



Financial intermediation and short term capital formation in Nigeria (1993-2019): A comparative analysis of selected intermediaries

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Abstract

The study on financial intermediaries and short term capital formation in Nigeria (1993-2019): A comparative analysis of selected intermediaries investigated the contribution of discount houses, micro finance banks, primary mortgage institutions and finance houses to the Nigerian money market. The objective is to determine the liquidity contribution of each intermediary to short term capital formation in Nigeria. The population of the study is made up of five (5) discount houses, Thirty (30) primary mortgage institutions, six hundred and twenty-nine (629) micro-finance banks and Seventy-nine (79) finance houses in the Nigerian financial system. The sample of the study is the consolidated financial position of the discount houses, primary mortgage institutions, micro-finance banks and finance houses as contain in the central bank of Nigeria statistical bulletin for 2019. Both descriptive and inferential statistics was employed for the study with Stata 10 pack for data analysis. The study revealed that there exist a significant relationship between the selected intermediaries and short-term capital formation in the Nigerian money market. The finance houses followed by the discount houses, microfinance banks and lastly primary mortgage institutions have the highest to the least correlation respectively to short term capital formation in the money market. The study recommends that investors in financial securities should always seek the services of financial intermediaries to transfer risk through in buying and selling of securities in financial markets. Financial intermediaries, most especially the primary mortgage institutions should increase their spread or office network as well as educate the non bank public as a role to enhancing financial inclusion strategy, reduce financial dualism and increase capital formation in the money market. The Monetary authorities should re-established discount houses to manage liquidity and enhance intermediation as found in other developed economies but with slight modifications to allow it engage in other banking and non-banking financial services to court public participation and investments in discount houses. Monetary authorities should also modify the operations of the Nigerian money market to reduce financial dualism to its barest minimum and meet international best practices. Financial intermediaries require a shift as stated in the shiftability theory from investors borrowing funds from the banks to investing in money market instruments to further develop the money market and avoid borrowing from banks particularly during inflation at higher rates but trade financial securities for funds at all times to acquire capital at short notice and at lower cost.

Keywords: financial intermediaries, intermediation process short term capital formation and money market value

Introduction

Financial intermediation is a process that allows the movement of funds from economic units who possess more than is required and thus have sufficient to save and are transferred to the other units in the economy who have less than is required to undertake their productive activities and as such require funds. Several institutions are in the process of ensuring the movement or transfer of these finances from one unit to the other and these institutions are called intermediaries and these movement or transfer of intermediation is done through the media called financial securities or assets (Jilghan, 2011) ^[11].

During inflation the money supply level is exceeding high and as thus limits the purchasing power of the domestic currency because output is relatively low and demand of goods and services are in a surge and the monetary authority implements the contracting monetary policy rate thereby increasing the interest rate on capital to be supplied by the commercial banks and these is inimical to be productive activities of the real economic sector and thus if it borrows at such high rates, inflation keep rising but the sure solution is to access funds from the money market through the financial intermediaries with financial securities and because the money market rate is lower during inflation and the lending rate increases it is an emergent situation at times and liquidity to keep afloat is sort in the short-term market (1-365days) and is referred to as the money market (Oru and Ubana, 2022) ^[13]. It is therefore imminent to examine the impact of the money market in alleviating the short-term capital requirements through financial intermediaries such as the Discount houses who are prime in liquidity management and discounting of bills as their key role for establishment and their de-listing by the central bank of Nigeria in the money market and liquidity management calls for a worry as to their operations and the status of the money market (Oru, Ubana and Okwajie). Several scholars have looked at economic growth

only but not a comparative analysis or the financial position or consolidated position of these financial intermediaries to short term capital formation. The money market therefore as a market for the transfer of financial securities with little or no loss of the value of the asset and is supposed to be very liquid because the rise in bank credit in the midst of high lending rates reflects when investors can access capital for productive services with no such cost except the discount charge by the financial intermediaries for information and reduction of risk or bearing the risk of the intermediation process is a more cheaper source for working, operating or short-term capital based on the production or product cycle of goods and services (Jilghan, 2011)^[11]. The surge in bank credit to investors at the high rate of interest reflects that either the investors do not possess financial securities or are ignorant of the availability of financial intermediaries or are incapacitated in their abilities to raise financial resources from and through the intermediaries or is the value of money market capitalization less compared to the financial requirements of the deficit economic units of the Nigeria economy? Thus, it is imperative to determine the contribution of discount houses, primary mortgage institutions, microfinance banks, and finance houses to capital formation in the money market severally and jointly as well as the role and limitations of these intermediaries and that of the economic surplus and economic deficit units of the economy towards short-term capital formation which beyond provision of required funds also stimulates economic growth.

Literature Review

1. Concept of Financial Intermediation

Financial intermediaries are financial institutions that intermediate between ultimate lenders and ultimate borrowers and facilitate funds flow from ultimate lenders to ultimate borrowers either directly or indirectly through financial institutions. Financial intermediaries are categorized into banking (BFI'S) and Non-Banking financial institution (NBFI'S). The banking financial intermediaries subsists of commercial banks, merchants banks, micro-finance banks, co-operative credit societies and the Non-bank financial institution consist but not also limited to Discount houses, insurance companies, mutual funds, unit Trust, pension funds Administrators, pension fund custodians, finance houses, savings and loan associations, building societies, government lending Agencies, bureau de change, investment companies, Development finance institution (DFI'S) portfolio managers, stock broking firms, issuing Houses, Loss adjusters, investment advisors, primary mortgage institutions. These intermediaries function under the Bank and other financial institutions decree (BOFI'S Decree amended 1993) who are not authorized to mobilize deposits from the public and issue self-drawn cheques, but are engaged in the process of fund mobilization from economic surplus units to the economic deficit units of the economy.

Financial intermediaries are broadly categorized as Household, individuals, firms, government and the foreign investors who are involved in the provision of funds and means by which funds can be transferred from surplus economic units in the economy to deficit economic units. The essential function of intermediaries is to simultaneously satisfy the portfolio preferences of two types of individuals or firms. These are borrowers (deficit economic units) and the lender (surplus spending units) of the economy on the other side. Their principal function is not to buy one type of security by issuing another but to produce and purchase current output (Gurley and shaw, 1960) and this makes them imminent in the Nigerian money market as they are largely involved in liquidity management through short-term capital formation.

The liabilities of financial intermediaries are the primary securities held and presented for fund sourcing by deficit economic units who wish to prepare their holdings to inventories, real estate, plant and equipments, working capital etc. This are known and called as all liabilities and outstanding equities of Non-Financial spending units (economic deficit units). These are bonds, debts of individuals and business, mortgages, bills, debentures etc. And on the other side are yet the lenders or surplus economic units (savers) whose assets are the form of bank deposits (certificate of deposits), insurance policies pension etc. these savings are acquired by the financial intermediaries and offer in return claims on themselves. They also purchase primary securities (bonds, equities, stocks) from deficit economic units by creation of claims on themselves through indirect or secondary securities. Secondary securities are currency issued by the central bank, demand and time deposit of commercial banks, saving deposits, insurance and pension funds of non-monetary intermediaries. Hence, financial intermediaries are therefore dealers in securities. They purchase primary securities and sell their secondary securities as they are ultimately licensed and engaged in buying funds from ultimate lenders in exchange for their own secondary securities and sell funds to ultimate borrowers in exchange of the borrowers primary securities. Financial intermediaries are greatly involved in the process of indirect finance (Abridged finance function) as it purchases securities from direct financiers (economic surplus) who purchase from deficit units. However, both primary and secondary securities are financial Assets which are the main stay of the financial intermediaries.

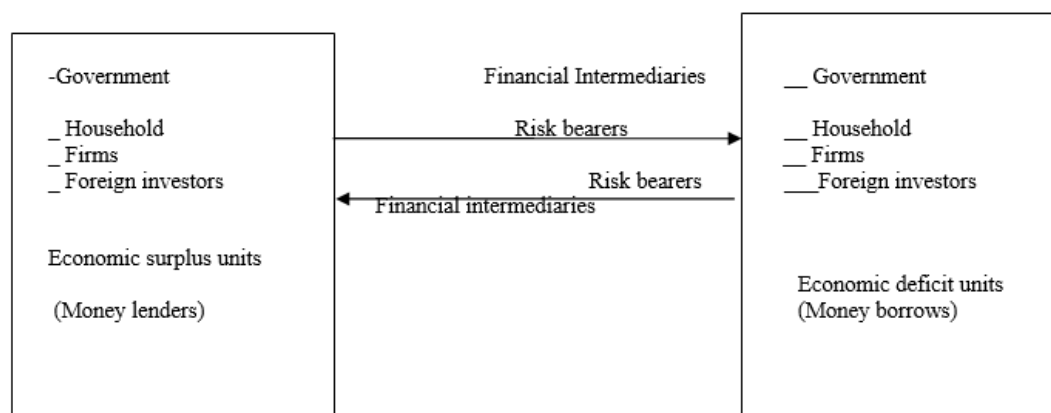
The impact of financial intermediation on capital formation in the Caribbean took the Caribbean Community (CARICOM) Single Market and Economy (CSME) process asserts that the financial intermediation process in the region remains largely unresponsive to the requirements of structural transformation for building resilient and competitive economies. Moreover, financial services liberalization under the CSME, although it has catapulted cross-border mergers and acquisition in the financial sector, has done little to change the orientation of financial institutions. Consequently, Caribbean production firms continue to face shortages of good quality finance. A number of measures are proposed to unstop the financial constraint in the region. Key among these is the introduction of greater competition in the banking sector through further liberalization to drive down the cost

of credit, boost financial innovation and to encourage greater credit flow to more productive activities. Secondly, incentives should be provided to broaden and deepen regional capital markets. These include financial education to encourage companies to cross-list on the regional exchanges, improved regulation and harmonization of company legislation and more favorable bankruptcy laws. Also, the single economy focus on coordination of macroeconomic policies to achieve benchmark levels of fiscal deficit, debt, inflation and other indicators should be given greater priority to promote a more seamless financial market in the region (caricom, 2015).

1.1 Financial Intermediation Process

When there exist equitable distribution of income among the spending units, all units have balanced budgets on income and expenditure account but a difference in income definitely some units will have surplus while some will be in deficits or an equivalent amount. The surplus units (ultimate lenders) supply options and current output equal to their surpluses and in turn acquire an equal amount of net financial assets which reflects financial assets less debt increased and equities issued (profit or discount rate). Deficit units (ultimate borrowers) take up and pay for them by increasing their net debt and equity. These budget imbalances normally lead to net issues of primary securities and net accommodation of financial assets. When economic surplus units (ultimate lenders) having demand deposit with banks, write cheques and present to the intermediaries, they, in return, receive claims on these intermediaries. The cheques are endorsed by the Non- bank financial institution and sent to the banks having demand deposits. These deposits however used to purchase primary securities from ultimate borrowers. The borrowers now have the demand deposit which they spend for current output and are eventually received by ultimate lenders. The ultimate lenders end up with the same amount of demand deposit exchanged but now have more financial assets which represent unspent income they have transferred to the ultimate borrowers.

In the process to intermediation, the economic deficit units (borrowers) have created again primary securities and the intermediaries have also secondary securities and the lenders have acquired financial Assets. This process however doesn't change the monetary system value of Assets and liabilities but have only being exchanged from one ultimate user (borrower) to another ultimate earner (lender). The bank's deposits have transferred from the economic surplus, units to the intermediaries, then to the economic deficit unit. This system of intermediation where the bank isn't an intermediary only has it administering the payment mechanism of transferring demand and deposits on its ledger. Where a banks act as an intermediaries the banks crates money by purchasing the primary securities and yet administer the mechanism for paying, hence it earns more in the process as it create money and acquires more financial assets (Jilghan, 2011)^[11].



Source: Monetary Economics, 2011

Fig 1: financial intermediation process

The intermediation process as shown in Fig 1.1 is such that the status of one economic unit is always transient, as one deficit economic unit, today in an economic surplus unit next day and as such no economic spending unit is in a static position. The financial Assets earned today can be presented later and is discounted at a fee called the discount rate by an economic unit that was deficit yesterday and the surplus is now presenting securities to be described by another surplus, in these cases the former has become an economic deficit unit (money borrowers).

1.2 A morden money market

The money market is a segment of the financial market in which financial instruments with high liquidity and very short maturities are traded. The money market is used by participants as a means for borrowing and lending in the short term, from several days to just under a year. The money market is a market for short-term instrument that are close substitutes for money. The shot-term instruments are highly liquid, easily marketable, with little change of loss. It provides for the quick and dependable transfer of short term debt instruments maturing in one year or less, which are used to fiancé the needs of consumers, business agriculture and the government. The money market is not one market but is "a collective name given the various form and institutions that deal with the various grades of near money." in other words, it is a network of market that are grouped together because

they deal in financial instruments that have a similar function in the economy and are to some degree substitutes from the point of view of holders.” Thus the money market consists of call and notice market, commercial bills market, commercial paper market, treasury bills, market, inter-bank market and certificates of deposit market. All these markets are closely interrelated so as to make the money market. It is a wholesale market where large numbers of financial assets or instrument are traded.

The money market is divided into direct, negotiated, or customers money market and the open or impersonal money market. In the former, banks and financial firms supply funds to local customer and also to larger centre where there are dealings internationally such as London for direct lending. In the open money market, idle funds drawn from all-over the country is transferred through intermediaries to the New York City market or the London market. These intermediaries comprise the Federal Reserve banks in the USA or the bank of England in England, commercial banks, insurance companies, business corporations, brokerage house, finance companies, state and local government securities dealers. ² the money market is a dynamic market in which new money market instruments are evolved and traded and more participants are permitted to deal in the money market.

The money market is used by a wide array of participants, from a company raising money by selling commercial paper into the market to an investor purchasing CDs as a safe place to park money in the short term. The money market is typically seen as a safe place to put money due the highly liquid nature of the securities and short maturities because they are extremely conservative, money market securities offer significantly lower returns than most other securities. However, there are risks in the money market that any investor needs to be aware of including the risk of default on securities such as commercial paper. The money market operates through a number of instruments like the Promissory Note, Bill of exchange or commercial bills, Treasury bills, Call and Notice Money, Inter-Bank Term Market: This market is exclusively for commercial and cooperative banks in India, which borrow and lend funds for a period of over 14 days and up to 90 days without collateral security at market-determined rates, Certificates of deposits (CD), Certificate of deposits are issued by commercial banks at a discount on face value. The discount rate is determined by the market. In some economies there is minimum size of the issue with the minimum subscription. The maturity period is between 3 months and 12 months, Commercial paper (CP). Commercial papers are issued by highly rated companies to raise short-term working capital requirements directly from the market instead of borrowing from the banks. CP is a promise by the borrowing company to repay the loan at a specified date, normally for a period of 3 months to 6 months. This instrument is very popular in the USA, UK, Japan Australia and a number of other countries. It has been introduced in India also in January 1990. The money market is not limited to these instruments but operates as instruments keeps emerging in the financial market and the financial space (Jilghan, 2011) ^[11].

The modern money market consist of commercial banks, discount houses, bill brokers, acceptance house, non-bank financial houses and the central bank operates through the bills, securities, treasury bills, government securities and call loans of various types, as the money market consists of varied types of institution dealing in different types of instruments, it operates through a number of sub-markets.

First, the money market operates through the call loan market. It has been defined as “a market for marginal funds, for temporarily unemployed or unemployable funds”. In this market the commercial banks use their unused funds to lend for every short period to bill brokers and dealers in the stock exchange. In developed countries, even for a day or a night and can be recalled at a very short notice. That is why a short period loan is known as call loan or call money market. Bill brokers and stock brokers who borrow such funds use them to discount or purchase bills or stocks. Such funds are borrowed at the “call rate” which is generally one percent below bank rate. But this rate varies with the volume of funds lent by the bank. If the brokers are asked to pay off loans immediately, then they are forced to get funds from large corporations and even from the central bank at high interest rate.

Second, the money market also operates through the bill market. The bill market is the short-period loan market. In this market, loans are made available to businessmen and the government by the commercial banks, discount houses and brokers. The instruments of credit are the promissory notes. Internal bills of exchange and treasury bill. The commercial banks discount bill of exchange; lend against promissory notes or through advances or overdraft to the business community. Similarly, the discount houses and bills brokers lend to businessmen by discounting their bills of exchange before they mature within 90days. On the other hand, government borrows through the treasury bills from the commercial banks and non-bank financial institutions. Third, the money market operator through the collateral loan market for a short period. The commercial banks lends to brokers and discount houses against collateral bonds, stock, securities etc. in case of need, commercial banks themselves borrower from the large banks and the central bank on the basis of collateral securities.

Finally, the other important sub-market through which the money market operates is the acceptance market. The merchant bankers accept bills drawn on domestic and foreign traders whose financial standing is not known. When they accept a domestic or foreign trade bill, they guarantee its payment at maturity. In recent years, the commercial banks have also started the acceptance business (Jilghan, 2011) ^[11].

A money market performs a number of functions in an economy, amongst which are but not limited to the following:

1.2.1 Provision of funds

It provides short-term funds to the public and private institutions needing such financing for their working capital requirements. It is done by discounting trade bills through commercial banks, discount houses, brokers and acceptance houses. Thus the money market helps the development of commerce, industry and trade within and outside the country.

1.2.2 Use of surplus funds

It provides an opportunity to banks and other institutions to use their surplus funds profitably for a short period. These institutions include not only commercial banks and other financial institutions but also large non-financial business corporations, states and local government.

1.2.3 No need to Borrow from banks

The existence of a developed money market removes the necessity of borrowing by the commercial banks from the central bank. If the former find their reserves short of cash requirements they can call in some of their loans from the money market. The commercial banks prefer to recall their loans rather than borrow from the central banks at a higher rate of interest.

1.2.4 Helps Government

The money market helps the government in borrowing short-term funds at low interest rates on the basis of Treasury bills. On the other hand, if the government were to issue paper money or borrow from the central bank, it would lead to inflationary pressures in the economy.

1.2.5 Helps in implementation of monetary policy

A well developed money market helps in the successful implementation of the monetary policies of the central bank. It is through the money market that the central bank is in a position to control the banking system and thereby influence commerce and industry.

1.2.6 Helps in financial mobility

By facilitating the transfer for funds from one sector to another, the money market helps in financial mobility. Mobility in the flow of funds is essential for the development of commerce and industry in an economy.

1.2.7 Promotes liquidity and safety

One of the most important function of the money market is the promotion of liquidity and safety of financial assets. It thus encourages savings and investments.

1.2.8 Equilibrium between Demand and supply of funds

The money market brings equilibrium between the demand and supply of loan able funds. This it does by allocating saving into investment channels. In this way, it also helps in rational allocation of resources.

1.2.9 Economy in use of cash

As the money market deals in near-money assets and not money proper, it helps in economizing the use of cash. It thus provides a convenient and safe way of transferring funds from one place to another, thereby immensely helping commerce and industry (Jilghan, 2011)^[11].

2. A developed money market

The developed money market is a well organized market which has the following main features: A central bank which is the most powerful authority in monetary and banking matter. It control, regulate and guide the entire money market. It provides liquidity to the money market, as it is the lenders of the last resort to the various constituents of the money market. An organized and integrated banking system is the second feature of a developed money market. In fact, it is the pivot around which the whole money market resolves. It is the commercial bank which supply short-term loans, and discount bills of exchange. They form an important link between the borrowers, brokers, discount houses and acceptance houses and the central bank in the money market (Jilghan,2011)^[11]. A developed money market consists of a number of specialized sub-markets dealing in various types of credit instruments. There is the call loan market, the bill market, the Treasury bill market, the collateral loan market and the acceptance market, and the foreign exchange market. The larger the number of sub-markets, the more developed is the money market. But the mere number of sub-markets is not enough. What is required is that the various sub-markets should have a number of dealers in each market and the sub-markets should be properly integrated with each other. A developed money market has a large number of near-money assets of various types such a bills of exchange, promissory notes, treasury bills, securities, bonds and the larger the number of near money assets, the more developed is the money market. Another important characteristic of a developed money market is that it has an integrated interest-rate structure. The interest rates prevailing in the various sub-markets are integrated to each other. A change in the bank rate leads to proportional changes in the interest rate prevailing in the sub-markets. A developed money market has easy access to financial sources from both within and outside the country like the Euro-dollar, Euro- DM, Euro-Francis markets and these markets are not confined to Europe but all over the world. In fact, such a market attracts adequate funds from both sources, as is the case with the London Money market. A developed money market provides cash and cheap remittance facilities in transferring funds from one market to the other. The London Money Market provides such remittance facilities throughout the world. Besides the above noted features, a developed money market is highly influenced by such factors as restrictions on international transactions, crisis, boom, depression, war and political instability (Ejem & Jumbo,2011).

2.1 The Nigerian money market and financial intermediaries

The Nigerian money market is a direct money market with banks and financial and non-financial firms involved in the supply of funds to local customer and also larger fund centre where there are dealings internationally such as London for direct lending. The Nigerian money market was hitherto managed by discount houses which were established in 1992 and commenced operations in 1993 with the prime task of managing liquidity formation through the discount rate charged on the deficit economic units of the economy. The discount houses were five (5) upon establishment until in 2015 when there became one(1) and this marked the end of discount houses operations in Nigeria at a discount rate of 13 percent in the money market but worthy of note is that of all financial intermediaries in the study only discount houses deals on all money market instruments with very short term maturity period. Ikpefan (2012), asserts that that a long-run relationship exist between discount houses operation and economic growth one hand and money market instruments in the other hand. This implies that discount houses serve as a veritable stimulant in Nigeria especially in this era of global economic meltdown and money market. The operation of discount houses in liquidity management in impacts positively on bank liquidity and there is a significant relationship between total operations of discount houses and short term capital formation (money market value). They recommend that the central monetary authority (CBN), should enlist the discount houses to perform the finance abridge function even though it's practiced by other banking and non-banking financial institutions as practiced in advanced economies. Discount houses should be recapitalized and made to spread its branches as well as make its services available to retail customers as it will create awareness of its activities besides the corporate financial sector. It further recommends that banks should be further recapitalized and their lending rate should be reduced to the barest minimum to attract good credit risk customers. In consonance with the shiftability and liabilities management theories banks should strike a balance between loans and advances and holdings of short-term securities to suffice for its liquidity shortfall to avoid liquidity crisis and enhance efficiency in funding the real economic sector of the economy (Oru, Ubana & Okwajie,2021).

The Primary mortgage institutions (PMI'S) are an Overview of Mortgage Business. Mortgage banking is an aspect of development banking that specializes in creation of the demand for and financing of house ownership through well structured short to long term repayment arrangements. Many mortgage institutions have designed special products and services which they market towards achieving this objective as well as having a good market share of the mortgage business. Indeed, mortgage business have become very important and well developed in the UK and USA and these countries can serve as good reference points for benchmarking, where mortgages provide essential bedrock for SME, private sector development and tangible security for loan. Mortgage banks have grown in these countries and in some cases constitute major or bail out investors in conventional banks. The objective of a primary mortgage institution in Nigeria is the provision of affordable housing on a continuous basis(Ekundayo,2005).Mortgage financing is basically a long term lending and as such PMI's can provide the abridge finance function and conveniently operate in the money market particularly upholding the principle of borrow, long lend short.

Microfinance bank refers to the banking financial institutions providing micro-financial services to low-income individuals or groups who are typically excluded from traditional banking. Most microfinance institutions focus on offering credit in the form of small working capital loans, sometimes called microloans or microcredit. However, many also provide insurance and money transfers, and regulated microfinance banks provide savings accounts. Microfinance aims to improve financial services access for marginalized groups, especially the rural poor, to promote self-sufficiency. Microfinance seeks to address the needs of the unbanked by fostering economic justice and financial inclusion for all. Access to essential financial services can empower individuals economically and socially by creating self-reliance and economic sustainability in impoverished communities where salaried jobs are scarce. The benefits of microfinance are the provision of Small loans, enabling entrepreneurs to start or expand micro, small and medium enterprises, Savings that help families build assets to finance school fees, improve homes and attain goals. Insurance products can offset the cost of medical care and Money transfers and remittances allow families to easily send and receive money across borders. Hundreds of millions of low-income people have benefited from microfinance since its inception, with about 140 million borrowers served by the industry worldwide annually and as intermediaries their investments are mainly in treasury bills and certificates (Jilghan,2011) ^[11]. The Microfinance Policy, Regulatory and Supervisory Framework for Nigeria of 2005 established MFBs as a means of formalizing microfinance institutions (MFIs) in order to promote financial discipline and sustainability, while also providing access to financial services to the unbanked population. The framework was designed to attract new capital as well as to regularize Community Banks (CBs), which had been established since the early 1990s, mainly as conduits for directed lending. Licensed by the CBN, MFBs are allowed to solicit deposits, which are guaranteed by the Nigeria Deposit Insurance Corporation (Worldbank group, 2017).The microfinance banks are also key investors in the treasury bills which are also monetary control measures of the central bank for money supply and stabilization of prices. Finance houses are financial institutions that accept deposits from savers and specialize in the lending of money by way of instalment credit (hire purchase loans) and leasing for private consumption and business investment purposes. Finance houses are the highest investors in the money market because there use large amounts of asset-backed commercial paper (ABCP) which is secured by pledge of eligible assets into an ABCP conduit.

Akani & Tony-Obiosa (2020), asserted that the effect of financial intermediation indicators on Nigeria gross fixed capital formation considering banking sector credit, banking sector deposit, savings prime lending and

maximum lending rates. That financial intermediation can explain 47.1 percent variation on Nigeria gross fixed capital formation. They observed that commercial banks deposit and savings rate have negative relationship with Nigeria gross fixed capital formation while commercial banks credit, maximum lending rate and prime lending rate that financial intermediation significantly affect Nigeria gross fixed capital formation and recommended financial inclusion policy, expansionary monetary policy and other implementable policies to increase effective financial intermediation in Nigeria financial market.

Table 1: Assets and Liabilities of selected financial intermediaries

Year	Institution				Assets and liabilities (N Billion)			
	Discount houses	Micro finance bank	Primary mortgage bank	Finance houses	Discount houses Nb	Microfinance bank Nb	primary mortgage institutions Nb	Finance houses Nb
1993	5	611	251	N/A	4.5	3.1	3.61	13.4
1999	5	550	115	N/A	15.1	8.9	7.6	8.9
2005	5	757	90	112	99.3	82.8	99.9	37.4
2011	5	821	102	114	320.8	11.97	357.1	117.6
2017	0	613	32	79	110,269.44		355.59	139.362
2019	0	629	30		0		299.26	233,422.23

Source: CBN statistical bulletin and annual report 2019

Table 1 above from the CBN statistical bulletin shows the number of the selected financial intermediaries in Nigeria and the net asset and liabilities of the intermediaries with table 2 below revealing the investments of the financial intermediaries in money market instruments from 1993 to 2019 which reveals that finance houses have the highest value of investment in the period under investigation as well as each year with exception to 1993.

Table 2: Financial Intermediaries investment and the Nigerian money market.

Year	Discount Houses (N'm)	Microfinance Bank (N'm)	Primary Mortgage institutions (N'B)	Finance Houses (N'B)	Money Market Value (N'B)
1993	4461.80	2872.00	1500.30	13385.80	148.96
1994	9583.20	4201.80	16677.70	11660.90	148.96
1995	3431.85	3752.20	1306.10	11265.90	153.95
1996	11778.45	4178.50	1109.10	8940.30	148.28
1997	6976.10	4322.40	1055.90	12059.60	126.62
1998	7852.60	6228.80	1482.90	8213.60	249.75
1999	6976.10	8466.82	2110.90	8941.70	249.21
2000	7852.60	11564.50	3026.54	7871.30	396.65
2001	15049.60	4580.10	1251.99	12903.50	518.42
2002	30260.80	14538.00	3919.11	11684.90	652.47
2003	32353.70	26428.20	6312.73	29606.00	804.59
2004	57282.90	31549.60	7739.18	34504.70	980.55
2005	52731.20	79272.80	125294.60	37460.60	1,049.51
2006	67346.20	52433.65	24995.60	54339.10	1,342.35
2007	99303.60	71843.10	33182.8	65647.95	2,209.41
2008	186531.30	115458.46	43705.70	127071.20	2,846.85
2009	298226.00	143585.00	48404.90	109938.60	3,394.76
2010	417154.60	161664.70	72315.00	105430.30	4,447.31
2011	345954.13	108912.30	36047.50	106590.40	5,545.53
2012	362409.39	179449.15	42719.20	77733.07	6,247.89
2013	320753.00	234482.10	65137.50	102309.73	6,853.88
2014	344718.81	217507.98	64580.75	115961.92	7,677.34
2015	55970.79	343349.54	84761.43	105803.09	8,691.42
2016		322764.60	92383.56	120192.20	10,870.51
2017		395329.95	66284.58	136127.20	12,382.05
2018		403072.32	146338.45	175074.21	12,152.44
2019		510710.51	186224.6	230138.98	13,245.86

SOURCE: CBN statistical bulletin, 2019

The Nigerian money market is an emerging market and at a critically low level as many intermediaries particularly firms are not trading in most money market instruments and lacks several specialized sub-markets dealing in various types of credit instruments and low number of near money assets. The larger the number of near money assets the more developed the money market. The market doesn't have a low remittance cost and remittance facilities for transferring funds from market to market. However, as the bank lending rate changes the

money market rate also changes as shown in table 3 below from the CBN statistical bulletin and the market is also influenced by international transactions, booms, depressions, wars and instabilities which are indicators of a developed market.

Table 3: Money market rate and bank lending rate

Year	Money Market Rate	Bank Lending Rate (weighted)
1993	26.00	36.00
1994	13.50	21.00
1995	13.50	20.79
1996	13.50	20.86
1997	13.50	23.32
1998	13.50	21.34
1999	18.00	27.19
2000	14.00	21.55
2001	20.50	21.34
2002	16.50	30.19
2003	15.00	22.88
2004	15.00	20.82
2005	13.00	19.49
2006		18.70
2007		18.36
2008		18.70
2009		22.62
2010		22.51
2011		22.42
2012		23.79
2013		24.69
2014		25.74
2015		26.71
2016		27.29
2017		30.68
2018		31.00
2019		31.55

2.2 Challenges of Financial Intermediaries and the Nigerian money Market

2.2.1 Financial dualism: The development of financial dualism refers to the coexistence of organized and unorganized money market in the developing economies of the world. The organized money market consist of the central bank, cooperative societies, micro finance banks and specialized banks, foreign banks and other financial institutions both banking and non banking as discussed earlier while the unorganized money market includes indigenou bankers, money lenders both professional and non-professional, traders, merchants, landlords, friends and relatives and pawn brokers, Teachers, pensioner, agriculturist, merchants, traders, rich widow or The value of intermediation and capital formulated is not harnessed from the two sectors thus the value of short term capital formation and the discount rate or interest rate varies and as such the forecast on the money market is not certain and the control inevitable because of flexibility in loan transactions, personal touch with lenders and borrowers, informality in dealing with borrowers by money lenders, flexibility in loan transactions, multiplicity of interest rate (Jilghan, 2011)^[11]. As such, more capital is formed during the intermediation period but cannot be accounted for in the organize money market and this impedes on the profitability of intermediaries and a threat on its going concern concept.

2.2.2 Trading deficiency: There is a low level of investment in near money assets or liquid assets otherwise called money market instruments by financial intermediaries exception of treasury bills and certificates that are almost mandated by the monetary authorities' for the control of inflation and public borrowing. Other money market instruments are sparingly traded in the Nigerian money market except by discount houses and finance houses who only deals with commercial papers besides treasury bills and certificates and this proofs the lack of awareness of the Nigerian investors on cheap, quick and affordable capital in Nigeria.

2.3. Market structure: The Nigerian money market structure doesn't reveal it possesses a strong link with the international money market as explicitly revealed by the instruments clearly invested and traded in the market. The market thus lacking high international liquidity instruments is a sign of a weak market structure and thus the lack of investments from foreign investors, high net worth individuals and domestic investors reliant on bank loans for working or short term capital or liquidity needs.

2.4. Underdeveloped Market: The Nigerian money market is operating in principle as expected because as bank lending rate increases or changes, money market rate also changes though it's also influenced by booms, depressions, wars and instability, inflation and international transactions thus, is not yet developed but developing and at a critical slow pace as many financial intermediaries(firms) are not traders in money market instruments devoid of several specialized sub-markets dealing on various types of credit instruments. They also exist a low number of liquid assets traded in the market as the more the number of items traded in the market, the more developed the market. There is no easy access to remittance facilities and the remittance cost is not cheap or cheaper for transferring funds from market to market.

3. THEORETICAL FRAMEWORK

This study on financial intermediaries; A comparative analysis of financial intermediaries and short term capital formation is based on the following theories of financial intermediation and anchored on the shiftability theory as the anchor theory.

3.1 The shiftability theory

The shiftability theory of liquidity was propounded by H. G. Moulton in 1960, who asserted that if the commercial banks maintain a substantial amount of assets that can be shifted to other banks for cash without loss in case of necessity, then there is no need to rely on maturities. In his view, an asset to be perfectly shiftable must be immediately transferable without capital loss when the need for liquidity arises and financial intermediaries should deal more on these assets to provide short term capital in the economy(money market) to finance operational and working capital of investors whether corporate or individual. Thus, this theory yet enables us evaluate the roles of financial intermediaries on their investment of short term securities that enhance the liquidity of the money market with the knowledge of the market (information asymmetry function) and thus the higher the money market value hence the absence of loss of capital.

3.2 Information asymmetry theory

The information Asymmetry theory was propounded by Akerlof, Spence & Stiglitz (1970), the theory deals with the study of decisions in transactions where one party has more or better information than the others. This asymmetry creates an imbalance of power in transactions, which can sometimes cause the transactions to be inefficient and causing market failure in the worst case. Examples of this problem are Adverse selection, moral hazard and monopolies of knowledge. Asymmetric information theory suggests that sellers may possess more information than buyers, skewing the price of goods sold. The theory argues that low-quality and high-quality products can command the same price, given a lack of information on the buyer's side. Others argue that ignorance of the facts is not a given, as wary buyers have access to information on demand. The risk of failure of investors' investment and the efficiency of the market is attained through the intermediation function of financial intermediaries on behalf of the surplus and deficit economic units instead of operating in an unorganized sector. Information asymmetry is studied in the context of principal-Agent problems where they are a major cause of misinforming and is essential in every communication process. Information asymmetry is in contrast to perfect information, which is a key assumption in neo-classical economics.

3.3 Adverse selection theory

The Adverse selection theory was propounded by Akerlof(1960), it is also called anti-selection, a term used in Economics and Insurance to describe a market process in which buyers or sellers of a product or service are able to use their private knowledge of the risk factor involved in the transactions to maximize their outcomes, at the expense of the other parties to the transaction. Adverse selection is most likely to occur in transactions in which there is an asymmetry of information; where one party has more or better information than the other party. Although information asymmetry tends to favor the buyer in markets such as the insurance industry, the seller usually has better information than the buyer in markets such as used cars, stock, and real estate. This is how financial intermediaries save the funds of surplus lenders from assets that may yield less for more yielding assets on maturity.

3.4 Moral hazard theory

Moral hazard theory was propounded by Dember & Boden (2000), Moral hazard is a situation where an economic actor has incentives to increase its exposure to risk because it does not bear the full costs of that risk. When a corporation is insured, it may take on higher risk knowing that its Insurance will pay the associated costs. A moral hazard may occur where the actions of the risk-taking party change to the detriment of the cost-bearing party after a financial transaction has taken place. Moral hazard can occur under a type of information asymmetry where the risk-taking party to a transaction knows more about its intentions than the party paying the consequences of the risk and has a tendency or incentive to take on too much risk from the perspective of the party with less information. One example is a principal-agent problem, where one party, called an agent, acts on behalf of another party, called the principal. If the agent has more information about his or her actions or intentions than the principal then the agent may have an incentive to act too riskily (from the viewpoint of the principal) if the interests of the agent and the principal are not aligned.

Methodology

1. Research Design

The study employed the panel research design using time series analysis (Expo-facto) with descriptive and inferential statistics for data analysis. This study employed the spearman rank correlation coefficient using the STATA 10 to determine the rate of short term capital formation by the selected intermediaries and the overall formation of short term capital by the intermediaries to the money market value in Nigeria as well as other unknown variables represented by the stochastic error term as a proxy for the determination of the relationship between money market capital formation against short term investments or near money assets of financial intermediaries proxy by value of money market instruments held by the selected intermediaries.

2. Population and Sample of The Study

The population of the study is made up of five (5) discount houses, Thirty (30) primary mortgage institutions, six hundred and twenty-nine (629) micro-finance banks and Seventy-nine (79) finance houses in the Nigerian financial system. The sample of the study is the consolidates financial position of the discount houses, primary mortgage institutions, micro-finance banks and finance houses as contained in the central bank of Nigeria statistical bulletin for 2019.

3. Data Treatment Technique

The study also employed the spearman’s rank correlation to determine the relationship or contribution of selected intermediaries to capital formation (money market value) and the overall of these intermediaries to the money market.

The model specified for the study can be started as;

$$MMV = f(DH_{SLb} + X_1) \text{-----(i)}$$

$$MMV = f(PMI_{SLb} + X_1) \text{-----(ii)}$$

$$MMV = f(FH_{SLb} + X_1) \text{-----(iii)}$$

$$MMV = f(DH_{SLb} + PMI_{SLb} + MFB_{SLb} + FH_{SLb} + X_1) \text{-----(iv)}$$

Where

MMV=Money market value

DH_{SLb}= Discount houses liabilities

PMI_{SLb}= Primary mortgage institutions liabilities

MFB_{SLb}=Microfinance banks liabilities

X₁= Error term for other lurking variables.

Results and Discussion of Findings

Table 4: Descriptive Statistics

	MMV	DH	MFB	PMI	FH
Mean	3687.974	130309.70	127574.50	84399.30	68179.90
Median	1342.350	114.4500	75549.80	75549.80	74950.75
Maximum	13245.86	417154.60	510710.51	186224.60	230138.98
Minimum	126.6200	3431.85	2827.0	1109.10	7871.30
Std. Dev.	4386.507	151.1488	621289.0	34287012	147900.2
Skewness	1.048397	0.115603	4.488283	4.902810	0.427727
Kurtosis	2.640261	1.245393	22.36687	25.03788	1.370232
Jarque-Bera	5.091698	3.523614	512.6114	654.5456	2.117467
Probability	0.078406	0.171734	0.000000	0.000000	0.346895
Observations	27	23	27	27	27
<i>Abbrev:</i> MMV = Money market value, DH = Discount houses, MFB = Microfinance houses, PMB = Primary mortgage institution, FH = Finance houses					

Descriptive statistics result show the mean money market value in table 1 reveals an average value of 368billion naira, with maximum and minimum values of 13246 billion and 127 billion naira respectively. The average value of discount houses is 130309.70 billion naira, with maximum and minimum values of 417154.60 million naira and 3431.85 million naira respectively. The data follows a normal distribution. The average value of microfinance banks operation is 127574.50 billion naira, with maximum and minimum values of 510710.51 and 2872.00 million naira respectively. Primary mortgage institutions have an average value of 84399.30 billion, with maximum and minimum values of 186224.60 and 1109.10 billion naira respectively. The standard deviation reveals that the data is spread away from the mean, with majority of the values in the data falling far below the mean value. The mean value for finance houses is 154935 billion naira. The respective maximum and minimum values of 230138.98 and 8213.60 billion naira reveal that the data do not have extreme outliers.

Table 5: Spearman Rank Correlation between financial intermediaries and Money market value

Spearman Rank Correlation Matrix					
Variables	DH	MFB	PMI	FH	MMV
DH	1.00				
MFB	0.95 (10.57)	1.00			
	0.00				
PMI	0.69 (3.43)	0.60 (2.688)	1.00		
	0.00	0.02			
FH	0.98 (18.82)	0.96 (11.92)	0.64 (3.03)	1.00	
	0.00	0.00	0.01		
MMV	0.92 (8.49)	0.91 (7.73)	0.66 (3.15)	0.94 (9.79)	1.00
	0.00	0.00	0.01	0.00	
Granger Causality Tests:				F-stats	p-value
4.09	0.05				
FH does not Granger Cause MFB				14.36	0.00
MMV does not Granger Cause MFB				6.88	0.02
FH does not Granger Cause PMB				13.26	0.00
MMV does not Granger Cause PMB				9.29	0.01

Abbrev: DH = Discount houses, MFB = Microfinance banks, PMB = Primary mortgage institutions, FH = Finance houses, MMV = Money market value.

SOURCE: STATA 10 pack for data Analysis

The spearman correlation matrix revealed that discount house operation is positively related with MFB ($r=0.95$), PMI ($r=0.69$), FH ($r=0.98$) and MMV ($r=0.92$). Microfinance banks operation is positively related with PMI ($r=0.60$), FH ($r=0.96$) and MMV ($r=0.91$). Primary mortgage banks operation is positively related with FH ($r=0.64$) and MMV ($r=0.66$). Finance houses operation is positively related with MMV ($r=0.94$).

The correlations indicate that DH has a 98 percent relationship with FH, followed by a 95 percent relationship with MFB, 92 percent relationship with MMV and finally a 69 percent relationship with PMI. MFB has a 96 percent relationship with FH, followed by a 91 percent relationship with MMV, and then a 60 percent relationship with PMI. PMI has a 66 percent relationship with MMV, followed by a 64 percent relationship with FH. Finally, FH has a 94 percent relationship with MMV. The rank correlations are significantly high indicating that the financial intermediaries studied in this work such as operations of discount houses, microfinance banks, primary mortgage institution and finance houses play significant role in the money market valuation of the Nigerian economy. This is in consonance with Ikpefan (2012), Akani and Tony-Obisoa (2020), Oru, Ubana and Okwajie (2021) and in contrast with the Caricom (2020) in the caribbean which is not as a result of the financial intermediaries but other lurking variables within the economy.

A further analysis of the t-statistics and p-values of the correlation matrix between financial intermediaries and money market value indicate that DH ($t=8.49$, $p=0.00$), MFB ($t=7.73$, $p=0.00$), PMI ($t=3.15$, $p=0.01$), and FH ($t=9.79$, $p=0.00$), all have high, positive and statistically significant relationship with Money market value (MMV) in Nigeria, at the 1%, 5% and 10% significance levels for DH, MFB and FH, and 5% and 10% for PMI. The Lag 1 granger causality test at 5% level of significance further indicates that the relationship is unidirectional, from DH to MMV, FH to PMI and MMV to MFB.

Conclusion and Recommendation

The study reveals that there exist a significant relation between discount houses, micro-finance banks, primary mortgage institutions and finance houses with the value of short-term capital formation in the Nigerian money market. Discount houses possessed 0.95 percent of the micro-finance liabilities, 69 percent of primary mortgage institutions, 98 percent of finance houses had contributed 92 percent to the short term capital formation in Nigeria. The micro finance banks have significantly 91 percent correlation to capital formation, primary mortgage institutions 66 percent correlation, finance houses and 94 percent correlation significantly to short-term capital formation in the Nigerian economy. The study further reveals that only discount houses are dealers in all money market instruments as the other intermediaries are basically dealers on Treasury bills and certificates only except finance houses who also deal on asset backed commercial papers (ABCP). The finance houses followed by the discount houses, microfinance banks and lastly primary mortgage institutions have the highest to the least correlation with short term capital formation in the money market. With a view on the number of discount houses on establishment and operating revealed that the lack of proliferation and closure is as a result of the lack of diversification of its functions upon establishment as other intermediaries grow numerically and expand in the midst of economic pressures and remain in business because of diversified products, portfolio mix and maturities. Economic surplus units such as government, household, firms and foreign investors do not invest in money market instruments thus the reason for the underdeveloped or developing money market in Nigeria and the high rate of investor reliance on commercial bank loans at very high lending rates. The study concludes a

significant and positive correlation between financial intermediation and capital formation in the money market and that the Nigerian money market is yet developed and a developed market is pivotal for optimal short term capital formation.

The study recommends that investors in financial securities should always seek the services of financial intermediaries to transfer risk through information asymmetry and avoid adverse selection in buying and selling securities in financial markets. Financial intermediaries, most especially the primary mortgage institutions should increase their spread or office network as well as educate the non bank public as a role to enhancing financial inclusion strategy, reduce financial dualism and increase capital formation in the money market. The Monetary authorities should re-established discount houses to maintain liquidity management and enhance intermediation as found in other developed economies but with slight modifications to allow it engage in other banking and non-banking financial services to court public participation and investment in discount houses. Monetary authorities should also modify the operations of the Nigerian money market to reduce financial dualism to its barest minimum and meet international best practices. The economic sector, individuals, households, firms, foreign partners need a shift from borrowing funds from banks to investing in money market instruments to further develop the money market and avoid borrowing from banks during inflation at higher rates but trade financial securities for funds and at all times acquire capital at short notice and at lower cost.

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