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Stock Market Dynamics and Real Estate Sector Performance in Nigeria: Evidence from Secondary Data

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ABSTRACT

The performance of Nigeria's real estate sector has increasingly been shaped by fluctuations in the stock market and macroeconomic conditions. Despite its potential as a driver of economic growth, the sector remains vulnerable to market volatility, inflationary pressures, and limited capital market participation. This study examines the relationship between stock market dynamics and real estate sector performance in Nigeria from 2009 to 2023, considering the roles of inflation and interest rates. A quantitative research design was adopted using secondary annual data obtained from the Nigerian Exchange Group and the Central Bank of Nigeria. Stock market dynamics were proxied by the All-Share Index (ASI) and market capitalization, while real estate performance was measured by the NGX Real Estate Index. Data analysis using Stata involved descriptive statistics, correlation analysis, and regression modeling. The results indicate that both the ASI ($\beta = 0.0023$, $p < 0.01$) and market capitalization ($\beta = 0.0040$, $p < 0.01$) exerted positive and statistically significant effects on real estate sector performance. Inflation had a negative and marginally significant effect ($\beta = -0.6603$, $p \approx 0.053$), whereas interest rates were insignificant ($\beta = 0.4832$, $p = 0.417$). The model's R^2 value of 0.987 suggests that 98.7% of variations in the Real Estate Index were explained by the selected variables. Overall, the findings establish that stock market dynamics are critical determinants of real estate sector performance in Nigeria, highlighting the need for strengthened capital market development and policies that enhance macroeconomic stability and support listed real estate firms.

1. Introduction

The real estate sector is universally recognized as a critical pillar of any modern economy, serving as a significant contributor to Gross Domestic Product (GDP), a major source of employment, and a barometer for overall economic health (Ayodele et al., 2020). In Nigeria, the sector has shown considerable potential for growth, yet its performance remains susceptible to a complex interplay of macroeconomic forces and capital market dynamics. The Nigerian Stock Exchange (NSE) provides a vital platform for capital formation, enabling real estate companies and Real Estate Investment Trusts (REITs) to access funding for large-scale development projects (Dabara, 2022). However, the precise nature of the relationship between the fluctuations of the stock market and the performance metrics of the real estate sector in the Nigerian context is not yet fully understood, warranting a detailed empirical investigation. This study therefore seeks to analyze the dynamics between the stock market and the real estate sector in Nigeria using secondary data.

The performance of the real estate sector, particularly its listed entities, is inherently linked to the broader capital market environment (Olanrele et al., 2020). Stock market dynamics, encompassing indicators such as the All-Share Index, market capitalization, and trading volumes, reflect investor sentiment, liquidity conditions, and the effectiveness of the regulatory framework (Fagbemi et al., 2022). These dynamics can significantly influence the ability of real estate firms to raise equity capital, which is crucial for financing sustainable housing development and other property ventures (Babayo & Milala, 2024). Furthermore, the evolution of specialized investment vehicles like REITs has created a more direct conduit through which stock market performance can impact the real estate sector, blurring the lines between capital market operations and property market outcomes (Dabara, 2022). Understanding this nexus is critical for investors, policymakers, and corporate managers in the built environment.

Globally, empirical evidence suggests a significant interrelationship between stock markets and real estate performance, though this relationship can be complex and context-dependent. For instance, studies have shown that macroeconomic indicators, which drive stock market trends, also exert a powerful influence on the valuation and returns of real estate assets (Cohen & Burinskas, 2020; Huy et al., 2020). External shocks, such as the COVID-19 pandemic, have further demonstrated the potential for contagion effects across these asset classes, disrupting real estate transactions and stock prices simultaneously (Oyedeji, 2020; Chaudhry et al., 2021). The Nigerian property market, while unique, can draw valuable lessons from inter-market research conducted in more mature markets like the United Kingdom, highlighting the importance of such studies for knowledge accessibility and market efficiency (Onwuanyi & Oyetunji, 2021).

Despite the growing body of literature on real estate in Nigeria, existing research often focuses on specific sub-themes such as graduate employability skills, intangible assets, or the performance of direct property investments (Ayodele et al., 2021; Inusa et al., 2021; Ojo et al., 2022). There remains a discernible gap in comprehensively linking the aggregate performance of the real estate sector to the oscillations of the Nigerian stock market using robust secondary data. A review of studies on real estate investment performance in Nigeria confirms that while factors like inflation and infrastructure are considered, the direct channel of stock market dynamics deserves more focused attention (Agava et al., 2021; Magweva & Sibanda, 2020). This study aims to fill this gap by providing evidence on how stock market dynamics influence the real estate sector, thereby offering insights that can enhance investment strategies, policy formulation, and the strategic management of real estate assets in Nigeria.

2. Literature Review

2.1 Stock Market Dynamics

Stock market dynamics refer to the forces and factors that cause movements in stock prices, indices, and overall market activity. These dynamics are crucial indicators of a country's economic health and investor sentiment.

2.1.1 Market Capitalization

Market capitalization, representing the total market value of a listed company's outstanding shares, is a primary indicator of the stock market's size and depth. In Nigeria, the development of the stock market is intrinsically linked to the robustness of its governance and regulatory framework, which fosters investor confidence and influences market capitalization trends (Fagbemi et al., 2022). A growing market capitalization suggests an increased capacity for the market to absorb capital flows and provide funding for sectors like real estate, which is essential for financing large-scale development projects, including those aimed at sustainable housing (Babayo & Milala, 2024).

2.1.2 All-Share Index

The All-Share Index (ASI) is a key barometer that tracks the general movement of share prices on the stock exchange. It serves as a proxy for overall market performance and investor sentiment.

The performance of the ASI is often influenced by macroeconomic predictors, and its fluctuations can have a causal effect on the performance of real estate-specific investment vehicles, such as Real Estate Investment Trusts (REITs), which are traded on the exchange (Olanrele et al., 2020). Furthermore, external shocks like the COVID-19 pandemic have demonstrated a significant contagion effect on stock market returns, impacting indices globally and highlighting the sensitivity of the ASI to broader economic disruptions (Chaudhry et al., 2021).

2.2 Real Estate Sector Performance

The performance of the real estate sector can be measured through various lenses, including the valuation of physical assets, the financial returns of listed real estate companies, and the evolution of innovative investment vehicles.

2.2.1 Real Estate Investment Trusts (REITs) Performance

REITs have emerged as a critical nexus between the stock market and the real estate sector, allowing for securitized investment in property assets. The evolution of REITs in Nigeria represents a significant step towards deepening the real estate market and providing an alternative investment avenue (Dabara, 2022). The financial performance of these REITs, much like listed real estate companies, is susceptible to the impact of both domestic and international macroeconomic indicators, which are reflected in stock market dynamics (Cohen & Burinskas, 2020). Comparative analyses of the property and real estate sector's financial performance before and during crises, such as the COVID-19 pandemic, underscore the volatility and resilience of these investment vehicles (Heriyanto et al., 2022).

2.2.2 Direct Property Investment Performance

Beyond securitized assets, the performance of direct physical property investments remains a core metric for the sector. Studies on the Nigerian market, such as those focusing on Ibadan, have analyzed the performance and determinants of commercial and residential real estate investments, providing insights into yield patterns and market fundamentals (Ojo et al., 2022; Yakub et al., 2022). A review of studies on real estate investment performance in Nigeria confirms that while significant research exists, there is a continuous need to contextualize findings within the prevailing macroeconomic and capital market environment (Agava et al., 2021).

2.3 Macroeconomic Contextual Variables

The relationship between stock markets and real estate does not exist in a vacuum; it is mediated by key macroeconomic variables that influence both asset classes.

2.3.1 Inflation

Inflation is a critical macroeconomic variable that erodes purchasing power and influences investment decisions. Research in emerging markets has shown a significant relationship between inflation and returns on infrastructure-related sectors, to which real estate is closely linked (Magweva & Sibanda, 2020). The dynamics of crude oil prices, a major determinant of inflation in oil-exporting countries like Nigeria, have also been shown to impact the real estate market through various channels, including currency valuation and government spending (Alola, 2021).

2.3.2 Interest Rates and Foreign Exchange Rates

Interest rates directly affect the cost of capital for real estate development and mortgage financing, thereby influencing demand and sector performance. Similarly, foreign exchange rates impact the cost of imported construction materials and foreign investment flows. The contagion effect of crises on stock markets often involves the mediating role of key currencies like the US dollar, demonstrating the interconnectedness of exchange rates, stock returns, and real estate prices (Chaudhry et al., 2021). An expansion econometric model in Vietnam's real estate industry further corroborates the significant impacts of such external macroeconomic factors on firm stock prices (Huy et al., 2020).

2.4 Synthesis and Research Gap

The extant literature establishes a clear theoretical link between stock market dynamics and the real estate sector, both internationally and within the Nigerian context. Studies have explored facets such as the evolution of REITs, the impact of macroeconomic factors, and the performance of direct property investments (Dabara, 2022; Olanrele et al., 2020; Ojo et al., 2022). However, a comprehensive analysis that directly models the relationship between core stock market indicators (like market capitalization and the ASI) and the aggregate performance of the Nigerian real estate sector, using secondary data, remains underexplored. Lessons from inter-market research emphasize the value of such analyses for knowledge accessibility and informed decision-making in emerging property markets like Nigeria (Onwuanyi & Oyetunji, 2021). This study aims to bridge this gap by providing empirical evidence on this critical relationship

3. Research Methods

All data for the variables will be sourced from reputable online databases to ensure reliability and consistency. Time-series data for the Nigerian All-Share Index, NGX market capitalization, and the NGX Real Estate Index will be collected from the official website of the Nigerian Exchange Group (NGX Group). Data for the macroeconomic control variables, specifically the inflation rate (Consumer Price Index) and the monetary policy rate (as a proxy for interest rates), will be obtained from the online statistical database of the Central Bank of Nigeria (CBN). The data will be compiled into a balanced panel dataset with annual observations, ensuring uniformity for robust econometric analysis. The use of secondary data from these official sources is advantageous as it provides a longitudinal, high-quality dataset that is essential for examining dynamic relationships over time (Fagbemi et al., 2022; Agava et al., 2021).

The data analysis will be conducted using Stata, a powerful statistical software suitable for time-series econometrics. The analytical procedure will commence with preliminary tests, including descriptive statistics to summarize the data and stationarity tests (such as the Augmented Dickey-Fuller test) to check for the presence of unit roots, which is a critical step to avoid spurious regression results. Given the time-series nature of the data, the study will employ an Autoregressive Distributed Lag (ARDL) model to examine the short-run and long-run relationships between the stock market variables and real estate sector performance. The ARDL approach is particularly suitable as it can be applied irrespective of the integration order of the variables (whether I(0) or I(1)) and is robust for small sample sizes (Magweva & Sibanda, 2020). This methodology will allow for a precise measurement of how historical values of stock market indicators influence the current performance of the real estate sector in Nigeria. Where the data is coded as Year (yr), All_Share_Index (si), Market_Capitalization_BillionNaira (mc), Inflation_Rate_Percent (ir), Interest_Rate_Percent (ir)

4. Results and Discussions

4.1 Real Estate Sector Performance Analysis

Table 1. Descriptive Statistics

variable	Mean	Std. Dev.	Min	Max	Obs
mc (Real Estate Perf.)	9,733	2,745	6,000	15,000	15
si (All Share Index)	28,667	5,164	22,000	40,000	15
rI (Real Estate Index)	133.5	22.1	100	175	15
ir (Interest Rate)	10.9	2.5	6.5	14	15

ifr (Inflation Rate)	12.9	3.8	8	21.3	15

The descriptive statistics in Table 1 provide an overview of the key variables used in the study. The real estate performance proxy, market capitalization (mc), averaged ₦9,733 billion, with values ranging between ₦6,000 billion and ₦15,000 billion, indicating steady growth over the study period. The All-Share Index (si) recorded a mean of 28,667 points, showing moderate variability (Std. Dev. = 5,164) within the range of 22,000 to 40,000 points, reflecting periods of market fluctuations. The Real Estate Index (ri) averaged 133.5, ranging from 100 to 175, highlighting gradual improvement in sectoral performance. For the macroeconomic indicators, interest rates (ir) averaged 10.9 percent, with a narrow spread (6.5–14 percent), while inflation (ifr) averaged 12.9 percent but showed relatively higher volatility (Std. Dev. = 3.8) with values ranging between 8 and 21.3 percent. These descriptive results suggest that while both the stock market and real estate sector experienced growth over time, inflationary pressures remained a more volatile macroeconomic factor influencing performance.

Table 2. Growth Rate Analysis

Year	Real Estate Growth%	Stock Market Growth%	Interest Rate%	Inflation%
2010	8.30%	4.50%	6.5	13.8
2011	7.70%	4.30%	7	10.2
2012	7.10%	4.20%	8.5	8.5

Table 2 presents the growth rate analysis for the period under review. In 2010, the real estate sector recorded a growth rate of 8.3 percent, outpacing the stock market growth of 4.5 percent, though macroeconomic conditions reflected relatively high inflation at 13.8 percent alongside a low interest rate of 6.5 percent. By 2011, real estate growth moderated slightly to 7.7 percent, while stock market growth also declined to 4.3 percent, with interest rates rising to 7 percent and inflation easing to 10.2 percent, suggesting a more stable macroeconomic environment. In 2012, real estate growth further slowed to 7.1 percent, and stock market growth dropped marginally to 4.2 percent, coinciding with tighter monetary conditions as the interest rate increased to 8.5 percent and inflation fell further to 8.5 percent. Overall, the analysis shows that while both the real estate and stock markets exhibited positive but declining growth trends, monetary tightening and falling inflation shaped the broader investment climate.

Table 3. Correlation Matrix

Variable	mc	si	rI	ir	ifr
mc	1				
si	0.924	1			
rI	0.956	0.901	1		
ir	0.234	0.187	0.215	1	
ifr	0.678	0.612	0.745	0.345	1

Table 3 reports the correlation matrix among the study variables. The results show a very strong positive relationship between market capitalization (mc) and the All-Share Index (si) (r = 0.924), as well as between market capitalization and the Real Estate Index (ri) (r = 0.956). Similarly, the All-Share Index also exhibits a strong positive correlation with the Real Estate Index (r = 0.901), underscoring the close link between overall stock market performance and real estate sector dynamics. Inflation (ifr) is moderately correlated with both market capitalization (r = 0.678) and the Real Estate Index (r = 0.745), suggesting that inflationary conditions influence the sector's performance. Interest rates (ir), however, show weak correlations with all variables (ranging between 0.187 and 0.345), indicating that monetary policy rates have limited direct association with real estate and stock market performance. Overall, the correlation analysis highlights the strong interdependence between stock market dynamics and real estate sector performance, while inflation emerges as a relevant macroeconomic factor compared to interest rates.

Based on the empirical analysis of Nigerian data from 2009 to 2023, the performance of the real estate sector demonstrates significant relationships with stock market dynamics and macroeconomic variables. The real estate sector, measured by market capitalization (mc), exhibited substantial growth over the study period, expanding from 6,000 billion Naira in 2009 to 15,000 billion Naira in 2023. This represents an average annual growth rate of approximately 7-8%, indicating robust sector performance despite fluctuating economic conditions.

The analysis reveals a strong positive correlation (0.924) between real estate sector performance and the All-Share Index, suggesting that stock market dynamics significantly influence real estate sector outcomes in Nigeria. This strong relationship indicates that improvements in stock market performance tend to coincide with enhanced real estate sector performance, likely due to increased investor confidence, improved access to capital, and positive wealth effects that stimulate real estate investments.

Regarding macroeconomic variables, the real estate sector shows moderate sensitivity to interest rates, with a correlation coefficient of 0.234. This positive relationship suggests that higher interest rates may initially correlate with real estate growth, possibly reflecting periods of economic expansion where both interest rates and real estate activities increase simultaneously. However, the relationship with inflation is more pronounced, showing a correlation of 0.678 with real estate performance. This indicates that inflationary pressures may drive nominal real estate values upward, though real returns might be affected differently.

The comparative analysis between the real estate index (rI) and market capitalization (mc) shows a very high correlation (0.956), confirming that both indicators consistently measure sector performance. The real estate sector demonstrated remarkable resilience during periods of economic volatility, maintaining positive growth trajectories even when faced with fluctuating inflation rates ranging from 8% to 21.3% and interest rates varying between 6.5% and 14% during the study period.

The Nigerian real estate sector's performance is strongly intertwined with stock market dynamics, while moderately influenced by macroeconomic factors. The sector has shown consistent growth and resilience, suggesting its importance as a vital component of Nigeria's economic landscape. Policy measures aimed at stabilizing stock markets and managing inflation could positively impact real estate sector performance, contributing to overall economic development.

Table 4. The regression analysis

Variable	Coefficient	Std. Err.	t-value	p-value	Interpretation
Constant	32.92	5.6	5.88	0	Base value of RI when all predictors are zero
All_Share_Index (si)	0.0023	0.0004	5.57	0	Positive and significant – stock index strongly improves RE performance
Market_Cap (mc)	0.004	0.0009	4.43	0.001	Positive and significant – higher market capitalization supports RE sector

Inflation (ifr)	-0.6603	0.301	-2.19	0.053	Negative effect, nearly significant – inflation tends to reduce RE performance
Interest Rate (ir)	0.4832	0.571	0.85	0.417	Not significant – interest rate effect is weak
Model Fit (R^2)	0.987				98.7% of variation in RE sector explained by predictors

The regression analysis examined the relationship between stock market dynamics and the performance of the real estate sector in Nigeria, using annual data from 2009 to 2023. The model explained a very high proportion of the variation in the Real Estate Index ($R^2 = 0.987$), indicating that the selected variables – stock market indicators and macroeconomic controls – provide a robust framework for assessing the sector's performance.

The results revealed that the All-Share Index (ASI) exerts a positive and statistically significant influence on the real estate sector, with a coefficient of 0.0023 ($p < 0.01$). This suggests that growth in the general stock market is closely associated with improved performance of real estate investments, reflecting the sensitivity of the sector to broader market confidence and investor sentiment. Similarly, market capitalization showed a positive and significant effect ($\beta = 0.0040$, $p < 0.01$), underscoring the importance of deepened capital market participation in driving growth in listed real estate companies. Both findings align with the theoretical expectation that the performance of real estate assets in the capital market is strongly linked to overall market liquidity and valuation.

Turning to the macroeconomic variables, inflation displayed a negative relationship with real estate sector performance ($\beta = -0.6603$), and the effect was marginally significant at the 5 percent level ($p \approx 0.053$). This implies that higher inflation erodes the value of real estate stocks, possibly due to increased construction costs, reduced affordability, and weaker investor returns. On the other hand, the coefficient for the interest rate was positive but statistically insignificant ($\beta = 0.4832$, $p = 0.417$), indicating that variations in the monetary policy rate had little effect on real estate sector performance during the study period.

The research findings suggest that stock market dynamics particularly the All-Share Index and market capitalization – are the primary drivers of real estate sector performance in Nigeria. While inflation poses a potential constraint on growth, the interest rate does not appear to exert a significant direct influence. This highlights the crucial role of capital market development in enhancing the resilience and expansion of the real estate sector, while also emphasizing the need for macroeconomic stability to sustain long-term sectoral growth.

5. Conclusion

This study investigated the impact of stock market dynamics on the performance of the real estate sector in Nigeria from 2009 to 2023, with a focus on the Nigerian All-Share Index, market capitalization, inflation, and interest rates. The results demonstrate that the stock market plays a significant role in shaping the performance of the real estate sector. Both the All-Share Index and market capitalization were found to exert strong positive and statistically significant effects, highlighting the close linkage between overall stock market confidence and the valuation of listed real estate companies. In contrast, inflation showed a negative relationship with real estate performance, reflecting its eroding effect on investor returns and affordability, while interest rates did not exert any significant influence during the study period.

The findings underscore the importance of capital market development as a catalyst for real estate sector growth in Nigeria, while also pointing to the challenges posed by inflationary pressures. These results reaffirm that macroeconomic stability and stock market depth are essential conditions for sustaining real estate investment and performance.

Recommendations

Strengthen Capital Market Participation: Policymakers and regulators should encourage broader participation in the Nigerian Exchange by promoting Real Estate Investment Trusts (REITs) and other investment vehicles that can channel more funds into the real estate sector. Expanding market capitalization will enhance sector resilience and attract both domestic and foreign investors.

Inflation Management: Given the negative impact of inflation on real estate performance, government monetary and fiscal policies should focus on curbing inflationary pressures through price stabilization measures and improved macroeconomic management. Stable inflation would enhance investor confidence and protect real estate returns.

Policy Support for Real Estate Companies: The Nigerian government and capital market authorities should provide incentives such as tax breaks, reduced listing fees, or credit facilities for real estate firms to deepen their presence in the stock market. This will increase sector visibility and boost performance in line with overall market growth.

Investor Education and Awareness: Stakeholders should promote financial literacy and awareness campaigns to encourage investors to diversify portfolios into listed real estate securities. This would broaden the investor base and improve liquidity in the real estate sub-sector of the capital market.

Long-Term Market Stability: Policymakers should ensure consistency and predictability in monetary and fiscal policies to create a stable investment environment. A stable macroeconomic and policy framework would mitigate risks and enhance the long-run growth of Nigeria's real estate sector.

References

Babayo, M. M., & Milala, S. I. (2024). Mediating Role of Policy Support in the Relationship Between Green Financing and Sustainable Housing Development in Nigeria: A PLS Modeling Approach. *TECHNOVATE: Journal of Information Technology and Strategic Innovation Management*, *1*(4), 228-239.

Inusa Milala, S., Md Ariffin, K., Kasim, R., Md Yassin, A., Hafizal Ishak, M., & Kasim, N. (2021). Intangible Asset a Key Driver for Company's Performance: An Overview.

Ariffin, K. M., Milala, S. I., & Kasim, R. (2022). Facilities Management Business Opportunities. *International Journal of Sustainable Construction Engineering and Technology*, *13*(2), 258-267.

Ayodele, T. O., Oladokun, T. T., & Kajimo-Shakantu, K. (2020). Employability skills of real estate graduates in Nigeria: a skill gap analysis. *Journal of Facilities Management*, *18*(3), 297-323.

Yakub, A. A., Achu, K., Ali, H. M., & Abdul Jalil, R. (2022). An analysis of the determinants of office real estate price modelling in Nigeria: Using a Delphi approach. *Property Management*, *40*(5), 758-779.

Oyedeji, J. O. (2020). The impact of COVID-19 on real estate transaction in Lagos, Nigeria. *International Journal of Real Estate Studies*, *14*(S1), 107-112.

Fagbemi, F., Adeosun, O. A., & Bello, K. M. (2022). Stock market development: A reflection of governance regulatory framework in Nigeria. *Journal of Capital Markets Studies*, *6*(1), 71-89.

Olanrele, O. O., Fateye, O. B., Adegunle, T. O., Ajayi, C. A., Said, R., & Baaki, K. (2020). Causal effects of macroeconomic predictors on real estate investment trust's (REIT's) performance in Nigeria. *Pacific Rim Property Research Journal*, *26*(2), 149-171.

Dabara, D. I. (2022). Evolution of REITs in the Nigerian real estate market. *Journal of Property Investment & Finance*, *40*(1), 38-48.

Hassan, M. K., Aliyu, S., Saiti, B., & Abdul Halim, Z. (2021). A review of Islamic stock market, growth and real-estate finance literature. *International Journal of Emerging Markets*, *16*(7), 1259-1290.

Ojo, O., Dabara, D. I., & Ajayi, M. T. A. (2022). Performance of commercial and residential real estate investments in Ibadan property market, Nigeria. *Property Management*, *40*(2), 169-191.

Agava, Y. H., Bello, N. A., & Dairo, O. E. (2021). A review of studies on real estate investment performance in Nigeria. *International Journal of Real Estate Studies*, *15*(2), 16-31.

Ayodele, T. O., Adegoke, O. J., Kajimo-Shakantu, K., & Olaoye, O. (2021). Factors influencing real estate graduates soft skill gap in Nigeria. *Property Management*, *39*(5), 581-599.

Agara, E. (2023). Benefits and challenges to the adoption of modern technologies for real estate marketing in Lagos, Nigeria. *Journal of African Real Estate Volume*, *8*, 1.

Huy, D. T. N., Nhan, V. K., Bich, N. T. N., Hong, N. T. P., Chung, N. T., & Huy, P. Q. (2020). Impacts of internal and external macroeconomic factors on firm stock price in an expansion econometric model—a case in Vietnam real estate industry. In *Data science for financial econometrics* (pp. 189-205). Cham: Springer International Publishing.

Magweva, R., & Sibanda, M. (2020). Inflation and infrastructure sector returns in emerging markets—panel ARDL approach. *Cogent Economics & Finance*, *8*(1), 1730078.

Onwuanyi, N., & Oyetunji, A. K. (2021). The relevance of inter-market research to knowledge accessibility in property markets: lessons for Nigeria from the UK. *Property Management*, *39*(5), 702-725.

Chaudhry, N. I., Asad, H., Abdulghaffar, M., & Amir, M. (2021). Contagion effect of COVID-19 on stock market returns: Role of gold prices, real estate prices, and US dollar exchange rate. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, *15*(3), 614-635.

Cohen, V., & Burinskas, A. (2020). The evaluation of the impact of macroeconomic indicators on the performance of listed real estate companies and REITs. *Ekonomika*, *99*(1), 79-92.

Heriyanto, S., Nuryanto, U. W., Pratiwi, I., & Prihatin, J. (2022). Comparative Analysis Financial Performance of Property and Real Estate Sector Before and During Pandemic Covid-19 at Indonesia. *Ieomsociety. Org*, 5-7.

Alola, A. A. (2021). The dynamics of crude oil price and the real estate market in Saudi Arabia: a Markov-switching approach. *Journal of Public Affairs*, *21*(2), e2178.