

## STRATEGIC INTERMEDIATION FUNDAMENTALS AND MARKET MICROSTRUCTURE POTENCY IN THE NIGERIAN FINANCIAL SYSTEM

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### Abstract

*Financial system frailties accounts for the poise of researchers to explore strategic intermediating factors, particularly in developing economies. To this end, market microstructure models tend to concentrate on institutional (unitary) conditions as against economy-wide (universal) environmental conditions. Conceptualized in terms of financial system efficiency, strategic intermediation fundamentals critically underscore the dynamics of institution design, process regulation, and overall market performance. Against this backdrop, this study examines strategic intermediation fundamentals and market microstructure potency in the Nigerian Financial System. Secondary data on the operational variables were derived from repositories of regulatory institutions such as the Nigerian Stock Exchange, Central Bank of Nigeria, and Securities and Exchange Commission, over a period of 32 years (1985-2016). A unique perspective of the time frame is the emphasis on national order by the new government in 1985 and restoration of macroeconomic discipline by the new government in mid-2015. Inferential (regression and causal) statistics are employed to ascertain functional significance at the 0.05 level. The results establish that the operationalized dependent variable (bid-ask-spread) has causal relationship with proxies of the independent variable (total number of new issues, market capitalization, market index, total value of transaction, exchange rate, treasury bill rate, and inflation rate). The study concludes that market microstructure potency has significant relationship with intermediation fundamentals in the Nigerian financial system. By this revelation, it is recommended that the regulatory agencies, in particular, should do more to strengthen governance frameworks in order to strategically deepen market integrity and sustainably boost investors' confidence in the financial system.*

**Keywords:** *Strategic intermediation fundamentals, Market microstructure, Nigerian financial system.*

### Introduction

Market microstructure is a perspective of finance concerned with functional details of the unitary components of the financial system. Basically, it studies the trading mechanisms used for securities and allied instruments of financial markets. It illuminates dynamics of the process of exchanging assets under well-defined market rules, essentially revealing the determination of asset prices (O'Hara, 1995). While economic tendencies basically evolve from the mechanics of trading, market microstructure focuses on how specific trading mechanism

defines the price formation process. It exemplifies the study of the trading mechanism used for financial securities. Its theory is, therefore, devoted to the study of the trading process in securities markets under explicit trading rules and regulation; conceptualized with financial market in mind and critically oriented towards micro concerns for institution design, regulation and market performance (Madhavan, 2000; Hasbrouck, 2007).

Projecting the potency of market microstructure, Stoll (2003) conceptualizes the dynamics associated with the purest form of financial intermediation; especially the trading of financial assets, such as stock or bond. By this, financial assets are not transformed in the manner banks transform deposit into loans, but simply transferred from one investor to another in the trading process. This characteristic dimension of financial intermediation is identified as immediacy; and depends on market design, which is largely fostered by professional dealers who bid price, investors who place constrained orders, or some combination. Contextually, the focus this study is on the relationship between strategic intermediation fundamentals and market microstructure potency in the Nigerian Financial System. The hypothesis elicited is:

*Ho: Market microstructure potency has no significant relationship with strategic intermediation fundamentals in the Nigerian financial system.*

In this study, strategic intermediation fundamentals identified with the dynamics of financial markets are exchange rate, regulation, monetary policy rate, and trade volume. In spite of the huge interest in market microstructure, many areas still appear fallow, thus, eliciting sustained analytical intensity. In the dimension of anonymous trading, studies on liquidity impact feature amorphous and conflicting dispositions; with some outcomes depicting informed traders' preference for anonymous trading venues, while uninformed traders prefer transparent trading venues. In translucent trading scenarios, informed traders may conceal trading intention; while in transparent market scenarios, liquidity suppliers may identify counterparts and establish whether the order is informed or otherwise. In view of these dynamics, this study seeks to examine the relationship between strategic intermediation fundamentals and market microstructure potency in the Nigerian Financial System. Overall, this is to promote market stability and virility.

## **Literature Review**

Financial systems have money and capital market components; nonetheless, the arena represents authorized overt where trading in securities, such as equities, bonds, currencies, and derivatives prevails. It is an atmosphere for trading in securities, commodities, and allied items of value at prices which should expectedly reflect the dynamics of supply and demand. Essentially, securities are denominated in stocks and bonds, while commodities are tangibles denominated in precious metals or agricultural products. Financial markets operationally drive financial systems, which project the framework of laws and regulations, institutions and practices designed to efficiently and effectively control the flow of financial resources in an economy. These underscore relationship between intermediating units such as banks, insurance companies, and allied financial institutions, guided by relevant legislations, regulations and governance policy frameworks (Osamwonyi & Kasimu, 2013; Agundu, 2019). The prevailing intermediating tendency is characterized by volatility. Several modes have been identified for the purpose of analysing market volatility, particularly focusing on short-run

fluctuations, assessed in terms of average day-to-day, week-to-week, or month-to-month changes over a period of time. Also, longer deviations may be considered hinging on base or equilibrium value. Studies which underscore short-term volatility relatively adopt strategic intermediation fundamentals (analytical variables) such as total value of transaction, total number of new issues, number of listed securities, stock market capitalization, stock market index, treasury bill rate, monetary policy rate, exchange rate, stock market prices, long-term and short-term interest rates.

Over the years, much interest had been shown with respect to market microstructure, but some areas need to be further explored and well explained. Some analysts contend that informed traders prefer translucent trading scenarios, while uninformed traders prefer transparent trading scenarios (Forster & George, 1992; Foucault, Monias & Theissen, 2007). The former is perceived as permitting informed traders to conceal trading intentions, while in the latter, liquidity suppliers are enabled to identify counterparts and come to terms with the prevailing order features. Liquidity suppliers avail informed traders a higher bid-ask spread and provide uninformed market participants with lower trading costs. Contrariwise, where the translucent trading scenarios attract both informed and uninformed traders, it brings about overall narrower spreads; a disposition which goes with inability to discriminate between informed and uninformed participants, and cordon uninformed orders or free-ride informed orders in the translucent scenarios. This operationally compels traders to place more aggressive limit orders and refrain from behaving differently relative to informed and uninformed trades.

There is also the tendency of price manipulation relative to intervention of regulatory authorities, as different intermediating structures affect the behaviour of market participants. Strategic intermediation fundamentals, as envisioned by analysts, bear on the role of information in the process, definition, measurement and control of liquidity; efficiency implication of transaction costs; as well as welfare and regulation of diverse trading mechanisms (Easley & O'Hara, 2004; Karunanayake, Valadkhani & O'Brien, 2010). Regulation of trading in securities markets, thus, has critical implications for the price formation process and other characteristic dynamics of financial markets.

Market microstructure, with respect to the foreign exchange system, focuses on order flow, information asymmetries, trading mechanisms, liquidity and the price discovery process. With apex bank intervention, the intermediation fundamentals emit information to the market in order to modify expectations and generate huge order flows (Evans & Lyons, 2008). Intervention - induced order flows relatively intensify volatility, which ultimately depends on the prevalence of liquidity traders relative to informed participants in the market. This intervention features as a special form of order flow, driving functionalities to change expectations on future perspectives of exchange and cascading order flows. The relationship between volume and volatility in the market microstructure setting is equally defined by information heterogeneity and asymmetry, as informed participants gain at the expense of their uninformed counter-parts in the wake of new information flows. This position finds analytical expression in the mixed distributions hypothesis. By this, volume and volatility in prices are aggregately related and driven by common dynamics as new information streams into the market during normal (liquidity trading) periods. Nonetheless, when the scenario is tumultuous, liquidity traders tend to withdraw from the market thereby forging an inverse

relationship (Easley and O'Hara, 2004; Galati & Heath, 2007). Consequently, the two market conditions typologies in which the apex bank may intervene are identified as:

- liquidity trading regime, where most liquidity traders are involved, the mean and variance of exchange rate returns being relatively small; and
- informed trading regime, where many liquidity traders leave the market, the mean and variance of exchange rate returns being relatively large.

Where liquidity trading regime prevails, apex bank intervention rather tends to intensify volatility, a positive relationship between volume and volatility. On the other hand, where the informed trading regime obtains, apex bank intervention tends to mitigate volatility, an inverse relationship between volume and volatility. Under *pure* market microstructure analytical approach, order flow is critical factor in exchange rate determination, as any exception taken relative to the efficient market hypothesis, amplifies apprehension relative to perspectives of future currency values and actual exchange rate movements. Unlike expectations assessed by superficial survey, the order flow mode exemplifies the willingness of participants to back commitment with consideration. The order flow forges signed transaction volume, where functional signs are given by initiators; illustrated in the instance that if one decides to sell 10 units of foreign currency in period 1, the order flow is -10; while an agent who buys 20 units of foreign currency in period 2, assigns an order flow of +20. The transaction volume of both trading periods is 30, whereas the specific order flow is +10 (Rime, Sarno & Sojli, 2010). The positive value implies net purchasing pressure on foreign currency and *vice versa*; whereas the order flow is simply decoded as shift in total foreign currency demand. This, in turn, reveals the dynamics of market expectations relative to future fundamentals, as foreign exchange rate dealers tend to learn more about fundamentals through order flow from non-dealers. The latter, also in turn, learn about the fundamentals from direct sources, to the extent that they possibly become willing to back up their beliefs with money. The profiling of electronic limit order markets in the intermediation process, involving providers of liquidity, who do not have to go through dealers, has contributed to deepening the discourse on strategic intermediation and role of dealers in the trading of securities. The concern in this perspective is the welfare implications of stiff competition which prevails between traditional stock markets and new electronic market systems, including the disposition of authorities on market fragmentation.

This extends to whether the trading system should be continuous or intermittent. Under the continuous trading mode, participants are enabled to trade at will; while under the intermittent trading mode, the process is synonymous with auction, allowing exchange only at specific points in time (Easley and O'Hara, 2004; Rime, Sarno & Sojli, 2010). Whereas, intermittent auctions are deemed preferable in terms of efficiency, relative to illiquid stocks, taking into consideration uncertainty about fundamental values or danger of downturns; greater favourable disposition is demonstrated in the direction of continuous trading system (Amihud, Mendelson & Lauterbach, 1997). Asymmetric information is tenable, but in terms of size, complexity and imprecision of publicly available information, investors in possession of exceeding information set display different expectations about risk and return configurations. These (asymmetric information and scenic divergent expectations) combine to constitute a vast set of forces that define the strategic intermediating dynamics of security prices. Essentially, the market structure is concerned with the feature of buy side desks, as frameworks are obviously neither perfectly liquid nor efficient in either informational or operational terms. A

preferred market structure is expected to afford intermediation fundamentals that deliver superior performance for active participants (Galati & Heath, 2007; Agundu & Haruna, 2018; Osayi, 2018). These intriguing systemic realities justify the present focus on the relationship between strategic intermediation fundamentals and market microstructure potency in the Nigerian financial system.

**Methodology**

This study features causal analytical research design, with secondary data on the operational variables drawn over a long time frame, in order to track the influence of strategic intermediation fundamentals on market microstructure potency in the Nigerian financial system. In furtherance of this, the time-series are sourced from the repositories of regulatory institutions such as the Nigerian Stock Exchange (NSE), Central Bank of Nigeria (CBN), and Securities and Exchange Commission (SEC), over a period of 32 years (1985-2016). In line with the framework adopted by Hung (1997), Evans and Lyons (2002), as well as Yomere and Agbonifon (1999), the model of this study:

$$MMP = f(SIF) \quad \dots (1)$$

Where:

MMP = Market microstructure potency denoted by Bid-Ask-Spread (BAS),

SIF = Strategic intermediation fundamentals,

Expanding Function (1) with specific factor components translates thus:

$$BAS = f(TNI, SMC, SMI, TVT, NLS, EXR, TRB, TOR, INF) \quad \dots (2)$$

Where:

TNI = Total number of new issues,

SMC = Market capitalization,

SMI = Market index,

TVT = Total value of transaction,

NLS = Number of listed securities,

EXR = Exchange rate,

TRB = Treasury bill rate,

TOR = Turnover ratio, and

INF = Inflation rate.

Operationalizing Function (2) translates thus:

$$BAS_t = a_0 + a_1TNI_t + a_2SMC_t + a_3SMI_t + a_4TVT_t + a_5NLS_t + a_6EXR_t + a_7TRB_t + a_8TOR_t + a_9INF_t + e \quad \dots (3)$$

Where:

a = constant/coefficients

e = the residual or error term.

A priori expectation is:

$a_1, a_2, a_3, a_4, a_5, a_6, a_7, a_8, a_9 > 0$  (implying: financial performance impacts on market microstructure).

Predicated on descriptive statistics (such as mean, median, and standard deviation) and Jarque-Bera statistic which relate to normality of data, probability values are used to establish functional significance at the specified (0.05) level. The overriding hypothetical stance is evaluated in terms of regression and causality, facilitated by E-views statistical package, as the determinants are denoted in Functions (2) and (3).

## Results

The analytical results are presented in Tables 1, 2 and 3:

### Table 1: Regression Results

Method: ML - ARCH (Marquardt) - Normal distribution

Lag: 1

Included observations: 31 after adjustments

Presample variance: backcast (parameter = 0.7)

GARCH = C(11) + C(12)\*RESID(-1)^2 + C(13)\*GARCH(-1)

Variable	Coefficient	Std. Error	z-Statistic	Prob.
Variance Equation				
C	1.30E+11	1.42E+11	0.915837	0.3598
RESID(-1)^2	0.605098	0.729554	0.829407	0.4069
GARCH(-1)	-0.330238	0.702226	-0.470273	0.6382
R-squared	0.812364	Mean dependent var	755181.6	
Adjusted R-squared	0.731948	S.D. dependent var	979115.5	
S.E. of regression	506924.3	Akaike info criterion	29.16975	
Sum squared resid	5.40E+12	Schwarz criterion	29.77110	
Log likelihood	-439.1311	Hannan-Quinn criter.	29.36577	
Durbin-Watson stat	2.094564			

Source: Research Data (E-views Statistical Output).

**Table 2: Granger Causality Test**

Lags: 2

Included observations: 30 after adjustments

Null Hypothesis:	Obs	F-Statistic	Prob.
TNI does not Granger Cause BAS	30	11.5190	0.0003
BAS does not Granger Cause TNI		0.16710	0.8470
SMC does not Granger Cause BAS	30	13.4128	0.0001
BAS does not Granger Cause SMC		0.34191	0.7137
SMI does not Granger Cause BAS	30	NA	NA
BAS does not Granger Cause SMI		NA	NA
TVT does not Granger Cause BAS	30	0.53927	0.5898
BAS does not Granger Cause TVT		13.1652	0.0001
NLS does not Granger Cause BAS	30	2.71522	0.0857
BAS does not Granger Cause NLS		0.59117	0.5612
TRB does not Granger Cause BAS	30	0.18333	0.8336
BAS does not Granger Cause TRB		0.32703	0.7241
EXR does not Granger Cause BAS	30	6.38201	0.0058
BAS does not Granger Cause EXR		1.74129	0.1959
INF does not Granger Cause BAS	30	0.08819	0.9159
BAS does not Granger Cause INF		0.09466	0.9100
TOR does not Granger Cause BAS	30	0.14977	0.8617
BAS does not Granger Cause TOR		1.30834	0.2881

SMC does not Granger Cause TNI	30	27.9008	4.E-07
TNI does not Granger Cause SMC		17.0823	2.E-05
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SMI does not Granger Cause TNI	30	0.09083	0.9135
TNI does not Granger Cause SMI		12.8373	0.0001
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TVT does not Granger Cause TNI	30	0.19159	0.8268
TNI does not Granger Cause TVT		2.75622	0.0828
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NLS does not Granger Cause TNI	30	0.12804	0.8804
TNI does not Granger Cause NLS		0.43185	0.6541
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TRB does not Granger Cause TNI	30	0.45959	0.6368
TNI does not Granger Cause TRB		2.00178	0.1562
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EXR does not Granger Cause TNI	30	4.37171	0.0235
TNI does not Granger Cause EXR		43.9648	7.E-09
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INF does not Granger Cause TNI	30	0.23121	0.7952
TNI does not Granger Cause INF		0.55653	0.5801
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TOR does not Granger Cause TNI	30	1.32057	0.2850
TNI does not Granger Cause TOR		0.82143	0.4513
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SMI does not Granger Cause SMC	30	0.34575	0.7110
SMC does not Granger Cause SMI		15.4845	4.E-05
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TVT does not Granger Cause SMC	30	0.29736	0.7454
SMC does not Granger Cause TVT		2.88912	0.0743
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NLS does not Granger Cause SMC	30	0.11261	0.8939
SMC does not Granger Cause NLS		0.52182	0.5998



TRB does not Granger Cause SMC	30	0.94096	0.4036
SMC does not Granger Cause TRB		1.56798	0.2283
EXR does not Granger Cause SMC	30	4.61141	0.0197
SMC does not Granger Cause EXR		23.9690	2.E-06
INF does not Granger Cause SMC	30	0.04973	0.9516
SMC does not Granger Cause INF		0.56360	0.5762
TOR does not Granger Cause SMC	30	0.82962	0.4479
SMC does not Granger Cause TOR		1.69825	0.2034
TVT does not Granger Cause SMI	30	1.09945	0.3486
SMI does not Granger Cause TVT		8.93757	0.0012
NLS does not Granger Cause SMI	30	0.77658	0.4708
SMI does not Granger Cause NLS		0.61462	0.5488
TRB does not Granger Cause SMI	30	0.08572	0.9181
SMI does not Granger Cause TRB		1.04416	0.3668
EXR does not Granger Cause SMI	30	29.5521	3.E-07
SMI does not Granger Cause EXR		0.39489	0.6779
INF does not Granger Cause SMI	30	0.14639	0.8646
SMI does not Granger Cause INF		1.26668	0.2992
TOR does not Granger Cause SMI	30	2.28474	0.1227
SMI does not Granger Cause TOR		1.33889	0.2803
NLS does not Granger Cause TVT	30	0.16413	0.8495

TVT does not Granger Cause NLS		1.66727	0.2091
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TRB does not Granger Cause TVT	30	0.14994	0.8615
TVT does not Granger Cause TRB		0.47606	0.6267
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EXR does not Granger Cause TVT	30	9.24168	0.0010
TVT does not Granger Cause EXR		0.05823	0.9436
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INF does not Granger Cause TVT	30	0.30959	0.7365
TVT does not Granger Cause INF		0.94876	0.4007
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TOR does not Granger Cause TVT	30	2.89125	0.0742
TVT does not Granger Cause TOR		1.72827	0.1981
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TRB does not Granger Cause NLS	30	0.93966	0.4041
NLS does not Granger Cause TRB		0.85921	0.4356
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EXR does not Granger Cause NLS	30	0.19617	0.8231
NLS does not Granger Cause EXR		0.21916	0.8047
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INF does not Granger Cause NLS	30	0.48272	0.6227
NLS does not Granger Cause INF		0.08436	0.9194
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TOR does not Granger Cause NLS	30	1.15779	0.3305
NLS does not Granger Cause TOR		0.63945	0.5360
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EXR does not Granger Cause TRB	30	2.15068	0.1375
TRB does not Granger Cause EXR		1.85029	0.1781
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INF does not Granger Cause TRB	30	1.48872	0.2450
TRB does not Granger Cause INF		3.89282	0.0337
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TOR does not Granger Cause TRB	30	1.01263	0.3777
TRB does not Granger Cause TOR		1.05738	0.3624
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INF does not Granger Cause EXR	30	0.14478	0.8659
EXR does not Granger Cause INF		0.13401	0.8752
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TOR does not Granger Cause EXR	30	1.93529	0.1654
EXR does not Granger Cause TOR		2.19301	0.1326
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TOR does not Granger Cause INF	30	2.69502	0.0871
INF does not Granger Cause TOR		0.05649	0.9452
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**Source: Research Data (E-views Statistical Output).**

**Table 3: Dominant Causality Highlights**

Lags: 2

Included observations: 30 after adjustments

Null Hypothesis:	Obs	F-Statistic	Prob.
TNI does not Granger Cause BAS	30	11.5190	0.0003 <i>Sig.</i>
SMC does not Granger Cause BAS	30	13.4128	0.0001 <i>Sig.</i>
BAS does not Granger Cause TVT		13.1652	0.0001 <i>Sig.</i>
EXR does not Granger Cause BAS	30	6.38201	0.0058 <i>Sig.</i>
TNI does not Granger Cause SMI		12.8373	0.0001 <i>Sig.</i>
EXR does not Granger Cause TNI	30	4.37171	0.0235 <i>Sig.</i>

EXR does not Granger Cause SMC	30	4.61141	0.0197 <i>Sig.</i>
SMI does not Granger Cause TVT		8.93757	0.0012 <i>Sig.</i>
EXR does not Granger Cause TVT	30	9.24168	0.0010 <i>Sig.</i>
TRB does not Granger Cause INF		3.89282	0.0337 <i>Sig.</i>

**Source: Research Data (E-views Statistical Output).**

In Table 1, the R-squared is 0.81; while the Adjusted R-squared is 0.73. Underscoring the R-squared implies that 81% of the features of market microstructure potency is attributable to the dynamics of strategic intermediation fundamentals in the Nigerian financial system. Table 2 exposes causality of the variables, as the p-values are either less or greater than the critical standard (0.05). However, the dimensions are underscored in Table 3 are those whose p-values are less the critical benchmark ( $p < 0.05$ ). Essentially, the causality statistics relating market structure potency to strategic intermediation fundamentals are significantly affirmative. By this, the study refrains from accepting the null hypothesis that market microstructure potency has no significant relationship with strategic intermediation fundamentals in the Nigerian financial system. Alternatively, it establishes that market microstructure potency has significant relationship with strategic intermediation fundamentals in the Nigerian financial system.

**Discussion of Findings**

The study examined market microstructure potency and strategic intermediation fundamentals in the Nigerian financial system, critically anchoring on the concepts of financial system performance, regulation and the market microstructure. Economies are composed of surplus units and deficit units; the former presumed to hold money in excess of immediate needs, as the latter presumably grapple with inadequacy. To bridge the funding gap, financial institutions come to play as monetary authorities exert macroeconomic policies on the functional units to influence and drive fundamental objectives. Financial intermediaries develop instruments to bridge the lending and borrowing process, with savers and borrowers forging auspicious ways save and accumulate funds, process the funds as loans and overdrafts, reduce associated risks (including bad debts), and manage the maturity for mutual benefit. Furthermore, some financial intermediaries, such as discount houses, intermediate between institutions, striving to place funds with other institutions. By this, the financial system constitutes the engine of growth for economic development, discharging the responsibility of regulating the financial environment, determining the types and amounts of funds to be issued, as well as cost and use of funds. The constituent financial institutions, thus, supply financial services to the economic community by meeting the diverse needs of lenders and borrowers (Osamwonyi & Kasimu, 2013; Aromwan & Isenmila, 2014). On the side of sensitivity, Bromley (2006) posits that market operators and investors care about volatility for the following reasons:

- The wider the swings in price the harder emotionally apprehension;
- When cash flows from security are needed at a specific future date, higher volatility attracts greater chance of shortfall;
- Higher volatility of returns from retirement savings results in wider distribution of final portfolio values;
- Higher volatility of return on the retired fund withdrawals results in larger impact on portfolio value; and
- Price volatility presents opportunities to buy assets cheaply and sell when overpriced.

The findings of this study bring to the fore the salient functional relevance of these manifests in an emerging market economy, affirming a significant relationship between market microstructure potency and strategic intermediation fundamentals in the Nigerian financial system.

### **Conclusion**

The Nigerian financial system manifests varying dynamics of financial intermediation. With advances in electronic communications, financial markets run with unique intermediating configurations, anchoring major dealers to harness continuous trading modes as against periodic trading modes. The trend clearly impresses on market participants to engage in continuous trading while exploiting efficient auctions. In the light of these tendencies, analysts project market microstructure theory as having four broad applications (O'Hara, 1995; Madhavan, 2000; Frömmel, Norbert & Pintér, 2011)). First, it illuminates and guides market structure development. Second, it facilitates development of algorithms for asset managers and broker/dealer intermediaries. Third, it supports market efficiency consideration, which primarily evolved with the efficient market hypothesis, and is still reckoned amongst financial economists as the cornerstone of modern portfolio theory. It has also attracted wider academic support over the years, majorly addressing informational efficiency as distinct from operational efficiency (Fama, 1970; Hung, 1997; Agundu & Haruna, 2018). Fourth, it illuminates how new information streams in and fuses to forge security prices, such that in a zero cost scenario (frictionless environment), share value is instantaneously and continuously updated with the release of new information.

Reflective of these contemporary realities the results of this study establish that bid-ask-spread has causal relationship with total number of new issues, market capitalization, market index, total value of transaction, exchange rate, treasury bill rate, and inflation rate. Based on the findings, the study concludes that market microstructure potency has significant relationship with strategic intermediation fundamentals in the Nigerian financial system. In the light of the conclusion, it is recommended that the regulatory agencies, in particular, should:

- More conscientiously strengthen governance frameworks in order to deepen market integrity;
- More cautiously intensify measures to guard against the adversity of market volatility; and
- More strategically incentivise investors with favourable (enabling) macroeconomic policies.

Going forward still, participants should uphold market discipline and comply strictly with regulatory stipulations to deepen corporate governance for sustainable confidence in the

financial system. Investment-related intrigues of value-added-tax regimentation and administration should be constructively addressed to fundamentally redefine and redirect the net-worth prospects of investors.

### References

- Aggarwal, R.K. & Wu, G. (2006). Stock market manipulations. *The Journal of Business*, 79(4), 1915-1953.
- Agundu, P.U.C. (2019). Finance: Public and Private Sector Fundamentals. Wukari: MEO Press.
- Agundu, P.U.C. & Haruna, H.A. (2018). Info-prevalence and price reflexes in the Nigerian stock market. *Journal of Accounting, Finance and Management Discovery*, 1(1), 79-86.
- Amihud, Y., Mendelson, H. & Lauterbach, B. (1997). Market microstructure and securities values: Evidence from the Tel Aviv stock exchange. *Journal of Financial Economics*, 45, 365-390.
- Aromwan, E.J. & Isemla, P.A. (2014). The Nigerian stock exchange: The journey so far. *Management Science Review*, 5(1&2),158-173.
- Bromley, D. (2006). What is a volatile market? Analyst article retrieved 14/12/2011via:<http://www.modustrading.com>
- Comerton-Forde, C. & Tang, K.M. (2009). Anonymity, liquidity and fragmentation, *Journal of Financial Markets*, 12 (3), 337-367.
- Easley, D. & O'Hara, M. (2004). Information and the cost of capital. *The Journal of Finance*, 59(4), 1553-1583.
- Evans, M. & Lyons, R. K. (2008). How is macro news transmitted to exchange rates? *Journal of Financial Economics*, 88(1), 26-50.
- Fama, E. (1970). Efficient capital markets: A review of theory and empirical work. *Journal of Finance*, 25, 283-306.
- Forster, M.M. & George, T.J. (1992). Anonymity in securities markets. *Journal of Financial Intermediation*, 2(2), 168-206.
- Foucault, T., Monias, S. & Theissen, E. (2007). Does anonymity matter in electronic limit order markets? *Review of Financial Studies*, 20(5), 1707-1747.
- Frömmel, M., Norbert, K.M. & Pintér, K. (2011). Macroeconomic announcements, communication and order flow on the Hungarian foreign exchange market. *International Journal of Finance and Economics*, 16(2), 172-188.
- Galati, G. & Heath, A. (2007). What drives the growth in FX activity? Interpreting the 2007 triennial survey, *BIS Quarterly Review*, December, 63–72.
- Hasbrouk, J. (2007). *Empirical market microstructure*, Oxford University Press, New York.
- Hung, J.H. (1997). Intervention strategies and exchange rate volatility: A noise trading perspective. *Journal of International Money and Finance*, 16 (5), 779-793.
- Karunanayake, I., Valadkhani, A. & O'Brien, M. (2010). Financial crises and international stock market volatility transmission. *Australian Economic Papers*, 49 (3), 209-221.

- Madhavan, A. (2000). Market microstructure: A survey. *Journal of Financial Markets*, 3, 205-258.
- Mendelson, H. (1987). Consolidation, fragmentation, and market performance. *Journal of Financial and Quantitative Analysis*, 22, 189-208.
- O'Hara, M. (1995). Market microstructure theory. *Basil Blackwell, Cambridge, MA*.
- Osamwonyi, I.O. & Kasimu, A. (2013). Stock market and economic growth in Ghana, Kenya and Nigeria. *International Journal of Financial Research*, 4(2), 83-98.
- Osayi, V.I. (2018). Financial Markets Performance, Regulation and Market Microstructure in Nigeria (Unpublished PhD Finance Dissertation), University of Benin, benin City, Edo State, Nigeria.
- Rime, D., Sarno, L. & Sojli, E. (2010). Exchange rate forecasting, order flow and macroeconomic information. *Journal of International Economics*, 80 (1), 72-88.
- Stoll, H. (2003). *Handbook of the Economics of Finance*, 1A, Chapter, Market Microstructure, 553-604. Elsevier.
- Yomere, G.O. & Agbonifoh, B.A. (1999). *Research Methodology in Social Sciences and Education*. Centrepiece Consultants Nigeria Limited.