

ESG Performance in Asia Stock Market During COVID-19: A Systematic Literature Review and Research Agenda

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Abstract

Purpose: To give reliable information as a guidance for future research to analyze and develop more data comprehensively from research questions. There are three research questions. Firstly, how is Environment Social Governance (ESG) performance conducted among ASIA conutries in the context of influencing in ASIA stock market during COVID-19 pandemic? Secondly, what are the syntheses and limitations of this field from three different perspectives: the empirical findings, theories, and methodological specifications? Lastly, What should be the resulting research agenda on ESG performance in ASIA Stock Market?

Design/methodology/approach: the systematic literature review (SLR) used, and do reviewing from three different perspectives: empirical, theoretical, and methodological frameworks.

Findings: regarding the RQ1, the researcher can outline the extant literature related to ESG to ASIA stock market. Some countries that already support the implementation of ESG are China, Japan, South Korea, Hong Kong, Bangladesh, Indonesia, Malaysia, Thailand, Singapore, Philippines, and Viet Nam. However, during the implementation, those companies have different policies and still in the early stage. Concerning RQ2, and RQ3, the researcher can explain three different points of perspectives, which are empirical results, theoretical framework and methodology reviews.

Research limitations/implications: this result can bring benefit for further researcher to use as a foundation material for doing analysis the role of ESG in ASIA stock market.

Practical implications: This result will give input to policy maker such as governments and managements to conduct more concern about the implementation of ESG. Although the implementation of ESG has already started in early stage, it is needed to make clear decision or support as a mandatory report in each ASIA country. It is because ESG has successfully been noticed and considered by investors during the COVID-19 pandemic as a downtrend protection for stock return.

Originality/value: The term of CSR has transformed to ESG investment in the earliest 2000s only in developed countries such as America and European countries. Nevertheless, not so many literature studies reporting the benefit of implementing ESG in the Asia stock market.



The research scope is "during the COVID-19 period", has become a new value beyond this study.

Keywords: ESG, ASIA, Stock Market.

Introduction

In the context of economic globalization, especially in the Corona Virus Disease (COVID-19) pandemic era, most of businesses in all around the world has faced finansial crisis, hence it can lead to unpredictable fluctuations in the stock market. ESG performance has been used as one of indicators, that is belief successfully, can sustain the downtrend of the stock return globally due to finansial crisis (Barnet & Salomon, 2012). Willis (2020) mentioned that the importance of companies which have higher ESG scores will have better protection during stock market crash in COVID-19 pandemic era compared to companies which have lower ESG. Nevertheless, Demers et al. (2021) reported that ESG performance cannot stop or prevent the downtrend of stock return globally during COVID-19 pandemic in the first quarter of 2020. They mentioned that it is due to the ESG investment implementation is not flexible and cannot be generalize across the crisis. In other words that during the financial crisis, there were only few ESG components can increase the desire of investment model. Therefore, the reports of ESG information were ignored by investors.

According to Global Sustainable Investment Alliance or GSIA (2019) reported that in developed countries have used ESG performance as a mandatory measurement to assess the stock return and the number of percentage of public liested companies have already spent more asset to actuate ESG activities as a sustainability report from 2016 to 2018. For instance in United States of America, the global asset spent for ESG activities has increased by 37.5% from 2016 (USD 8,723 billion) to 2018 (USD 11,995 billion). Another example in Asian country is Japan, which the asset spent significantly for ESG activities has risen by 359% from the year 2016 (USD 474 billion) and 2018 (USD 2,180 billion). ESG report implementation in developed countries has well established compared to developing countries. Most of Asia countries are developing countries, except Japan, Singapore, Hong Kong, Israel, South Korea, Taiwan, and Macau (International Monetary Fund, 2022). In developed countries has implemented the ESG report as a sustainability report since the earlies of 2000s. Nevertheless, ESG in ASIA can be said still in the early stage of mandatory or obligation for public listed companies. Moreover, the public listed companies still lack of activities and government policy to support the development of sustainability development goals on ESG performance by 2030 (UNESCAP, 2018). Therefore, this gap will be an interesting topic to discuss further in this literature review study.

To address these research gaps found, this research is more focused on three research questions. Firstly, the research question is: How is ESG performance conducted among ASIA conutries in the context of influencing in ASIA stock market during COVID-19 pandemic? Secondly, the research question is: What are the syntheses and limitations of this field from three different perspectives: the empirical findings, theories, and methodological specifications? Lastly, the research question will be: What should be the resulting research agenda on ESG performance in ASIA Stock Market?

The main contribution of this research is to give a guidance for further researcher who wants to get data about the implementation of ESG performance in ASIA stock market towards market crash during COVID-19 pandemic. In addition, the result is expected can help to



advance the ESG field in terms of addressing suitable research gaps and constructing more information on theoretical framework and suggesting a better methodological validity. In addition, the purpose for the practical implication is to help government to monitor which companies or what kinds of policy that has implemented ESG reporting to support the Asia Sustainable Development Goals (SDGs) agenda in 2030.

Literature Review

A literature reviews can be broadly defined as a systematic way to collect and synthesize previous research (Baumeister & Leary, 1997). This literature review is used as a significant part of all kinds of research work which can provide a basis for knowledge progress, make a guideline for workplan, and create new ideas and directions in a certain area. Moreover, this systematic literature review can be used to guide the future research and theory work.

In this research used Systematic Literature Review (SLR) on the role of ESG performance on ASIA stock market based during COVID-19 pandemic. Moher et al. (2009) explained the purpose of researcher use a systematic literature review is to identify all the empirical evidences which is appropriate to specific inclusion criteria to gather information and answer the research questions and hypothesis, and can also minimize bias, therefore the reliable and valid result can be useful for further research.

The type of SLR is conducted in this research is meta-analysis. Davis et al. (2014) mentioned that a meta-analysis is defined as a statistical method of integrating the findings from many past studies to measure, compare, and identify the relationship among variables and also patterns that appear on the same topic. In addition, Glass (1976) said that by using meta-analysis method, every primary study must be abstracted and coded, and the result from findings are going to be changed into a common metric which is used to measure statistical measures or an overall effect size. Therefore, the implementation of a meta-analysis approach on the SLR studies is challenging, especially past studies has used different methodological approaches (Tranfield et al., 2003).

ESG (Environment, Social and Governance) performance in Asia Stock Market

Many past studies have shown positive correlation between ESG performance and stock return market. Albuquerque et al. (2020) reported that companies with higher score in environmental, social, and good corporate governance will have better protection from bad signals given from the outsiders which can lead to the downtrend movement during COVID-19 propagation time. Moreover, companies which runs more the project business based on the ESG activities will have more benefit from social such as trust, good image and capital (Lins, et al., 2017). Those previous studies mainly generated in developed countries such as European countries and the U.S. where the concept of ESG activities established and developed well. Therefore, the ESG implementation result is still unclear where it is applied in different region, such as Asia. According to Financial Times (2020) stated that there were some investors in Asia, for example in Japan, has already conscious the importance of ESG investment on stock market. However, in fact during the COVID-19 pandemic, most stock market faced crash or downtrend significantly in the worldwide. In some certain period for example Q3 in 2020, there were a reversal direction in the stock market. Therefore, tt is interesting to be figured out the relationship between ESG ratings and stock market, especially in Asia stock market.



The importance of ESG performance towards stock return.

There are many past studies explain the importance of ESG activities on stock return. ESG performance can create better financial performance through many mechanisms, for example increase the sales or income of the company or can reduce cost (Korwatanasakul & Manjoe, 2019). In addition, if company has better ESG scores in the sustainability report, it can proof that company is better than its rival. Lastly, companies with higher ESG score, normally will more solid and avoid more internal conflict due to pay attention on keeping their brand up, therefore the company can achive highest goal.

ESG performance is used as a part of strategies on sustainable investing in ASIA countries to get a larger scale for investors.

The implementation of ESG performance in ASIA countries is still limited. Not all in the ASIAN countries have already made rules as mandatory action to all public listed company on reporting the ESG activities as the report. In order to get bigger market cap for sustainable investment in ASIA countries, it is very important that how to comprehend the usefulness of asset under management to collaborate with ESG strategies. This comprehensive ways to get the highest stock return as a result. The top leader management in the public companies have several considerations to utilize their assets a long with ESG strategies which one of them is the corporate engagement (Uzsoki, 2020). The form of corporate engagement could be related to positive activities and the responsibility of shareholders to create a better corporate governance on ESG issues. Corporation with good governance will own better company value, hence it can increase the credibility from the investors to buy its stocks together. In addition, the solid corporate engagement from the management from public listed company on ESG issues can lead investors to be more eager to more concern on ESG performances into their stock portfolios. As a consequence, the companies are doing more enthusiastic in implementing the ESG activities as part of the corporate' strategy to attract the shareholder's interest on stock return. In conclusion, the public listed companies in ASIA when doing an investment in a sustainable strategy on ESG performance, can create a wider market scope and it will continue increasing gradually.

Method

This paper used systematic literature review (SLR) which follows the principles from PRISMA statement (Liberati et al., 2009). Previous studies are eligible for this literature reviews if they examined ESG performance to ASIA stock market events during COVID-19 pandemic. Thereby, the term "ASIA stock market events" consists of all types of stock market movement, such as stock price market, volatility, and stock return. In this research paper process, I relied database on "Scopus" and "Web of Science" and generate the keywords to show the literature research. Moreover, In the beginning point of the research, I employed the meta-analysis by Endrikat (2016), which have already provided a solid foundation for the relevant literature from 2020 to 2022.

Findings

The research scope for this research is that the data has to comprise of Environment, Social or corporate governance that relate to Asia Stock Market (stock price reaction, volatility, stock return, abnormal return) during the COVID-19 era (2020-2022).



Table 1. Meta-analysis Scopus and Web of Science journals

Keywords	Scopus	Web of Science
"ESG"	17,080	5499
"all" or "open access"	4848	1954
LIMIT-TO (PUBYEAR, 2022) OR LIMIT-	3113	900
TO (PUBYEAR, 2021) OR LIMIT-		
TO (PUBYEAR, 2020)		
LIMIT-TO (SUBJAREA, "BUSI") OR LIMIT-	964	202
TO (SUBJAREA, "ECON"		
LIMIT-TO (DOCTYPE, "ar")	893	192
LIMIT-TO (PUBSTAGE, "final")	734	-
LIMIT-	163	50
TO (AFFILCOUNTRY, "China") OR LIMIT-		
TO (AFFILCOUNTRY, "Malaysia") OR LIMIT-		
TO (AFFILCOUNTRY, "Indonesia") OR LIMIT-		
TO (AFFILCOUNTRY, "Viet Nam") OR LIMIT-		
TO (AFFILCOUNTRY, "India") OR LIMIT-		
TO (AFFILCOUNTRY, "Hong Kong") OR LIMIT-		
TO (AFFILCOUNTRY, "United Arab		
Emirates") OR LIMIT-		
TO (AFFILCOUNTRY, "Japan") OR LIMIT-		
TO (AFFILCOUNTRY, "Saudi		
Arabia") OR LIMIT-		
TO (AFFILCOUNTRY, "Singapore") OR LIMIT-		
TO (AFFILCOUNTRY, "South		
Korea") OR LIMIT-		
TO (AFFILCOUNTRY, "Bangladesh") OR LIMIT-		
TO (AFFILCOUNTRY, "Taiwan") OR LIMIT-		
TO (AFFILCOUNTRY, "Thailand") OR LIMIT-		
TO (AFFILCOUNTRY, "Sri Lanka")		
LIMIT-TO (EXACTKEYWORD, "COVID-	47	-
19") OR LIMIT-		
TO (EXACTKEYWORD, "ESG") OR LIMIT-		
TO (EXACTKEYWORD, "Financial		
Performance") OR LIMIT-		
TO (EXACTKEYWORD, "Systematic Literature		
Review"	47	50
The rest:	47	50

Table 2. Empirical findings review summary

Authors	Countries in Asia	Period	Event Samples
Broadstock D.C., Chan K., Cheng L.T.W., Wang X.	China	17 Januari 2020 - 27 March 2020	CSI300 firms traded on Shanghai Stock Exchange and Shenzhen Stock Exchange.



Takahashi H., Yamada K.	Japan	31 December 2019 - 31 March 2020	sample consists of 3349 firms data on all firms listed on at least one of the four stock exchanges in Japan (i.e., Tokyo, Sapporo, Nagoya, and Fukuoka) on December 30, 2019, the last trading day of 2019.
Omura A., Roca E., Nakai M	Japan	January 1, 2018 to June 24, 2020	examine four SRI indices (ETF in the U.S. And MSCI net returns for regions: US, Japan, Europe) and 24 funds.
Akhtaruzzaman M., Boubaker S., Umar Z.	China and India	January 1, 2020 to April 21, 2020	ESG Indices from the emerging markets include Brazil, China, India, Russia, and South Africa. The developed markets such as US, UK, and European.
Hoang H.V., Nguyen C., Nguyen D.K.	South Korea, China, Japan	January 31, 2020 to May 29, 2020	4508 firms listed on the four startup stock exchanges listed startups on four stock exchanges: NASDAQ, CHINEXT, JASDAQ and KOSDAQ
Lee S., Lee D., Hong C., Park MH.	South Korea	January 20, 2020 to February 28, 2021	34 firms Korean companies listed on the Dow Jones Sustainability Indices (DJSI) in the DJSI and 133 firms that are not in the DJSI
Zhong M., Zhao W., Shahab Y.	China	January 20, 2020 to March 25, 2020	3227 firm Chinese firms listed on both Shanghai and Shenzhen Stock Exchanges in 2020
Liu H., Jiang J., Xue R., Meng X., Hu S.	China	January 1, 2020 to June 30, 2020	use Chinese A-share firms listed on the Shanghai and Shenzhen stock markets
Baatwah S.R., Al-Qadasi A.A., Al-Shehri A.M.	Oman	March 11, 2020 to December 31, 2021	use 261 companies for CSR budgeting analysis and 169 companies for CSR spending analysis
Beloskar, Ved Dilip; Rao, S. V. D. Nageswara	India	March 11, 2020 to April 12, 2021	335 public listed companies in Bombay Stock Exchange's (BSE) fagship S&P BSE 500 index which alreade completed with ESG indicators.



Table 3. Theoretical framework review summary

Author	Theoretical Framework	SpillOver Effect
Broadstock D.C., Chan K., Cheng L.T.W., Wang	Undefined	NO
X. Takahashi H., Yamada K.	Undefined	NO
Omura A., Roca E., Nakai M	Undefined	NO
Akhtaruzzaman M., Boubaker S., Umar Z.	Undefined	YES
Hoang H.V., Nguyen C., Nguyen D.K.	Undefined	NO
Lee S., Lee D., Hong C., Park MH.	Undefined	NO
Zhong M., Zhao W., Shahab Y.	Legitimacy Theory	NO
Liu H., Jiang J., Xue R., Meng X., Hu S.	Resource based	YES
	theory	
Baatwah S.R., Al-Qadasi A.A., Al-Shehri A.M.	Stakeholders	NO
Beloskar, Ved Dilip; Rao, S. V. D. Nageswara	Undefined	NO

Table 4. Methodological framework review summary

Author	Estimation Model	Estimation Window	Confounding Events	Non- parametric test
Broadstock D.C., Chan K., Cheng L.T.W., Wang X.	Market	3 months	NO	NO
Takahashi H., Yamada K.	Market	6 months	YES	NO
Omura A., Roca E., Nakai M	Market, Fama- French Five model	5 months	NO	NO
Akhtaruzzaman M., Boubaker S., Umar Z.	market, time- varying parameter Vector Autoregressive model (TVP– VAR)	8 weeks	YES	NO
Hoang H.V., Nguyen C., Nguyen D.K.	Market	4 months	YES	NO
Lee S., Lee D., Hong C., Park MH.	Market	52 weeks	NO	NO
Zhong M., Zhao W., Shahab Y.	Market	12 months	NO	NO
Liu H., Jiang J., Xue R., Meng X., Hu S.	Market	6 months	NO	NO
Baatwah S.R., Al-Qadasi A.A., Al-Shehri A.M.	Market	36 months	NO	NO
Beloskar, Ved Dilip; Rao, S. V. D. Nageswara	Market	32 weeks	NO	NO



Discussion

In this section the author would like to discuss further about what the findings above based on several parts, such as empirical findings, theoretical frameworks, and methodological specification.

Emperical findings

As outlined in the Table 1, although from Scopus website data has 47 journals that need to be reviewed, there are only 9 journals which fulfill the research scope. In addition, for the web of science website data, there are only 3 journals was selected out of 50 journals which fulfill the criteria. Afterwards, the researcher separate the double publication on both website journals. Therefore, the total number of selected journals are only 10 journals which 9 journals derived from Scopus website and 1 additional journal from WOS. Those studies examine the implementation of ESG in ASIA countries towards stock market during market crash due to COVID-19 pandemic.

Theoretical frameworks

In this section, the researcher wants to review past studies in terms of the effects that they measure which are direct and spillover effect. The theoretical frameworks also reviews about what the underlying theories are used to link the phenomenon and hypotheses arisen in the research paper.

Theoretical perspectives on the direct effect

The direct effect explaines the effect of ESG performance event on the Asia stock returns during COVID-19 pandemic for the event. The underlying theories employed by researchers is stakeholder (Freeman, 2010), and legitimacy (Porter and van der Linde, 1995). Those theories arguing that the role of conflict of interest from stakeholders and investors react to new stock market information before COVID-19 era (Fama et al., 1969). During the pandemic, the stock market crash could not be avoided for the first quarter 2020. Post lockdown era, many investors are more likely to buy companies who has higher ESG performance rather than lower ESG performance. It means that ESG bring the direct effect to stock market reaction by showing a reversal downtrend.

Theoretical perspectives on the spillover effect

The spillover effect explaines the effect of conducting ESG activities by public listed companies where the event has been caused by other company's action or events. There are only two out of 10 studies reviewed are related to the spillover effect. Table 3. Has shown the undefined theories used in spillover studies. Similar to direct effect studies, the condition of COVID-19 event gives a shocked information disclosure which is received by investors and stakeholders. Those information can react upon panic selling where the investors predict bad future of the companies. When the negative information released to the public, which is related to the number of death people or lockdown due to COVID-19, the stakeholders might think different budget allocation strategy which is useful for the future company's financial which is related to resource-based theory. Therefore, those new strategies will be a spillover to others.

Methodological specification

In this review section, the researcher will explain more about the details of the methodological applied as proposed by MacKinlay (1997) which is based on the daily chart or value stock returns (Brown & Warner, 1985). Some elements that will be reviewed in this study are estimation model, estimation window, confounding events, and non-parametric test



(statistic test). First, the estimation model will describe about how the researcher measure the data based on market data or anykinds of previous studies used to more concern on estimating Asia stock return. Second, the event windows is described as the range of period needs for Asia stock market movement are scaled and defined, for examples the period of stock returns estimation, volatility, or abnormal returns measurement. The third component which is the most crucial issue is named by confounding events. This events occured at the same time with the interest event or event window, and it can actuate their own reactions, hence the possibility for making mistakes to the event of interest is high or can make bias conclusions (McWilliams and Siegel, 1997). Therefore, the researcher do reviewing on how the extant the past literature studies can deal with confounding events. Last, the researcher will do review on the statistic test, where it reviews whether nonparametric test statistics are selected and used to control the normality assumption for parametric tests.

Based on Table 4, the researcher concerned, first, on the estimation model. The estimation model is used to determine the prediction of the role ESG reporting dealing with the downtrend movement in the Asia stock market during COVID-19 era in 2020. The researcher only find a few models which are gathered the data directly from market, Fama-french Five Model, and time-varying parameter Vector Autoregressive model (TVP–VAR). Thus, the market model has become the most dominant estimation model in this reseach study. In addition, the researcher also concern about the underlying markets (benchmarks) by considering their size to get data or information as representative on measuring estimated market returns. The researcher found that while prevailing event studies generally, previous researcher conduct large benchmarks to measure the market returns, many researchers do not explicitly mention that stock market index was used also for the measurement.

The estimation window shows the variety of pre-event period events used to predict the stock return during COVID-19 period. In every research has different of unit measurements, for intance using weeks or months. The third component is confounding events, the researcher admit there are only two out of ten journals that have addressed the confounding event. The last component is non-parametric test. All of the reviewed journals have conducted the statistic tests which can be strengthen against event-induced variance and cross-sectional correlation.

Empirical findings recommendations

In this study, the researcher wants to point out 3 research gaps that should be figure out further by future research. The first recommendation is the term of ESG is new compare to Corporate Social Respondsibilities (CSR). Many past studies found especially in the developing countries in ASIA, they are more likely used the term of CSR or environmental pollution, social problem or good corporate governance, which implicitly used separate one to each other or combine 2 out of 3 components of ESG rather than comprehensively named by ESG performance. Therefore, for the future research, in order to collect more data, it needs to be discussed more details the each segmentation of ESG as a keyword when they are looking for in the scopus or WOS website rather than use the keyword of ESG performance as a term.

The second recommendation is the widening research scope of subjects. In this case is the implementation of ESG performance. Although, ESG performance has been used in many developed countries, the fact that in Asia countries are still in the early stage. Only developed and big countries in Asia such as Japan, China, South Korea, Indonesia and others have implemented the ESG reporting to support the sustainable development goals. Therefore, when



the researcher wants to figure out more ESG information in developing countries, it is quite difficult to find and match to this relevant topic.

The third recommendation is widening scope of object research. To get more comprehensive data for advanced study, the term of "stock market" should be revised by "financial market". It means the scope of research is not only focuses on the "stock" but also more focus on the other financial market instruments such as bonds, cyrptocurrency, and forex.

Theoretical framework recommendations.

In the academic papers or especially in the management research, theories have a crucial role to hypothesize on the relationships among variables. Indeed, it should be big noted that there are many research questions cannot be directly answered only by designing solely upon other research questions. In other words, one theory could not be sufficient to examine the main process that can trigger certain findings and to hypothesize on relationships (Bacharach, 1989; Mayer and Sparrowe, 2013). The researcher can suggest one limitation that should be implemented in future research.

The researcher suggests that for the future studies must rely on the theoretical framework which explained the rationale behind how the ESG performance affect to Asia stock market, rather than based on the phenomenon driven. As per seen in the Table 3, the researcher found that previous researchers did not consider a theories as a fundamental framework in their investigations. It means, in those studies, hypotheses are build based on the underlying case and not be based on the theoretical framework. The negative effect for this action is quite difficult to understand the intricate mechanisms which have done by the researchers (for example: this study is spillover or not; or this study result is relevant to other condition or not).

Methodological specification recommendations.

The reseacher would like to provide recommendations on the estimation or event windows and confounding events. First, for the future research, they should consider multiple event windows in the methodological framework examinations. The researcher found that many past event studies examined only focus on one single event window to capture the Asia stock return which is in the year of 2020. Therefore, the researcher suggests that the next research should more focus in 2021 when the condition still in COVID-19 era. However, as a negative possible consequence, by implementing the single event windows may not consider for other potential information leakage (McWilliams and Siegel, 1997), the anticipation action from investors towards stock volatility (Bhattacharya et al., 2000), and postponed the learning effects (Bebchuk et al., 2013) which can need more event window extensions. Therefore, the future research should at least consider further event windows which would be able to deal with those possible issues raised by single event windows.

Second, methodological point need to be addressed in this review studiy refers to the problem of confounding events and how to deal with them. The past review studies described that researchers treat confounding events very differently and do not explicitly explain how they manage and handle with this matters (instead of their potential biasing conclusions on the Asia stock return). Although it is a challenge to get the state-of-the-art in handling with confounding events, keeping the event window can help researcher to have a better control for confounding events as substantially rises with the length of the event window.



Conclusion

In this research uses a systematic literature review (SLR) which only show 10 past studies from 2020 to 2022 examining the role of ESG performance in Asia stock market during pandemic. this research paper has answered 3 research questions: how is ESG performance conducted among ASIA conutries in the context of influencing in ASIA stock market during COVID-19 pandemic? Secondly, what are the syntheses and limitations of this field from three different perspectives: the empirical findings, theories, and methodological specifications? Lastly, What should be the resulting research agenda on ESG performance in ASIA Stock Market?

Regarding to answer RQ1, the researcher has explained by performing the relevant literatures in this field which is comprehensively attributed to Asia stock market. As we can see that only few references that is related to the implementation of ESG in Asia stock market. It means that ESG implementation is still in the early stage compared to developed countries such as US and European countries. However, in Asia, there are several countries has conducted the ESG as a mandatory or still optional for making sustainable reporting. Concerning RQ2 and RQ3, the researcher has shown to explain by using three distinct reviews which are the empirical findings, underlying theoretical frameworks, and methodological review. By having those three different reviews, the researcher realize to identify limitations and develop meaningful recommendations. To sum up, the researcher provides 10 research, three theoretical, and two methodological recommendations to advance future event studies examining ESG performance which is used to support and monitor the development of implementation for SDGs as next agenda in 2030. These findings can be useful to help further studies in terms of addressing research gaps, and providing more relevant theoretical reviews and reliable methodological framework.

This research implication of this study will give value or benefit to practical and theoretical things. For practical, this result will give input to policy maker such as governments and managements to conduct more concern about the implementation of ESG. Although the implementation of ESG has already started in early stage, it is needed to make clear decision or support as a mandatory report in each ASIA country. It is because ESG has successfully been noticed and considered by investors during the COVID-19 pandemic as a downtrend protection for stock return. For theoretical, this result can bring benefit for further researcher to use as a foundation materials for doing analysis the role of ESG in ASIA stock market.

References

- Akhtaruzzaman, M., Boubaker, S., & Umar, Z. (2022). COVID–19 media coverage and ESG leader indices. *Finance Research Letters*, 45(March 2021).https://doi.org/10.1016/j.frl.2021.102170
- Albuquerque, R., Koskinen, Y., Yang, S., & Zhang, C. (2020). Resiliency of environmental and social stocks: An analysis of the exogenous COVID-19 market crash. Review of Corporate Finance Studies, 9(3), 593–621. https://doi.org/10.1093/rcfs/cfaa011.
- Bacharach, S.B. (1989). Organizational theories: some criteria for evaluation. Academic Management Revision. 14 (4), 496. https://doi.org/10.2307/258555.
- Barnett, M. L., & Salomon, R. M. (2012). Does it pay to be really good? Addressing the shape of the relationship between social and financial performance. Strategic Management Journal, 33(11), 1304-1320. DOI. 10.2307/41679849.



- Bhattacharya, U., Daouk, H., Jorgenson, B., Kehr, C.-H. (2000). When an event is not an event: the curious case of an emerging market. Journal of Finance and Economic. 55 (1), 69–101. https://doi.org/10.1016/S0304-405X(99)00045-8.
- Baumeister, R. F., & Leary, M. R. (1997). Writing narrative literature reviews. Review of General Psychology, 1, 311–320. https://doi.org/10.1037/1089-2680.1.3.311.
- Bebchuk, L.A., Cohen, A., & Wang, C.C. (2013). Learning and the disappearing association between governance and returns. Journal of Finance and Economic 108 (2), 323–348. https://doi.org/10.1016/J.JFINECO.2012.10.004.
- Beloskar, V. D., & Rao, S. V. D. N. (2022). Did ESG Save the Day? Evidence From India During the COVID-19 Crisis. In *Asia-Pacific Financial Markets* (Issue 0123456789). Springer Japan. https://doi.org/10.1007/s10690-022-09369-5
- Broadstock, D. C., Chan, K., Cheng, L. T. W., & Wang, X. (2020). The role of ESG performance during times of financial crisis: Evidence from COVID-19 in China. *Finance Research Letters*, *July*, 101716. https://doi.org/10.1016/j.frl.2020.101716.
- Brown, S.J., Warner, J.B. (1985). Using daily stock returns. J. Financ. Econ. 14 (1), 3–31. https://doi.org/10.1016/0304-405X(85)90042-X
- Davis, J., Mengersen, K., Bennett, S., & Mazerolle, L. (2014). Viewing systematic reviews and meta-analysis in social research through different lenses. SpringerPlus, 3, 511. https://doi.org/10.1186/2193-1801-3-511.
- Demers, E., Hendrikse, J., Joos, P., & Lev, B. I. (2021). ESG Didn't Immunize Stocks Against the Covid-19 Market Crash. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3675920
- Endrikat, J.,(2016). Market reactions to corporate environmental performance related events: a meta-analytic consolidation of the empirical evidence. J. Bus. Ethics 138 (3), 535–548. https://doi.org/10.1007/S10551-015-2598-0.
- Fama, E.F., Fisher, L., Jensen, M.C., & Roll, R. (1969). The adjustment of stock prices to new information. International Economic Rev. 10 (1), 1. https://doi.org/10.2307/2525569.
- Financial Times. (2020). Asian investors warm to embracing sustainable business targets. (May 11, 2020).
- Freeman, R.E.(2010). Strategic Management: A Stakeholder Approach. Cambridge University Press. https://doi.org/10.1017/CBO9781139192675.
- Glass, G. V. (1976). Primary, secondary, and meta-analysis of research. Educational Researcher, 5, 3–8. https://doi.org/10.2307/1174772.
- Global Sustainable Investment Alliance. (2019). 2018 Global Sustainable Investment Review. Retrieved from http://www.gsi-alliance.org/.
- Hoang, H. V., Nguyen, C., & Nguyen, D. K. (2022). Corporate immunity, national culture and tock returns: Startups amid the COVID-19 pandemic. *International Review of Finansial Analysis*, 79(October 2021), 101975. https://doi.org/10.1016/j.irfa.2021.101975
- International Monetary Funds. (2022). https://www.imf.org/en/Countries
- Korwatanasakul, U., & A. Majoe. (2019). ESG Investment: Towards Sustainable Development in ASEAN and Japan. Tokyo: ASEAN– Japan Centre.
- Lee, S., Lee, D., Hong, C., & Park, M. H. (2022). Performance of socially responsible firms during the COVID-19 crisis and trading behavior by investor type: Evidence from the Korean stock market. *Finance Research Letters*, 45(October 2021), 102660. https://doi.org/10.1016/j.frl.2021.102660
- Liberati, A., et al. (2009). The PRISMA statement for reporting systematic reviews and metaanalyses of studies that evaluate health care interventions: explanation and elaboration. PLoS Med. 6 (7), e1000100 https://doi.org/10.1371/journal.pmed.1000100.



- Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. Journal of Finance, 72(4), 1785–1824. https://doi.org/10.1111/jofi.12505
- Liu, H., Jiang, J., Xue, R., Meng, X., & Hu, S. (2020). Corporate environmental governance scheme and investment efficiency over the course of COVID-19. Finance Research Letters, Volume 47, Part B,2022,102726,ISSN 1544-6123. https://doi.org/10.1016/j.frl.2022.102726.
- MacKinlay, A.C. (1997). Event studies in economics and finance. J. Econ. Lit. 35 (1), 13–39. http://www.jstor.org/stable/2729691.
- Mayer, K.J., Sparrowe, R.T. (2013). From the editors: integrating theories in AMJ articles. Academic Management Journal Vol. 56 (4), 917–922. http://www.jstor.org/stable/43589199.
- McWilliams, A., & Siegel, D. (1997). Event studies in management research: theoretical and empirical issues. Acad. Manag. J. 40 (3), 626–657. https://doi.org/10.5465/257056.
- Mayer, K.J. & Sparrowe, R.T. (2013). From the editors: integrating theories in AMJ articles. Academic Management Journal 56 (4), 917–922. http://www.jstor.org/stable/43589199.
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. Annals of Internal Medicine, 151, 264–269. https://doi.org/10.7326/0003-4819-151-4-200908180-00135.
- Omura, A., Roca, E., & Nakai, M. (2021). Does responsible investing pay during economic downturns: Evidence from the COVID-19 pandemic. *Finance Research Letters*, 42(December 2020), 101914. https://doi.org/10.1016/j.frl.2020.101914
- Porter, M.E., van der Linde, C., 1995. Toward a new conception of the environment competitiveness relationship. J. Econ. Perspect. 9 (4), 97–118. https://doi.org/10.1257/jep.9.4.97.
- Baatwah, Saeed Rabea & Al-Qadasi, Adel Ali & Al-Shehri, Amer Mohammed & Derouiche, Imen, (2022). Corporate social responsibility budgeting and spending during COVID–19 in Oman: A humanitarian response to the pandemic. Finance Research Letters, Elsevier, vol. 47(PB).
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. Journal Business Research, 104, 333–339.
- Takahashi, H., & Yamada, K. (2021). When the Japanese stock market meets COVID-19: Impact of ownership, China and US exposure, and ESG channels. *International Review of Financial Analysis*, 74(June 2020), 101670. https://doi.org/10.1016/j.irfa.2021.101670
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. British Journal of Management, 14, 207–222. https://doi.org/10.1111/1467-8551.00375.United Nations Economic and Social Commission for Asia and the Pacific. (2018). Asia and the Pacific SDG Progress Report 2017. Retrieved from: https://www.unescap.org/publications/asia-and-pacific-sdg-progressreport-2017.
- Uzsoki, D. (2020). Sustainable Investing of finance. *International Institute for Sustainable Development*, February, 29.
- Willis, A. (2020, April 24). ESG as an equity vaccine. Morningstar Market Insights. Retrieved from https://www.morningstar.ca/ca/news/201741/esg-as-an-equity-vaccine.aspx
- Zhong, M., Zhao, W., & Shahab, Y. (2022). The philanthropic response of substantive and symbolic corporate social responsibility strategies to COVID-19 crisis: Evidence from China. *Corporate Social Responsibility and Environmental Management*, 29(2), 339—



355. 10.1002/csr.2204