

The Impact of the COVID-19 Pandemic on the Financial Performance of Publicly Listed Companies

Chan, C.H *; Wong, W.K; Au Yong, H.N

Faculty of Business and Finance, University Tunku Abdul Rahman, Perak Email: cheehuiw01@1utar.my

* Corresponding Author

Abstract

Purpose: This study assesses how the pandemic has affected the financial performance of Public Listed Companies (PLCs) in Malaysia, examining data from both pre-pandemic and post-pandemic periods. Our primary focus is on evaluating Return on Asset (ROA) as the dependent variable, with independent variables including Leverage, Dividend Per Share, Asset Growth Rate, Tobin's Q, Net Profit, Size, and the presence of COVID-19.

Design/methodology/approach: Our dataset comprises annual reports spanning six years, from 2017 to 2022. The data is obtained from Refinitiv and Investing.com. We gathered this data from a representative sample of eighty publicly listed companies in Malaysia, representing diverse sectors such as Financial Services, Consumer Products & Services, Industrial Products & Services, and Healthcare. We employed various statistical techniques, including EViews, Panel Data Regression, Fixed Effect Model (FEM), and Random Effect Model (REM) as regression models. Additionally, we conducted the Hausman Test to determine the most suitable regression model and conducted diagnostic tests.

Findings: The findings of this study indicate that there is no significant correlation between the presence of COVID-19 and the ROA of publicly listed companies in Malaysia. The Asset Growth Variable consistently shows a positive coefficient, implying that higher asset growth rates among listed companies are associated with increased returns on assets. Interestingly, Net Profit is the only variable demonstrating a consistent relationship across all industries, highlighting its importance as a consistent driver of financial performance.

Research limitations: The research sample included a limited number of public listed companies, and the number of variables considered was also restricted. The chosen six-year timeline may not fully encompass the comprehensive impact of COVID-19.

Practical implications:

The treasury departments of these public listed companies are gaining a thorough understanding of the profound effects of COVID-19. The Malaysian government is actively seeking to comprehend the pandemic's impact on the financial performance of various sectors in the country. Our analysis underscores the significance of asset growth and Net Profit as key factors influencing financial performance across industries.

Originality/value:

This is one of the earliest study comparing financial performance of public listed companies in Bursa Malaysia before and after COVID-19.

Keywords: Return on Asset, Covid-19, Public Listed Company



Introduction

The global reach of the COVID-19 pandemic has cast a profound shadow over the world's economies, leaving no facet of life untouched. Among the entities bearing the brunt of this upheaval are publicly traded companies. Foss (2020) highlights that these corporations have had to swiftly adopt novel financial strategies, enhance operational flexibility, and harness technological innovations to grapple with the pandemic's adverse repercussions. It's crucial to acknowledge that the pandemic's impact transcends mere public health; it has engendered economic disruptions, subjecting both nations and companies to a barrage of measures, including mobility constraints, stay-at-home directives, social distancing protocols, and community lockdowns.

It's noteworthy that the pandemic's ramifications have been far from uniform, varying across industries. For instance, while grocery stores experienced surges in demand, sectors like travel and hospitality grappled with precipitous declines (Pantano et al., 2020). The collective toll of these events has been staggering, with trillions of dollars in losses, contributing to the nascent stages of a global recession.

The pandemic-induced economic downturn has ushered in a reduction in consumer spending, supply chain tumult, and dwindling corporate investments. Dimson et al. (2020) astutely observe the paucity of studies examining how these transformations translate into shifts in business performance. In Malaysia, publicly traded enterprises have grappled with a blend of favorable and unfavorable consequences. Stringent lockdown measures and restricted mobility have birthed a series of supply chain challenges (Sharma et al., 2020), disrupting businesses across the spectrum, from large, listed companies to small and medium-sized enterprises (SMEs).

In Malaysia, consumer spending has experienced a contraction, particularly in the retail and consumer goods sectors, as individuals and households tread cautiously in the face of economic uncertainty (Nair, S et al., 2022). Furthermore, the pandemic-induced supply chain disruptions have taken a toll on the manufacturing and export sectors, leading to production delays and diminished export revenues (Javid, M et al., 2022). The adverse effects have not spared industries reliant on consumer spending, such as tourism, which has witnessed a marked decline in sales (Hamid et al., 2021).

This study embarks on an exploration of the impact of COVID-19 on the financial performance of publicly traded Malaysian firms, both preceding and subsequent to the pandemic's onset. Our sample comprises the top 20 corporations in terms of market capitalization, hailing from four diverse sectors: Financial Services, Consumer Goods and Services, Health Care, and Industrial Products. Our examination delves into key company attributes, encompassing liquidity, leverage, asset growth ratio, cash ratio, net profit, Tobin's Q, size, and payout policy. A notable finding is the positive correlation between liquidity, dividends per share, and performance indicators (Dawar, 2014), signaling that managers bolstered cash reserves to navigate operational risks stemming from COVID-19 and ensure business resilience. Although the pandemic exerted an impact on various company attributes, spanning performance, dividends, liquidity, and leverage, the disparities between the two periods did not attain statistical significance. This research lends valuable insights into the ways in which epidemics and pandemics reshape publicly traded companies' characteristics, both pre- and post-crisis.



Literature review

The global landscape has been profoundly reshaped by the COVID-19 pandemic, with farreaching implications for various facets of society, particularly the economy. Within this complex ecosystem, the ownership structure of companies has emerged as a pivotal determinant of their performance. Return on Assets (ROA), a key metric reflecting a company's efficiency in utilizing its assets for shareholder benefit, has taken on greater significance in assessing corporate performance during these transformative times. Ownership type plays a crucial role in shaping corporate governance, influencing efficiency, firm value, access to resources, and capital costs. In the face of unprecedented challenges, ownership structures have transitioned from being passive backdrops to becoming dynamic forces that drive efficiency, resilience, and growth (Perwitasari et al., 2022). This symbiotic relationship between ROA and the COVID-19 pandemic's impact on publicly listed firms unveils the intricate interplay of various factors.

One critical factor in this dynamic is the leverage ratio, which has been instrumental in enhancing company performance through improved managerial efficiency. The impact of this relationship, however, varies across corporate sizes, with larger companies grappling with high fixed costs, while smaller enterprises face distinct challenges. The financing divide further exacerbates the challenges faced by smaller firms (Perwitasari et al., 2022). Dividend per share emerges as another crucial variable during the pandemic, indicating managers' proactive efforts to bolster cash reserves. Yet, board and audit committee meetings appear to have a negative impact, influenced by high director compensation levels, exacerbated by pandemic-induced uncertainty (Khatib et al., 2021).

The impact of the COVID-19 pandemic on firm performance extends beyond financial metrics. Asset growth, especially in sectors such as transportation, tourism, and catering, has witnessed a symphony of underperformance, particularly in the initial stages of the pandemic. Regional differences have played a substantial role, with rapid-growth regions exhibiting better performance, highlighting the importance of geographical context (Makni, 2023). Tobin's Q (TOBQ) emerges as a vital gauge for assessing banking firms' performance during the pandemic, providing valuable insights into corporate governance within the sector. As the sector navigates post-pandemic challenges, Tobin's Q remains crucial, guiding strategic decisions and risk management (El-Chaarani, 2022).

In India, food companies faced unique financial challenges during the pandemic, with net profit declining post-pandemic, despite an increase in earnings per share. Factors such as limited market access and stockpiling contributed to the sector's performance decline (Alsamhi et al., 2022). Aggregate total assets across sectors experienced a widespread decline during the pandemic, driven by various factors, including supply chain disruptions, reduced consumer spending, and market volatility. Industries heavily reliant on physical presence, such as retail, hospitality, and travel, were particularly affected (Shen et al., 2020). Interestingly, financially distressed firms did not significantly worsen their performance during the pandemic, potentially due to their pre-existing financial challenges, which may have bolstered their resilience (Shahimi et al., 2021).

These multifaceted findings underscore the need for nuanced and context-aware analyses to comprehend the diverse impacts of the COVID-19 pandemic on corporate landscapes. Ownership structures, financial metrics, regional variations, and industry-specific factors all play integral roles in shaping the performance of publicly listed firms during these



unprecedented times. Understanding these complexities is essential for businesses and policymakers alike as they navigate recovery and chart a path towards resilience and growth.

Theoretical Framework

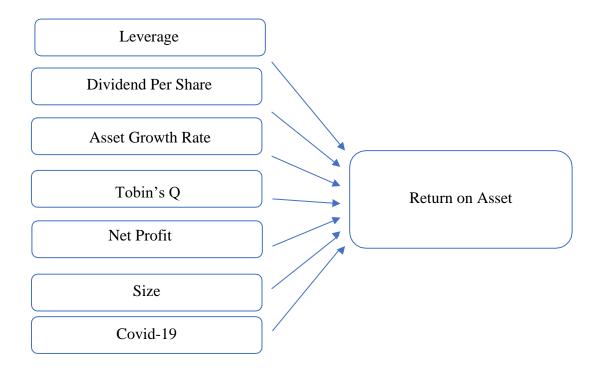


Figure 1: Model of variable affect the Return on Asset of Public Listed Company during COVID-19 in Malaysia.

Return on Asset = $\alpha + \beta 1$ Leverage + $\beta 2$ Dividend Per Share + $\beta 3$ Asset Growth Rate + $\beta 4$ Tobin's Q + $\beta 5$ Net Profit + $\beta 6$ Size + $\beta 7$ Covid- 19 + ui

Hypothesis Development

There are seven hypotheses proposed in this research:

- H1: There is a significant relationship between Leverage and ROA.
- H2: There is a significant relationship between Dividend Per Share and ROA.
- H3: There is a significant relationship between Asset Growth Rate and ROA.
- H4: There is a significant relationship between Tobin's Q and ROA.
- H5: There is a significant relationship between Net Profit and ROA.
- H6: There is a significant relationship between Size and ROA.
- H7: There is a significant relationship between Covid-19 and ROA.



Method

In the process of composing a thesis, secondary research serves as a pivotal tool for gaining insights and knowledge on a subject. Secondary research entails the utilization of pre-existing and publicly available data, such as studies and reports, that have been compiled by others. This approach offers several advantages, including rapid access to a wealth of information, cost-effectiveness, and the opportunity to develop a comprehensive understanding of the subject matter.

Academic journals and publications represent a widely adopted avenue for conducting secondary research. These sources provide extensive analyses and information on specific topics, often incorporating data and findings from original research studies. The research design plays a crucial role as it establishes a framework that effectively connects the various components of research methodologies through well-planned data collection strategies. Therefore, devising the study's design is a prerequisite before gathering data from multiple sources. In this research, a quantitative approach takes precedence, emphasizing objective quantification and mathematical, algebraic, or numerical analysis of data. This involves the use of questionnaires, surveys, forms, or algorithmic methods to analyze complex numerical data. The preference for a quantitative technique over a qualitative one is rooted in its greater reliability and precision.

An innovative aspect of our study lies in its empirical examination of how COVID-19 impacts the financial performance of publicly listed companies. It involves identifying the current relationships between variables and firm performance. The dependent variable in our evaluation is Return on Asset (ROA), which assesses the financial performance of publicly traded companies in Malaysia. Additionally, we consider several independent variables such as Leverage, Liquidity, Asset Growth Ratio, Dividend Per Share, Cash Ratio, Tobin's Q, Net Profit, and Size. These variables' data were extracted from the companies' Annual Reports.

Our research timeline is divided into two distinct periods: pre-COVID and post-COVID. The pre-COVID analysis relies on data from 2017 to 2019, while the post-COVID phase encompasses data from 2020 to 2022. This division allows us to scrutinize the influence of the pandemic on company performance. To comprehensively assess the impact of COVID-19, we incorporate secondary data and quarterly statistics covering the outbreak's timeline from 2017 to 2022, until the pandemic's conclusion. Consequently, the data employed in this research is sourced from six years of quarterly reports submitted by eighty publicly listed companies in Malaysia

Findings

Our extensive analysis, utilizing the Random Effect model across various sectors, has revealed crucial insights that shed light on the financial performance of Public Listed Companies (PLCs) in Malaysia. Our research has identified two key variables that hold significant significance within our research model: Dividend Per Share and Net Profit. These findings provide valuable insights into the factors that drive financial performance among PLCs, especially in the post-pandemic landscape.



T 11	4	D 1.	CD 1	TICC . N. F. 1 1
Table	١.	Pacilif	ot Pandom	Hittact Madal
Lanc	Ι.	17CSuit	OI Kanuoni	Effect Model

Variable	All Sector	Consumer Product & Services Sector	Industry Product & Services Sector	Healthcare Sector
С	(19.06925)	(17.15823)	(0.034718)	(0.073962)
	0.0418**	0.5957	0.0501*	0.0002***
LEV	(-26.43009)	(-82.68749)	(-0.082949)	(-0.225013)
	0.1219	0.1744	0.0771*	0.0001***
DPS	(65.59859)	(30.45461)	(0.060213)	(0.293113)
	0.0000***	0.1876	0.3643	0.0075***
GROWTH	(4.275718)	(136.2018)	(0.010573)	(0.041064)
	0.1969	0.0226**	0.1121	0.0056***
TBQ	(-0.206392)	(-6.584408)	(0.035500)	(0.009657)
	0.7974	0.01304**	0.0000***	0.0285**
NP	(-6.58E-09)	(0.000432)	(2.83E-11)	(7.50E-11)
	0.0069***	0.0000***	0.0001***	0.0000***
SZ	(-3.24E-10)	(-0.000323)	(-2.36E-12)	(-2.44E-12)
	0.6267	0.6770	0.0095***	0.0126**
CVD	(0.163525)	(12.49831)	(0.003752)	(0.010698)
	0.9464	0.2573	0.5347	0.3768
R-squared	0.096811	0.718856	0.539489	0.797047
Adjusted R- Square	0.077938	0.676983	0.508493	0.782401
Prob (F-statistic)	0.000015	0.000000	0.000000	0.000000

Notes: There will be rejected the null hypothesis of p-value at 10%, 5% and 1% significance level are represented by *, **, *** respectively. The coefficient is in parentheses. Constant (C), Leverage (LEV), Dividend per Share (DPS), Asset Growth Rate (GROWTH), Tobin's q (TBQ), Net Profit (NP), Size (SZ), and Covid-19 (CVD).

One of the most significant revelations of our study is the robust and affirmative correlation between Dividend Per Share and Return on Assets for PLCs in Malaysia across all sectors. This finding underscores the enduring influence of Dividend Per Share on financial performance, irrespective of the sector. This insight is particularly noteworthy in the context of the post-pandemic era, where dividends have become a crucial driver of returns for investors. Furthermore, our research has uncovered a notable trend within the Malaysian corporate



landscape. Prior to the COVID-19 pandemic (2017-2019), a substantial proportion of PLCs, ranging from 10% to 15%, did not distribute dividends. However, following the pandemic's impact from 2020 to 2022, a significant shift occurred. Many of these non-dividend paying entities changed their strategies and began distributing dividends. This strategic shift led to a favorable alteration in the correlation between Dividend Per Share and Return on Assets, highlighting the dynamic interplay between external events and corporate financial decisions.

Conversely, when examining the Net Profit variable, we observed a discernible decline in Net Profit across all sectors within the top 80 Public Listed Companies. This decline had a detrimental impact on the Return on Assets within our model, signaling a negative effect on financial performance in the altered post-pandemic economic landscape. This discrepancy in the findings underscores the complex dynamics within the corporate financial realm, where Dividend Per Share exhibits a positive association with Return on Assets, while Net Profit experiences a contrasting trajectory. Our research also delved into sector-specific analyses to provide a more comprehensive understanding of the factors influencing financial performance. In the Financial Services sector, for instance, we employed the Fixed Effect Model and identified four crucial variables: Leverage, Growth, Net Profit, and Size.

Within the Financial Services sector, we discovered a negative correlation between the Leverage Ratio and Return on Assets in the post-pandemic period. Many PLCs in this sector reduced their Leverage ratios following the onset of the pandemic, contributing to enhanced stability and resilience. Additionally, the sector demonstrated impressive revenue growth, showcasing its ability to navigate challenges effectively. However, there was a noticeable decline in the Size of companies within the sector in the post-pandemic era, which impacted the Growth Ratio.

In the Consumer Goods and Services sector, analyzed using the Random Effect Model, three significant variables emerged: Growth, Tobin's Q, and Net Profit. We found a negative correlation between Tobin's Q and Return on Assets post-pandemic, attributed to an influx of capital infusion and an increase in Total Assets. Additionally, the sector exhibited substantial growth in Net Profit due to increased revenue generation.

The Industrial Product and Services sector, also analyzed using the Random Effect Model, revealed four significant variables: Leverage Ratio, Tobin's Q, Net Profit, and Size. A negative correlation was observed between the Leverage Ratio and Return on Assets in the post-pandemic period, driven by a decrease in Leverage Ratios and an increase in Net Profit. Market Capitalization played a role in the positive correlation between Tobin's Q and Size.

In the Health Care sector, analyzed with the Random Effect Model, six significant variables were identified: Leverage Ratio, Dividend Per Share, Growth Ratio, Tobin's Q, Net Profit, and Size of firm. Notably, there was a negative correlation between the Leverage Ratio and the Size of health care companies with Return on Assets post-pandemic. Many PLCs in this sector lowered their Leverage Ratios, leading to enhanced profitability. Some previously non-dividend paying entities in health care began sharing dividends after accruing substantial net profits. However, the Size of firms exhibited a decline toward the end of the post-pandemic period, impacting the correlation with Return on Assets.

In addition to these sector-specific insights, we conducted various tests to assess multicollinearity, heteroscedasticity, and autocorrelation. Our findings indicated that the



independent variables in our model did not exhibit significant multicollinearity, enhancing the robustness of our analysis. We also detected the presence of heteroscedasticity and employed the Random Effect Model (REM) and Fixed Effect Model (FEM) to mitigate its potential impact. Autocorrelation was identified and confirmed using the Durbin-Watson Test and Breusch-Godfrey Serial Correlation LM Test, necessitating further attention.

Discussion and Conclusion

This comprehensive study meticulously assesses the ramifications of the COVID-19 pandemic on the Return on Assets (ROA) of Public Listed Companies in Malaysia, encompassing diverse sectors including Financial Services, Consumer Products, Industrial Products, and Healthcare. Employing four distinct models, it unveils sector-specific impacts of the pandemic on ROA, providing invaluable insights. These findings are of paramount importance for companies, as they equip their treasury departments with the knowledge necessary to navigate the financial repercussions of the pandemic effectively. Armed with this understanding, companies can formulate strategies aimed at enhancing ROA amidst the prevailing economic uncertainties.

This study is not without its noteworthy limitations, warranting careful consideration. Firstly, the research sample was confined to the top 20 largest capitalized companies within four specific industries, resulting in a relatively modest sample size of just 80 publicly listed firms. This limited scope may give rise to concerns regarding the representativeness of the findings when extrapolated to encompass the entire landscape of Malaysia's public listed companies. To address this limitation, future research endeavors should prioritize the expansion of the sample size, thereby enhancing the study's generalizability and robustness.

Furthermore, the division of the pre-COVID period into two discrete segments, spanning from 2017 to 2019 and from 2020 to 2022, introduces inherent challenges when attempting to make direct comparisons of sector performances during the pandemic. This division might not fully capture the pandemic's protracted and evolving impact, as some companies could experience extended periods of recovery and adjustment. Extending the observation period beyond the confines of these two segments could provide a more accurate and nuanced assessment of the lasting effects of COVID-19 on the companies under scrutiny.

Acknowledgement

This work was supported by Universiti Tunku Abdul Rahman Strategic Funding Scheme – Strategic Research Grant No.: IPSR/RMC/UTARSRF/ PROJECT 2021-C1/005

References

- Achim, M. V., Safta, I. L., Văidean, V. L., Mureșan, G. M., & Borlea, N. S. (2022). The impact of covid-19 on financial management: evidence from Romania. *Economic Research-Ekonomska Istraživanja*, 35(1), 1807-1832.
- Alsamhi, M. H., Al-Ofairi, F. A., Farhan, N. H., Al-Ahdal, W. M., & Siddiqui, A. (2022). Impact of Covid-19 on firms' performance: Empirical evidence from India. *Cogent Business & Management*, 9(1), 2044593.
- Ashraf, B. N. (2020). The economic impact of government interventions during the COVID-19 pandemic: International evidence from financial markets. *Journal of Behavioral and Experimental Finance*, 27, 100371. https://doi.org/10.1016/j.jbef.2020.100371
- Bai, C., Quayson, M., & Sarkis, J. (2021, July). COVID-19 pandemic digitization lessons for sustainable development of micro-and small-enterprises. Sustainable production and consumption. Retrieved



from

https://www.sciencedirect.com/science/article/pii/S2352550921001482

- Baicu, C. G., Gârdan, I. P., Gârdan, D. A., & Epuran, G. (2020). The impact of COVID-19 on consumer behavior in retail banking. *Evidence from Romania. Management and Marketing*, 15(s1), 534–556. https://doi.org/10.2478/mmcks-2020-0031
- Barney, P. (1991), "Firms resources and sustained competitive advantage", *Journal of Management*, Vol. 17, pp. 99-120
- Cho, H. and Pucik, V. (2005), "Relationship between innovativeness, quality, growth, profitability, and market value", *Strategic Management Journal*, Vol. 26, pp. 555-75.
- Dawar, V. (2014). Agency theory, capital structure, and firm performance: Some Indian evidence. *Managerial Finance*, 40(12), 1190–1206. https://doi.org/10.1108/MF-10-2013-0275
- Dimson, J., Mladenov, Z., Sharma, R., Tadjeddine, Z. (2020). COVID-19 and European smalland medium-size enterprises: How they are weathering the storm. Retrieved January 20,2021, from https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-european-small-and-medium-size-enterprises-how-they-are-weathering-the-storm
- El-Chaarani, H., Abraham, R., & Skaf, Y. (2022). The impact of corporate governance on the financial performance of the banking sector in the MENA (Middle Eastern and North African) region: An immunity test of banks for COVID-19. *Journal of Risk and Financial Management*, 15(2), 82.
- Foss, N. J. (2020). The impact of the COVID-19 pandemic on firms' organizational designs. Journal of Management Studies, ahead of print (ahead of print) https://doi.org/10.1111/joms.12643
- Hamid, R.& Hanisah, N, Azren, M. Najihah, H. (2021). The Impact of Covid-19 on Malaysia Tourism Industry Supply Chain. https://hrmars.com/papers_submitted/11213/the-impact-of-covid-19-on-malaysia-tourism-industry-supply-chain.pdf
- Hoekstra, J. C. & Leeflang, P. S. (2020, November 23). *Marketing in the era of COVID-19*. SpringerLink. Retrieved from https://link.springer.com/article/10.1007/s43039-020-00016-3
- Javid, M.& Amir,M. Maxim,A. (2022). Supply chain disruption during the COVID-19 pandemic Recognizing potential disruption management strategies.
 - $https://www.researchgate.net/publication/360125120_Supply_chain_disruption_during_the_COVID-$
 - 19_pandemic_Recognizing_potential_disruption_management_strategies
- Kalogiannidis, S. (2020, December 21). Covid impact on small business. International Journal of Social Science and Economics Invention. Retrieved from https://www.researchgate.net/profile/Stavros-Kalogiannidis/publication/347524972_Covid_Impact_on_Small_Business/links/5fe10 1a0299bf14088331a61/Covid-Impact-on-Small-Business.pdf.
- Khatib, S. F., & Nour, A. (2021). The impact of corporate governance on firm performance during the COVID-19 pandemic: Evidence from Malaysia. *Journal of Asian Finance, Economics and Business*, 8(2), 0943-0952.



- Makni, M. S. (2023). Analyzing the impact of COVID-19 on the performance of listed firms in Saudi market. *Technological Forecasting and Social Change*, *187*, 122171.
- Nair, S., & Ming Wei, G.Jayabalan, N. Perumal, I. (2022). Factors Affecting Consumer Behaviour during the Covid-19 Pandemic in Malaysia. *Journal of Hunan University Natural Sciences*. https://doi.org/10.55463/issn.1674-2974.49.4.15
- Pantano, E., Pizzi, G., Scarpi, D., & Dennis, C. (2020). Competing during a pandemic? Retailers' ups and downs during the COVID-19 outbreak. *Journal of Business Research*, 116(May), 209–213. https://doi.org/10.1016/j.jbusres.2020.05.036
- Perwitasari, D., Setiawan, D., Nurrahmawati, A., & Rahmawati, I. P. (2022). Firm Performance during COVID-19 Pandemic: Does Ownership Identity Matter? Evidence from Indonesia. *Journal of Risk and Financial Management*, 15(10), 444.
- Shahimi, W. R. M. A., Hanafi, A. H. A., & Mohamad, N. A. (2021). The Impact of Covid-19 On The Financial Performance of Pn17 and Gn3 Status Firms: Does It Add Salt into The Wound? *Advanced International Journal of Banking, Accounting and Finance*, 3(7), 47-58
- Shen, H., Fu, M., Pan, H., Yu, Z., & Chen, Y. (2020). The impact of the COVID-19 pandemic on firm performance. *Emerging Markets Finance and Trade*, 56(10), 2213-2230.
- Wernerfelt, B. (1984), "A resource based view of the firm", *Strategic Management Journal*, Vol. 5, pp. 171-80