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Real Estate Investment Capitalization Issues in Emerging Markets: Reflection on Capital Market Instruments

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ABSTRACT: In spite of the potentials of the capital market, one wonders why the Nigerian real estate developer has not resorted to the use of capital market instruments for real estate financing. In light of the potentials of these instruments in real estate development financing, the study examines the issues bordering on real estate development financing using capital market instruments. Specifically, the study was guided by the following objectives: to ascertain the challenges associated with the funding of real estate development using capital market instruments in the study area, and to determine the prospects of capital market instruments in funding real estate development in the study area. The study area was the south-eastern geopolitical zone of Nigeria. A quantitative approach was chosen for this study. The population of the study was 245 comprising real estate investors\developers, Estate Surveying and Valuation firms, Primary and Federal Mortgage Bank of Nigeria, Nigeria Stock and Exchange Commission, selected Academia of Estate profession in south East, Nigeria. The primary data collected through the questionnaire were analyzed and presented using charts, Binomial test of proportion and Z-approximation test. The study found seven (7) significant challenges associated with the capital market financing of real estate development in the study area; while six (6) significant prospects of capital market funding of real estate development in the study area were found. The study recommended that policies that will impact positively on the real estate development sector of the Nigerian economy as it concerns funding should be pursued with all the seriousness it deserves; and good regulatory environment should be provide with adequate safeguard to enable investors tap into the potentials of the capital market in financing real estate development.

KEYWORDS: Capital market, housing deficit, property development finance, sources of real estate development financing.

I. BACKGROUND TO THE STUDY

Real estate investment refers to physical assets and services that are essential to socioeconomic growth and development. In spite of this essentiality, the delivery of optimum and affordable real estate investments remains a challenge for most countries, especially developing ones like Nigeria. Extant research acclaims that in the country, several urban dwellers live in inhuman and informal housing conditions, while those with access to formal housing often live at exorbitant costs (Abubakar & Aina, 2019; Aina, 2018; Ewurum et al., 2020; Odenigbo & Ewurum, 2018). This semblance of a housing crisis is probably the reason for assertions which suggest that property development is a fundamental necessity that is equated with human rights. This is because real estate developments not only serve as personal and national asset, but one that also provides protection and security for the people.

Lack of real estate development is one of the major problems facing developing countries. And this can be attributed to the lack of financing for the development of real estate projects. Without a doubt, financing is an important factor in real estate development. Lack of long-term financing to implement real estate development is a major obstacle to large-scale real estate development. This is anchored on the reality that teal estate development requires a lot of money, which is usually beyond the reach of most urban dwellers, especially those with low and middle incomes in developing countries. As a result, affordability for real estate developments is usually low and generally depends on the financial resources available for real estate development. Many years after Nigeria's independence, a dynamic mortgage market is still underdeveloped and existing mortgage institutions programs that are supposed to offer affordable property development loans do not fully meet the needs of the population (Agbogun et al., 2022; Keke et al., 2022).

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Financial security for real estate development has been exacerbated by financial institutions' stringent stance on lending to real estate development. Their financing system makes it very difficult for middle- and low-income groups to access available facilities. Traditionally, Nigerian real estate companies, investors and developers raise capital through bank loans. In contrast to a market-oriented economy like the US, Nigeria is a bank-oriented financial system, where the banking system provides funding for investments. Still, with the majority of the population lacking access to basic housing needs, with the exception of a few major Nigerian cities, the country's real estate sector is highly underdeveloped. There is indeed a dire need for creative financing of real estate investment in the country.

To ensure the success of real estate development financing and the continuous flow of funds, the government has established three major programs. Voluntary, Compulsory and State Fiscal Transfers (Onokwube, 2012). Capital markets, as markets for long-term funding, play an important role in the operation of these schemes. The capital market is arguably the most robust institutions in any economy, characterized by mobilizing the funds needed to finance long-term and productive projects (Okunev, 2000; Wijburg, 2019). It manages relatively large amounts of capital and is the largest provider of long-term financing for capital projects such as real estate developments that require large capital commitments. In spite of this, very few companies in Nigeria raise funds through the capital markets, a model that has shown great potential globally (Diala et al., 2021; Nebo et al.,2022; Okunev, 2000; Wijburg, 2019).

Notwithstanding these potentials, one wonders why the Nigerian real estate developer has not resorted to the use of capital market instruments for real estate financing. Capital market instruments refer to the use of development bonds, real estate investment trusts, debenture and other stock derivatives to fund the development of real estate (Nebo et al., 2022). In light of the potentials of these instruments in real estate development financing, the study examines the issues bordering on real estate development financing using capital market instruments.

In particular, this research was guided by the following objectives:

1. To ascertain the challenges associated with the funding of real estate development using capital market instruments in the study area.
2. To determine the prospects of capital market instruments in funding real estate development in the study area.

AREA OF THE STUDY

The area of the study is the Southeast Geopolitical zone of Nigeria. The area, which is one of Nigeria's six geopolitical zones, is identified in the geospatial representation of the map of Nigeria shown in Figure 1.

Figure 1: Geospatial Data of Nigeria (showing the South East region)
Source: Geographical Information System Laboratory (2021)

Figure 1 shows the South East of Nigeria (illuminated with a thick black borderline). The region comprises five states as follows - Abia, Anambra, Ebonyi, Enugu and Imo States. The area was selected for the study using convenient sampling and the findings of the study will generate insights that may be used in examining the research problem in other geopolitical zones of the country.

II. REVIEW OF RELATED LITERATURE

Capital Market Financing of Real Estate Development

A capital market can be defined as a financial market in which lenders provide long-term funds in exchange for financial assets issued by borrowers or traded by holders of outstanding tradable debt instruments (Tsoukalas et al., 2017). Capital markets are recognized as institutions that contribute to the socioeconomic growth and development of emerging and developed economies (Onuorah, 2019; Tan & Shafi, 2021). This is made possible by its key role in the mediation process in these economies (Diala et al., 2021). A look at the money mobilized in the capital markets for real estate development over the past two decades shows that government bonds, which reopened in 2013, dominate. Since then, the Nigerian capital market has become a viable source for funding state and municipal infrastructure projects through bond issuance.

From 2010 to the present, government bonds auctioned in the market are worth more than N3.36 trillion, equivalent to about 90.2% of the debt issued in 20 years. There are other instruments in the capital market that can be used to invest in real estate. Ejimuo et al. (2014) and Nebo et al., 2022 identify these various instruments as common stocks, real estate investment trusts, loan and bond stocks, debenture, government development stocks, and project bonds. Nebo et al. (2022) examined the role of these instruments in the resurgence of domestic real estate financing in Nigeria and found that they have huge potential for the sector. In light of this finding, the study follows by examining the prospects and challenges of adopting this financing medium for the industry with a view to leverage on its potentials for the Nigerian real estate sector.

Challenges of Adopting Capital Market Instruments for Real Estate Development Financing in Nigeria

As with any economic activity, capital markets are not without risks. These include the potential for asymmetric information between savers and users, non-transparency and lack of adequate regulation and monitoring of issuers, lack of adequate and efficient market infrastructure for possible increased volatility due to issuance, trading, clearing and settlement, and liquidity, interest rate and rollover risks. At best, capital markets enable alignment of cash flow profiles and risk appetites between investors and issuers, improving economic prosperity for all parties. Appropriate regulation for issuers, investors and intermediaries, in addition to robust prudential regimes to protect investors, to ensure that they reap the benefits of a well-functioning market, promote liquid market, and manage systemic risk are critical.

However, accrual of such benefits is not without certain salient challenges. Ajibola et al. (2018), Arunma (2010), Moore (2019), Raimi & Uzodimma (2020) in considering the application of capital market instruments in Nigeria identified several challenges which are explained as follows.

i. The existence of a deep, liquid government yield curve.

This is the key to supporting the pricing of these products. More generally developing government bond markets can be a catalyst for establishing and improving an appropriate bond market infrastructure, and broadening and deepening the fixed income markets. Significant progress has been made in government bond market development especially during the last twelve years. But for many of them, widening yield curves, achieving liquidity across wider maturities, more active secondary markets and a more diverse investor base, and developing hedging tools.

ii. The existence of well-functioning money markets

This is another fundamental building block for developing both government and non-government bond markets. Reliable pricing with short maturities (<1 year) is necessary to anchor the entire yield curve, and active trading in both outright and repo instruments support this price discovery. Money markets also serve as an important financing source for primary dealers and other market participants that invest in fixed income instruments. Developing money markets is an area of challenge for all real estate developers, for which coordination with central banks policies is extremely important.

iii. A stable macroeconomic environment is key for long term investment.

A strong policy framework and stable macroeconomic policies will reduce uncertainty and increase investor interest. Where inflation rates are high and currencies volatile investing over a long-term horizon is not possible. This is the case for both domestic and foreign real estate developers. Furthermore, qualitative information suggests that the macroeconomic environment is a key factor, that foreign investors consider when deciding whether to make investments in a country. The governments of many countries have implemented the necessary reforms to build the foundation for a stable macroeconomic environment – although the crisis has put pressure on some of them.

Some countries still have work to do to achieve the needed progress on the macro stability front. Burger et al (2012) find that countries with stable inflation rates (a proxy for creditor-friendly policies) have more developed local capital markets. Similarly, Goldstein and Turner (2004) argue that economic policies and institutions are key determinants of capital market development in a country. Hale (2007) points out that sovereign risk is a key macroeconomic fundamental that explains many of the differences in corporate funding options between bonds and syndicated loans.

iv. The tax framework

Taxes can affect the financial viability of different types of instruments and influence real estate developers' choices. Indeed, key to the financial viability of both securitization and fund structures is the tax treatment of these instruments, in particular in connection with the transfer of assets to the instrument. In both cases, the key tax objective is to achieve tax neutrality. Yet, in many countries this remains a challenge particularly in the context of securitization structures. More generally the existence of favorable tax treatments for certain types of instruments and/or vehicles can act as a powerful incentive for their use.

However, it is important that such incentives (even if intended for long-term investment) are well designed and their potential impact evaluated. This is because, the clarity and stability of the tax framework is key to long term investment. Clarity around tax exemptions and stabilization of taxes over the life of long-term projects are also among important factors that could increase the appetite of real estate developers. Investor confidence is reduced by sudden changes in taxes because of the uncertainty associated with such changes.

v. The rule of law and the framework for creditors' rights

In general, private sector engagement requires respect for the rule of law. On the whole, the basic principles that underpin the rule of law are in place across developing countries; however, specific challenges might exist on a country-by-country basis. In particular the quality and expediency of the judiciary is an issue of concern for many developers. Within this general framework, a strong framework for creditor rights, particularly the implementation of robust bankruptcy regimes, is important for bond markets.

An insolvency framework that promotes the reorganization of viable enterprises and gives honest entrepreneurs a second chance is critical to improve real estate developers access to finance. At the same time, accelerated bankruptcy proceedings reduce risk for investors and creditors, as they can lead to higher recovery rates. However, many developers still face challenges in connection with their insolvency frameworks. Out-of-court settlements are often not included and severely punish entrepreneurs. In addition, insolvency proceedings are protracted.

vi. Quality of regulation and supervision

The quality of regulation and supervision of capital markets can also affect real estate developers' confidence to participate in the market. It is generally considered that investors have the capacity to understand the risks of the investments they made. As a result, securities markets regulation and supervision has usually focused on market transparency and integrity and the protection of retail investors. However, real estate developers do not invest in a vacuum. Rather, an important consideration for investors, especially foreign investors, when investing in a country is their perception of that country's level of investor protection and the extent to which its markets are fair and transparent. For this reason, a stronger regulatory and supervisory environment, including better protection of property rights, creditor rights and information, has been shown to be positively associated with higher levels of financial development.

vii. Insolvency

Implementing a robust insolvency system that promotes the reorganization of viable enterprises and give honest entrepreneurs a second chance is also critical to improve real estate developers access to finance. Recovery-oriented bankruptcy regimes play an important role in reducing investor and creditor risk, which helps improve access to credit and reduce borrowing costs.
Other challenges encumbering the financing of real estate development with capital market instruments are as follows:

(a) Indivisibility

A unit holder cannot actually point out a particular property among the various properties owned by these instruments, which is his own. He rather owns a slice or slices in a particular loaf or various loaves of bread.

(b) Forced external management

Many instruments are forced to use externally managed system and to out-source most of its operations. These delay decision-making and are more expensive than internal staff. External management team is not as committed as the staff under employment and raise problem in some instances.

(c) Difficulty in having reserves

The recent global crises exposed some weaknesses in these instruments. The distribution requirements in most instruments' regimes, which require the majority of earnings to be paid to shareholders each year, made it impossible for some instruments to conserve cash and weather the storm.

(d) Other legislative drawbacks

Leverage ratios while designed to temper these instruments debt levels during growth phases, proved detrimental as assets values fell rapidly.

(e) Stress test

The recession was in effect, a stress test for most of these instruments on a global scale. It was found out by Ernst and Young (2010), that countries that strayed farthest from the traditional passive instruments fared worst. In the UK, capital market instruments are predominantly more exposed to property development risks than most of the global instruments, which do more of property purchase.

(f) Unequal advantage

Capital market instruments are unduly favoured by governments and are not exposed to common competition. They enjoy tax advantage at the expense of other taxpayers. In Europe, governments have adopted or are broaching some regulatory changes to spur investments in capital market vehicle.

These challenges were investigated by the study from the perspective of how they influence real estate development financing in the study area.

2.3 Prospects of Capital Market Instruments in Funding Real Estate Development

There are numerous potentials which accrue to investors in the capital market. These potentials make investments in the market very attractive and actually enhance the favourability of this market against some other alternatives. According to Dozie (1996), the capital market can be described as a place where a nation's wealth is bought and sold. It facilitates the creation of facility to raise funds for investments in long-term assets. Nigeria's capital markets do not justify this global role. The opportunities that abound in the Nigerian capital market can be looked at from three major perspectives.

i. corporate finance benefits of the capital market

A unique advantage of stock exchanges for companies is the provision of long-term financial capital without leverage. Through the issuance of equity securities, companies acquire perpetual capital for development. By offering equity, the market can avoid companies becoming overly dependent on debt financing. This will improve the company's debt-to-equity ratio.

ii. Financing options in the capital market

Stock markets offer a variety of long-term investment financing vehicles that meet the long-term investment needs of both the public and private sectors. The medium- and long-term corporate debt markets remain a critical element in the sustainable development of economics. Nigeria's experience over the past decade shows that using corporate debt is a more sensible way to raise long-term funding than bank loans. The advantages are that states or local government can implement their project quickly and at the same time avoid high interest rates in the bank loans.

iii. Secondary market activities

The stock market is an important sector of the economy and is most valued for its benefits in terms of efficiency in accumulating and allocating capital. An efficient stock market takes advantage of savings and allocates a greater percentage to investments with the highest expected return after due consideration of risk. The secondary market is synonymous with NSE and does not create new securities. Business in this market is triggered when primary market investors decide to sell their holdings. In fact, issuers do not directly benefit from trading in the secondary market. It is the original investor who gets the profit.

Such benefits come in form of

Dividend payment, Stock split, Capital appreciation, long-term hedge against trends (Akintola, 2018). Securitization opens up the world of commercial and mortgage real estate to the public. This will lead to more active real estate transactions, increasing sales, income and investment movement. Securitization will help overcome the intrinsic negative perception of property as a poor, inefficient investment medium.

According to Okolie & Anidiobu (2021), there are very significant advantages and benefits derivable from securitization, prominent among which are:

- Securitization enhances market efficiency
- Securitization has changed the woolly perception of real property through its divisibility and tradability key elements of

investment liquidity and attractiveness
- Investors and providers of capital benefit from increased volume and variety of investment instruments
- Securities are above management manipulation.
- Securitization provides good fees to placing agents, that is, dealers in mortgage stocks.
- This reduces the cost of lending by financial intermediaries.
- Securitization helps spread risk through superior investment mixes and stable returns. It also eliminates the market financing (loan) mismatches inherent in the ongoing financial market financing (loans) of real estate developments.
- It hedges against the regional economic recession.

Besides, benefits also accrue to both the users of funds and the regulators, and some of these are:
- Cheaper borrowing cost due to the advantages of economies of scale.
- Wide availability of credit due to liquidity.
- More managerial freedom is assured as freedom restricting covenants in loan are ousted.
- It will engender stable financial system.
- Helps regulators reduce overcapacity of less skilled professionals.
- Meet supervisory desires to use capital in a low-risk manner effectively; and
- Bank failure rate is low relative to traditional credit because of the multiple level of scrutiny that securitized credit undergo.

Akintola (2018) opines that securitization makes it possible to share the risks on a non-pro-rata basis among investors. Different classes or tranches of securities are created here, each with its own risk, such as non-receipt of the future expected income, and hence no return on investment. Many types of securities are therefore created with different risk-return ratios. Furthermore, securitization suits well with the risk-appetite of real estate investors because they can offer real estate developers access to assets that would otherwise not be available to them, and this in turn can deliver to them long stable cash flows with higher yields than government bonds.

The Royal Institution of Chartered Surveyors (RICS) gave a list of the advantages of unitization scheme as follows:
(1) Stimulate regional investment in large, socially desirable urban renewal projects.
(2) Enable groups of smaller investors and in due course, the general public to participate in a wider market to which they presently have limited access.
(3) Create a vehicle which would supplement the involvement of major investment institution in the market.
(4) Introduce liquidity into the market to the benefit of all classes of investors
(5) Open a wider range of property investment opportunities and enable an investor to spread risk through a tax neutral vehicle.

In most emerging and developed economies REITs own many forms of the shopping malls, apartment building, students' hostels, homes, medical facilities, office building, hotels, cell towers, and so on. In these markets, REITs contribute significantly to job creation and capital gains in the economy. REITs have diverse profiles that offer many advantages. It has many potential advantages which includes:
a. Diversification: Equity REITs may invest in many different properties in different geographical locations within the country, bringing investment diversification by property and geography to investor portfolios.
b. Dividends: REITs are usually required to pay a large percentage of their taxable income as dividends to shareholders who in turn pay income taxes on those dividends;
c. Liquidity: Publicly traded REITs shares can easily be bought and sold.
d. Performance: Over the past 30 years, publicly traded equity REITs outperformed the leading stock market indices, including the S&P 500, Dow Jones Industrials, NASDAQ Composite, etc;
e. Transparency: Publicly traded REITs operate under the same rules as other public companies for securities regulatory and financial reporting purposes; and
f. Growth: Over long holding periods, equity REIT returns have tended to outpace the rate of inflation in particular economies, helping investors hedge the purchasing power of their portfolios.

Critique of Related Literature

In Nigeria, the quest for capital market instrument is slow unlike in the other parts of the developed world. Yet, extant literature has focused more on examining the potential of these instruments without adequate attention to the challenges and prospects of adopting it in the financing of real estate development in Nigeria. This gap in literature informs the motivation of the study to examine these issues as they border on real estate financing in the country.

III. METHODOLOGY

The quantitative approach was adopted for this study. This method homogenizes large population of respondents with different characteristics and give them equal chance of being chosen from the study. Primary data was used for the study and they comprise the use of Likert scale questionnaire for data collection. The population of this study consequently includes several individuals whose profession deals on the construction and development of property and also on capital and stock market. Such persons include real estate investors\developers, Estate Surveying and Valuation firms, Primary and Federal Mortgage Bank of Nigeria, Nigeria Stock and Exchange Commission, selected Academia of Estate profession in south East, Nigeria; which was obtained from their respective Directories.

The total population of the study is 245 distributed among the groups as indicated in the Table I.

Table I. POPULATION DISTRIBUTION OF SAMPLE GROUPS

S/N	NAMES OF GROUP	POPULATION OF GROUP
1	Real Estate Investors/Developers	**70**
2	Registered Estate Firms	**55**
3	Primary and Federal Mortgage Banks	**35**
4	Nigeria Stock and Security Exchange Commission	**40**
5	Academia	**45**
	Total Population of Study	**245**

Source: Field Survey, 2022

Table I shows the population distribution of the study. The population of the study, thus, is 245 respondents.

IV. DATA PRESENTATION AND ANALYSIS

The primary data collected through the questionnaire were analyzed and presented using different descriptive and non-parametric methods. The data was presented with charts and analyzed with Binomial test of proportion and Z-approximation test. All the hypotheses will be tested at 5% error while the level of significance is represented at 95 degrees of confidence.

Decision Rule

The following decision rules were applicable:

- If ***p*<0.01**, Test is Highly Significant
- If ***p*<0.05**, Test is Significant Reject Null Hypothesis (H_O)
- If ***p*>0.05**, Test is NOT Significant Fail to Reject Null Hypothesis (H_O)

Where p is the level of significance

Data presented in this section emanated from primary sources, where a total of 245 copies of the questionnaire were administered to the respondents; out of which a total of 200 copies were retrieved from the respondents as shown in Table II.

Table II: PERCENTAGE ANALYSIS OF RESPONDENTS RESPONSE RATE

No response	**200**	**81.6%**
Non response	**45**	**18.4%**
Total	**245**	**100%**

Source: Field Survey, 2022

Table II shows that a total of two hundred and forty-five (245) copies of questionnaire were distributed, out of which two hundred (200) copies representing 81.6% were fully complete and returned. The rate of returned being 81.6% adequate for this study in consistency with the position of Ewurum et al. (2020). The responses from the questionnaire were presented in consistency with the objectives of the study.

V. RESULTS AND IMPLICATIONS

Research Objective 1

To ascertain the challenges associated with the funding of real estate development using capital market instruments in the study area. The analysis was presented in Table III.

Table III: Binomial Test of proportion using Z- approximation.

Challenges associated with the funding of real estate development using capital market instruments in the study area	Category	n	Observed Proportion (p).	Test Proportion (P).	Exact Sig. (2-tailed)
Non-existence of sound macro-economic and policy framework deters the well-functioning of the capital market instrument in funding real estate development.	Agree	174	.87	.50	.000
	Disagree	26	.13		***p*** **<0.01**
	Total	200	1.00		**Test is Highly Significant for "Agree" option**
Inadequate and inefficient market infrastructure for issuing, trading, clearing and settlement discourages the applicability of the capital market instrument.	Agree	144	.72	.50	.000
	Disagree	56	.28		***p*** **<0.01**
	Total	200	1.00		**Test is Highly Significant for "Agree" option**
An unstable political environment and non-clarity of tax framework hinders the proper application of capital market instrument.	Agree	162	.81	.50	.000
	Disagree	38	.19		***p*** **<0.01**
	Total	200	1.00		**Test is Highly Significant for "Agree" option**
The quality of regulation and supervision of capital market affect real estate developers' confidence to participate in the market.	Agree	176	.88	.50	.000
	Disagree	24	.12		***p*** **<0.01**
	Total	200	1.00		**Test is Highly Significant for "Agree" option**
Lack of information regarding capital market instruments, distorted government interest rate and credit allocation policy are obstacle to the use of REITs, securitization in the near future.	Agree	194	.97	.50	.000
	Disagree	6	.03		***p*** **<0.01**
	Total	200	1.00		**Test is Highly Significant for "Agree" option**
High share issue cost due to government involvement in the pricing with long and miserable issuing procedure challenges the application of capital market instruments in funding real estate development.	Agree	175	.88	.50	.000
	Disagree	25	.13		***p*** **<0.01**
		200	1.00		**Test is Highly Significant for "Agree" option**
Lack of knowledge regarding capital market instruments, distorted government interest rate and credit allocation policy are obstacle to the use of REITs, securitization in the near future.	Agree	153	.77	.50	.000
	Disagree	47	.24		***p*** **<0.01**
	Total	200	1.00		**Test is Highly Significant for "Agree" option**

Source: Field Survey, 2022

Thus, from indications in Table III, the study found that challenges associated with the funding of real estate development using capital market instruments in the study area were as follows:

a. Non-existence of sound macro-economic and policy framework deters the well-functioning of the capital market instrument in funding real estate development (**p= 0.87; p<0.01).**
b. Inadequate and inefficient market infrastructure for issuing, trading, clearing and settlement discourages the applicability of the capital market instrument (**p= 0.72; p<0.01).**
c. An unstable political environment and non-clarity of tax framework hinders the proper application of capital market instrument (**p= 0.81; p<0.01).**
d. The quality of regulation and supervision of capital market affect real estate developers' confidence to participate in the market (**p= 0.88; p<0.01).**
e. Lack of information regarding capital market instruments, distorted government interest rate and credit allocation policy are obstacle to the use of REITs, securitization, e.t.c in the near future (**p= 0.97; p<0.01).**

f. High share issue cost due to government involvement in the pricing with long and miserable issuing procedure challenges the application of capital market instruments in funding real estate development (**p= 0.88; p<0.01).**
g. Lack of knowledge regarding capital market instruments, distorted government interest rate and credit allocation policy are obstacle to the use of REITs, securitization, e.t.c in the near future (**p= 0.77; p<0.01).**

These results suggest that the challenges associated with the capital market financing of real estate development were highly statistically significant **(*p*<0.01).** For this study, these seven (7) challenges associated with the development and application of the identified can be adopted with a 99% confidence in funding real estate development in this study area. The implication is that these seven (7) factors were the major challenges associated with the development and application of the identified instruments in funding real estate development in the study area. These are further illustrated in Figure I.

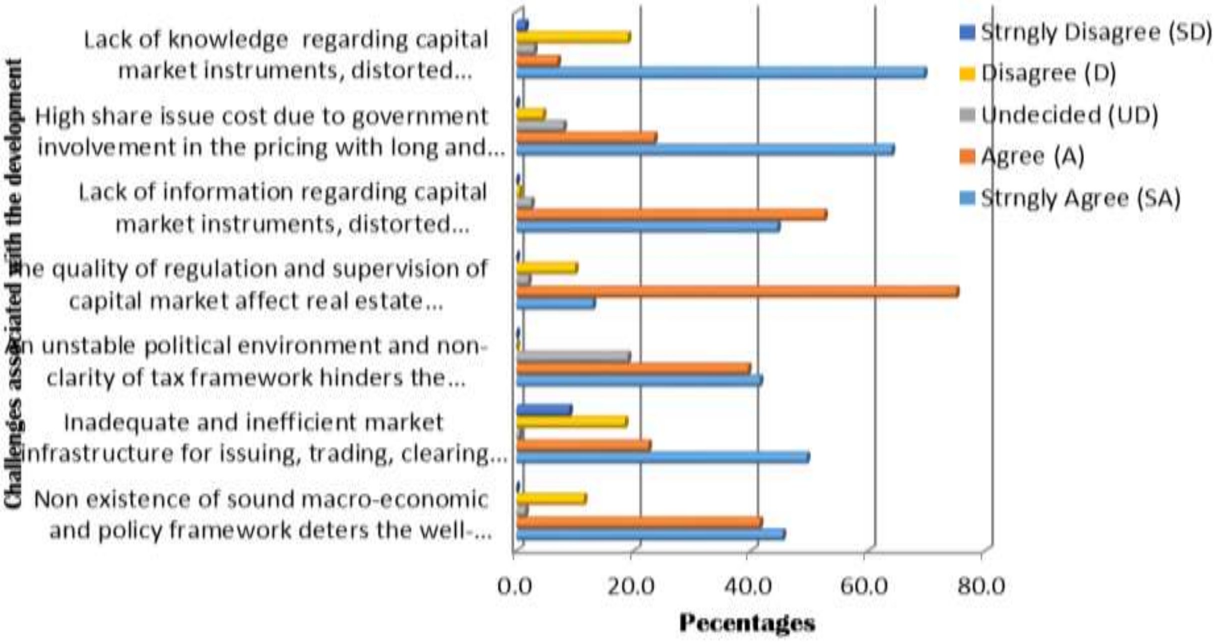

Figure Challenges associated with the development and application of the identified instruments in funding real estate development

Source: Field Survey, 2022

Figure I shows the proportion (%) of respondents observed among respondents that agreed and disagreed for the challenges associated with the development and application of the identified instruments in funding real estate development in the study area. It further confirms the assertion that there was a significant difference in the proportion of respondents observed among respondents that agreed and disagreed to the various challenges associated with the development and application of the identified instruments in funding real estate development in the study area.

Research Objective 2

To determine the prospects of capital market instruments in funding real estate development. The results of the analysis were shown in Table IV.

Table IV: Binomial Test of proportion using Z- approximation

Prospects of capital market instruments for real estate development financing	Category	n	Observed Proportion (p).	Test Proportion (P).	Exact Sig. (2-tailed)
Capital market enhances financial stability and reduces vulnerabilities to exchange rate stocks and sudden interruptions of capital flows.	Disagree	14	.07	.50	.000
	Agree	186		.93	***p* <0.01**
	Total	200		1.00	**Test is Highly Significant for "Agree" option**

Capital market instruments create a built in operational and creational efficiency within the financial system to ensure that resources are optimally utilized at relatively little cost.	Agree	191	.96	.50	.000
	Disagree	9		.05	***p* <0.01 Test is Highly**
	Total	200		1.00	**Significant for "Agree" option**
Capital market instruments provides diversification opportunities unto all types of real estate development in various geographical locations within and outside a particular country.	Agree	191	.96	.50	.000
	Disagree	9		.05	***p* <0.01 Test is**
	Total	200		1.00	**Highly Significant for "Agree" option**
Capital market instruments failure rate is low relative to traditional credit because of the multiple level of scrutiny it undergoes.	Disagree	36	.18	.50	.000
	Agree	164		.82	***p* <0.01 Test is Highly**
	Total	200		1.00	**Significant for "Agree" option**
Capital market instruments opens a wider range of real estate investment opportunities and enable developers to spread risk through a tax neutral vehicle.	Agree	197	.99	.50	.000
	Disagree	3		.02	***p* <0.01 Test is Highly**
	Total	200		1.00	**Significant for "Agree" option**
The development of Capital market instruments will promote the creation of alternative source of funding real estate development in Nigeria.	Agree	178	.89	.50	.000
	Disagree	22		.11	***p* <0.01 Test is Highly**
	Total	200		1.00	**Significant for "Agree" option**

Source: Field Survey, 2022

To determine the prospects of capital market instruments in funding real estate development, a *binomial Test of proportion using Z- approximation* was conducted. Given data from a five-point Likert scale reduced to the nominal level by combining all agree and disagree responses into two categories of "Agree" and "Disagree", a *binomial Test of proportion using Z-approximation* was calculated as shown in Table IV.

The results of this test indicated that there was a highly statistically significant difference (***p* <0.01**) in the proportion of respondents observed among respondents that agreed and disagreed for the various prospects of capital market instruments in funding real estate development. The major prospects of capital market instruments in funding real estate development were stated as follows:

(a) Capital market enhances financial stability and reduces vulnerabilities to exchange rate stocks and sudden interruptions of capital flows (**p= 0.93; p<0.01).**

(b) Capital market instruments create a built in operational and creational efficiency within the financial system to ensure that resources are optimally utilized at relatively little cost (**p= 0.96; p<0.01).**

(c) Capital market instruments provides diversification opportunities unto all types of real estate development in various geographical locations within and outside a particular country (**p= 0.96; p<0.01).**

(d) Capital market instruments failure rate is low relative to traditional credit because of the multiple level of scrutiny it undergoes (**p= 0.82; p<0.01).**

(e) Capital market instruments opens a wider range of real estate investment opportunities and enable developers to spread risk through a tax neutral vehicle (**p= 0.99; p<0.01).**

(f) The development of Capital market instruments will promote the creation of alternative source of funding real estate development in Nigeria (**p= 0.89; p<0.01).**

These results suggest that the prospects of capital market instruments in funding real estate development were highly statistically significant **(*p*<0.01).** For this study, these six (6) prospects of capital market instruments were adopted with a 99% confidence in funding real estate development. The implication, thus, is that these six (6) factors were the major prospects of capital market instruments in funding real estate development in the study area, as shown in Figure II.

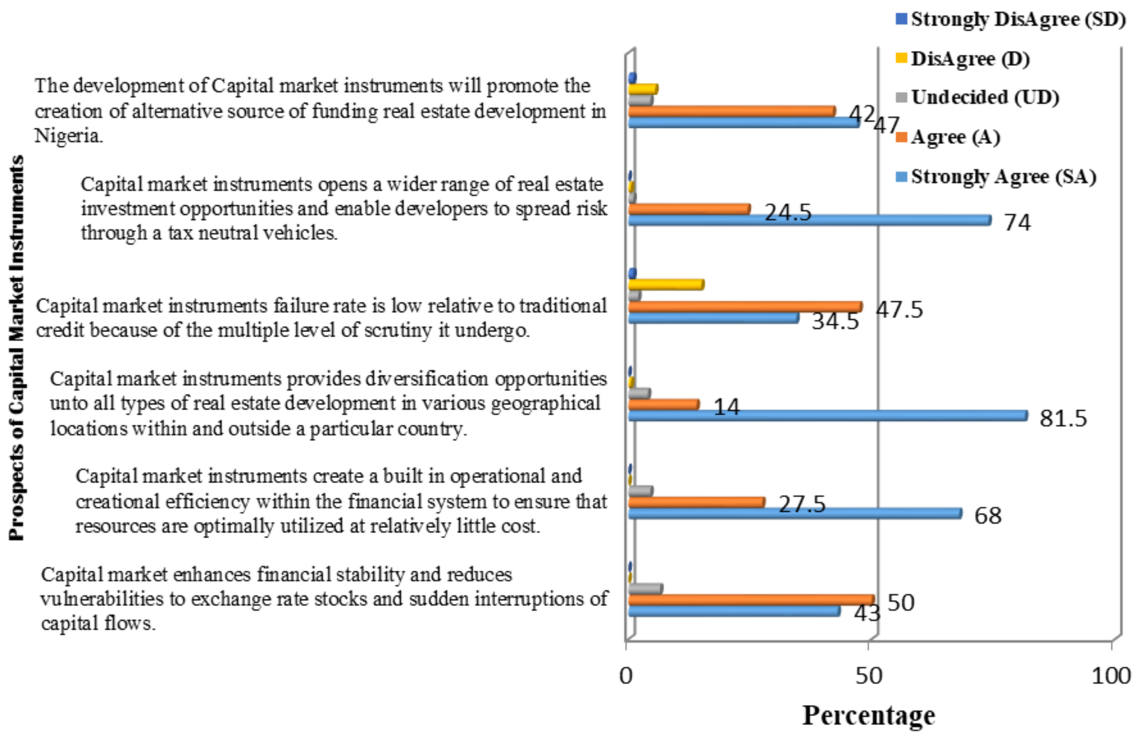

Figure II: Prospects of Capital Market Instruments in Funding Real Estate Development.

Source: Field Survey, 2022

Figure II shows the proportion (%) of respondents observed among respondents that agreed and disagreed for the various prospects of capital market instruments in in funding real estate development in the study area. It further confirms the assertion that there was a significant difference in the proportion of respondents observed among respondents that agreed and disagreed for the various prospects of capital market instruments in funding real estate development in the study area.

RECOMMENDATIONS

It was based on the findings of this study that the following recommendations are made.

(i) An enabling environment also needs to be created for both the operators in the capitals market and the real estate developers to ensure optimum service delivery.

(ii) The policies of government on investment of capital market instruments and the condition required for accessing it should be made flexible and a bit liberal for real estate developers/ investors.

(iii) Policies that will impact positively on the real estate development sector of the Nigerian economy as it concerns funding should be pursued with all the seriousness it deserves if Nigeria is to achieve her desire of providing affordable properties to its citizens.

(iv) A good regulatory environment with adequate safeguard to protect investors and other participants should be pursued by the Government.

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