

## **Analysis of Business Risks of Fast Food Firms in Calabar Metropolis, Cross River State, Nigeria**

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**Abstract:** The study analyzed business risk of fast food firms in Calabar metropolis, Cross-River State, Nigeria. Specifically, it assessed the operations of fast food businesses, analyzed rate of growth of the firms, evaluated the different risks involved and determine the effect of risk variables on their performance (profit). Both primary and secondary data were used while data obtained were analyzed using descriptive statistics, business risk model and multiple regression analytical technique. The results revealed that 75.6% of the firms source their raw materials from the markets; their mean growth rate was 5.78 with a mean coefficient of variation of 67.16%, showing that most firms were exposed to high level of risk. The regression results revealed that business risk, volume of sales, age of the firms, variable costs, business equity growth rate and total revenue were significant on profit. Consequently, the study recommended that, in setting up a fast food business, the social setting of the people particularly their food preferences should be considered, managing variable costs through bulk purchases could improve the profit of these firms and that the significant variables should be considered for optimum performance and sustainability.

**Keywords:** Business, Risk, Fast Food, Firm, Metropolis, Cross-River State.

## **INTRODUCTION**

Sustenance assembling and handling is one of the examples of overcoming adversity of worldwide economies. One reason for sustenance generation achievement has been the grasping of current innovation that takes into consideration numerous handling efficiencies in the fast food industry [1].

The country's fast food industry is a key patron to the economy with an expected yearly income of ₦230 billion and expenses in abundance of a billion naira for each annum (The Guardian, Oct 24, 2015). The business contributed largely to employment generation absorbing about 500,000 individuals on the preparing and retailing outlets. These enterprises has monstrous development possibilities as it is commanded by more than one hundred little to medium size indigenous brands with more than 800 outlets spread the nation over.

According to Christopher and Matthew [2], fast food firms have strong hospitality elements which ensure that Restaurant provide high-quality food, drinks and good customer service. The National Institute of Health (NIH) stated that fast food are quick alternatives to home cooked meals. They are high in saturated fat, sugar, salt and calories. Modern commercial fast food is highly processed and prepared on a large scale from bulk ingredient using standardized cooking and production methods and equipment, it is usually rapidly served in cartons, or bags or in a plastic wrapping in a fashion which reduces operating costs by allowing rapid product identification and counting, promoting longer holding time, avoiding transfer of bacteria, and facilitating order-fulfillment. However, it also includes activities common to business mangers within the sector, such as overseeing, finance, human resources, marketing operations and sales. In some fast food firms, management is on a relatively large scale, as some fast food restaurants have turnovers of more than one million naira and more than 40 staff [3].

Of concern is the variety of charges required, which are aggravated by the covering elements of a few administrative officers and the absence of coordination amongst such controllers prompting substantial money related weights on fast food organization [4]. Then again, a more noteworthy risk to institutionalized Quick Service Restaurants (QSRs) may have been coming from traditional restaurants. The traditional restaurants are fast taking over and competing for the market share of the standard QSRs. They offer many Nigerians with different dishes from various

cultural backgrounds [5]. Some have even gone a step further to introduce continental and Chinese meals in a bid to woo the expatriate communities.

However, problems relating to business risks in fast food business have not been really researched. While Mustapha, Fakokunde and Awolusi [3], were concerned about emerging opportunities for growth of QSR business in Nigeria, Umeze and Ohen [6] concentrated on the performance of micro restaurant enterprises in Cross-River State. Olotu and Awoaka [7] focused on franchising as a means of reinventing fast food business growth. In short, there is a dearth of information on business risk exposure of these businesses; hence the focus of this study was intended to find out the correlation of performance and business risks exposure among fast food firms in Calabar metropolis, Cross-River State, Nigeria.

### **Objective of the Study**

This study's broader objective is to analyze the business risks in fast food firms in Calabar metropolis, Cross River State, Nigeria. The specific objectives include:

- Asses the operations of fast food business in Calabar metropolis,
- Analyze rate of growth of fast food firms.
- Evaluate the different risks involved in fast food operations in Calabar, and
- Determine the effect of selected factors of business risks on performance (profit) of fast food business in Calabar.

### **The Study's Hypotheses**

The study was guided by the following null hypothesis:

- Food operation is not significantly affected by business risks.
- No significant relationship exists between the captured business risk variables and fast food business performance (profit).

### **Theoretical Framework**

The theoretical framework adopted for the paper included the prospect theory of business risk, the Hawley's risk theory of profit and the modern portfolio theory of risk that attempt to explain business risks exposures of individuals and firms.

#### **Prospect Theory of Business Risk:**

The prospect theory provides an intriguing framework for understanding how executives perceive risks and innovation opportunities. Prospect theory was developed by Daniel Kahnemna and Amos Tversky in 1979. The theory states that people make decisions based on the potential value of losses and gain rather than final outcome, and that people evaluate these losses and gain using certain heuristics. In particular, the prospect theory shows that people are highly risk averse when it comes to potentially increasing their wealth, but risk seeking when dealing with potential economic loss, moreover, there is a tendency for the average person to look at losses and gain in percentage rather than in absolute terms.

#### **Hawley's Risk Theory of Profit (Residual Theory)**

Hawley's offered his risk theory of profit in 1893. The theory states that risks in business arise from product obsolescence, a sudden fall in prices, superior substitutes, natural calamities or scarcity of certain crucial material, risk taking is an inevitable component of dynamic production and those who take risk in business have a right to a separate reward known as profit. According to Hawley, profit is the price paid by society for assuming business risk. A businessman would not take a risk without expecting compensation in excess of actuarial value, that is, a premium on calculable risk, the reason that expected profit must be more than actuarial risk is the assumption that risk gives rise to dis-utilities of various kinds.

Hawley and Diwedi [8], however stated that profit was composed of two parts, one part represents compensation for average loss incidental to the various causes of risk and exposed to risk. Hawley believed that profits arose from factor ownership as long as the ownership included risk, if the entrepreneur avoided risk by insuring against it, he ceased to be an entrepreneur and should not receive profit. Profit arouses out of uninsured risk, the uncertainty ends with sale of the entrepreneur's product.

#### **Modern Portfolio Theory of Risk**

Modern Portfolio Theory (MPT) was propounded by Harry Markowitz in 1952. The fundamental principal of MPT is that the advantages in an endeavor portfolio should not be picked freely rather, every favorable alternative should be considered on the basis of performance in return to other asset associated in the portfolio. Modern portfolio theory acknowledge that budgetary allocation are peril restricted, including that, given two portfolios that offer the same

expected return, an investor will choose the less risky one thus, a budgetary pro will risk everything just if reimbursed by higher expected return.

## METHODOLOGY

### Study Area

The study was carried out in Calabar metropolis, the capital city of Cross-River State, Nigeria. It consists of two Local Government Areas, Calabar Municipal Council and Calabar South Local Government Area. It is bounded in the North by Odukpani L.G.A, Northeast by Akankpa L.G.A and Southwest by the Atlantic Ocean.

Geographically, Calabar is located between latitudes  $4^{\circ}28'$  and  $9^{\circ}00'$  east of the Greenwich meridian. It has a land mass of 40sq kilometers and a population of about 2.8 million, [9]. Calabar falls within the rainforest zone, and rain is evenly distributed over nine months of the year. It has a sub-equatorial climate, influenced during months of June and July with a temperature range of 25-28°C. Crop majorly grown in Calabar include Cassava, plantain, maize and vegetables such as pumpkin, amaranthus and water leaf. The presence of Calabar river and other water bodies encourages fishing activities [10].

Three major ethnic groups inhabit Calabar- Efiks, Efuts and Quas, but English and Efik are the most widely spoken languages. Because of its peculiar location, Calabar is widely known as the tourist hub of Nigeria with many tourist sites dotting the city and its environs. In addition to festivals such as Carnival Calabar, Leboku, Akachak etc. this perhaps explains why in recent times, there has been an upsurge of business activities, particularly fast food business in the city [11].

### Sampling Technique and Sources of Data

In order to capture the analysis of business risk in fast food firms in Calabar metropolis, the study targeted registered fast food outlets (Quick Service Restaurants [QSRs]) with Cross River ministry of internal revenue, which made up the industry. Although we have up to 50 fast food firms in Calabar Metropolis. A random sampling technique using the proportionate sample method at 90% precision level was used in selecting 45 fast food firms for the study. Data were subsequently collected using structured questionnaire and were supplemented with data from secondary sources such as magazines, journals, internets and the Cross River State News letters and publications.

### Data Analysis/Models

Data obtained were analyzed using descriptive and inferential statistical techniques. The risk model, an extension of the growth model given by Barry, Hopkin and Baker [12] was used to analyze business risk exposure. The model measures risk relationship with leverage, with expected growth rate of the business as the key. The variability of this growth rate as defined by standard deviation and coefficient of variation, given as:

$$CV = \delta g / \bar{g}$$

Where CV = Coefficient of variation

$\delta g$  = standard deviation of the growth rate in equity.

$\bar{g}$  = the expected rate of growth.

But  $\bar{g} = (rP_a - iP_d)K$

Where  $\bar{g}$  is as earlier defined

$K = (1 - t) (1 - c)$

$r$  = average net rate of return, except for interest ( $i$ ) and taxes ( $t$ ), on total assets owned by the firm.

$i$  = average interest rate paid on debt

$t$  = the average rate of income taxation

$c$  = the average rate of withdrawals for family consumption, dividends and other business flows

$P_a$  = the ratio (or proportion) of assets to equity

$P_d$  = the ratio (or proportion) of debt to equity.

To determine business risk effect on firm growth, proxies by profit, and the multiple regression models was used and was specified as follows.

$$Y = a + a_1 x_1 + a_2 x_2 + a_3 x_3 + a_4 x_4 + a_5 x_5 + a_6 x_6 + a_7 x_7 + u$$

Where

- Y = profit (naira)  
 X<sub>1</sub> = Business risk (coefficient of variation)  
 X<sub>2</sub> = Staff strength (number)  
 X<sub>3</sub> = Volume of sales (naira)  
 X<sub>4</sub> = Business growth rate (equity) (naira)  
 X<sub>5</sub> = Variable cost (naira)  
 X<sub>6</sub> = Age of firm (years)  
 X<sub>7</sub> = Total revenue (naira / firms per year).

## RESULTS AND DISCUSSION

### Operations of Fast Food Firms

The various fast food firms operating in the study area carry out different business operations and marketing strategies. Table 1 indicated that 86.7% of fast food in Calabar has no staff bus to convey workers to their business offices and sales outlets, while 13.3% provide buses for their workers transportation. The result also shows that 75.6% of fast food firms buy their raw materials/foodstuff from the market while 24.4% depend on their supplier (directly from farmers/traders). This agrees with Eyo et al, [16], that the open market is the major source of food stuff supply for the people. However, 73.3% of the respondent firms purchase their food items daily while 26.7% do not. The table also revealed that 91.1% of the fast food firms prepared their food ready before 9am while 8.9% prepared their food at later hours, after 9am. According to the table, 93.3% served food directly to customers eating table while only 6.7% of the fast food do not. Moreover, 60% of the firms preserved their leftover food in the freezer while 40% of the firms depend on cold room for their food preservation. The result also shows that 73.3% of the respondent firms make daily cash deposit into bank, while 26.7% make cash deposit weekly.

**Table-1: Operating Characteristics of Fast Food Firms**

Conveying of workers to firms	Frequency (N=45)	Percentage %
Staff bus not available	39	86.7
Staff bus available	6	13.3
<b>Source of raw materials</b>		
Market	34	75.6
Supply by farmers	11	24.4
<b>Daily purchase of food items</b>		
Yes	33	73.3
No	12	26.7
<b>Prepared food before 9am</b>		
Yes	41	91.1
No	4	8.9
<b>Serve food to customers' table</b>		
Yes	42	93.3
No	3	6.7
<b>Food preservation method</b>		
Freezer	27	60
Cool room	18	40
<b>Deposit of cash in bank</b>		
Daily	33	73.3
Weekly	12	26.7
<b>Total</b>	<b>45</b>	<b>100</b>

Source: Field survey, 2016

### Rate of Growth of Equity of Fast Food Firms

A firm growth rate is maximum when the firm can sustain its operations without having to increase financial leverage through outside borrowing or financing. A sustainable growth rate is a measure of how large and quick a firm can grow without borrowing. Table-2 revealed that 15 of the firms had a growth rate of equity of 0.1-3.0 representing 33.3%, while 24 firms had 3.1 – 6.0 growth rate representing 53.3%. Moreover, 4 and 2 of the firms had 6.1 – 9.0 and 9.1 – 12.0 growth rate respectively represent 8.9% and 4.4% of the total respondents. It could be concluded that fast food firms operating in Calabar have relative low growth rate.

**Table-2: Percentage growth rate of equity of firms**

Class	Frequency (N=45)	Percentage %
0.1 – 3.0	15	33.3
3.1 – 6.0	24	53.3
6.1 – 9.0	4	8.9
9.1 – 12.0	2	4.4
<b>Total</b>	<b>45</b>	<b>100</b>
<b>Mean</b>	<b>5.78</b>	

Source: Calculated from field data, 2016

**Risk Exposure of Fast Food Firms**

According to Everitt [13], risk reflects the chance that actual return on an investment may be very different than the expected return which can be measured using variance and standard deviation. The result from Table-3 revealed that 24 fast food firms representing 53.3% had a covariance of 61 – 80, while 8, 6, 4, 2 and 1 had 41 – 60, 81 – 100, 21 – 40, 101 – 120 and 01 – 20 coefficient of variation respectively. With a coefficient of variation of 61 – 80% by more than 53% of the firms sampled, it shows how risky fast food business is in Calabar. The mean coefficient of variation is 67.16, implying that the majority of the fast food firms in Calabar are risk prone. This is a clear indication of high financial risk with high leverage implying a greater likelihood of loss of equity capital by the firms.

**Table-3: Risk Exposure of Fast Food Firms**

Class of Risk	Frequency (N=45)	Percentage %
01 – 20	1	2.2
21 – 40	4	8.9
41 – 60	8	17.8
61 – 80	24	53.3
81 – 100	6	13.3
101 – 120	2	4.4
<b>Total</b>	<b>45</b>	<b>100</b>
Mean coefficient of variance = 67.16		

Source: Field survey, 2016

**Effects of Selected Business Risk Variables on Performance (Profit) of Fast Food Firms**

Business risk factors in nature are known to influence business performance and sustainability. This study used a multiple regression analysis to determine the effects of some business risk variables on the business performance.

The resulting regression equation is as follows:

$$Y = 211810.4 - 10964.85 X_1 + 4242.118X_2 + 1298.721X_3 + 80847.86X_4 + 6.001X_5 - 213923.1X_6 + .564X_7$$

(.402)<sup>x</sup> (.248)<sup>x</sup> (0.034)<sup>xxx</sup> (5.847)<sup>xxx</sup>
(6.805)<sup>xxx</sup> (2.204)<sup>x</sup> (3.903)<sup>xx</sup> (5.097)<sup>xxx</sup>

$R^2 = 60\%$ ,  $\text{Adj. } R^2 = 59\%$  and  $F\text{-value} = 6.095^{\text{xxx}}$ .

<sup>xxx, xx</sup> and <sup>x</sup> – indicate significance at the 1%, 5% and 10% levels, respectively.

The regression model revealed that the explanatory variables included accounted for 60% of the variations in the performance (Profit) of fast food firms in Calabar. Six of the seven factors included in the model were statistically significant. These factors include business risk, volume of sales, business growth rate (equity), variable cost, age of firm and total revenue.

The coefficient of business risk was significant at 10% and negatively related to amount of profit made implying that the higher the business risks the lower the profit. Expunge higher the business risk, the higher the profit. Risky events captured include fire outbreak, knife-cut during food preparation, risk of other competitors, missing money/theft, poor management, electric shock and auto accident. These risky events have a very high propensity of reducing profit and causing financial distress in firms.

Volume of sales had a positive coefficient and is significant at 5% level, suggesting an increase in profit made as the volume of sales increases. This conforms to *a priori* expectations and also agrees with result from Enimu *et al.*,

[14], who noted that as the volume of sales increases, the amount of profit made by oil sellers also increases in Delta State, Nigeria.

The coefficient of business growth rate (equity) was significant at 1% level and positively related to the performance variable of profit made. This implies that an increase in business growth rate (equity) will lead to a direct increase in the amount of profit made. This result is in agreement with *a priori* expectation and work by Umeze and Ohen[6], Olotu and Awoaka [7].

In contrast, and against *a priori* expectations, variable cost was significant at the 10% level and positively related to amount of profit made. This result implies that, the higher the amount of variable cost incurred in the fast food business, the higher the amount of profit made. This is possibly because the fast food operators as business managers make necessary business adjustment to cushion the high amount of the variable cost.

The age of the fast food firms displayed a negative coefficient and was significant at the 5% levels which imply that the longer the firm existence, the lower the amount of profit made. This is likely possible because most customers, particularly young ones are in the habit of patronizing newly opened fast food outlets.

Moreover, the coefficient of total revenue was significant at 1% level and positively related to profit made. This indicates that the higher the total revenue generated by the firm, the higher the profit made. This parallels *a priori* expectations and conforms to Olotu and Awoaka [7], Enimu *et al.*, [14], Mohammed [15], Sanni [1] and Ariyo [4] results, which reveal that the higher the amount of total revenue, the higher the profit made especially when variable cost are relatively stable.

## CONCLUSION

The nation's fast food industry is a key contributor to the Nigerian economy. Apart from contributing billions of naira to the gross domestic product, it provides employment to many Nigerians especially at the processing and retailing level. Recent happenings however reveal that this important sector seems to be struggling as most outlets particularly of leading QSR are losing customers. This may not be unconnected with the business risks exposure of these firms and the operational mechanism carried out by them; coupled with lack of coordination and inconsistent government policies. It is therefore recommended that fast food firm managers should consider the social and regulatory framework of the business, they should understand the operational dynamics and constantly explore innovations in line with present day realities and also carefully understand the business risks determinants/factors which affected performance significantly in order to buffer a viable and sustainable fast food business.

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