or implemented to favor the creation of businesses by women in the country. Businesses are springing up daily and the level of operation is affected by the transaction costs and business operating ease or environment. These costs vary from country to country. It also varies from region to region depending on the business-operating environment. Nikolaeva & Pletnev has shown from literature how transaction cost has been having adverse effects on business (Nikolaeva & Pletnev, 2016). However, there has not been a clear boundary or dividing line between the entrepreneurial activities and achievements of men compared to women (Steyaert & Katz, 2004). They are found operating in the same business environment and they are affected by the same factors among which are regulations and taxes, finance,

corruption, informality, crime, gender biases, infrastructure, trade, work force, firm characteristics, performance evaluations, and other obstacle (Enterprise Survey Data—EDS, 2014). However, the tenacity and the doggedness of men to survive more than women in this harsh business environment has been linked to cultural, environmental, and societal attributes which are favorable to the males than the females (Baughn, Chua, & Neupert, 2006). According to Estrin and Mickiewicz (2011), although women are occupying spaces in the professional and business terrain, the level of participation is still very low compared to the men (Kim, 2006; Langowitz & Minniti, 2007; Langowitz & Morgan, 2003). This is sequel to the fact that there is scanty literature on the combination of asymmetric information and transaction cost on female business owners or entrepreneurs in Nigeria with the aim of achieving entrepreneurial sustainability transitions which is the aim of this research work. This is the reason for continuous clamor for women's empowerment and gender equality as a means of enhancing economic development rapidly among women. Therefore, this research is focused on how female entrepreneurs could make asymmetric information a positive means of directing female activities and transaction cost to achieve in the business environment. These was achieved by looking into the different categories of business obstacles and what obtains in the business environment with particular emphasis on ease of doing business. Hence, female business owners or entrepreneurs where targeted in the research in order to help them move their businesses to a level where it will outlive them and thereby bring about sustainable transitions; thus this research work provided a link between asymmetric information, business environment, and transaction cost. All these are expected to help the female entrepreneur have a sustainable business transitions that would transit her.

2 | METHODOLOGY

The Enterprise survey data of the World Bank for year 2014 conducted in Nigeria was used in this study. The survey data is a panel data conducted on different enterprises and firms. Firm size levels were sub-divided into small, medium, and large sized firms, employing 5–19, 20–99, and over 100 employees, respectively.

The methodology used in sampling was stratified random sampling as reported by the Enterprise Surveys. This involves a simple random sample of population members having same probability of selection, hence need of weighting the observations. Homogenous groups are used among all the population units, selecting simple random samples within each group. This allows for the computing estimates for each strata putting in place specified precision. Population estimates can be estimated with a proper weighting of observations individually. This takes into consideration varying probabilities that may arise from selecting different strata. The survey used the strata of farm size, geographic sector within a country, and business sectors (EDS, 2014). These focused primarily on manufacturing and services sector of the country. Services sector includes retail, wholesale, transport, storage, restaurants, hotels, information technology, and communication.

The data extracted from the EDS (2014) were logically presented, inductively interpreted directly, and cross-referenced.

3 | RESULTS AND DISCUSSION

The Enterprise survey data collected in Nigeria focused on some themes which are regulations and taxes, firm characteristics, finance, corruption, crime, informality, gender biases, infrastructure, trade, work force, performance evaluations, and other obstacles (Enterprise Survey Data—EDS, 2014). However, for this research purpose we focused mainly: gender, finance, infrastructure, regulation and taxes, and firm characteristics.

3.1 | Gender bases

Women according to Escribano and Casado (2018) and Rubio-Banon and Esteban-Lloret (2016) have been seen to play important roles as entrepreneurs. However, their participation in business as shown in Figure 1 below indicates that 16.2% of them actually participated actively as owners which is contrary to the outcome of Escribano and Casado (2018) and Rubio-Banon and Esteban-Lloret (2016). Therefore, according to Bitsch (2016) could be as a result of the challenges faced by women when it comes to transfer of information in this wise and wealth to increase on their sustainability. Majority of women although prefers to be socially and economically independent, but there is little to nothing they can do based on the sociocultural environment in which they find themselves (Rubio-Banon & Esteban-Lloret, 2016). Involvements of women in entrepreneurial activities according to Holienka et al. (2016) were driven by perception of societal attitudes, social capital, and their demographic characteristics individually. These according to these researchers have impacted a lot on the decision to

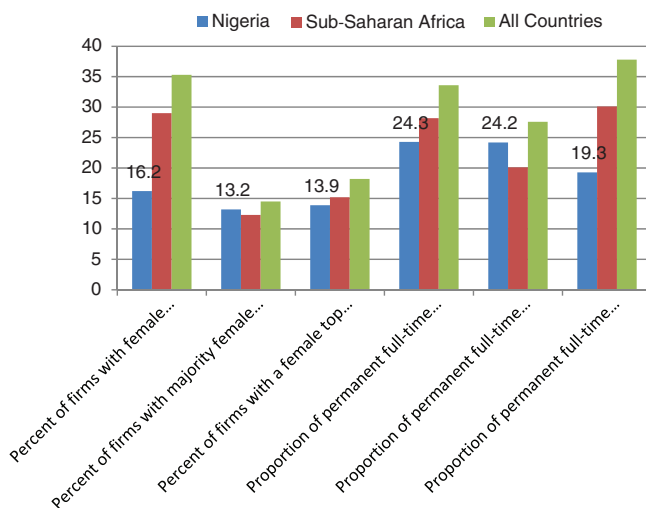


FIGURE 1 Participation of women in businesses in Nigeria, Sub-Saharan Africa, and all countries. Source: Enterprise Survey Data for Nigeria (2014)

either begin/start-up a business as well as staying in business. This research outcome is very similar to the indicators for participating as firm owners showed by the enterprise survey for Nigeria (16%), Sub-Saharan Africa (29.0%), and other countries (35.3%). The indicator for percentage of firms with majority of female owners in Nigeria is also very low (13.2%), while firms with female top managers in the country were only 13.9%. Female who were involved as full time workers and full time production workers were 24.3% and 24.2%, respectively. These indicators further support the outcomes of the research of Escribano and Casado (2018) which shows that decisions made by the females to become an entrepreneur is based on a lot of factors some of which are psychological and cultural. This further supports the outcome that more male entrepreneurs are more informed about business life and updates than females as only 30% of registered entrepreneurial businesses or outfits are owned by women in Nigeria.

3.2 | Regulations and taxes

In order for businesses in Nigeria to accomplish required successes there is need for proper regulations. Effective regulations have been found to address market failures which could serve an inhibitor to productive investment. There are clamors for good governance in form of taxation, regulations, and business licensing which are key pillars of business creation. However, in situations where regulators are not encouraging business owners then the desired result of businesses turning out to be productive investments can never be achieved. For instance, Table 1 shows a number of indicators captured by the enterprise survey. More than 60% (68.8%) of business owners or their officers have to meet with tax officials on a regular basis before they could meet their tax obligations. The implication of this is that tax operations is made stringent by the officials saddled with that duty. Hence, there is need for less stringent measures and activities by the officials of the tax collecting office in order to make business attractive in the country. This was argued by Carlson and Bitsch (2019) on the understanding of transaction costs and organizational structures, although this study was based on food systems in Germany, but the knowledge can be shared and extended to the Nigerian business terrain as a means of improving production thereby achieving more customer satisfaction. The solidarity-based food systems shared by Carlson and Bitsch (2019) if well understood is a good way of insulating producers from market pressures as witnessed by business owners from tax officers in Nigeria. Consequently, a comparison of regulations and taxes with sub-Saharan Africa shows that 69.8% of the firms had constraints as a result of having to meet with tax officials while the data for all countries shows that businesses (54.1%) were required to meet with tax officials before they can have ease of business.

3.3 | Infrastructure

Infrastructure is a key ingredient of businesses today. Businesses are made competitive with the strength and power for growth and

TABLE 1 How regulations and taxes affect businesses in Nigeria

Indicator	Nigeria	Sub-Saharan Africa	All countries
Senior management and time spent dealing with requirements of regulations of government (%)	7.5	8.5	8.8
Percent firms visited and requirement to meet with tax officials	68.8	69.8	54.1
Average number of visits or required meetings with tax officials, if there was visits	3.7	3.6	2.7
Number of days to obtain an operating license	14.4	22.4	28.7
Days to obtain a construction-related permit	16.5	48.5	67.6
To obtain an import license in days	18.8	15.6	16.2
Firms identifying tax rates in percent as a major constraints	18.5	35.7	32.8
Percent of firms that identified tax administration as a major constraint	14.1	29.2	23.1
Firms in percent whose major constraints was business licensing and permits	9.3	17.5	14.5

Note: Enterprise Survey Data for Nigeria (2014).

TABLE 2 How infrastructure affects businesses in Nigeria

Indicator (main limitation)	Nigeria	Sub-Saharan Africa	All countries
Experiencing electrical outages (%)	77.6	75.6	57.3
Number of electrical outages in a typical month	32.8	8.5	5.6
Average duration, if there were outages (hr)	11.6	6.5	4.6
Average losses due to electrical outages (% of annual sales)	15.6	8.1	4.3
Sharing or ownership of a generator (%)	70.7	51.5	34.9
What is the average proportion of electricity from a generator (%)	58.8	27.2	18.4
Upon application how many days does it take to obtain an electrical connection	9.4	36.5	36.7
Electricity as a major constraints (percent)	48.4	41.7	33.2
Percent of firms experiencing insufficiency of water	16.4	22.3	13.2
Number of water insufficiencies in a typical month	2.5	2	1.1
Proportion of products lost to breakage or spoilage during shipping to domestic markets (%)	2.8	1.9	1.3
Transportation as a major constraints (percent)	17.1	26.3	20

Note: Enterprise Survey Data for Nigeria (2014).

development when there is strong infrastructure in place (Nedozi et al., 2014). When infrastructures are good, adequate and in their right proportion, customers and producers of goods and services are able to connect perfectly and adequately (Agbigbe, 2016). There were some indicators used by the enterprise survey data in capturing some available infrastructures to business entrepreneurs in Nigeria, sub-Saharan Africa, and all countries as a whole. Some of these indicators have shown in Table 2 below however indicated that business owners in Nigeria are at a disadvantage as more than 70% (77.6%) complained of electrical outage as a constraint to their business. Lack of infrastructural access by business owners is one of the major impediments to business growth and development according to Aworinde and Akintoye (2019). This further shows that because business owners do have access to electricity, 70.7% of them had to share generators in Nigeria in order to generate light and electricity needed for their business; this would come about as a result of high cost of diesel/fuel. More than 50% businesses in sub-Saharan Africa share generators as a means of generating electricity while 34.9% share generators in

businesses sampled in all other countries. Therefore, in Nigeria 48.4, 16.4, and 17.1% has been able to identify electricity, water, and transportation, respectively, as the most important constraints of doing business in Nigeria.

3.4 | Firm characteristics

The firm characteristics as captured by the indicators from the enterprise survey as seen in Table 3 shows that business owners were not novices as the least number of years firms interviewed were in operation was 15.9 years. The indicator further shows that 70.7% firms were privately owned by Nigerians, 76.7% had a status of sole proprietorship while 24.1% had invited external auditors to audit their annual financial statements. The implication of this is that although businesses were privately or solely owned, there is still a lack of adequate financial education or information on the parts of business entrepreneurs (Boldureanu et al., 2020) and this will

TABLE 3 How firm characteristics affect businesses in Nigeria

Indicator	Nigeria	Sub-Saharan Africa	All countries
Age of firms (years)	15.9	14.7	17.5
Proportion of domestic private ownership in a firm (%)	70.7	77.5	86.7
Percent of firms having at least 10% of foreign ownership	9.2	18	12.0
Percent of firms with at least 10% of government/state ownership	8	1.6	0.8
Percent of firms having legal status of sole proprietorship	76.7	58.2	42.6
Percent of firms internationally recognized quality certification	7.1	11.4	15.1
Percent of firms whose annual financial statement have been reviewed by external auditors	24.1	48.7	47.5

Note: Enterprise Survey Data for Nigeria (2014).

TABLE 4 How finance affects businesses in Nigeria

Indicator	Nigeria	Sub-Saharan Africa	All countries
Percent of firms who have a checking or savings account	70.4	87.4	88.0
Percent of firms running on bank loan/line of credit	11.4	21.5	33.2
Proportion of loans that requires collateral (%)	88.8	84.3	77.7
What value of collateral is needed for a loan (% of the loan amount)	227.7	203.7	199.1
Percent of firms not in need of a loan	49.4	38.6	47.3
Percent of firms who has recent loan application rejected	18.1	15.6	10.8
Percent of firms depending on banks for investment financing	6.9	19.4	26.5
Proportion of investment internally financed (%)	52.5	75.3	71.8
Proportion of investment financed by banks (%)	3.4	9.8	14.9
Percent of firms whose sole working capital is from the bank	16.9	22.5	30.1
Percent of firms using supplier/customer credit as working capital	27.4	22.8	29.7
Proportion of working capital financed by banks (%)	3.9	8.8	11.7
Percent of firms whose main constraints was access to finance	33.1	38.8	26.1

Note: Enterprise Survey Data for Nigeria (2014).

continue to hinder their level of reach, achievements, and posterity (Babatunde, 2016; Nikolaeva & Pletnev, 2016).

3.5 | Finance

The above discussion on firm characteristics has further implication for business owners than they themselves would ever have imagined. It is worthy of note that the minutes information obtained by business owners¹ will go a long way in determining businesses expansion, liquidity, and posterity in the long run. The indicators shown in Table 4 attest to the fact that the proportion of entrepreneurs who will have access to banks and other financial institutions are premise on the available information² to such business owners (Chiappori & Salanie, 2000; Matagu, 2018). In order for a business to exist, there is need for initial bank account opening. Therefore, a business entrepreneur may need to show financial details supported by the statistics of 70.4% entrepreneurs as shown in Table 4, who presented with initial bank account details. This will further either enhance or delay businesses and business owners in moving forward as need arises for loans. This is reflected when 49.4%

business owners needed to show financial literacy in book keeping and accounting which is very critical in today's business environment than storing information in the brain and word of mouth.

Furthermore, to further discourse the constraints faced by entrepreneurs in the Nigerian business environment 227.7% value was needed as collateral by firms before they can access loans. This is more than a hundred percent increase in asset or collateral if an entrepreneur would have access to loan at all. This is too stringent for an upcoming business owner and majority of the small or medium sized businesses scattered all over the country. This is even more stringent on female entrepreneurs who do not readily have access to productive assets as a result of cultural, social, and environmental constraints (Escribano & Casado, 2018; Camelo-Ordaz et al., 2016; Holienka et al., 2016; Rubio-Banon & Esteban-Lloret, 2016).

4 | CONCLUSION


Using the Enterprise survey of the World Bank conducted on businesses and business owners in Nigeria for 2014, we identified some

important indicators serving as obstacles to female entrepreneurs. This therefore necessitates an understanding and asymmetry of information by female entrepreneurs if they want to excel in business and as well as transit their business to the upcoming generation. This article has been able to show that there is a link between symmetric information on financial business knowledge and transaction cost which if properly harnessed by female entrepreneurs despite their socio, physiological, and cultural backgrounds will help them succeed as well as pass the business on to the next generation. This study recommends that there should be more incentives given to female entrepreneurs like regulations and tax regimes that are favorable. This study recommends that there is need for adequate financial education for female business owners with the aim of allowing them stand competitive and be able to access loans and collaterals. Provision of adequate infrastructures to business owners in Nigeria by the government at all levels can never be over emphasized.

5 | LIMITATIONS TO THE STUDY

The World Bank's Enterprise survey data were used for this study and the most recent year obtained was 2014, while we are now in the year 2020. The researchers would have appreciated it better if they could have access to more recent dataset on the country's business environment. The Enterprise survey data collected in Nigeria focused on themes like regulations and taxes, corruption, crime, informality, gender biases, finance, infrastructure, trade, work force, firm characteristics, performance evaluations, and other obstacle however, this study was only able to focus on gender, finance, infrastructure, taxes and regulations, and firm characteristics. The researchers will love to go deeper into all other indicators as further research in the near future.

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ENDNOTES

¹ On how to handle their financial records, their purchasing and supply books, their inventory books, their debit and credit records to mention a few.

² How they can adequately manage their financial records which they would then present to banks for loans.

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