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Market Frictions and Stock Market Performance in Nigeria

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Abstract: What comes to mind when we hear the phrase "financial market frictions" are taxes and transactions costs which are obvious examples, but market frictions are diverse and widespread. This paper models the various components of financial market friction and how they affect the Nigerian capital market with emphasis on variables like transaction cost, taxes and regulations, asset indivisibility, non-traded asset and agency with information problems. The study employed use of econometric analysis like unit root test, co-integration test, correlation and regression with time series data from 1981-2018. It was discovered that the various components affect the stock market performance in different ways and also are real determinants of the various responses to issues in the stock market. Considering the results of econometric analysis, the study recommended among others proper management of the transaction costs, while the taxes paid by investors in the country should provide opportunity for investment and the capital market should operate in such a way as to make access to information valid while the number of instruments traded on the stock exchange should be increased to make investors have options.

Keywords: Transactions costs; taxes and regulations; asset indivisibility; non-traded assets; agency and information problems; financial market frictions

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1. Introduction

The capital market is filled with a lot of demands ranging from efficiency, returns, investment, forecasting, seasonality, modeling and many other issues. The majority

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of these demands focus on what is to make the market better. To test the validity of these demands, a lot of works has been undertaken by Fama (1970) who wrote a paper entitled "Efficient Capital Markets: A Review of Theory and Empirical Work, Jensen (1978), Grossman and Stiglitzs (1980), Bob- Ozaze(1982) Osamwonyi (1984) and many others who developed hypotheses, models and laws that have been used to test many assumptions in the capital market.

In all of these, some issues which affects and interferes with trading in the market were raised. When purchasing a security an investor needs not only have in mind the cash flows that the security will pay in the indefinite future, he/she must also anticipate his/her desire and ability to resell the security in the marketplace at a later point in time, these are regarded as market frictions.

What comes to mind when we hear the phrase 'financial market frictions' are taxes and transactions costs. These are obvious examples, but market frictions are diverse and widespread, affecting virtually every transaction in some way. Capital gains taxes, for example, influence decisions to trade stocks and bonds.

The financial market friction need not be a monetary cost. Investors sometimes must stand in line to pay a lower price. New businesses must charge lower prices than companies with established reputations. The basic question is: What is a market friction? In the context of the capital asset pricing model (CAPM), this study defines a financial market friction as anything that interferes with trade. This interference is in two dimensions. First, financial market frictions cause a market participant to deviate from holding the market portfolio. By implication, these frictions can cause a market participant to be exposed to more or less risk than she might prefer. This definition at first seems very limited but is, in fact, only as limited as the definition of the market portfolio. In this study, the term market portfolio means not only financial assets but also real estate, human capital, investors' time, and so on. Put differently and somewhat less obscurely, financial market frictions generate costs that interfere with trades that rational individuals make (or would make in the absence of market frictions). Market frictions may be detected by direct measurement, or by indirect identification.

As mentioned earlier, market frictions may be detected by direct measurement, which is possible. It is worth stressing that frictions in trading processes, especially non-trading effects, have an intricate and pervasive impact on the process of generating returns.

This paper is related to the existing studies of portfolio choice under transactions costs such as Constantinides (1976a, 1976b, 1986), Davis and Norman (1990), Dumas and Luciano (1991), Edirsinghe, Naik and Uppal (1993), Gennotte and Jung (1994), Shreve and Soner (1994), Leland (2000), Longsta (2001), Nazareth (2002), Bouchard (2002), Obizhaeva and Wang (2005), Liu and Lowenstein (2002), Jang,

Koo, Liu and Lowenstein (2007) and Gerhold, Guasoni, Muhle-Karbe and Schachermayer (2011) among others.

The objective of this study is to look at the effect of the various market friction variables liketransactions costs, taxes and regulations, asset indivisibility, non-traded assets, agency and information problems on stock market performance in Nigeria. Therefore, this paper will provide further empirical evidence on the issue of financial markets frictions using various models and Nigerian data, the paper will be divided to sections.

2 Fundamental Issues in Financial Market Frictions

2.1. Nigerian Stock Market Experience and Financial Market Frictions

The Nigerian stock market is an important part of the Nigerian Financial System. Other Sectors within the system, include the Money Market, the Insurance and the Pension. The Money Market which consists of Deposit Money Banks, and other Financial Institutions, like Macro-Finance Banks (MFB), and Primary Mortgage Institutions (PMI), is being regulated by CBN. Act 2007(ISA) states the functions of Securities and Exchange Commission is to be in charge of registration, market development, investigations of any kind, complaints management, monitoring and ensuring compliance and for smooth operation of the Nigerian Capital Market. However, with particular reference to the Nigerian Capital Market, the concern for market frictions are as a result but not limited to the following reasons:

1. Unstable Market

The Nigerian Capital Market has been facing fluctuations in the price of stocks. This has not been favorable to investors in the stock market. For example, Nigeria Capital Market along with others around the world, crashed during the global financial crisis of 2009. In 2017, Nigeria recently recorded economic recession, regarded the worst in country's history. This had proven that the markets are largely risky and unpredictable for investors.

2. Industry Risk

Companies operating in the Nigerian Capital Market are exposed to many risks. These risks affect the level of profitability which can go a long way to affect fortunes of the company in the capital market.

3. Regulatory problems in the Nigerian Capital Market

The Nigerian capital market faces difficulty in laying down rules for proper implementation of operational guidelines a lot of shady dealings by stock brokers and top officials in the markets which go on unchecked usually creates future and affects the companies operating in the market. Surplus funds are not properly

accounted for or claimed due to lack of monitoring and uncoordinated systems thus resulting in loss of profits by investors who are supposed to be protected in the market.

4. Operational shell banks or institutions

There are scams popularly known as the Ponzi scheme, calculated to deceive and defraud unsuspecting individuals. The scammers normally promise investors abnormal cash returns which is far from what is obtainable from the normal banks.

5. Limited knowledge about Nigerian Capital Market

A lot of people in Nigeria find it difficult to understand the mode of operation of the Nigerian capital market due to lack of adequate information. It is important to provide information that will enable the populace to obtain basic knowledge about shares, debentures and bonds available for trading i the capital market.

6. Market Size Problem

According to Securities and Exchange (SEC) 2015-2025 Master Plan Report on Nigeria Capital Market, the country has not been well positioned and has not been equipped for relevance in some key sectors of the economy. Companies who were interested in the power sector, were expected to have been in the Capital Market, five years before acquisition of Shares.

7. Lack of Technology

There is the low level of information technology assimilation and capacity in the capital market. There is need to modernize and transform operative models, the capacity and encourage smaller operators to invest in technology. There is limitation for innovation and specified value added content. Technology brings about a more productive and effective capital market for investors.

8. Other reasons for global concerns about financial market frictions

Financial market frictions can generate real costs for investors. Recognizing these costs helps us understand the total costs of transactions and decide where to place them and even whether to make them at all. The capital gains tax is an obvious example. Constantinides (1984) shows that the option to take or defer capital losses or gains has substantial value. The option's exact value—and the corresponding optimal trading strategy—depends on factors such as transactions costs, the capital gains tax rate, and the asset's volatility.

Financial market frictions also generate business opportunities. After all, many costs are paid to someone or to some entity. Institutions that can lower costs arising from market frictions have a competitive advantage. Until competing firms adapt, they can earn economic rents. One example from the financial markets is mutual funds, which relax wealth constraints and asset indivisibilities (DeGennaro & Kim 1986)

Financial market frictions can and do change over time. The degree of existing market frictions varies, new ones appear, and existing frictions disappear. Bank analysts now face the daunting task of analyzing far larger and more complex institutions that existed twenty years ago, but this challenge is offset in part by a vast increase in the information and computing power now available to them. Kane (2000) shows that regulators face a similar problem. The complexity and the difficulty of resolving an undercapitalized institution increases with the size of the institution. Megamergers have the capacity to shift the political calculus of a resolution, and all the financial market frictions. There is need for change from qualitative information to quantitative information dissemination in the market. Jith and Donald 2010 were of the opinion that information frictions affects a lot of issues related to the performance of the Companies/

3. Financial Market Frictions and Market Structure

Financial market frictions, especially transactions costs, depend in part on market structure. Market structure, in turn, depends on both the risk of the traded asset and trading volume. In thin markets for risky assets, participants search for counterparties directly because the fixed costs of capital investments (including communication) are too large to be offset by the lower marginal costs of each transaction if transactions are few. As trading volume increases, markets evolve from direct search through brokered, dealer, and continuous auction markets. This evolution is a simultaneous process because as volume increases, the structure evolves, and as the structure evolves, trading volume increases. For example, Cox and Koelzer (2000) observed that the internet has transformed the way that agents and consumers form their relationships. In short, as trading volume increases, markets tend to evolve from a structure with low fixed costs and high marginal costs for transactions to markets with high fixed costs and low marginal costs. Transactions costs are lower in these high-volume markets.

3.1. Classification of Financial Market Frictions

The universe of financial market frictions can be partitioned in many ways. Because there are many financial market frictions, though, no structure can be said to be complete. Structures are built on the economic forces underlying financial market frictions and are expected to identify those entities capable of reducing the costs of market frictions.

This study identified five primary categories of market frictions. These are transactions costs, taxes and regulations, asset indivisibility, non-traded assets, and agency and information problems.

3.1.1 Transactions Costs

This study divided transactions costs into two categories: the costs of trade and the opportunity costs of time. The costs of trade in financial markets include postage, telephone charges, computer power, and similar real expenditures of resources. These have been declining with technological improvements. Over some periods these costs may have risen in real terms, but the costs of communication and data analysis have fallen over time. For example, the cost of an e-mail message is effectively zero. And the costs of virtually all other mechanical costs of trade have fallen.

With regards to the opportunity costs of time, it is noted that trading requires time, which includes both search costs, or the time to gather information (including finding a trading partner), and the time to make the trade itself. Minimizing these costs represents a profit opportunity. One partial solution is to automate the process by means of automatic electronic payments.

The future of transactions costs. Transactions costs are probably among the most familiar financial market frictions though they might be among the least important. Advances in communications and data-handling technology have reduced not only the costs of trade to a fraction of what they were just a few years ago but also the time needed to make trades. For example Vayanos (1998) found out that realistically small transaction costs have negligible effects on asset returns and mainly affect the portfolio rebalancing frequency.

3.1.2. Taxes and Regulations

The second major category in our taxonomy of financial market frictions is taxes and regulation. We use the term *regulation* loosely in this *explicit taxes.* Everyone is familiar with any number of pecuniary taxes; governments both within and outside the Nigeria impose explicit pecuniary taxes in hundreds if not thousands of ways. Corporations pay taxes on income, which change prices. Taxes can even affect the medium of exchange. For example, corporate acquisitions paid for with stock can receive more favorable tax treatment than those paid for with cash. Individuals pay income and capital gains taxes, and these payments surely affect their investment decisions and trades. Miller and Scholes (1978) give a good example of a non-pecuniary tax. They show how investors can generate deductions to offset dividends earned in order to eliminate the tax on the dividends. However, in practice, this offsetting may be costly. Taxpayers can and do take steps to minimize the amount they pay, and the costs of these steps count toward the total tax burden.

3.1.3. Asset Indivisibility

If assets were infinitely divisible, then investors could hold an arbitrarily small portion of each asset. This practice would permit all investors, even those with little to invest, to hold the market portfolio of all investable assets. For wealthy investors,

asset indivisibility is a smaller problem than it is for less wealthy ones. In addition, a wealthy investor can hold a larger number of assets. Combined with trading costs, which usually have a fixed component, asset indivisibility makes it harder for investors of limited means to begin investing because their portfolios tend to lie farther below the capital market line. Asset indivisibilities are an important reason mutual funds and derivative securities exist. By pooling funds from many investors, they permit investors to hold portfolios that more nearly approximate the market portfolio.

3.1.4. Non-traded Assets

Becker (2005) reports that human capital now makes up at least 70 percent of all wealth in economically advanced nations. This enormous capital stock tends to drive workers away from holding the market portfolio Financial innovation continually removes items from the list of non-traded assets by introducing new instrument that render assets effectively tradable. In addition to the human capital examples above, recent years have seen credit-card securitizations, credit-spread derivatives, collateralized mortgage obligations, and many others. In some of these cases, bundling the assets reduces idiosyncratic risk. In others, the innovation permits unbundling the assets' risk and selling parts of it to investors who are better able to bear it (for example, credit-default swaps).

3.1.5. Agency and Information Problems

Jensen and Meckling (1976) wrote the seminar paper in this area, but the concept was developed since 1776 by Adam Smith. Smith notes that the directors of large companies, who manage large amounts of other people's money, cannot be expected to exercise the same vigilance that they would exercise for their own money. Why then is the separation of ownership and control a financial market friction? The answer is that this separation can lead to incentive problems, and financial contracts cannot handle them at zero cost. This difficulty can reduce or even eliminate trading assets based on human capital because no one will pay the fair value of the musician's income stream.

This problem is familiar at the corporate level, where earnings management and fraud have led to the dismissal of corporate executives and even criminal charges. Jith and Donald 2010 were of the opinion that information frictions affects a lot of issues related to the performance of the companies.

4. Review of Empirical Studies

Empirical works on financial market friction has been undertaken by many authors who at one time or the other have been able to look at the various determinants of financial market friction and have made considerable research on the subject matter.

Mamaysky, and Wang (2004) observed that even small transaction costs can have a substantial effect, causing investors to refrain from trading. From an aggregate perspective, Amihud and Mendelson (1986) presented some evidence that stock returns reflect the effects of market frictions. Their empirical analysis shows that the bid-ask spread affects stock returns. In particular, they find that the average returns on stocks with larger bid-ask spreads tend to be higher. This result may stem from investors' lower demand for high-transaction-cost stocks. This lower demand reduces the prices of these stocks and boosts their average return to the point where investors are willing to hold them. Investors seem to pay a price premium for the liquidity of stocks with low bid-ask spreads.

Balduzzi and Lynch (1999) found out that realistically small transaction costs tend to prompt much less rebalancing on the part of investors. They estimate that ignoring these transaction costs and rebalancing more frequently can cost investors from 0.8 percent up to 16.9 percent of wealth. A form of restricted trading is considered by Longsta (2009) where a physical asset traded by two logarithmic investors is considered illiquid if, after being bought at time 0, it must be held till some date T after which it becomes liquid again. The consequences for asset prices are drawn in relation to the length T of the freeze. One can also capture liquidity considerations by means of a portfolio constraint. Holmström and Tirole (2001) study a .financial-market equilibrium in which investors face an exogenous constraint on borrowing.When they hit their constraint, investors are said to be .liquidity constrained. Gromb and Vayanos (2002) and Brunnermeier and Pedersen (2008) study situations in which the amount of arbitrage capital is constrained. It would be necessary to present some micro foundations for the constraint. A constraint on borrowing would best be justified by the risk of default on the loan. Equilibrium with default is an important but separate topic of research. This study was built upon the earlier work of Buss et al. (2011). Both studies derive an equilibrium in a financial market where investors incur a cost when they transact and both use the backward-induction procedure of Dumas and Lyaso (2011) to derive the model. Jith and Donald 2010 was of the opinion that information frictions affects a lot of issues related to the performance of the companies.

5. Theoretical Foundation

The financial market friction has its rootsin many classical and neo classical theories which are well formulated to support the just cause that financial market frictions do not exist in vacuum.

5.1. Agency Theory

As early as in 1776, Adam Smith noted in his seminal piece 'The Wealth of Nations' that problems arise with separation of ownership and control. In particular, he argued that a manager with less than full ownership in the firm that he manages will face incentives not to act so as to maximize overall welfare. Rather, acting in his own interest, the manager may be negligent and wasteful in spending firm resources as long as this is to his own benefit (Smith, 1776)..

The realism of the Jensen and Meckling perspective on the modern corporation was contested by Fama (1980) and Fama and Jensen (1983). First and foremost, while the authors concur with the contractual view on the firm, they distance themselves from the notion of a central manager and residual risk bearer. For illustrative purposes and to operationalize agency analysis, Tirole (2001) presents a sequential model of the agency relationship where the conflict between managers and owners is illustrated from the initial investment stage until the final outcome stage where capital is returned to the investor.

5.2. Stakeholder Theory

Stakeholder theory has its origins in R. Edward Freeman's (1984) seminal book Strategic Management: A stakeholder approach, published in 1984. In this book, Freeman (1984) emphasizes the importance of fully comprehending the dynamics of a business, and argues that a successful firm necessarily has to create value for its stakeholders i.e. for customers, suppliers, employees, communities and financiers (shareholders, banks etc.). The success of a firm cannot be measured by studying one stakeholder in isolation, but a wider approach including the full range of stakeholders is necessary to fully evaluate the performance of firm. Subsequently, the purpose of the firm is defined by the overall value creation for stakeholders (Freeman 1984).

5.3. New Institutional Theory

New institutional theory emphasizes the structure and composition of an organization's environment, suggesting that the organization's formal structure is not only a product of resource dependencies and technical demands, but that it is also influenced by institutional forces, including rational myths, knowledge legitimized through the educational system and by the professions, public opinion, and the law. Organizational practices and structures are considered as either reflections of, or responses to, rules, beliefs and conventions built into the wider environment. In aggregate, these form an enduring system of social beliefs and organized practices referred to as institutions (Powell 2007).

5.4. The Theory of Multiple Lending

The theory of multiple lending implies that banks are able to have deposits which are often several times bigger than the cash base. The increase in lending ability out of much lesser deposit arises out of deposit multiplication (Carletti, Cerasi & Daltung 2007). If a bank has dormant accounts of high value, its capacity to loan out is increased and if the bank is actually able to loan out, its profitability is increased.

6. Theoretical Framework

The theoretical framework of this study derives from the work of Degennaro and Robotti (2007). It assumes that there are financial markets frictions which are not just the transaction cost but other variables which affect the transactions in the capital market. The theoretical framework also derives from the work of Buss and Dumas (2017) who worked on financial market equilibrium with friction in the capital market in 2012 and updated in 2017 using more variables.

7. Data and Methodology

7.1. Data Sources and Description

The study covers the market transactions and components of the market frictions between the period 1981 and 2018.The transactions which are influenced by all the components are well documented by the activities on the Nigerian stock exchange reports for the period and are reported in the central bank annual reports for the period of study.

7.2. Model Specification

Following the work of Ramon P. Degennaro and Cesare Robotti (2007) with that of Adrian Buss and Bernard Dumas (2017) there were time series model specified to carry out the study.

Functionally, we have

$$TRANSAC=f(TRBT,AIP,MKTID,NTA) \quad (1)$$

The econometric form of the model is given as

$$TRANSAC=\beta_o+\beta_1 TRBT+\beta_2 AIP+\beta_3 MKTID+\beta_4 NTA+\mu \quad (2)$$

To make eqn. 2 highly representative, there is need to log some of the variables to bring them at par with one another in units, therefore eqn. 2 becomes

$L\_TRANSAC=\beta o + \beta_1 TRBT, \beta 2L\_AIP, \beta 3L\_MKTID+\beta 4L\_NTA + \mu$ (3)

where

TRANSAC= Total Value of Market Transactions

TBRT= Treasury bill rate

TC= Total Value of Transaction cost

AIP= Agency and Information Problem proxied with Total Value of Equity Sold,

MKTID=Market Indivisibility proxied with Total Value of Mutual Funds Transactions

NTA=.Non-traded Asset proxied with Value of bonds and other Instruments

U= Stochastic error term assumed to satisfy the usual properties of zero mean, unit variance and zero covariance

The presumptive signs of the co-efficient in the specification regarded as the priori are

$\beta_1\ \beta_2\beta_3\beta_4 < 0$

8. Empirical Results

8.1. Unit Root Test

As a precondition for dealing with time series data, the issue of stationarity becomes imperative. It is obligatory that series must exhibit stationarity so as to not yield spurious and misleading results. Unit root test is a common test in econometric analysis to check whether a series is time invariant i.e. whether its properties of mean, variance and auto covariance are constant over time. If these properties are time variant, the series is said to be non – stationary thus follow a unit root process. However, it does not follow a unit root process if it is stationary. Hence, this study subjects each of the series in our model to various unit root tests. This study adopted the Augmented Dickey-Fuller (ADF) unit root test in arriving at the order of the integration stationarity.

Table 1. Augmented Dickey-Fuller (ADF) Unit Root Test

Variables	Level			First Difference			Order of Integration I(d)
	Model I	Model II	Model III	Model I	Model II	Model III	
L_TRANSC	-0.8190	-1.1970	2.1401	-4.8464*	-4.8552*	-4.1168*	I(1)
L_TBRT	-3.0604*	-3.0741*	-0.6342*	_____	_____	_____	I(0)
L_TC	-0.8190	-1.1970	1.5465	-4.8464*	-4.8552*	-4.1168*	I(1)
L_NTA	-1.1512	2.3717	0.1683	-5.0447*	-4.9522*	-4.8848*	I(1)
L_MKTID	-2.9093	-4.4287	-1.1052	-5.4779	-5.1829	-5.9085	I(1)
L_AIP	-0.8395	-1.6466	1.3330	-8.3979*	-9.6698*	-6.4279*	I(1)

Source: Author's computation (2022)

Note: *represent significance level at 5%

From the result of the ADF unit root test presented in table 1 above, it was revealed that all the variables were stationary at first difference with the I(1) order of integration except for treasury bill rate (TBRT) that was stationary at level. Hence, the need to test for the co-integration (long-run) relationship in the estimation model using Autoregressive Distributed Lag Bound Test (ARDL) model following the combination of I(0) and I(1) in the order of integration above.

8.2. Co-Integration Test

The co-integration test employed for the model estimation is the ARDL bound co-integration test. This is because all of the variables were stationary at both level and first difference.

The result of the ARDL Bound test is presented in the table 2 below:

Table 2. ARDL Co-Integration Bound Test

F-Statistic Calculated Value = 2.22				
Level of Significance				
	10%	**5%**	**2.5%**	**1%**
Upper Bound I(1)	3.35	3.79	4.18	4.68
Lower Bound I(0)	2.26	2.62	2.96	3.41

Source: Author's computation (2022)

Table 4.3 revealed the result of the ARDL co-integration bound test. However, from the table, the calculated F-statistic value is 2.22 which is lower than all the lower bound I(0) and upper bound I(1) at all levels of significance. Hence, it was concluded that there is no co-integration in the estimation model. Subsequently, the null hypothesis that there is no co-integration cannot rejected at all levels of significance.

8.3. Regression Result

This section deals with the interpretation of the regression analysis results for the short-run (dynamic) and as well test for the hypothesis significance.

Table 3. ARDL Short-Run Estimation Result

Variables	**Coefficient**	**Std. Error**	**t-Stat**	**Prob**
D(TC)	333.333	150.000	2.22222	0.0000
D(TBRT)	512.00	860.000	0.5955	0.5570
D(NTA)	479.00	11200	0.0427	0.9664
D(MKTID)	200	276	0.7222	0.4771
D(AIP)	2210	451	4.8958	0.0001
C	-482	1360	0.3534	0.7268

Source: Author's computation (2022)

8.4. Discussion of Findings

Following the result of the ARDL regression estimation analysis in table 3 above, it was discovered that financial market friction represented with transaction cost, agency and information problem proxy with equity value traded, tax and regulation proxy with treasury bill rate, non traded asset proxy with bonds transaction value and market indivisibility proxy with mutual funds value all have a positive effect on capital market growth proxied with value of market capitalization.

Specifically, it was discovered from the result of the regression in table 4.4 above that a unit increase in transaction cost (TC) brought about an average increase of 333.33% on the market capitalization value. From the result, it was observed that increase in the demand of capital market instruments for the period under

observation brought about increase in the cost of transaction arising from search and information cost, agency cost among many other cost attached from securities acquisition.

Similarly, tax and regulatory cost proxied with treasury bill rate (TBRT) also depicted a direct relationship on market capitalization (TRANSC). This implies that, a unit increase in treasury bill rate brought about an average increase of 512% on the market capitalization. The result of the effect could be linked to an increase in demand for capital market instruments leading to increase in its regulatory charge as a result of high demand of the sector instrument. On the other hand, non-traded asset proxied with bond value transaction also revealed a positive effect on market capitalization. Meaning, 1% increase in bond transaction value brought about an average increase of 479% on market capitalization as seen in the table above. This is in tandem with the work of Wang and Eberly 2010 on the need to do capital re-allocation so as to reduce the effect of market frictions.

In addition, market indivisibility proxied with mutual funds transaction (MKTID) and agency and information problem proxied with total equity traded (AIP) also depicted direct relationship on market capitalization cost (TRANSAC) this implies at a unit increase in MKTID and AIP brought above an average increase of 200% and 2210% on market capitalization (TRANSAC) respectively. The effect shows that increase in insider information leading to information asymmetry on share prices tends to increase the patronage of such equity in the financial market by those investors who have access to such information. However, an increase in the purchase of such equities (shares) arising from insider information release tends to increase the growth of the capital market in terms of high transaction volume and value of such securities.

8.5. Test of Hypothesis

This section test for the level of significance for the identified financial market friction variables and growth of capital market. Level of significance is tested at 5% level of significance. Hence, at 5% level of significance, transaction cost (TC), P-value calculated in table 4.4 above with 0.000 shows that there is a significant effect between transaction cost and capital market growth. Hence, the null hypothesis (H_0) will be rejected at 5% level of significance. Similarly, agency and information problem (AIP) with P--value calculated of 0.0001 lower than the 0.05 level of significance shows that there is a significant effect between agency and information problem and capital market growth. Also, the null hypothesis (H0) cannot be accepted at 5% level of significance.

On the other hand, tax and regulatory rate (TBRT), non-traded asset (NTA) and market indivisibility (MKTID) with p-value calculated as 0.5570, 0.9664 and 0.4771

which is higher than 0.05 level of significance shows that there is no significance effect between TBRT, NTA and MKTID and TRANSC. Hence, the null hypotheses at 5% level of significance cannot be rejected.

9. Policy Implication

The estimates from the above connote interesting policy connotations. Judging from the priori signs and results and the statistical significance of the explanatory variables the results therefore shows that these variables are very crucial in modeling financial markets frictions. The results emphasize the place of proper management of the events in the capital market against the backdrop of the variables related to transaction cost, agency and information problem, tax and regulatory rates, non-traded asset and market indivisibility. However, the non-statistical significance of non-traded asset and market indivisibility shows the strength of the market in managing financial market frictions in the Nigerian capital market.

10. Policy Recommendation

Based on the above findings, the study recommends as follow:

- The transaction cost in the capital market is a very good determinants of the financial market friction and should be properly handled to encourage investment in shares and full participation in the capital market;
- Taxes in the country should be well managed to so as to encourage found for the investors to invest in the capital market;
- There are lots of information issues to be managed so that the investors can be well informed and to provide information asymmetry;
- More instruments should be introduced to the market to make the capital market to grow and help market indivisibility;
- The non-traded asset is a very big factor that the rules of the capital markets should look into for ease of access to the market;
- The market requiring an element of growth should be able to encourage open access to information without any hindrance so as not to create unnecessary friction in the market.

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