



<https://ijecm.co.uk/>

VALIDATING FINANCIAL GEARING THEORIES IN REAL ESTATE INVESTMENT TRUSTS: RESEARCH DIRECTION FOR EMERGING PROPERTY MARKETS

Stella Obiageli Onwubuya-Ezeala 

Department of Estate Management, Chukwuemeka Odimegwu Ojukwu University,
Igbariam, Anambra, Nigeria
labverity@gmail.com

Fidelis Ifeanyi Emoh

Department of Estate Management, Nnamdi Azikiwe University, Awka, Anambra, Nigeria

Esther Ifeanyichukwu Oladejo

Department of Estate Management, Nnamdi Azikiwe University, Awka, Anambra, Nigeria

Abstract

Real estate investment financing has been a significant challenge in emerging economies. Strategies have evolved in addressing the problem, and real estate investment trusts have been well identified. This brings the model of capitalizing REITs to the fore and the study follows suit in exploring the capital structure models employed by stock market-driven investments. These models are tradeoff, pecking-order and market timing capitalization models and several studies have been conducted on their implications in several industries and climes. These studies have conflicting findings on the outcomes of these financing models in investment capitalization. In addition to this lack of consensus, there is minimal evidence on the outcomes or validations of these models as they concern real estate investment trusts in Nigeria. The study presents a case for further research to address this gap in extant literature.

Keywords: Capital structure, Market efficiency, Real estate investment capitalization, REITs, Sustainable investment practices



INTRODUCTION

A crucial encumbrance to the delivery of affordable housing in Nigeria is the issue of the huge capital outlay that real estate development investments attract. With this scenario, it is almost inevitable that real estate investments cannot be funded by equity alone. The other option now becomes the use of debt to finance real estate investments. However, in Nigeria, this is rather easier said than done because the cost of borrowing is relatively very high. This very high cost of acquiring loan further aggravates the issue because the borrower appears to be entering the same financial burden they are trying to avoid in the first place.

Contemporary sources of financing real estate investment appear to be a ready-made alternative solution to this problem. One of these contemporary sources is already existent in the country in the form of real estate investment trusts (REITs). REITs, along with their attributes of vitalizing real estate investment financing is a crucial resource for alleviating the over 17 million housing deficit in Nigeria. To actualize this, REITs normally follow a number of ways to attract capital for real estate investment. These are:

- i) Use of shareholder equity alone
- ii) Use of debt
- iii) Combination of equity and debt.

These financing means provide a number of questions to ponder, amongst which is the determination of when to use equity alone, debt or both. Such consideration is very necessary because REIT-financing of real estate investment is atypical to the direct real estate investment market. This is as a result of REITs being a capital market investment vehicle with all the attributes of capital market instrumentation. In this regard, it is therefore exposed to macroeconomic influences and systematic risk that play out in the economy. When the Nigerian economy is brought up in this respect, the imperfect nature of the market makes it difficult for fund managers to access adequate and correct information for decision-making purposes.

This opacity further heightens the discussion on what financing model REITs in Nigeria (NREITs) should employ in reducing the housing deficit in the country. Certain models offer perspectives for investment managers in Nigeria and these range from the Pecking-order model, market timing model and the tradeoff model. Interestingly, there appears a consensual foundation in empirical literature which infers that investors analyze the model employed by REITs in investment financing prior to taking decisions to support the REIT or not. On the other hand, there also appears inadequate empirical evidence of the model preferred and most applicable to NREITs. This is in addition to the paucity of empirical evidence on the validation of pecking-order, tradeoff and market-timing models for N-REITs.

In response, the study examines pertinent research on these models with a view to presenting a research agenda as they concern REITs in Nigeria. This informs the aim of the study. For emphasis, REITs in Nigeria are as follows:

- a. Sky Shelter Fund (SFS)
- b. Union Homes REIT (UH REIT)
- c. UPDC REIT

THEORETICAL FRAMEWORK

The pecking order, market timing and tradeoff financing models follow the capital structure theories developed by Modigliani & Miller (1958). Interestingly, they hypothesize that in a perfect market, returns are not affected by the financing model employed in investment capitalization. However, the Nigerian real estate market is not a perfect one (Onyema & Oji, 2018; Orji et al., 2021; Sadiq et al., 2019; Yahaya & Andow, 2019; Yinusa et al., 2017) and this calls into question the position of their postulation. To establish the framework for a validation of the theories, we further review the arguments and contentions of the theories.

Capital Structure Theory

The Modigliani and Miller (1958) stance gave rise to the M-M Theory, which is known in the literature. The theory makes the supposition that capital structure has no bearing on business value. We widen its presumptions as follows in order to better understand the meaning of this theory:

- i. The value of the company is constant throughout all capital structure levels, regardless of whether they are fueled by equity, debt, or a combination of the two.
- ii. The weighted mean cost of capital is unaltered at all capital structure levels.

Instead, returns and/or idiosyncratic and systematic risks determine business value.

Under these assumptions, earnings are independent of the company's funding model. Nonetheless, funding models or capital structures remain a key issue in empirical economics, a finding of several studies that soften the theory's position with conflicting results (Lucas et al., 2021; Mbonu et al., 2021; Mota et al., 2017; Onuorah et al., 2016; Trinh et al., 2017; Vo, 2017; Yinusa et al., 2017). Among other explanations, the main reason existing research relaxes this theory is that no market is perfect. Indeed, some markets in developed countries are characterized by the availability, relevance and accessibility of information, but it is very difficult to find a market free of taxation, transaction costs, bankruptcy costs, etc. This attempt to relax this arguably unrealistic assumption has led to the development of capital structure theories such as trade-offs, market timing, and pecking order theory.

Trade-off Theory

Meyer et al. (1984) proposed a trade-off theory as a form of Modigliani et al.'s (1958) capital structure theory. This theory has assumptions that suggest companies leverage their investments in an optimal capital structure. An optimal capital structure represents a balanced mix of equity and debt funding to generate returns. In this sense, the theory postulates that companies will generate positive returns if their capital structure is balanced. It also recommends low debt consolidation for companies with high growth opportunities and more intangible assets, and high debt consolidation for companies with high amounts of tangible assets due to collateral value.

However, there are also criticisms of this theory. Such critiques say that a theory that emphasizes a balanced capital structure cannot explain what constitutes a balanced capital structure. The question arises as to what ratio of equity to debt-to-equity is needed to achieve a balanced capital structure. Still, where one assumes that it did provide evidence of what balanced capital structure signifies, it would also be criticized on the notion that there is no uniform capital structure for all firms.

This argument finds credence in studies presenting determinants of capital structure as any compendium or variation of firm size, growth opportunities, macroeconomic influences, profitability, asset structure, investment liquidity, tax regimes, financial flexibility, industry classification and characteristics, firm idiosyncrasy, managerial competence, share price performance, collateral value of assets, non-debt tax shields, age of the firm, equity volume, financial institution efficiency (Ahmed, 2016; Bala & Abatcha, 2020; Güner, 2016; Ibrahim, 2022; Khémiri & Noubbigh, 2018; Onuorah et al., 2016; Orlova et al., 2020; Owolabi & Inyang, 2012; Pratheepan & Yatiwella, 2016; Vo, 2017; Yinusa et al., 2017).

Studies have also shown evidence of improved returns arising from equity alone and equity-debt mix financing models (Achieng et al., 2018; Akingunola et al., 2018; Orji et al., 2021; Risfandy, 2018; Salamat et al., 2016), as well as negative or unaffected returns arising from adoptions of the tradeoff hypothesis (Jarallah et al., 2019; Rehman, 2016). Such evidence disputes the theory's perception that balanced capital structure guarantees improved returns and increases firm value. Still, the jury is out with respect to the veracity of this theory in Nigerian real estate investment trusts, and the study proposes an examination of the theory.

Pecking-Order Theory

The basis of this theory is consistent with his second criticism of the trade-off theory presented by this study. This study challenges the assertion that returns and shareholder value always depend on a balanced combination of debt and equity, and seeks to find industries and

companies with the peculiarity of being able to achieve financial performance solely through equity financing. Remember that you denied Interestingly, a hierarchy theory hypothesis consistent with this argument was also developed by Myers & Majluf (1984). They refute the compromise-driven view of the optimal capital structure, arguing that "the optimal capital structure is not predefined because companies have different preferences when it comes to using equity and debt."

When it comes to choosing a capital structure, it is implicitly left in the hands of the manager, or left to the idiosyncrasies of the company and industry. This paves the way for an equity-first or equity-only approach. To further grasp the theoretical assumptions, this study examined the validity of the empirical findings (Huang & Ritter, 2005; Saad, 2010). These findings suggest that:

- i. Companies follow an equity-first approach and only use debt capital when deemed so insufficient. However, before making such a decision about an inadequate capital base, they usually use any means available to increase their capital base. This includes selling shares to investors to raise more equity, rather than borrowing, when the company is determined to be of high value and attractive. This approach can be problematic if company valuations are low and investor pessimism persists.
- ii. If the manager is competent, a positive conclusion may arise from the quote analysis. Such positive conclusions may arise from forecasts or prospects of stock price appreciation or from investors' optimistic indications of the company. The future return potential of the investment may thus lead to the choice of equity financing over the debt equity category.
- iii. Opportunities to increase capital through external funding typically arise internally. This assumption leads to conflicting interpretations. First, if this is the case, it shows signs of financial mismanagement on the part of management, or if there are signs of poor management on the part of management, or if financial difficulties threaten bankruptcy. If so, the company may find it difficult to actually incur debt. On the other hand, if the acquisition is successful, debt-financed where necessary, management will likely take the utmost seriousness and dedication to keep the company from defaulting. This motivation to use leverage to improve solvency at the firm level, along with the prospect of returns on investment risk, can attract investors to firms.

Therefore, the equity-oriented view of this theory suggests that we should exhaust all equity options first before considering leverage. The argument is to minimize cost of capital and maximize return on equity. With this in mind, this study explores the applicability of this theory in real estate investment trusts in Nigeria. Agyei et al. (2020) justify the analysis of this theory by

acknowledging that the pecking order theory is based on the theory of information asymmetry. This theory is based on the assumption that corporate agents, such as managers, possess market information that shareholders and investors may lack. In short, this theory assumes that managers know something about the market that investors don't, such as risks, processes, limits, and leverage effects.

This view includes information asymmetries in the Nigerian property market (Agboola & Scofield, 2018; Akinbogun *et al.*, 2020; Olapade & Olaleye, 2018; Omokehinde *et al.*, 2017; Udoka, 2017). However, this information asymmetry underlying pecking order theory has been criticized on the grounds that it can limit the attractiveness of companies to investors. It is based on the logic that investors with less information than investors and managers are likely to be discouraged from investing (García-Sánchez & Noguera-Gámez, 2017; Yildiz, 2021). This can negatively affect the company's value and attractiveness to investors.

This discrepancy between knowledgeable information managers and the lack of information of investors, and the accompanying investor pessimism, led to the equity-first approach of pecking order theory (Myers *et al.*, 1984). Therefore, the pecking order theory suggests that if this equity-based approach is not sufficient to effectively fund investments, investor pessimism caused by information asymmetry will cause managers to increase the capitalization of their investments. Efficient use of debt financing is expected to start increasing corporate value in the eyes of investors. To what extent does this apply to real estate funds in Nigeria?

Market Timing Theory

A survey of investment CFO behavior trends by Graham & Harvey (2001) found that more than two-thirds of managers believe that interest rates are high or equities are overvalued. Accordingly, shareholders and investors resort to debt when interest rates are low and financing is less tight. This empirical evidence effectively captures the philosophy of market timing, which is based on the assumption that a firm's capital structure is a function of management's ability to read, understand and interpret the market. Financial liabilities are therefore determined by market information.

Baker & Wurgler (2002), in developing the latest of the influential financial gearing theories, assume that financial gearing depends on market conditions. This position refutes the optimal leverage ratio hypothesis of trade-off theory. This is because we assume that returns depend on market information rather than on a given attitude towards the stock-liability combination. To better understand the assumptions of market timing theory, this study examined empirical evidence supporting the pecking order hypothesis (Baker *et al.*, 2002;

Huang & Ritter, 2005; Saad, 2010). These results also validate the market timing approach in some areas and show that:

i) Companies sell stock when their value is high and investor optimism outweighs pessimism.

While this seems like a confirmation of the pecking order theory, it should be noted that such decisions are made based on analysis of market conditions. It is the information and knowledge available from the market that convinces corporate managers of the attractiveness of their investments to outside investors.

ii) Previous Discussions in Hierarchy Theory of Prospect Estimation Analysis.

Earnings, stock prices, and upward trends in stock prices are also relevant to the market timing discussion. This view is based on the logic that the results of such probabilistic analysis are derived from market research regarding past, current and future market conditions relevant to the company. Therefore, when the outlook is bright, the attractiveness of corporate values may favor the stock. Conversely, negative results and prospects may lead to leverage being used on the basis of evidence of low company valuations and investor pessimism.

iii) As stated in the Addendum to the Pecking Order Theory Assumptions.

"Market" sentiment already belies the relevance of the discussion to the market-timing hypothesis, even with the inclusion of the market as a predecessor to the term "sentiment." This is because market sentiment resulting from changes in market conditions and government policies was only available to the company executives who analyzed the market in the first place. Therefore, it makes sense to bet on stocks when the sentiment is favorable. Leverage can be relied upon when market conditions indicate unfavorable sentiment. Positive sentiment arising from market conditions can also lead to leverage, as it can be assumed that such sentiment will make the company attractive to lenders.

Despite the assumptions, the theory also has considerable scope limitations. The claim of financial liability due to market conditions has been recognized by several scholars (Asif et al., 2018; Ater, 2017; Cerpentier et al., 2021; Chen et al., 2019; Choi, 2022; Muhammad et al., 2020; Zavertiaeva & Nechaeva, 2017). Still, the authors' positions are still open to criticism. This study argues that assuming that capital structure is determined by market conditions erroneously assumes that managers are competent enough to read the market. It does not take into account the possibility of poor manager competence or errors that may arise from market analysis. This could result in financial liabilities with fundamentally flawed financial liabilities. Another problem with this theory's position is that emerging property markets, such as Nigeria's, are characterized by market imperfections (Adesiyani et al., 2018; Oyedeji, 2020; Sadiq et al., 2021; Sadiq et al., 2020; Sadiq et al., 2019; Sadiq et al., 2016; Taiwo, 2016). This relative lack

of transparency therefore makes managers more likely to rely on experience rather than market conditions.

RESEARCH AGENDA

The review examined theories on capital structure with emphasis on pecking-order theory, tradeoff theory and market-timing theory. These theories have been argued as derivatives of Modigliani Miller's theory of capital structure. Modigliani Miller's capital structure theory argues that earnings are independent of the mix of capital used to finance an investment. This theory position has been subjected to some analysis, research and implications, but what emerged was minimal evidence of its effectiveness in the Nigerian Real Estate Investment Trust market.

Interestingly, several of the studies on the discourse were not based on real estate investment trusts, and where they were, there appears minimal representation of NREITs. Due to this paucity of significant quantum of research available to an investor keen on the Nigerian REIT market. This gap in extant research is a concern given the country's ever-widening housing deficit amid financial challenges that have weighed on direct real estate investors in Nigeria.

It is not encouraging that the Nigerian REIT market has been overtaken by the later-launched South African REIT market in terms of market capitalization, equity size, global exposure and number of companies. The study proposes the need for further research into ascertaining the aggregate and most applicable financial model for capitalizing real estate investments in Nigeria.

REFERENCES

- Achieng, B. O., Muturi, W., & Wanjare, J. (2018). Effect of equity financing options on financial performance of non-financial firms listed at the Nairobi Securities Exchange, Kenya. *Applied Economics and Finance*, 5(4), 160-173.
- Adesiyani, O. F., Adesiyani, A. T., Bamire, A. S., Coulibaly, O., & Asiedu, R. (2018). Competitiveness of the food crop production system in Nigeria: A policy analysis matrix approach. *Journal of Competitiveness Studies*, 26(3/4), 162-182.
- Agboola, A. O., & Scofield, D. (2018). Time to completion in the Lagos commercial real estate market: an examination of institutional effects. *Journal of Property Research*, 35(2), 164-184.
- Agyei, J., Sun, S., & Abrokwah, E. (2020). Trade-off theory versus pecking order theory: Ghanaian evidence. *SAGE Open*, 10(3), 2158244020940987.
- Ahmed, A. B. (2016). Empirical evidence on capital structure determinants in Nigeria. *Journal of Economics and International Finance*, 8(6), 79-84.
- Akinbogun, S. P., Aigbavboa, C., Gumbo, T., & Thwala, W. (2020). The Nigerian Property Market Situation. In *Modelling the Socio-Economic Implications of Sustainability Issues in the Housing Market* (pp. 23-46). Springer, Cham.
- Akingunola, R. O., Olawale, L. S., & Olaniyan, J. D. (2018). Capital structure decision and firm performance: Evidence from non-financial firms in Nigeria. *Acta Universitatis Danubius. Œconomica*, 13(6).

- Asif, J., Abbas, S. K., & Hassan, H. A. (2018). Valuation based test of market timing theory. *International Journal of Academic Multidisciplinary Research*, 2(4), 28-30.
- Ater, D. K. (2017). Market timing and capital structure: A critical literature review. *Research Journal of Finance and Accounting*, 8(6), 81-94.
- Baker, M. and Wurgler, J. (2002). Market timing and capital structure. *The Journal of Finance*, 57, 1-32. <https://doi.org/10.1111/1540-6261.00414>
- Bala, S. A., & Abatcha, B. M. (2020). Determinants of Capital Structure in Listed Insurance Companies in Nigeria. *International Business and Accounting Research Journal*, 4(1), 1-10.
- Cerpentier, M., Vanacker, T., Paeleman, I., & Bringmann, K. (2021). Equity crowdfunding, market timing, and firm capital structure. *The Journal of Technology Transfer*, 1-28.
- Chen, Y. W., Chou, R. K., & Lin, C. B. (2019). Investor sentiment, SEO market timing, and stock price performance. *Journal of Empirical Finance*, 51, 28-43.
- Choi, W. D. (2022). Do the Firms Utilize Market Timing? Capital Structure of Restaurant Firms by Pecking Order and Market Timing Theories. *Journal of Quality Assurance in Hospitality & Tourism*, 1-20.
- García-Sánchez, I. M., & Noguera-Gámez, L. (2017). Integrated reporting and stakeholder engagement: The effect on information asymmetry. *Corporate Social Responsibility and Environmental Management*, 24(5), 395-413.
- Graham, J. R. and Harvey C. R., (2001), The Theory and Practice of Corporate Finance: Evidence from the Field, *Journal of Financial Economics*, 60, 187-243
- Güner, A. (2016). The determinants of capital structure decisions: New evidence from Turkish companies. *Procedia Economics and Finance*, 38, 84-89.
- Huang, R. and Ritter J.R. (2005). *Testing the Market Timing of Capital Structure*. Working Paper from University of Florida, 1-44.
- Ibrahim, H. R. (2022). Strengthening Indonesia's diplomacy in economic recovery and mitigating budget management in developing countries through the G20 dialogue forum. *Journal of Social Political Sciences*, 3(2), 210-222.
- Jarallah, S., Saleh, A. S., & Salim, R. (2019). Examining pecking order versus trade-off theories of capital structure: New evidence from Japanese firms. *International Journal of Finance & Economics*, 24(1), 204-211.
- Khémiri, W., & Noubbigh, H. (2018). Determinants of capital structure: Evidence from sub-Saharan African firms. *The Quarterly Review of Economics and Finance*, 70, 150-159.
- Lucas, C. A. F., Noriller, R. M., Hall, R. J., de Souza Nogueira, M. A. F., & Botelho, D. R. (2021). Macroeconomic variables and capital structure: Public finance and insurance in Latin America and Asia. *Revista Evidenciação Contábil & Finanças*, 9(2), 133-142.
- Mbonu, C. M., & Amahalu, N. N. (2021). Effect of firm characteristics on capital structure of insurance companies listed on Nigeria stock exchange. *International Journal of Management Studies and Social Science Research*, 3(5), 217-228.
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American economic review*, 48(3), 261-297.
- Mota, J. H., & Moreira, A. C. (2017). Determinants of the capital structure of Portuguese firms with investments in Angola. *South African Journal of Economic and Management Sciences*, 20(1), 1-11.
- Muhammad, M., Yet, C. E., Tahir, M., & Nasir, A. M. (2020). Capital structure of family firms: the effect of debt and equity market timing. *Journal of Family Business Management*, 11(1), 1-18.
- Olapade, D. T., & Olaleye, A. (2018). Factors affecting accessibility to property data in an opaque market. *Property Management*.
- Omokehinde, J. O., Abata, M. A., Russell, O., Migiro, S. O., & Somoye, C. (2017). Asymmetric information and volatility of stock returns in Nigeria. *Journal of Economics and Behavioral Studies*, 9(3 (J)), 220-231.
- Onuorah, A. C. C., & Nkwazema, O. G. (2016). Capital Structure Performance and the Determinant Factors in Nigeria 1985-2015. *International Journal of Empirical Finance*, 5(2), 69-77.
- Onyema, J. I., & Oji, J. U. (2018). Financial leverage and profitability of quoted food and beverage companies in Nigeria. *International journal of research in economics and social sciences (IJRESS)*, 8(9), 46-60.
- Orji, A., Nwadior, E. O., & Agubata, N. (2021). Effect of debt-equity financing on firms performance in Nigeria. *J Account Financ Manag*, 73.

- Orlova, S., Harper, J. T., & Sun, L. (2020). Determinants of capital structure complexity. *Journal of Economics and Business*, 110, 105905.
- Owolabi, S. & Inyang, U. (2012). Determinants of capital structure in Nigerian firms: A theoretical review. *eCanadian Journal of Accounting and Finance*, 1(1), Pp.7-15.
- Oyediji, 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.
- Pratheepan, T., & Yatiwella, W. B. (2016). The determinants of capital structure: Evidence from selected listed companies in Sri Lanka. *International Journal of Economics and Finance*, 8(2).
- Rehman, O. U. (2016). Impact of capital structure and dividend policy on firm value. *Journal of Poverty, Investment and Development*, 21(1), 40-57.
- Risfandy, T. (2018). Equity financing and Islamic banks' profitability: Evidence from the biggest muslim country. *Jurnal Keuangan dan Perbankan*, 22(3), 496-505.
- Saad, M.D.P. (2010). *Pengaruh Sentimen Investor dan Kendala Keuangan Terhadap Equity Market Timing*, (Unpublished Dissertation) Jakarta: PSIM University of Indonesia.
- Sadiq, M. S., Singh, I. P., & Ahmad, M. M. (2020). Sesame as a potential cash crop: an alternative source of foreign exchange earnings for Nigeria. *Sri Lanka Journal of Food and Agriculture*, 6(1).
- Sadiq, M. S., Singh, I. P., Ahmad, M. M., Usman, B. I., & Yunusa, J. B. (2019). Risk attitudes of rice farmers participating in ifad-vcd programme in Niger State of Nigeria. *Journal of Agricultural Extension Management*.
- Sadiq, M. S., Singh, I. P., Suleiman, A., Umar, S. M., Grema, I. J., Usman, B. I., ... & Lawal, A. T. (2016). Extent, pattern and degree of integration among some selected cocoa markets in West Africa: An innovative information delivery system. *Journal of Progressive Agriculture*, 7(2), 22-39.
- Sadiq, S. M., Singh, I. P., & Ahmad, M. M. (2021). Navigating Fish Food Insecurity by Simultaneous Household and Marketed Surplus-Led Productions in Kogi State of Nigeria. *Acta Aquatica: Aquatic Sciences Journal*, 8(2), 91-97.
- Said, H. (2013). Impact of ownership structure on debt equity ratio: A static and a dynamic analytical framework. *International Business Research*, 6(6).
- Taiwo, J. N. (2016). Problems and prospects of poverty alleviation programmes in Nigeria. *International Journal of Business and Management Review*, 4(6), 18-30.
- Taiwo, M. A. (2021). *Assessment of residential property market efficiency in Akure, Nigeria* (Doctoral dissertation, Federal University of Technology, Akure).
- Trinh, H. T., Kakinaka, M., Kim, D., & Jung, T. Y. (2017). Capital structure and investment financing of small and medium-sized enterprises in Vietnam. *Global Economic Review*, 46(3), 325-349.
- Udoka, I. S. (2017). Effect of land titles registration on property investment in Nigeria. *International Journal of Advanced Studies in Economics and Public Sector Management Hard*, 5(2), 2354-4228.
- Vo, M. T. (2021). Capital structure and cost of capital when prices affect real investments. *Journal of Economics and Business*, 113, 105944.
- Vo, X. V. (2017). Determinants of capital structure in emerging markets: Evidence from Vietnam. *Research in International Business and Finance*, 40, 105-113.
- Yahaya, O. & Andow, A. (2019). Capital structure and firm's financial performance: Panel evidence of listed conglomerate firms in Nigeria. *Kaduna Business Management Review*, 2(1), 1-25.
- Yildiz, Y. (2021). Foreign institutional investors, information asymmetries, and asset valuation in emerging markets. *Research in International Business and Finance*, 56, 101381.
- Yinusa, O. G., Alimi, O. Y., & Ilo, B. M. (2017). Macroeconomic determinants of capital structure of firms: Evidence from Nigeria. *Journal of Knowledge Globalization*, 9(2), 1-21.
- Zavertiaeva, M., & Nechaeva, I. (2017). Impact of market timing on the capital structure of Russian companies. *Journal of Economics and Business*, 92, 10-28.