Association between Contingency Factors and Financial Performance of Listed Manufacturing Firms in Lagos, Nigeria

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Abstract

World leading economies are rooted in the strength of her manufacturing sectors to attain sustainable economic independence. However, the position of Nigeria manufacturing sector is still below expectation in the 21st century. There is the need to arrest this pervasive problem in order to revive this sector, thus, this study came up with these objectives; to investigate and determine the association between contingency factors and financial performance among listed manufacturing firms in Lagos, Nigeria, This study used PLS-SEM, because it's composed data on both the independent (contingency factors), dependent variables (financial performance) and moderating variable (performance measurement system) from the same respondents. The results of path coefficient from model 1 revealed that four (4) contingency factors (employee training, leadership style, organisational culture and strategy) have substantial positive relationships with financial performance of the firms as evident in the Beta and P-value and from the path coefficient result model 2, it was revealed that four (4) and the five (5) contingency factors (external environment employee training organisational culture and organisational strategy) have a moderating influence on the association. Firms should ensure that these factors are used in the best way to achieve financial performance. It`s therefore, recommended that stakeholders/managements must ensure that performance measurement systems and contingency factors are employed to evaluate financial performance of manufacturing firms in Lagos, Nigeria.

Key words: Contingency factors, financial performance, performance measurement system PLS-SEM.

I. INTRODUCTION

The business world of today have influenced many firms to assume superlative decision-making practices that is proficient of improving firms' performance, the global trends such as competitive environment and performance measurement system for generating maximum returns and making effective decisions to bring about highly viable manufacturing setting continues to receive crucial consideration from both experts and scholars (Cescon, Costantini & Grassetti, 2019). Most early contingency based investigation focused on the positioning and use of budgets, however, the collapse of many firms over in the past two

decades and growing role of human capital in firm's success, performance measurement has become increasingly significant to managers of enterprises (Mustapha, 2022). Sole (2009), explained that two fundamental factors (internal and external) influences performance management systems in business organisation. Internal factors includes; internal leadership and organization commitment, internal assets, routine culture, employee commitment and performance measurement development.

However, after many years of independence, the position of Nigerian manufacturing sector is still far below expectation. In the 21st century, this concept was substantiated in the study of Ku, Mustapha & Goh, (2010) when examining the previous and current performance of Nigerian manufacturing subdivision as a positive developing sector due to foreign direct investment, introduction of innovative manufacturing technology that saved time and charges, all these improves' value of products. In the contrary, the study concluded that this sector failed to survive as a result of heavy dependence proceedings of oil, feeble infrastructure, absence of expert labor, absence of suitable; financial means, supervision and the likes. As a thing of necessity, there is the need to work towards agreeing all these pervasive complications in direction to re-brand Nigerian industrial sector. The deterioration in the performance of firms may be linked to wrong application or inappropriate selection of contingency factors that affect organisational performance (Obisi, 2011).

II. REVIEW OF LITERATURE

Conceptual Review

Contingency Variables

The implementation of performance measurement framework in an organisation is critical to its success, however, this study measures contingency factors using organisational; strategy and culture, leadership style, external environment and employee training. As spotted by Spector and Brannick (2011), that using a great number of independent variables will make an exploration procedure to be more demanding and healthier than the minute independent variables. When many independent variables are used, hypotheses testing will reveal true relationship among variables of a study. The choice of the above listed factors are as a consequence of firms undermining the effect of outer environment which is seen as an uncontrollable factor by an organisation, the influence of democratic/ lesser via leadership style as compare to

autocratic leadership influence organisation strategies that were tailored towards customer services, the roles of organisation culture on internal setting as how it affects financial performance, then lastly, the influence of training on behavior and ability of worker in an organisation on how possible positive changes could be attained. These variables are discussed one after the other as follows:

Organisation Strategy

Gareth, (2010) elucidated that strategy is a necessary instrument for an organisation accomplishment, as it aids a firm to be more active than sensitive in molding its specific prospect, it brands an organisation to initiates and have emotional impact so that it can exercise control above its own fate. Performance measurement system should be shaped and applied according to business tactic in order to tie it to the goals of purposes, collections of people and persons, in addition to operational aspects (Neely, Adams & Kennerly, 2002).

Organisation Culture

Culture is the set of organisational ethics plus standards, governing principles and compassions that are mutual to the entire organisation (Daft, 2004). Kandula (2006) argued that great culture is tactical for operative performance as variation in organisational culture, is uniform with methods that may not give the same result for both companies which might be in the same sector. A healthy and positive culture can empower the average employee to perform well. Though, philosophy that is not solid and has pessimism can discourage outstanding employees, cause them to execute below par and end up inadvertently. The high routine oriented culture will ease and compensate prospective staff through elements such as; steady leadership coordination and trustworthy morals. As a result of this, organisational culture shift from a command and regulate culture to an open and positive one.

Leadership Style

Leadership style is a technique of direction used by an administrators of firms to accomplish staff efficiency with a persistent response edifice that highlights consistent effective message among directors, employees and reduce officialdom. Rowe, Cannella, Rankin and Gorman. (2005) advocated that one of the prime motives of prevalent concern in headship study is the unanimously held faith, that headship can and ensures impact of the whole performance of most organisations. Diverse forms of interactions and dealings were

eminent early as far back by Max Weber's explanations of enigmatic leadership of 1947, the concept of a leader being transformational in nature existed first look at and presented by Burns in 1978. Burns (1978) pronounced transformational leaders as persons who form strong groups by authorizing their followers and stimulating its supporters to accomplish their own individuals aims, and in so doing help the whole organisation to attain whole success.

External Environment

Environmental dynamism is very inaccurate and organisation is faced with regular changes in the monitoring, socio-economic, partisan and high-tech atmosphere, thus, environmentally friendly dynamism is linked with tactical direction, organisational edifice, implementation of performance measurement system, and organisational efficiency, (Galli, 2011). Environmental insecurity or volatility is linked with the design and application of all-inclusive performance measurement system (Ferreira & Otley, 2009). McManus (2013) contended that comprehensive evidence on the intricacy of the outer environment is essential for the fruitful application of cultured performance measurement system.

Employee Training

Nadeem and Khawaja (2013) elucidated that training are chains of events undertaken by the organisation that prime to the acquirement of facts or talents for the drive of development, in so doing backing the well-being and performance of human wealth, the organisation, improving the productivity of workers and reducing the break between existing sound standard performance. Training has turn into the most vital element in today's dynamic commercial realm, as it's rises the competence and value of staffs in addition to the organisation as whole (Raja, Furqan & Muhammad, 2011). Training is imperative not merely from an organisational opinion of view, but also to staffs, as it provides them with better work safety and chance for profession progression, it is more operative in inspiring and retentive high worth human capitals within the organisation (Hutchings, Zhu, Brain, Cooper, Zhang & Shao, 2009). Training can be done in these approaches; tutoring and mentoring, peer collaboration and subordinate involvements.

Performance Measurement System

Performance measurement system is seen as what enhances the interrelationships that enable an organisation to make more

strategic decision; facilitate budget increase; formidable work force and bringing about more efficient processes of improved performance. Chartered Institute of Management Accountants (CIMA, 2007) suggested that for an organisation to be effective the following steps needs to be developed; performance measurement system be comprehensive and incorporated with the whole tactic of the corporate, there must stand a system of systematic response and appraisal of actual outcomes against the novel plan and performance measures themselves. More so, measure must to be fair-minded and attainable. Wherever performance measures are used to compensate manager's, the appraisal should contain only the fundamentals they have uninterrupted control over

Financial Performance

Financial performance simply denotes measurement of strategic outcomes, policies plus operations in monetary terms. Financial performance gives a logical measure of exactly how a business is able to utilize its assets to create income. Measuring the financial performance of firms remains function of strategic management that aims to satisfy the benefits of stakeholders and other investors of a company. A good financial performance of a business will rise the incomes of its staffs, bringing value products to its consumers and making it more user-friendly with its operating environment (Mirza & Javed, 2013). Successful businesses can bring higher returns and generate more profits that can lead to future investments, create employment opportunities and increase people's income. The evaluation of company performance is an assessment that is carried out periodically and systematically to determine the achievement of firm objects (Amelia, 2012).

Theoretical Review

The relevance of theories in research cannot be overemphasized, as theories provides explanation to phenomenon under study, hypothesizing relationship between variables and projecting outcomes. Contingency theory reviewed and deliberated for the resolution of this study.

Contingency theory was propounded by Austrian psychologist, Fiedler, in his article titled landmark 1964 "A contingency model of leadership effectiveness". He considered the personality and features of leaders, the model further positions that, there is no finest stylishness of leadership and that contingency is a condition that is reliant on or depending on somebody or somewhat

else. Thus, contingency theory preposition was that there might not be "one best way" for management to thrive. Contingency perspective was initiated with the effort of Joan Woodward (1958) who claimed that know-hows straight determine the variances in such organisational qualities as span of regulator, concentration of power, the formalization of guidelines and techniques. In summary, the foremost thoughts basic contingency theory are; organisations are open system that used cautious managing to satisfy and balance in-house needs (organisational culture) and to adopt to environmental conditions (external environment). There is no finest way of forming (environmental uncertainty), that is, the suitable form of organizing rest on kind of job or environment one is dealing by. Management must be apprehensive with alliances in achieving noble fits (organisational strategies and leadership styles) and diverse kinds of organisations are required in diverse types of environment (environmental dynamism). The major strengths of contingency theory as stressed by Peter, Hartke and Pollman (1985) are that; the theory is dependable grounded on several trials, it widened the consideration of leadership by influencing personalities to reflect on the various influences of circumstances on leaders, prediction of leaders that will be most effective in a given situation and lastly the theory offers concrete information on leadership flairs that is best appropriate to organisations in developing their identifiable leadership profiles. Theory of contingency is of more relevance and considers business organisation as a loose system without a particular form that has a global application.

Empirical Review

This subsection discussed previous empirical studies conducted in the areas related and their relevance to this study.

Evans, Mutende, Njihi and Ochieng (2017) searched on the impact of firm characteristics on the link among free cash flows and companies financial performance in Kenya. Aims of the study were; to found the link among free cash flows and financial performance and to establish the impact of firm characteristics on the link among free cash flows and financial performance of firms listed on the NSE. The firm characteristics measured are firm size and age. Panel data was gotten from all listed firms on the NSE within the period 2006 to 2015. Regression analysis was engaged and outcomes indicates that free cash flows have a substantial positive influence on financial

performance; while firm characteristics have a negative substantial moderating influence on the link among free cash flows and financial performance. The study recommended free cash flows for firm`s financial performance.

Paul, Zaki, Kolo and Adogbo (2018) appraised performance measurement practice of construction companies in Nigeria. Survey was conducted on randomly carefully chosen small and medium sized construction firms in Abuja, Nigeria. A total of 50 surveys were circulated and 23 were returned and used for analysis. Data were analysed using the descriptive statistics technique including tabulation, percentages and charts. The outcomes shown that most construction firms are concerned in how they perform and do quantify their performance. The study also shows that most of the construction companies still `depend on financial measures.

Kalu, Paul, Christianah, Clementina, Regina, Foluso and Paul (2019) worked on the repositioning of manufacturing sub-subdivision in order to resuscitate Nigeria from problematic of 'growth-less-ness'. The expository study surveyed the position of Nigeria economy and overview of the industrial strategies engaged to inspire development ever since independent. It also examined an overview of industrial policies engaged by South Korea which gave the nation its accomplishment story. However, Nigeria condition is proficient of changing for healthier if what functioned in South Korea manufacturing subsector is apply in Nigeria.

Efuntade and Akinola (2020) studied the influence of company characteristics on the financial performance of quoted manufacturing companies in Nigeria. Descriptive and cross sectional study design were embraced to examine the link among variables of company characteristics and financial performance of quoted manufacturing companies in Nigeria over a period of 14 years. Secondary data were gotten from annual reports of five designated quoted manufacturing companies. Panel least square regression model was used to test the framed proposition. Results revealed that wholly the independent variables conjointly and strongly have influence on the financial performance of manufacturing companies in Nigeria measured by yield on assets. It was resolved the clarifying variables (company age & size, sales growth, liquidity and leverage) were significantly related with the dependent variable (Yield on Asset).

Literature on firm`s performance measurement seems not to be adequate on Nigeria studies, thus, researchers continue to advocate for simple, flexible and costless measurement framework that will be suitable for manufacturing firms in developing economies like Nigeria (Pekkola, Saunila & Rantanen, 2016). The conceptual discussions, theoretical explanations and empirical reflections typically from previous works on contingency factors, performance measurement system and financial performance, seems not enough. Thus, there exists some aspects which needs to be addressed, and investigated. Practically, to the extent of literature search no previous studies empirically examined the relationship among contingency factors, performance measurement system and financial performance, also most past studies used ordinary least square (OLS) as estimation technique, despite that those studies involved measurement of latent variables and institutionally, studies conducted were in the other sectors other than manufacturing sector such as; Evans, et al., (2017) and Efuntade and Akinola (2020), while few of the studies carried out in the manufacturing sector were purely conceptual (Kalu, et al., 2019; Janes, 2018 & Paul, et al., 2018). This study addressed these issues by providing more empirical evidences about the relationship among the variables of this work through formulation of the following hypotheses:

H_{01}: Contingency factors does not significantly impacted on financial performance among listed manufacturing firms in Lagos, Nigeria.

H_{02}: Performance measurement system do not significantly moderate the association between contingency factors and financial performance among listed manufacturing firms in Lagos, Nigeria.

III. METHODOLOGY

Research Design

Cross-sectional survey was conducted between June and September, 2022. Structured questionnaire were administered on target respondents. The population comprises of; chief accountant, senior accountant, chief internal auditor, senior internal auditor, advertisement/customer relations manager, marketing/store manager, production manager, and personnel/human resources manager in each of the listed manufacturing firms on Nigeria Stock Exchange as at 31st December, 2020. The

choice of the population was in line with the argument of Fatoki (2014) who held that owners of business lack time to manage their enterprise, as such the use of employees as the population of a study is in order and the site of the study is Lagos, being the hub of manufacturing firms in Nigeria. Thirty seven (37) listed manufacturing firms sited in Lagos, Nigeria, formed the population of this study. (eight staff from each of the thirty seven (37) listed manufacturing companies' that is, 37 x 8 = 296). Adeoye and Lawason (2012), opined that social investigation necessitates the assortment of samples from population that cannot be straightforwardly listed making it essential to generate and effect a more multifaceted sample thus, purposive sample technique was adopted. From the population of 296 respondents gotten through purposive sampling technique using Yamane (1967) sample size determinant, One hundred and seventy (170) respondents was determined and PLS-SEM was employed to analyse data collected. In order to avoid responses falling below the sample size of 170 respondents, 200 questionnaires were administered since some of the respondents may not answer their questionnaire completely. Out of the 200 administered questionnaires, 185 were returned and submitted but 17 of the 185 returned questionnaires were not completed correctly and as such excluded from the analysis. The response rate was 91% which could be relied upon for conversion and policy direction. This rate is in line with the argument of Sivo, Sanders, Chang and Jiang (2006) which held the view that average response rate between 30% and 50% of total sampled population is sufficient for the survey results.

Measurement of Variables

Variables involved are; Contingency factors as independent variable proxy with; organisational strategy, organisational culture, leadership style, external environment and employee training. Organisational culture was measured with statements adapted from Ahmad (2017), organisational strategy measured with statements adapted from Reza *et al*. (2015); Ting Chi (2015), external environment measured with statements adapted from Brownhilder (2016), Lorenzo *et al*. (2018), employee training measured with adapted statements from Ken and Christopher (2004), while leadership style is measured with statements adapted from Allan *et al.* (2016); Rod *et al.* (2017); Nur *et al.* (2012). Financial performance as the dependent variable, measured by using adapted statements from Faeq *et al.,* (2019) and

performance measurement system as moderating variable, measured by using adapted statements from Matthew (2008). The choice of performance measurement system as a moderating variable was informed by proposition of Sowa, Selden and Sandfort (2004) that contingency variables and performance measurement system interact to enhance financial performance.

Model Specification

Model 1 (M1): Contingency factors and financial performance

This model specifies the association between contingency factors and financial performance.

$$FP = \beta_0 + \beta_1 OS_i + \beta_2 OC_i + \beta_3 LS_i + \beta_4 EX_i + \beta_5 ET_i + e_i \quad ..(1)$$

Model 2 (M2): Contingency factors, performance measurement system and financial performance

This model specifies the interaction between contingency factors and performance measurement system and financial performance.

$$FP = \beta_0 + \beta_1 OS_i + \beta_2 OC_i + \beta_3 LS_i + \beta_4 EX_i + \beta_5 ET_i + \beta_7 OS_i * PMS_i + \beta_8 OC_i * PMS_i + \beta_9 LS_i * PMS_i + \beta_{10} EX_i * PMS_i + \beta_{11} ET_i * PMS_i + e_i \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(2)$$

Where: FP = financial performance, OS=organisational strategy, OC = organisational culture, LS = leadership style, E X= external environment, ET = employee training, PMS = performance measurement system and e_1 = error term

However, the *a* priori expectancy of this study was that all contingency variables will positively influence financial performance and that the interaction of contingency factors and performance measurement system will produce a significant improvement in financial performance of firms.

IV. DATA ANALYSIS AND DISCUSSION OF FINDINGS

This study applies Harman's single factor to investigate common method bias using an uprooted principal factor analysis and performed exploratory factor analysis on all observed variables. The results of this study presented includes; Results from the preliminary data analysis, including normality test, multicollinearity analysis, measurement model and the structural model.

Preliminary and Diagnostic Test

Normality Test

This determines whether or not the data collected for this study are normally

distributed, thus, Skewness and Kurtosis statistics employed for test of normality of the data collected.

Table 1: Test of Normality

Constructs	N	Skewness	Kurtosis
External Environment	168	-0.244	-1.004
Employee Training	168	-0.077	-1.065
Financial Performance	168	0.002	-1.099
Leadership Style	168	-0.354	-0.611
Organisation Culture	168	-0.501	1.617
Organisation Strategy	168	-0.484	0.192
Performance Measurement System	168	-0.319	-0.793

Source: Author's Computation (2022)

In Table 1, all Skewness and Kurtosis values for every variable used in this study are within, Kline's (1998) threshold of -3 to +3. The scores of the variables are assumed to be normally distributed.

Test of Multicollinearity

Since there is no variable that is having high correlation above 0.7 threshold, thus, no problem of multicollinearity. Consequently, variables were retained and subjected to further analysis in this study. Similarly, this study also applied the full collinearity test, as suggested by Kock (2017). All variables are regressed against a common factor to check for likely collinearity problems in the Full Collinearity Test.

Table 2: Full Collinearity Test

Variable	ET	EE	FP	LS	OC	OS	PMS
Tolerance	0.355	0.476	0.413	0.566	0.720	0.721	0.316
VIF	2.781	2.129	2.419	1.844	1.651	1.464	3.137

Source: Authors' Computation (2022)

The outcome, as revealed in Table 2, shown that all variables were below the 3.30 threshold. Consequently, once again, common method bias or variance is not a problem (Kock, 2020).

Assessment of the Measurement and Structural Model

This study measurement model determined the validity and reliability of the measurement items. The individual item loadings, internal composite reliability and convergent validity were surveyed.

Table 3: Summary of the Construct Loadings, Convergent Validity and Reliability

Constructs	Items	Loadings	Composite	Average Variance
External environment	EE2	0.673	0.837	0.508
	EE3	0.700		
	EE4	0.646		
	EE5	0.779		
	EE6	0.757		
	EE7	0.716		
Employee training	ET1	0.743	0.915	0.642
	ET2	0.852		
	ET3	0.864		
	ET4	0.795		
	ET5	0.785		
	ET6	0.762		
Financial performance	FP1	0.800	0.943	0.704
	FP2	0.839		
	FP3	0.850		
	FP4	0.865		
	FP5	0.824		
	FP6	0.828		
	FP7	0.868		
Leadership style	LS1	0.749	0.94	0.691
	LS2	0.788		
	LS3	0.836		
	LS4	0.828		
	LS5	0.899		
	LS6	0.817		
	LS7	0.893		
Organisational culture	OC1	0.901	0.908	0.665
	OC2	0.798		
	OC3	0.682		
	OC4	0.825		
	OC5	0.856		
Organisational strategy	OS1	0.665	0.869	0.572
	OS2	0.799		
	OS3	0.729		
	OS4	0.849		
	OS5	0.726		
Performance measurement	PMS1	0.815	0.907	0.661
	PMS2	0.870		
	PMS3	0.755		
	PMS4	0.792		
	PMS5	0.830		

Source: Authors' Computation (2022)

Measurements model outcomes are shown in Table 3. Construct validity is the degree to which a set of measured variables quantify what they are thought to measure established on a grounded theoretical measure (Hair, *et al*., 2016). The reliability

of a measurement denotes to its reliability. Construct validity was measured from end to end convergent and discriminant validity (Hair *et al*., 2016). Agreeing to Hair *et al*. (2016), item indicators outer loadings must be 0.708 or greater. Nonetheless, loadings between 0.4 and 0.7 ought to be considered for exclusion simply if the removal leads to rise in Average Variance Extracted (AVE) and Composite Reliability (CR) above the recommended threshold. Great part of the indicators loaded above 0.708, with the exception of some items as indicated in the notes for Table 3. The items were not removed because their AVEs and CRs are already beyond the suggested thresholds. Similarly, the composite reliability (CR) test evaluates the reliability of the measurement items, and this method is more appropriate for PLS-SEM than Cronbach's Alpha (Hair *et al*., 2016). All constructs have their CR above 0.7, hence, CR was established suitable. Convergent validity is the degree to which a quantity associates positively with alternate measures of the same concept. The convergent validity for this study was recognized using the Average Variance Extracted (AVE) gotten from the Smart PLS 3.3.0 algorithm as recommended by Hair *et al*. (2017). In order to substantiate that the latent variable elucidates more than half of its indicator's variance, Hair *et al*. (2017) recommended that an AVE value of 0.5 and upper should be attained. Consequently, all the constructs' AVE values were bigger than the 0.5 lowest threshold.

Structural Model (Test for Multicollinearity)

The second aspect of the valuation was the structural model which is always useful once the measurement model valuation is adequate. As pronounced by Hair *et al.* (2019), five key conditions form the assessment for the structural model in PLS-SEM, includes; investigating the collinearity, coefficient of determination (R^2), effect sizes (f^2), the relevance of the path coefficients, the statistical significance, and the predictive relevance (Q^2 and PLS predict). Hair, *et al*., (2017). However, this study will be limiting it`s assessment on only two out of the conditions as it will be enough for to satisfy other conditions. Suggested that, it`s crucial to test for collinearity before going on with further structural association valuations. The Variance Inflation Factor (VIF) was used to evaluate multicollinearity amongst the variables.

Table 4: Result of the Collinearity Assessment (Variance Inflation Factor)

	Financial Performance Model	Performance Measurement System
Employee Training	2.844	1.862
External Environment	2.102	2.040
Leadership Style	2.000	1.718
Organisation Culture	1.583	1.318
Organisation Strategy	1.508	1.361
Performance Measurement System	3.080	-

Source: Authors' Computation (2022)

In Table 4, collinearity problems doesn`t exist amongst the constructs as all the values of the VIF are under the threshold of 3.3 (Hair *et al*., 2019).

Path Coefficients Results for Model 1 (M1): Contingency Factors and Financial Performance

Model 1 (M1) was formulated to assume that financial performance would not be predicted by contingency factors. This assumption also lays the foundation for hypothesis H_{01}.

$H_{01:}$ Contingency factors does not significantly impacted on financial performance among listed manufacturing firms in Lagos, Nigeria.

Table 5: Model 1 (M1) Hypothesis Testing

					Confidence Interval	
	B	**Std Error**	**T-Value**	**P Values**	**2.50%**	**97.50%**
EE -> FP	0.053	0.049	1.085	0.283	-0.036	0.138
ET -> FP	0.251	0.065	3.861	0.000	0.100	0.334
LS -> FP	0.351	0.073	4.786	0.000	0.247	0.475
OC -> FP	0.302	0.059	5.145	0.000	0.197	0.382
OS -> FP	0.103	0.049	2.093	0.041	-0.048	0.161

Source: Authors' Computation (2022)

As presented in Table 5, the result showed that four contingency factors (employee training, leadership style, organisation culture and strategy) were significantly related to financial performance of listed manufacturing firms in Lagos, Nigeria. Noted from the result for this model that leadership style has the strongest influence on the financial performance. The influence of organisational culture and employee training was also strong compared to the organisational strategy that has a weak but significant association (P = 0.041). However, external environment is a good

predictor of the financial performance of listed manufacturing firms in Lagos, Nigeria, as established by this model.

Path Coefficients Results for Model 2 (M2): Contingency Factors, Performance Measurement System and Financial Performance

Model 2 (M42) was formulated to assume that performance measurement system would not moderate the association amongst contingency factors and financial performance of listed manufacturing firms. Upon this assumption, H_{02} was formulated.

H_{02} Performance measurement system does not significantly moderate the association between contingency factors and financial performance among listed manufacturing firms in Lagos, Nigeria.

Table 6: Model 2 (M2) Hypothesis Testing

	B	Std Error	T-Value	P Values
EE*PMP -> FP	0.144	0.051	2.822	0.007
ET*PMP -> FP	-0.142	0.057	2.506	0.016
LS*PMP -> FP	0.029	0.059	0.494	0.624
OC*PMP -> FP	0.114	0.056	2.041	0.047
OS*PMP -> FP	-0.133	0.041	3.202	0.002

Source: Authors' Computation (2022)

As displayed in table 6, the result indicates that performance measurement system positively and considerably moderates the association amongst external environment, organisation culture, and financial performance. Notably, performance measurement system shows no moderating relations between employee training and organisation strategy as the inference showed no enough evidences on financial performance. However, performance measurement system moderates the association between leadership style and financial performance of listed manufacturing firms in Lagos, Nigeria.

Discussion of Findings

The results of path coefficient from model 1 revealed that four (4) contingency factors (employee training, leadership style, organisational culture and strategy) have substantial positive relationships with financial performance of the firms. This supports the suggestion of contingency theory which predicts that when different organisational factors are combined together in the most appropriate way, it is more likely that there would be improvement in organisational performance. However, external environment has no substantial effect on financial performance although,

there exist positive association amongst external environment and financial performance. By implication, external environment (competition, weather, government policies and regulations) as indicated in the instrument in terms of environmental; dynamism, complexity, uncertainties and government regulatory control put in place do not influence the bottom line performance of the sampled firms. This may be as a result of the procedures and policies involved on the part of Manufacturers Association of Nigeria (MAN), National Agency for Food and Drug Administration and Control (NAFDAC) and Standard Organisation of Nigeria (SON) that are not within the capacities of the sampled firms. However, the priori expectation of hypothesis 1 was that contingency factors shall positively and considerably influenced financial performance of listed manufacturing firms in Lagos, Nigeria. Thus, the null hypothesis rejected while the alternative hypothesis upheld. From the aforementioned factors, external environment is outside the organisation's control. This effect is consistent with the studies of; Darwish and Potocnik (2016); Brownhilder (2016); Evans *et al.* (2017); Paul *et al.* (2018); and Efuntade and Akinola (2020) who found a significant influence among contingency factors and financial performance

The path coefficient result of model 2, revealed that four (4) of the five (5) contingency factors (external environment employee training organisational culture and organisational strategy) have a moderating influence on the association. The relativity of contingency theory to this hypothesis was that business organisation is seen as a loose system and corroborating this result, the study of Burkert *et al.,* (2014) on organisational factors like: technology, strategy, culture and external environment adjudged constitute the best form of system design is in interdem with this finding.

IV. CONCLUSION AND RECOMMENDATIONS

In line with the results of this study there is a significant association that exist among organisational; strategy, culture, employee training and leadership style with financial performance, it is therefore, recommended that manufacturing firms should ensure that these factors are used in the best way to achieve financial performance. Performance measurement system moderates the relationship between external environments, employee training, organisational; strategy, culture and financial performance of

manufacturing firms are significantly moderated too, We recommends further that stakeholders/managements must ensure that performance measurement systems and contingency factors are employed to strengthen financial performance of manufacturing firms in Lagos, Nigeria. Importantly, as shown in the results, leadership style need to be given special attention in order to achieve a better financial performance.

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