



Effect Of Operating Leverage On The Market Value Of Common Shares: An Applied Study

Iftikhar Jabbar Abed^{1*}, Majid Fahem Jaafar²

¹⁻²Al-Qadisiyah University, College Of Administration And Economics, Iraq

eftekhar.abd@qu.edu.iq^{1*}, MAJID.F.JAAFAR@qu.edu.iq²

Author Correspondence: eftekhar.abd@qu.edu.iq*

Abstract. *The research aims to know the impact of operating leverage on the market value of ordinary shares of industrial sector companies listed on the Iraqi Stock Exchange for the period (2011-2020), based on the data obtained and published in the reports and financial statements of the relevant companies, and after descriptive and deductive analysis. To test its data and hypotheses, the research reached many results, including: There is an effect of operating leverage on the market value of shares in industrial companies (Al-Mansour Pharmaceutical Industries, Baghdad Soft Drinks, Al-Kindi for the Production of Vaccines and Veterinary Medicines, Al-Erqi Carpets and Furnishings Company, Chemical and Plastic Industries), and the results reached the following: There is an effect of operating leverage on the market value of common shares in the companies studied.*

Keywords: *Operating leverage, Market value, Common shares*

1. INTRODUCTION

Companies of all kinds are the main artery that feeds the national economy, as they seek and help in the advancement of the economy through the role they play in achieving sustainable economic development, through continuous development and improvement. Therefore, their importance has increased as a result of the developments that the world is witnessing, and this means that they need... It is desperate for methods and tools that serve its interests, and methods that serve management in the appropriate decision-making process, in order to avoid obstacles and risks, and also to achieve the desired goals. Finance theories have explained an undoubted fact regarding the company's main goal, as the primary goal is to maximize wealth. Shareholders. In order to achieve this goal, management must make sound decisions regarding appropriate investments and financing. Maximizing shareholders' wealth is achieved by determining the value of the facility. The value of the facility is determined through two basic axes: return and risk, where return and risk are considered the basic nucleus on which it is built. It makes investment and financing decisions.

It has become clear that the continuation of companies and projects depends on the extent of their ability to compete through price and quality, and therefore these companies must strive to reduce costs to the maximum possible degree in addition to their commitment to the required quality and quality standards, and from here comes the concept of operating leverage, and operational leverage is one It is one of the most important tools that helps in identifying

and predicting risks associated with financial and operational aspects, and predicting the effects that may negatively affect operational activities, and therefore it is a tool to assist decision makers in mitigating and controlling risks, by identifying those negative effects on the operational profits achieved.

First Section: The Scientific Methodology Of Research

a. First: Research Problem

Cases of failure increase in some companies due to some backward decisions, whether in the financial, investment, or operational fields, and after this failure in decision-making results in their inability to achieve the appropriate balance of the cost structure with the volume of sales, in other words, the knowledge of their success in achieving the appropriate operational leverage for their activity. It can be said that it has become clear that the continuity and survival of companies lies in the ability to know the extent of the return achieved by companies. In addition, financial performance can be considered one of the most important indicators that reflect the extent to which the company achieves its goals. It is also considered one of the most important financial aspects because it is linked to the continuity and stability of the company. In addition to measuring the extent of the organization's efficiency and effectiveness in exploiting its resources, companies seek the ability to make appropriate decisions by predicting the company's profitability ratios that relate to the company's financial performance. From this perspective, the research problem is to know the extent of the impact of operating leverage on the market value of common shares in Companies listed on the Iraqi Stock Exchange. Hence, the research problem is summarized in answering the following main question: (To what extent is the degree of operating leverage able to influence the market value of ordinary shares).

b. Second:- Research Objectives

The current research aims to achieve the main goal, which is to reveal the extent of the ability of operating leverage to influence the market value of ordinary shares in companies listed on the Iraq Stock Exchange, based on their economic type. The study targeted commercial and industrial companies, and to achieve the following sub-objectives: -

- 1- Identify the cost structure and its relationship to operating leverage.
- 2- Identify the factors affecting operating leverage.
- 3- Identify the effect of operating leverage on the market value of ordinary shares of companies listed on the Iraq Stock Exchange.

c. Third: The Importance Of Research

The importance of scientific research stems from the importance of operating leverage, as companies of all types try to reach an idea that can help them in the process of influencing the market value of common shares in general, and from this this research seeks to clarify the ability of operating leverage to influence the market value of common shares of companies. Commercial and industrial, as well as providing new methods that can help corporate management in the process of predicting corporate profitability, and this leads to management's ability to make appropriate decisions, which serve these predictions to reach the desired goal.

d. Fourth:- Hypotheses

- **H_{0.1}**:There are no statistically significant differences for operating leverage on the market value of common shares.
- **H_{1.1}**:There are statistically significant differences for operating leverage on the market value of common shares.

Second Section: The Theoretical Literature On Operating Leverage And Market Value Of Common Shares

a. First: Concept Of Operating Leverage

The level of operating leverage is related to the organization's share of fixed costs to total costs, where operating leverage is greater the greater the ratio of fixed costs to total costs. This means that higher fixed costs are linked to the company's capital intensity (De Medeiros et al., 2006), and that operating leverage occurs with an increase Relying on fixed costs over variable costs (Sarkar, 2018). (Sari & Hutagaol, 2009) defines it as the extent to which fixed costs are used in the economic activity practiced by the organization, while (Harjoto, 2017) defines it as being linked to the results of using fixed costs in operational processes, and that using operational leverage will lead to an increase in fixed costs. This will lead to the break-even point moving higher, meaning that the organization needs to provide greater services or greater sales volume in order to cover its fixed costs.

What is meant by operating leverage is to inflate the volume of profits by increasing reliance on fixed costs at the expense of variable costs (Pawar et al., 2019). The operating leverage is based on fixed costs. If the company had succeeded in increasing its fixed costs (Younas & Sarmad, 2020), it would have resorted to using more machines, and in return it was able to dispense with a large number of workers who were replaced by these machines (variable

costs). Thus, it would have resorted to To what is known as operational leverage, the result will be that it can achieve greater profits or at the same time be exposed to greater losses at the same level of sales than it achieved before resorting to operational leverage. Hence the concept of operating leverage. By replacing fixed costs with variable costs, you can, with the same effort (level of sales), amplify the results. Operating leverage can be defined as the available use of operational fixed costs in order to maximize the impact of changes occurring in sales in operating profit, or what is called earnings before interest and taxes (Paganini, 2021).

The presence of fixed operational costs in the company's operations forms the basis for the existence of the idea of operating leverage, as such a phenomenon does not exist in financial companies without their operating costs including fixed costs without financial costs, so this characteristic applies to companies that operate in capital-intensive industries such as Cement, iron, electricity, petroleum, and aviation industries (Aharon et al., 2023).

b. Second: Advantages Of Operating Leverage

There are several advantages to operating leverage, including:-

1. The advantages of operating leverage vary according to the nature of the economic conditions of the organization and the market in which it operates. If the organization is (Younas & Sarmad, 2020).
2. The degree of operating leverage is linked to commodity pricing policies in industrial institutions and service pricing in financial companies. An organization that is characterized by a high degree of operating leverage and faces a recession in its sales and revenues may be able to lower the price slightly and increase its sales, which leads to an increase in its operating profits (Sari & Hutagaol ,2009).
3. An organization that reaches a revenue value greater than the break-even point and has high operating leverage, the increase in the amount of sales or the increase in the provision of banking and financial services will lead to a greater increase in profits before interest and taxes, which is a good situation (Lourenço et al., 2018).
4. The benefit from operational leverage is achieved when the organization's total revenues increase by exploiting fixed costs and reducing variable costs (Dagogo, 2014).
5. Most studies and research indicate that operating leverage results as a result of the presence of large fixed costs in the company's activities or in its cost structure, as the cost structure affects the sensitivity of net profit. This means the sensitivity of profits, or the extent to which the change in sales affects the change in net operating profit (Sarkar, 2018). (Paganini, 2021). Hence, operating leverage can be considered a double-edged

sword, as it inflates profits when net sales increase, and in return, it inflates losses when net sales decrease (Sari & Hutagaol, 2009). This can be summarized using the equation to calculate operating leverage as follows (Ahuja, 2017):-

$$DOL = \frac{Q(p-AVC)}{Q(p-AVC)-TFC}$$

DOL = Operating Leverage

Q = Production Volume

P=Price

Avc = Rate Of Variable Costs

TFC = Total Fixed Costs

Paganini (2021) believes that operating leverage can be calculated as follows:-

Operating leverage = Total Fixed Assets / Total Assets

a. Third: Concept Of Market value

One of the fundamental benchmarks and metrics that can be utilized to convey the worth of the business is the market value of a share. From the owners' perspective, it is referred to as a measure and a benchmark of performance. The market price of the company's shares can also be used to evaluate its value, in addition to the fact that investors in the financial market consider this value. as a sign of the business's success or failure (Hart & Zingales, 2017). According to Niego et al. (2021), it is the price at which the stock is sold on the open market and may or may not be more than the book or nominal value. The market price of the shares is predicted to be greater than the book or nominal value if the business performs well and turns a profit. On the other hand, a weak performance by the company is likely to cause its share price to drop in the market and possibly fall below the book or nominal value (Lo et al., 2018).

The market capitalization index is used to calculate the market's overall size, which is a suitable indicator of the nation's capacity to transfer capital and diversify risks on a national scale (Autor et al., 2021). Many watchers of the financial markets also use this indicator to track the evolution of market activity (Ionescu et al., 2019). Higher market values are indicative of increased economic activity, as measured by rising market prices, which could be a reflection of the growing volume of financial transactions in the market, an increase in the number of shares listed on the market, an increase in the number of companies listed therein, or both (Brown & Reichenberg, 2019).

b. Fourth: Importance Of Market Value

According to Anifowose et al. (2017), the market value of an establishment is determined by investors' impression of it, which is frequently correlated with stock prices. The primary objective of any establishment is to maximize its wealth and value. Its top priority is to maximize the facility's worth. The facility's market worth is reflected in both stable and rising stock prices. The facility is extremely valuable due to its high share price, which also has an impact on market confidence on the facility's current performance and prospects for the future. As a result, in investment deals, the facility's worth is crucial (Solikhah et al., 2020).

c. Fifth: Determinants Of The Market Value Of The Stock

Similar to the prices of other commodities, the price of a share in the financial market is set by the forces of supply and demand within the market (Bernath et al., 2021). This is because the share's value is based on the highest price that buyers are willing to pay and the lowest price that sellers are willing to accept. He claims (Imberman & Lovenheim, 2021) People's willingness to pay for a given stock is mostly determined by the company's annual gains, which include not just the company's accomplishments this year but also its past successes, current performance, and anticipated future performance. The value of the stock price in the future is mostly determined by the firm's future performance and the gains the company anticipates making in the years to come (Altaf, 2016).

Sixth: Value Types

1-Liquidation Value And Going Concern Value

The term "liquidation value" describes the amount of money a business can make after selling its assets and closing its doors. Systematic or forced liquidation could be the result of this (Solikhah et al., 2020). According to Ulrich (2015), this indicates that the market value of the company's assets less the amount of debt it owes equals the worth of the company's shares when it sells assets and pays all of its obligations. The total will then be divided by the number of company shares.

2-Nominal Value

It is the value that is recorded on the share document, and this value is determined by the company and is usually a nominal amount and does not reflect the true value of the share. The nominal value means the purchase price of the share at the time of establishing the company (Tampakoudis & Anagnostopoulou, 2020), and it is the value that is determined in

accordance with private and public laws. For each company, the nominal value is used in order to determine the percentage of profit distributed to the shareholders of ordinary shares. The issuance of ordinary shares with a small nominal value may be due to the desire to provide a reasonable amount of liquidity for those shares, considering that this would attract a larger audience of investors with high incomes. Ltd. (Reverte, 2016).

3-Market Value

This value, which is derived by multiplying the number of shares by their yearly price in the financial market, serves as a proxy for the enterprise's value and is influenced by both financial and economic market conditions (Vogtlander et al., 2017).

4-The Real Value Or Fair Value

The true value or fair value is defined as the true price of assets and liabilities at which financial transactions are concluded between experienced market dealers. The goal of measuring fair value is to determine the true exchange price and this will make the deals real deals and reliable market dealers can (Anifowose et al., 2017).

5-Book Value

These represent the asset's acquisition cost less cumulative depreciation and are the asset's accounting values in the business's books. Even though the asset's book value would disappear entirely in the case of its total extinction, its economic worth would still exist because it is still useful (Hidajat, 2018). The total assets of the corporation match its book value. Retained capital accounts, reserves, profits, share premium, and shareholders' equity are included, minus liabilities (Eising et al., 2020).

Third Section: The Applied Framework For The Research

a. First: - Research Population And Sample

The research community consists of companies in the industrial sector listed in the Iraq Stock Exchange. The researcher conducted a comprehensive survey of the companies' data in the research community and excluded companies that did not meet the necessary conditions to achieve the research objectives. Five companies were selected: (Al-Mansour Pharmaceutical Industries, Baghdad Beverages). Al-Ghaziyah, Al-Kindi for the Production of Vaccines and Veterinary Medicines, the Ethnic Carpets and Furnishings Company, Chemical and Plastic Industries), as a sample for the research, and Table (1) shows this.

Table (1): Research sample companies

Company Name	code	Capital upon listing
Al Mansour Pharmaceutical Industries	IMAP	432,000,000
Ethnic Carpets and Furnishings Company	IITC	500,000,000
Baghdad for soft drinks	IBSD	10,000,000,000
Chemical and plastic industries	INCP	1,000,000,000
Al-Kindi Company for the production of vaccines and veterinary medicines	IKLV	360,000,000

Second: Search Tool

The research tool is the method used by the research in order to collect the data necessary to measure the independent variable (operating leverage) as well as measure the dependent variable (market value of common shares), and Table (2) shows this.

Table (2) Research Tool

Variable	Method of measuring
Operating leverage	Operating leverage = Total Fixed Assets / Total Assets
The market value of common shares	Market value=number of share *price of share

Third: - The statistical methods used

After entering indicators, ratios, and semantic data from the semantic lists into the program's tables, the researcher applied statistical methods, tests, distributions, and indicators using the Statistical Packages for the Social Sciences (SPSS) program to process and analyze data to address the research questions, test its hypotheses, and accomplish the research objectives.

Fourth: Operating Leverage

It is noted that the results of calculating operating leverage in Table (3) show that IKLV achieved the highest operating leverage of (0.169), which is the highest degree of operating leverage for the years of the study, meaning that it achieves operating profits, and thus an increase of 1% in net sales over the level of sales. The current increase will result in an increase of (0.169) in net profit before interest and taxes, followed by (INCP), which achieved an operating leverage of (0.059), and (IMAP) came in third place, with its operating leverage reaching (0.054).

Table (3) Operating leverage of the companies in the research sample for the period from (2011-2020)

year	IMAP	IITC	IBSD	INCP	IKLV	Men
2011	0.044	0.005	0.022	0.043	0.143	0.051
2012	0.040	0.006	0.027	0.042	0.203	0.064
2013	0.036	0.006	0.025	0.054	0.171	0.058
2014	0.052	0.009	0.015	0.073	0.117	0.053
2015	0.048	0.017	0.015	0.075	0.204	0.072
2016	0.047	0.021	0.013	0.076	0.224	0.076
2017	0.093	0.028	0.062	0.046	0.123	0.070
2018	0.082	0.039	0.087	0.045	0.202	0.091
2019	0.037	0.044	0.045	0.058	0.162	0.069
2020	0.056	0.059	0.065	0.074	0.138	0.078
Men	0.054	0.023	0.038	0.059	0.169	0.068

Fifth:-Market value

Through Table (4), it is clear that the general average market value of the companies in the research sample for the period (2011-2020) reached (1097973538), and we note that the company (INCP) has achieved the highest average market value, reaching (2845307264) among the companies in the research sample. This indicates This is due to the high number of its shares and that the company's investment status is in good condition and it can grow and expand its market size by entering into new investments, while (IITC) achieved the lowest average market value ratio, reaching (3.444654835), and this indicates the weakness of the position of these companies. In the financial market, it must work to increase its market value.

Table (4) Market value of the companies in the research sample for the period from (2011-2020)

year	IMAP	IITC	IBSD	INCP	IKLV	Men
2011	561792174.2	2.850800593	273981766	202565825	153440089.2	238355971.5
2012	2591775217	2.850800593	6484529606	2785355399	330177192.3	2438367483
2013	1047767482	4.414109367	99891662.9	5433806008	891841330.8	1494661298
2014	1633665844	6.072244678	91068240	1172058318	638561667.7	707070815.2
2015	1346274337	1.902542498	563612643	1276180263	151847372.8	667582923.5
2016	1418712598	3.594149088	747649361	1639930633	249153633.7	811089245.9
2017	224861077.2	4.23263844	645958381	1376169597	886918277.5	626781467.4
2018	1121330089	3.160060149	353889007	678253199.6	164198194.6	463534098.7
2019	755614415.4	3.242523121	589028499	5123430381	5743411.7	1294763342
2020	1598077335	2.126679818	737024138	8765323012	87219196.02	2237528737
Men	1229987057	3.444654835	1058663330	2845307264	355910036.6	1097973538

Sixth: Testing Hypotheses

- $H_{0.1}$: There are no statistically significant differences for operating leverage on the market value of common shares.

- H_{1.1}: There are statistically significant differences for operating leverage on the market value of common shares.

The hypothesis will be tested using the Regression Linear Multiple test, and the test results are as shown in Table (5).

Table (5): Results of the multiple linear regression model for the effect of operating leverage on the market value of the stock

Coefficient					ANOVA		Model Summery		Dependent Variable
Statement	Slope	error	Beta	T	Df	F	R	R ²	Market value of the stock
Constant	40.648	4.025		-10.098	9	49.966	0.824	0.679	
Operating leverage	5.098	0.449	1.056	11.359					
sig($\alpha \leq 0.05$)									

Table (5) represents the results of the statistical test of this hypothesis model, which is represented by the presence of two variables (operating leverage, a dependent variable, and one representing the market value of the stock). The table indicates that there is a statistically significant effect of operating leverage on the market value of the stock in the companies in the research sample, as it reached the level of (sig=0.00). Based on the above, and since the significance level is $(0.00) < (0.05)$, we reject the null hypothesis (H_{0.1}). We accept the alternative hypothesis (H_{1.1}), and this result is an answer to the second question of the study. The same result can be reached through the F value of (49.966), which is greater than its tabular value of (2.66) and significant at a significance level ($\alpha \leq 0.05$), which also represents the significance of this model at a degree of freedom (9). The R value of (0.679) indicates that operating leverage explained (67.9%) of the change occurring in the market value of the stock for the companies in the research sample, and the remaining (32.1%) is due to random errors and other factors that this study did not take into account. The coefficient was also Correlation (824), which indicates a strong relationship between operating leverage and the market value of the stock.

2. CONCLUSIONS AND RECOMMENDATIONS

1. Conclusions

Despite the constant fluctuations that occur in the market value of companies due to their great influence on market influences, it remains the most important indicator when evaluating the financial performance of companies and knowing their competitive position among companies in the market. If companies adopt a policy of continuous borrowing to finance their business, they must prepare to bear high financial risks and other financial

burdens, such as paying continuous interest on these loans. Its operating leverage can be positive and beneficial and increase its profits. This is achieved when the facility's management can achieve a rate of return on its investments that were financed with loans that is higher than the rate of the cost of these loans. The company can achieve high returns when it enters into new and beneficial investments that will raise the rate of return. sales and increase its financial returns.

2.Recommendations

The researcher recommends some recommendations that may be a solution to some of the scientific problems related to the variables of our study, such as the industrial companies listed on the Iraqi Stock Exchange conducting studies and research on the factors affecting the market value of companies and focusing on them, because these factors would determine the company's position in the financial market and also lead to growth. The company and the strength of its competitive position in the market. Among these factors is studying the nature of its competing companies and studying the country's political situation and taking it into account when determining the market value, as it is an external factor that affects it. In addition to the need to give industrial companies more attention to financial statements and work to publish data and information related to calculating indicators of scientific variables that are included in these lists on websites, if possible, especially those lists related to cash flows, especially free cash flow, and directing the focus of industrial companies listed in the Iraqi market. Securities depend on debt ratios as one of the important factors in determining and knowing the market value of companies.

3. REFERENCES

- Aharon, D. Y., Kroll, Y., & Riff, S. (2023). Modified degree of operating leverage risk measure. *Finance Research Letters*, 51, 103493. <https://doi.org/10.1016/j.frl.2023.103493>
- Ahuja, H. L. (2017). *Managerial economics: Analysis of managerial decision making* (9th ed.). S. Chand Publishing.
- Altaf, N. (2016). Economic value added or earnings: What explains market value in Indian firms? *Future Business Journal*, 2(2), 152–166. <https://doi.org/10.1016/j.fbj.2016.09.002>
- Anifowose, M., Abdul Rashid, H. M., & Annuar, H. A. (2017). Intellectual capital disclosure and corporate market value: Does board diversity matter? *Journal of Accounting in Emerging Economies*, 7(3), 369–398. <https://doi.org/10.1108/JAEE-01-2017-0003>

- Autor, D., Dorn, D., & Hanson, G. (2019). When work disappears: Manufacturing decline and the falling marriage market value of young men. *American Economic Review: Insights*, 1(2), 161–178. <https://doi.org/10.1257/aeri.20190028>
- Bernath, C., Deac, G., & Sensfuß, F. (2021). Impact of sector coupling on the market value of renewable energies: A model-based scenario analysis. *Applied Energy*, 281, 115985. <https://doi.org/10.1016/j.apenergy.2020.115985>
- Brown, T., & Reichenberg, L. (2021). Decreasing market value of variable renewables can be avoided by policy action. *Energy Economics*, 100, 105354. <https://doi.org/10.1016/j.eneco.2021.105354>
- Dagogo, D. W. (2014). Degree of operating leverage, contribution margin and the risk-return profile of emerging companies: Evidence from Nigeria. *International Journal of Economics and Finance*, 6(12), 148–165. <https://doi.org/10.5539/ijef.v6n12p148>
- de Medeiros, O. R., Lustosa, P. R. B., & Dantas, J. A. (2006). The impact of the degree of operating leverage on stock returns: An empirical study in the Brazilian market. *Journal of Economics and Finance*, 30(3), 322–339. <https://doi.org/10.1007/s12197-006-0014-4>
- Eising, M., Hobbie, H., & Möst, D. (2020). Future wind and solar power market values in Germany: Evidence of spatial and technological dependencies. *Energy Economics*, 86, 104638. <https://doi.org/10.1016/j.eneco.2019.104638>
- Harjoto, M. A. (2017). Corporate social responsibility and degrees of operating and financial leverage. *Review of Quantitative Finance and Accounting*, 49(2), 487–513. <https://doi.org/10.1007/s11156-017-0602-5>
- Hart, O., & Zingales, L. (2017). Companies should maximize shareholder welfare not market value. ECGI-Finance Working Paper, No. 521. <https://doi.org/10.2139/ssrn.2931168>
- Hidajat, N. C. (2018). Pengaruh return on equity, earnings per share, economic value added, dan market value added terhadap return saham perusahaan sektor pertanian yang terdaftar di bursa efek Indonesia periode 2010-2016. *Jurnal Ekonomi*, 23(1), 62–75.
- Imberman, S. A., & Lovenheim, M. F. (2016). Does the market value value-added? Evidence from housing prices after a public release of school and teacher value-added. *Journal of Urban Economics*, 91, 104–121. <https://doi.org/10.1016/j.jue.2015.11.001>
- Ionescu, G. H., Firoiu, D., Pirvu, R., & Vilag, R. D. (2019). The impact of ESG factors on market value of companies from the travel and tourism industry. *Technological and Economic Development of Economy*, 25(5), 820–849. <https://doi.org/10.3846/tede.2019.11026>
- Lo, C. K., Tang, C. S., Zhou, Y., Yeung, A. C., & Fan, D. (2018). Environmental incidents and the market value of firms: An empirical investigation in the Chinese context. *Manufacturing & Service Operations Management*, 20(3), 422–439. <https://doi.org/10.1287/msom.2018.0733>

- Lourenço, W. D. S., Louzada, L. C., & Novaes, P. V. G. (2018). The moderating role of market structure on the relationship between firm operational performance and degree of operating leverage. *Revista Universo Contábil*, 14(4), 160–181. <https://doi.org/10.4270/ruc.201886>
- Niego, A. G., Rapior, S., Thongklang, N., Raspé, O., Jaidee, W., Lumyong, S., & Hyde, K. D. (2021). Macrofungi as a nutraceutical source: Promising bioactive compounds and market value. *Journal of Fungi*, 7(5), 397. <https://doi.org/10.3390/jof7050397>
- Paganini, M. A. (2021). The DOL-DFL nexus: The relationship between the degree of operating leverage (DOL) and the degree of financial leverage (DFL). *International Journal of Economics and Finance*, 13(6), 71. <https://doi.org/10.5539/ijef.v13n6p71>
- Pawar, A., Gholap, R., & Sheel, A. (2019). Strategic effect of degree of operating leverage on value premium of lodging firms. *Journal of Hospitality Financial Management*, 27(1), 3. <https://doi.org/10.1080/21595813.2019.1562554>
- Reverte, C. (2016). Corporate social responsibility disclosure and market valuation: Evidence from Spanish listed firms. *Review of Managerial Science*, 10, 411–435. <https://doi.org/10.1007/s11846-015-0182-4>
- Sari, L. A., & Hutagaol, Y. R. (2009). Debt to equity ratio, degree of operating leverage stock beta and stock returns of food and beverages companies on the Indonesian stock exchange. *Journal of Applied Finance and Accounting*, 2(1), 1–12.
- Sarkar, S. (2018). Optimal DOL (degree of operating leverage) with investment and production flexibility. *International Journal of Production Economics*, 202, 172–181. <https://doi.org/10.1016/j.ijpe.2018.06.016>
- Solikhah, B., Wahyudin, A., & Rahmayanti, A. A. W. (2020). The extent of intellectual capital disclosure and corporate governance mechanism to increase market value. *The Journal of Asian Finance, Economics and Business*, 7(10), 119–128. <https://doi.org/10.13106/jafeb.2020.vol7.no10.119>
- Tampakoudis, I., & Anagnostopoulou, E. (2020). The effect of mergers and acquisitions on environmental, social and governance performance and market value: Evidence from EU acquirers. *Business Strategy and the Environment*, 29(5), 1865–1875. <https://doi.org/10.1002/bse.2535>
- Ulrich, D. (2015). *The leadership capital index: Realizing the market value of leadership*. Berrett-Koehler Publishers.
- Vogtlander, J. G., Scheepens, A. E., Bocken, N. M., & Peck, D. (2017). Combined analyses of costs, market value and eco-costs in circular business models: Eco-efficient value creation in remanufacturing. *Journal of Remanufacturing*, 7, 1–17. <https://doi.org/10.1007/s13243-017-0009-3>
- Younas, K., & Sarmad, M. (2020). The impact of degree of financial leverage and degree of operating leverage on the systematic risk of common stock. *Malaysian E Commerce Journal*, 4(1), 24–32.