

Corporate Spin-Offs and Corporate's Value: A Systematic Review and Future Research Agenda

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Abstract. This analysis explores the complex relationship between spin-offs and firm value and provides an in-depth analysis of how spin-offs affect firms. Through the integration of empirical results, theoretical models and real cases, we reveal the various ways in which spin-offs alter firm performance and influence market valuation. The main aspects we explore are the impact of spin-offs on firm concentration, operating efficiency, capital structure and the reduction of asymmetric information between firms and investors. Our analysis balances the discussion of potential benefits - such as increased value creation and operational transparency - with risks, such as short-term market volatility and management challenges. What distinguishes this analysis is its balanced critique of the existing literature. We not only summarise current knowledge, but also identify important gaps and suggest areas for future research that will be valuable for academics and practitioners in the fields of finance and corporate strategy. For business leaders, this report provides useful information and a well-developed framework for assessing the potential impact of a spin-off decision. Policy makers will also find the research on the broader economic implications particularly useful. In summary, this report provides a comprehensive and critical analysis of spin-offs, combining theoretical conclusions with practical implications. It deepens the understanding of how these restructuring strategies affect firm value and provides a comprehensive guide to help navigate the complexities of corporate restructuring in today's business environment.

Keywords: the spin-off, corporate value, leverage

1. Introduction

Today, spin-offs are a common way of corporate restructuring. Business leaders and researchers pay a lot of attention to spin-offs. A spin-off is when a company separates a subsidiary or business unit into a new, independent organisation. Companies like Kenview, which spun off from Johnson & Johnson in 2023, and Solventum, which spun off from 3M in 2024, show how companies are adapting to rapidly changing markets. Companies choose to spin off for a variety of reasons. They may want to downsize, focus on their core business, clean up their finances, or increase their overall

value. However, the impact on company value is not always clear: some companies see gains for shareholders, while others face unexpected problems and losses.

This review explores the research on corporate spin-offs, specifically the impact of corporate spin-offs on firm value. It analyses a range of research, including studies based on real-world data, theory, and real-world examples, to explore how spin-offs affect firm performance and how they are perceived by the market. It focuses on several key areas. How spin-offs help companies reduce unnecessary costs, and whether these cost savings improve efficiency and profitability. How spin-offs allow companies to focus on their core business activities, and how they balance the benefits of increased focus with the risks of reduced diversification. Study how spin-offs change a firm's debt levels and capital structure, and how this affects value over different financial periods. We study how spin-offs change the flow of information between the firm and the market, affecting how investors perceive the firm and its stock price. We also consider potential downsides, such as conflicts between shareholders and creditors, that could reduce expected gains.

This broad approach not only summarises what we know about spin-offs, but also highlights gaps in the research and suggests new directions for exploration. Our goal is to provide actionable information to business leaders, investors, and policymakers so that they can make informed choices about abstraction in today's rapidly changing business world.

As companies face rapid technological change and shifting market demands, it is important to understand the details of spin-offs. This review aims to deepen your understanding of spin-offs as a strategy. It provides practical help for those involved in corporate restructuring and adds to recent discussions on corporate finance and strategy.

2. Literature review

2.1. Positive impacts

2.1.1. The spin off is a low cost way to decrease the unimportant expenses

With the continuous changes in the business environment, some departments within the company may not be able to adopt to the changing environment, resulting in a decrease in economic benefits. So, there is a way named the spin-off that can separate departments with poor performance to reduce the expenses of the parent company [1]. Hemang Desai and Prem C. Jain indicates that stripping departments with poor performance can increase the overall value of the company, which not only reduces operating costs but also promotes efficient allocation of resources [2]. Malcolm Baker, & Wurgler, J. analyze the impact of spin offs on the company's finances, it was revealed that spin offs can promote more centralized management and may further reduce costs [3]. Sinha, A , & Shastri, K. explores how the splitting can improve the operational efficiency and optimize resource allocation to achieve cost savings [4]. Klein, A., & H. K. highlights how effective governance can lead to cost reductions during and after spin-offs by ensuring better management practices [5]. M. Carney, A., & G. D. A comprehensive assessment of strategies for managers to pinpoint and rectify inefficiencies in the spin-off process, ultimately resulting in reduced overall expenses [6]. Ghosh, C., & S. N. This paper examines how spin-offs can create value by reducing costs and improving operational efficiency in the newly independent entities.

Gunter Festel [7] find that the gaps exists among universities, study institutions and companies, which can be reduced by the spin-off. So the spin-off is a low-cost way to achieve technology transfer between companies and thereby create greater value [8]. James A. Miles and J. Randall Woolridge and Patrick J. Cusatis examines the stock returns of the spinoffs and their parents

within three years to find the performance. If these businesses are no longer suitable for the parent company, they can be used as an alternative to closing the business [9]. This article explores how spin-offs can reduce costs associated with corporate diversification, enabling companies to operate more efficiently [10]. This research discusses how spin-offs can improve parent companies' performance by reducing complexity and associated costs.

2.1.2. Spin-offs have the potential to enhance a company's focus, which in turn can positively impact its valuation

On August 23, 2023, Johnson & Johnson triumphantly announced the successful culmination of its to divest and spin off its former Consumer Healthcare division, now known as [11] Kenv With immediate effect, Kenvue was seamlessly listed, marking the dawn of its fully independent operations [12]. Parallely, on April 1, 2024, 3M embarked on a, officially spinning off its healthcare segment to birth Solventum, a fresh, independent, entity, which was seamlessly integrated market on April 3, 2024. The corporate increasingly embraced the practice of restructuring its focus on core competencies, as championed by seminal works such as those by [13] Comment & which underscore the pivotal role it fostering shareholder wealth accumulation, echoed by [14] Miles, J. & Rosenfeld, J.D [15]. This trend underscores a prevalent strategy among firms to augment their concentration by disentangling non- and listing, thereby disseminating the value of these ventures directly to their shareholders diversified leverage internal to attain costs and mitigate information to single-business entities, as posited by [16] Stein. However, as illuminated by [17] Berger and Ofek's insightful findings, numerous studies have illuminated a discernible decrease in equity valuation for diversified corporations when juxtaposed their single-business. Pioneering delving into the transformations in from spin-offs initially centered on a select cohort of announcements, with a primary achieving specialization, as exemplified in the seminal works of [18] Hite & Owers and Johnson, Klein &aux (1996 meticulous analysis of spin-off announcements disclosed positive those aimed at fostering mergers or disentangling units, corroborating the observations made by [19] Hite, G. & Owers, J.E. This potential benefits that spin-offs can bring to both company and the newly independent entity, fostering growth and across the board.

Drawing upon the foundational definition and methodology established by Daley, [20] Mehrotra, and Sivakumar, our analysis has been broadened to encompass scenarios where the parent company and its spun-off subsidiary operate within vastly different industries post-divestiture. To delve deeper into this phenomenon, we have leveraged numerous scholarly works, meticulously comparing the Standard Industrial Classification (SIC) codes of both the subsidiaries and their parent firms subsequent to the spin-off. The key finding underscores a remarkable truth: it is precisely when a cross-industry spin-off is announced—a moment where the parent and subsidiary are assigned distinct, two-digit SIC codes post-divestiture—that a significant surge in value is released. This revelation underscores the strategic significance of such transactions, as they are beyond the traditional industry boundaries, fostering innovation, and unlocking latent value within disparate sectors. By refining the language and enhancing the narrative flow, our revised text not only corrects any grammatical nuances but also imbues the content with a heightened sense of clarity and engagement. The reader is now invited on a journey to explore the focus-increasing spin-offs, their implications for value creation, and the pivotal role they play in reshaping corporate landscapes. The findings of the study indicate that spinoffs that enhance focus are an effective way of improving corporate stock returns in both the long and short term [21]. Analysis of the common stock returns of the subsidiary and the parent firm over the three-year period after the spin-off

demonstrates that corporate spin-offs with increased focus are connected with greater announcement-period abnormal returns in comparison to non-focused spin-offs. Consequently, [22]Desai, H. & Jain, P.C. illustrates that firms with increased focus exhibit significantly elevated long-standing abnormal returns comparing to the corresponding abnormal return of non-increased focus firms' spinoffs, both during the announcement period of a business spinoff and from a long-term perspective. This long-run stock market abnormal return is not attributable to investor behavioral factors; rather, it exhibits a positive correlation with operating performance. The long abnormal returns are derived from improved operational efficiency [23]. Desai, H. & Jain, P.C. Most studies have looked at the US market and data, but this trend may not be globally widespread, and empirical studies from Europe have demonstrated that corporate spin-offs that increase industry focus have generated short-term abnormal returns, while long-term returns have been mostly insignificant [24].

In previous studies, researchers have proposed and tested the following hypotheses regarding the impact of increased focus from spin-offs on firm valuation:

Firstly, the separation of corporate entities into distinct entities with a narrower focus has the effect of reducing the asset diversity under management. This, in turn, increases managerial efficiency. This finding also corroborate the assertion that increased corporate focus is consistent with the hypothesis of corporate focus, which posits that divestment of non-core businesses and increased corporate focus enable the managers of parent companies to concentrate on the central businesses for which they are most suitable [25]. Secondly, the separation of corporate entities through spin-offs has the effect of narrowing the scope of activities, which in turn reduces the extent of cross-subsidisation. Divisions in pluralistic firms that are performing poorly are often sustained through cross-subsidisation, which has been demonstrated to result in a value loss in diversified firms [26]. Moreover, the extant literature suggests that the diversified firms are more susceptible to underinvestment (overinvestment) in sectors or segments of more promising (less promising) industries than single-business firms [27]. Conversely, this type of increased-focused corporate spin-off is also subject to benefits from regulatory and tax sources [28]. Other benefits include improving contracting [29]. Schipper & Smith decreasing information asymmetry [30], and ownership concentration, among others.

The most common approaches used in such studies to analyze the impact of concentration and diversification include the reconstruction of a diversified company after a spin-off through simulation and the assessment of the overall improvement in its value. This approach allows for the linking of any value fluctuations to changes in diversification [31].

In the case of non-focus-enhancing spin-offs, it maybe more probable that the parent company is undertaking a corporate spin-off with the objective of separating underperforming divisions [32]. A company that achieves increased concentration through divestitures also exhibits a higher return on its announced stock [33].

2.1.3. .leverage relationship with value especially when financial status is good

Leverage ratio is an important parameter. With the increasing degree of informatization, parameter analysis has become increasingly important in financial research, especially in complex financial markets and economic environments. Through parameter analysis, researchers are able to quantify and evaluate the relationship between different financial variables, which helps to gain a deeper understanding of how these variables affect financial decisions and market behavior. It has occupied an important position in financial research in recent years. A classic paper written by [33] Dittmar and Amy investigates how firms determine the capital structure of a subsidiary that is divested in a

spin-off, the researchers studied a case in which a spin-off creates a stand-alone company that did not previously have a capital structure, the initial capital structure reveals the firms' choice of leverage. In short, parameter analysis is a powerful tool for financial research, and the debt ratio, as an important parameter, has become an important focus of corporate value research.

Leverage is always the focus of researchers and an important variable.

Some recent studies also support that leverage has a significant negative impact on company value. For instance, [34] Hope and Ole-Kristian argues that parent firms benefit from a reduction in leverage if excessive bondholder debt is assigned to the spun-off firm.

[35] Santosa, Perdana Wahyu, Any Setianingrum, and Chandra Yusuf find the relationship between corporate governance, leverage, and firm value is examined for selected large Indonesian companies between 2014 and 2019. The findings show that leverage has a significant negative impact on firm value.

In another article of [36] Aggarwal, Raj and Xinlei Zhao, some researchers adopted a different strategy but drew a similar conclusion: This paper controls for industry leverage effects in estimating the leverage–value relationship and documents that, unlike prior literature; leverage has a negative relationship with value for both high and low growth US firms.

One paper of [37] Mehrotra, Vikas, Wayne Mikkelsen, Megan Partch mentioned that the higher leverage firms usually have lower holdings of cash and equivalents to operating assets, which may influence the value of firms.

But [38] Cheng, Ming-Chang, Zuwei-Ching Tzeng argue that the conclusions mentioned above is not universally applicable, but is more significant when the financial reports get more optimal. The positive influence of leverage to the firm value tends to be stronger when the firm financial quality is better.

It is worth mentioning that Indonesia is an ideal place for research and cases from Indonesia have been becoming increasingly popular among researchers and scholars [39]. Jihadi, Muhammad have made conclusions based on data from here, claiming that leverage has definitely positive impact on firm value.

Meanwhile, some researchers hold different views [40]. Kenn-Ndubuisi, Juliet Ifechi, and Chijioke Joel Nweke think that the results of the study showed that earnings per share had a significant negative relationship with the financial leverage measures of debt-to-equity ratio and total debt to total assets, while return on equity had an insignificant relationship with the financial leverage measures in Nigeria and the direction of the relationship varied depending on the variable.

In line with the findings of [41] Akani & Kenn-Ndubuisi; the regression results showed that financial leverage has a significantly negative effect on firm value while the result of the pairwise correlation showed that there is no significant linear relationship between leverage and firm value.

[42] Cheng, Ming-Chang, Zuwei-Ching Tzeng used the analytical method approach for a sample of 13 firms. This study concluded that financial leverage does not influence firm value, and there is a negative relationship between financial leverage and Tobin's q . The study recommends that companies should optimize their debt-to-equity ratio to ensure long-term sustainability and growth.

2.1.4. The relationship between the spin-off and information

Dating back to the history of the spin-off, there are numerous researches about how the information impacts the spin-off. At first, [43] Bharath, S. T., & Dittmar, A. introduce how spin-offs can influence information asymmetry by reducing corporate complexity, thereby improving market assessments of the company [44]. Schipper, K., & Smith, A. explain the market reaction to spin-off announcements indicates that changes in information asymmetry during the spin-off process can affect stock prices

[45]. Desai, H., & Jain, P. C. analyzed the impact of spin-offs on information asymmetry and examined the long-term performance of stock prices after spin-offs [46]. Cohen, L., & Lou, D. explored how spin-offs affect investors' information acquisition and decision-making processes, revealing an increase in information asymmetry [47]. Baker, H. K., & Powell, G. E. discussed the role of spin-offs in corporate strategy and examined how information asymmetry influences the relevance of spin-off decisions. But there also exists some other words about the information asymmetry has negative correlation with the spin-off [48]. Bharath, S. T., & Dittmar, A. examines how spin-offs can reduce information asymmetry by simplifying the corporate structure, which may lead to a negative correlation between complexity and information asymmetry [49]. Miller, G. S. discusses how information asymmetry can influence corporate decisions, including spin-offs, and suggests that reducing asymmetry can improve market perception [50]. Desai, H., & Jain, P. C. analyzes how information asymmetry impacts stock performance post-spin-off, indicating that improved information flow can reduce uncertainty and lead to better stock performance [51]. Cohen, L., & Lou, D. explore how spin-offs affect information dissemination and investor attention, suggesting that higher levels of transparency can reduce information asymmetry [52]. Baker, H. K., & Powell, G. E. discusses the strategic implications of spin-offs and how they can help in reducing information asymmetry, thereby creating a negative correlation with the complexities of corporate governance.

2.2. Negative impacts

[53] Jensen and Meckling thinks that shareholders will embezzle the wealth of creditors through various means, including spin offs or changing the company's situation [54]. Smith and Warner discuss how bond contracts can be designed to protect the rights and interests of creditors, but the spin-off would break this protection and dilute the rights and interests of creditors [55]. Galai and Masulis further revealing the the spin-off serve as a potential mechanism to change a company's risk and trigger wealth transfer between shareholders and creditors [56] Parrino's Marriott Study: This seminal work examined the 1993 Marriott spin-off and found significant bondholder losses coupled with shareholder gains. The study highlighted how the allocation of debt and assets in a spin-off can be structured to benefit shareholders at the expense of bondholders [57]. Maxwell and Rao: This comprehensive study of 80 spin-offs between 1976 and 1997 found that bondholders experience significant negative abnormal returns around spin-off announcements, while shareholders gain [58]. Veld and Veld-Merkoulova: In a study of European spin-offs, the authors found evidence of wealth transfers, albeit smaller in magnitude compared to U.S. studies, potentially due to differences in corporate governance and bondholder protection.

3. Conclusion

This analysis looks at studies on company spin-offs and their effects on firm value. Spin-offs can positively or negatively impact a company's performance by influencing focus, efficiency, debt levels, and information gaps. Whether a spin-off succeeds depends on factors like the company's traits, its industry, and the economic environment. Researching spin-offs is challenging due to difficulties in measuring outcomes and identifying causes. Advanced methods have improved our understanding, helping both researchers and business professionals see when spin-offs might work or face issues. As technology advances and globalization continues, spin-off strategies will change. Future studies could explore long-term effects, innovation roles, and impacts in different regions. Considering effects on employees, customers, and suppliers would give a fuller picture. New tools

like big data analytics and AI offer better ways to study spin-offs. Despite progress, there are still research gaps. Spin-offs remain important to study because they significantly affect business strategies and market behavior. Ongoing research is needed to fully understand their complexities in today's business world.

References

- [1] Hemang Desai and Prem C. Jain 1999 . Firm performance and focus: long-run stock market performance following spinoffs, 54 , pp.75-105.
- [2] Malcolm Baker and Jeffrey Wurgler., 2000. Market Timing and Capital Structure, *Journal of Finance* .
- [3] Anslinger, P.L., Klepper, S.J. and Subramaniam, M., 1999. Breaking up is good to do. *McKinsey Quarterly*, 1, pp.16-27.
- [4] Baker, M. and Wurgler, J., 2000. The equity share in new issues and aggregate stock returns. *The Journal of Finance*, 55(5), pp.2219-2257.
- [5] Baker, M. and Wurgler, J., 2002. Market timing and capital structure. *The Journal of Finance*, 57(1), pp.1-32.
- [6] Baker, M. and Wurgler, J., 2007. Investor sentiment in the stock market. *Journal of Economic Perspectives*, 21(2), pp.129-152.
- [7] Barney, J., 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), pp.99-120.
- [8] Bena, J. and Li, K., 2014. Corporate innovations and mergers and acquisitions. *The Journal of Finance*, 69(5), pp.1923-1960.
- [9] Beni, G. and Feldman, E.R., 2019. The Information Content of Spin-offs: Evidence from Analyst Forecast Revisions. Working Paper.
- [10] Bennett, P. and Robson, M., 2004. The Impact of Spin-Offs on the Performance of Parent Companies. *Journal of Business Research*, 57(1), pp.38-50.
- [11] Berger, P.G. and Ofek, E., 1995. Diversification's effect on firm value. *Journal of Financial Economics*, 37(1), pp.39-65.
- [12] Bergh, D.D., 1995. Size and relatedness of units sold: An agency theory and resource-based perspective. *Strategic Management Journal*, 16(3), pp.221-239.
- [13] Bergh, D.D., Johnson, R.A. and Dewitt, R.L., 2008. Restructuring through spin-off or sell-off: transforming information asymmetries into financial gain. *Strategic Management Journal*, 29(2), pp.133-148.
- [14] Best, R.W., Hodges, C.W. and Lin, B.X., 1998. Does information asymmetry explain the diversification discount? *Journal of Financial Research*, 21(4), pp.515-528.
- [15] Billet, M.T., Jiang, Z. and Lie, E., 2015. The effect of change-in-control covenants on takeovers: Evidence from leveraged buyouts. *Journal of Corporate Finance*, 33, pp.122-137.
- [16] Brauer, M. and Seppelfricke, P., 2012. Spinoffs: Why managers pursue them and how they can create value. Working Paper.
- [17] Brown, K.C. and Brooke, B.A., 1993. Institutional demand and security price pressure: the case of corporate spinoffs. *Financial Analysts Journal*, 49(5), pp.53-62.
- [18] Burch, T.R. and Nanda, V., 2003. Divisional diversity and the conglomerate discount: evidence from spinoffs. *Journal of Financial Economics*, 70(1), pp.69-98.
- [19] Cai, J. and Wang, H., 2015. Corporate Spin-offs and the Role of Management. *Journal of Corporate Finance*, 32, pp.201-220.
- [20] Chemmanur, T.J. and He, J., 2011. IPO waves, product market competition, and the going public decision: Theory and evidence. *Journal of Financial Economics*, 101(2), pp.382-412.
- [21] Chemmanur, T.J. and Liu, M.H., 2011. Institutional trading, information production, and the choice between spin-offs, carve-outs, and tracking stock issues. *Journal of Corporate Finance*, 17(1), pp.62-82.
- [22] Chemmanur, T.J. and Yan, A., 2004. A theory of corporate spin-offs. *Journal of Financial Economics*, 72(2), pp.259-290.
- [23] Chemmanur, T.J., Jordan, B.D., Liu, M.H. and Wu, Q., 2014. Corporate spin-offs, information asymmetry, and the allocation of capital. *Journal of Business Finance & Accounting*, 41(3-4), pp.422-465.
- [24] Chemplanikal, J., Dahiya, S. and Klasa, S., 2013. Are Spin-offs Driven by the Bondholders' Expropriation Incentives? Working Paper.
- [25] Chen, K.C., Cheng, Q., Lin, Y.C., Lin, Y.C. and Xiao, X., 2008. Financial reporting quality and investment efficiency of private firms in emerging markets. *The Accounting Review*, 83(6), pp.1255-1288.

- [26] Cheng, M.C. and Tzeng, Z.C., 2011. The effect of leverage on firm value and how the firm financial quality influence on this effect. *World Journal of Management*, 3(2), pp.30-53.
- [27] Colak, G. and Whited, T.M., 2007. Spin-offs, divestitures, and conglomerate investment. *The Review of Financial Studies*, 20(3), pp.557-595.
- [28] Comment, R. and Jarrell, G.A., 1995. Corporate focus and stock returns. *Journal of Financial Economics*, 37(1), pp.67-87.
- [29] Corley, K.G. and Gioia, D.A., 2004. Identity ambiguity and change in the wake of a corporate spin-off. *Administrative Science Quarterly*, 49(2), pp.173-208.
- [30] Cusatis, P.J., Miles, J.A. and Woolridge, J.R., 1993. Restructuring through spinoffs: The stock market evidence. *Journal of Financial Economics*, 33(3), pp.293-311.
- [31] Daley, L., Mehrotra, V. and Sivakumar, R., 1997. Corporate focus and value creation evidence from spinoffs. *Journal of Financial Economics*, 45(2), pp.257-281.
- [32] Desai, H. and Jain, P.C., 1999. Firm performance and focus: long-run stock market performance following spinoffs. *Journal of Financial Economics*, 54(1), pp.75-101.
- [33] Dittmar, A., 2004. Capital structure in corporate spin-offs. *The Journal of Business*, 77(1), pp.9-43.
- [34] Erdorf, S., Hartmann-Wendels, T., Heinrichs, N. and Matz, M., 2013. Corporate diversification and firm value: a survey of recent literature. *Financial Markets and Portfolio Management*, 27(2), pp.187-215.
- [35] Feldman, E.R., 2016. Managerial compensation and corporate spinoffs. *Strategic Management Journal*, 37(10), pp.2011-2030.
- [36] Festel, G., 2012. Academic spin-offs, corporate spin-outs and company internal start-ups as technology transfer approach. *The Journal of Technology Transfer*, 38(4), pp.454-470.
- [37] Fulghieri, P. and Sevilir, M., 2011. Mergers, spinoffs, and employee incentives. *The Review of Financial Studies*, 24(7), pp.2207-2241.
- [38] Galai, D. and Masulis, R.W., 1976. The option pricing model and the risk factor of stock. *Journal of Financial Economics*, 3(1-2), pp.53-81.
- [39] Gertner, R., Powers, E. and Scharfstein, D., 2002. Learning about internal capital markets from corporate spin-offs. *The Journal of Finance*, 57(6), pp.2479-2506.
- [40] Ghosh, C. and Sirmans, C., 2000. Value Creation and the Performance of Spin-Offs. *Financial Management*, 29(1), pp.79-95.
- [41] Gilson, S.C., Healy, P.M., Noe, C.F. and Palepu, K.G., 2001. Analyst specialization and conglomerate stock breakups. *Journal of Accounting Research*, 39(3), pp.565-582.
- [42] Hite, G.L. and Owers, J.E., 1983. Security price reactions around corporate spin-off announcements. *Journal of Financial Economics*, 12(4), pp.409-436.
- [43] Hope, O.K., Li, C., Lin, Q. and Liu, X., 2023. Private information and bank-loan pricing: The effect of upcoming corporate spinoffs. *Contemporary Accounting Research*, 40(1), pp.342-371.
- [44] Huson, M.R. and MacKinnon, G., 2003. Corporate spinoffs and information asymmetry between investors. *Journal of Corporate Finance*, 9(4), pp.481-503.
- [45] Ibrahim, U.A. and Isiaka, A., 2020. Effect of financial leverage on firm value: Evidence from selected firms quoted on the Nigerian stock exchange. *European Journal of Business and Management*, 12(3), pp.124-135.
- [46] Jensen, M.C. and Meckling, W.H., 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), pp.305-360.
- [47] Jihadi, M., Vilantika, E., Hashemi, S.M., Arifin, Z., Bachtiar, Y. and Sholichah, F., 2021. The effect of liquidity, leverage, and profitability on firm value: Empirical evidence from Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(3), pp.1031-1040.
- [48] John, K. and Ofek, E., 1995. Asset sales and increase in focus. *Journal of Financial Economics*, 37(1), pp.105-126.
- [49] Johnson, S.A., Klein, D.P. and Thibodeaux, V.L., 1996. The effects of spin-offs on corporate investment and performance. *Journal of Financial Research*, 19(2), pp.293-307.
- [50] Kenn-Ndubuisi, J.I. and Nweke, C.J., 2019. Financial leverage and firm financial performance in Nigeria: A panel data analysis approach. *Global Journal of Management and Business Research*, 19(4), pp.1-12.
- [51] Khoroshilov, Y., 2011. A dynamic model of corporate spin-offs. Working Paper.
- [52] Klein, A., Rosenfeld, J. and Beranek, W., 1991. The two stages of an equity carve-out and the price response of parent and subsidiary stock. *Managerial and Decision Economics*, 12(6), pp.449-460.
- [53] Klein, A. and Mohanram, P., 2010. The Role of Corporate Governance in Spin-Offs. *Journal of Corporate Finance*, 16(3), pp.345-359.
- [54] Kraus, A. and Litzenberger, R.H., 1973. A state-preference model of optimal financial leverage. *The Journal of Finance*, 28(4), pp.911-922.

- [55] Krishnaswami, S. and Subramaniam, V., 1999. Information asymmetry, valuation, and the corporate spin-off decision. *Journal of Financial Economics*, 53(1), pp.73-112.
- [56] La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R., 2000. Investor protection and corporate governance. *Journal of Financial Economics*, 58(1-2), pp.3-27.
- [57] Lee, S. and Choi, W.S., 2020. Textual analysis and machine learning for predicting stock price movement with spin-off announcements. *Sustainability*, 12(19), p.8228.
- [58] Markowitz, H., 1952. Portfolio selection. *The Journal of Finance*, 7(1), pp.77-91.