



CORPORATE INVESTMENT AND CORPORATE PERFORMANCE: DO CRISIS MATTER?

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Abstract

Corporate performance is an achievement of success from a series of corporate activities in several predetermined strategies. Investing in goods and capital increases the firm's value and therefore the firm's performance will be different during the economic crisis and normal conditions. The study aims to examine the relationship between corporate investment and corporate performance. Furthermore, this study also does a different test of the corporate investment effect on corporate performance between the normal and crisis periods. We use the Capital Expenditure and Net Working Capital as measurements of corporate investment and firm performance proxied by operating profit margin. The sample used are 243 non-financial industries firms listed on the Indonesia Stock Exchange (IDX) for the 2017-2021 period, then there is 1215 observation data. The data were analyzed descriptively, and then panel data regression was used for testing the hypotheses. The results showed that the company's investment had a positive effect on the company's performance and there was a significant difference in these influences in both normal and crises periods. This finding has implications that companies can continue investing to improve their performance with economic growth as main consideration for investment decision-making.

Keywords: *Corporate investment; Corporate performance; Crisis; Investment decision making.*

Abstrak

Kinerja Perusahaan merupakan pencapaian keberhasilan dari serangkaian kegiatan perusahaan dalam beberapa strategi yang telah ditentukan. Investasi dalam barang dan modal meningkatkan nilai perusahaan dan oleh karena itu kinerja perusahaan yang akan berbeda selama krisis ekonomi dan kondisi normal. Penelitian ini bertujuan untuk menguji hubungan suatu investasi perusahaan dengan kinerja perusahaan. Selain itu, penelitian ini juga melakukan pengujian yang berbeda terhadap pengaruh investasi perusahaan terhadap kinerja perusahaan. Penelitian ini menggunakan *Capital Expenditure* dan *Net Working Capital* sebagai pengukuran investasi perusahaan dan kinerja perusahaan yang diprosikan dengan Operating Profit Margin. Sampel yang digunakan adalah 243 perusahaan industri non-keuangan yang tercatat di Bursa Efek Indonesia (BEI) periode 2017-2021 dan total ada 1215 unit observasi. Data dianalisis secara deskriptif, dan regresi data panel digunakan untuk menguji hipotesis. Hasil penelitian menunjukkan bahwa investasi perusahaan berpengaruh positif terhadap kinerja perusahaan dan ada perbedaan signifikan dari pengaruh tersebut pada periode normal dan krisis. Temuan ini memiliki implikasi bahwa perusahaan dapat melanjutkan investasi untuk meningkatkan kinerja dengan pertumbuhan ekonomi sebagai pertimbangan utama pengambilan keputusan investasi.

Kata Kunci: *Investasi perusahaan; Kinerja perusahaan; Krisis; Keputusan investasi.*

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INTRODUCTION

The uncertainty of global events can impact the activities of individuals, groups, and countries, among others, triggered by crises, whether initiated by global financial pressures or pandemics. The problem affects one area and almost all existing activities, including the firm's performance.

Firm performance is also very important for the sustainability and survival of a firm. According to Nugrahayu and Retnani (2015), firm performance results from work that a person or group can achieve within a firm by their respective authorities and responsibilities to achieve firm goals legally and not violating the law, not contradicting morals and ethics.

Portraits of firm conditions in normal and crisis periods also show a similar trend in Indonesia, where the performance of Indonesian industrial companies is as follows:

Table 1. IDX Industrial firm Performance Data for the Last 12 Years

Sector	Growth In 12 Years			High (IDR)
	IDR	%	AVG/YEARS (%)	
JKSE	4.887,95	270,72	22,56	6.693,47
JKAGRI	2.410,54	197,84	16,49	3.628,99
JKMING	2.722,95	291,78	24,32	3.656,16
KBIND	713,40	484,98	40,41	860,50
JKMISC	1.281,50	451,04	37,59	1.565,62
JKCONS	2.638,32	672,25	56,02	3.030,77
JKPROP	476,03	387,27	32,27	598,95
JKINFA	483,23	62,63	5,22	1.254,85
JKFINA	1.017,15	492,40	41,03	1.223,72
JKTRADE	731,41	265,89	22,16	1.006,94

Source: Reprocessed from Investing.com (2019).

In the last 12 (twelve) years, the highest price for JKSE was (Rp. 6,693.47-Rp. 1,802,52) = Rp. 4,887.95, equivalent to an increase of 270.72% or an average of 22.56. % per year. Behind the rise in JKSE prices was the growth of 9 industrial sectors on the IDX with varying percentage increases. The increase with the highest value was achieved by the consumption sector (JKCONS) by reaching 672.25% or equal to 56.02% per year. Meanwhile, the Infrastructure sector (JKINFA) is the lowest industrial sector, only 62.63% or equivalent to 5.22% per year.

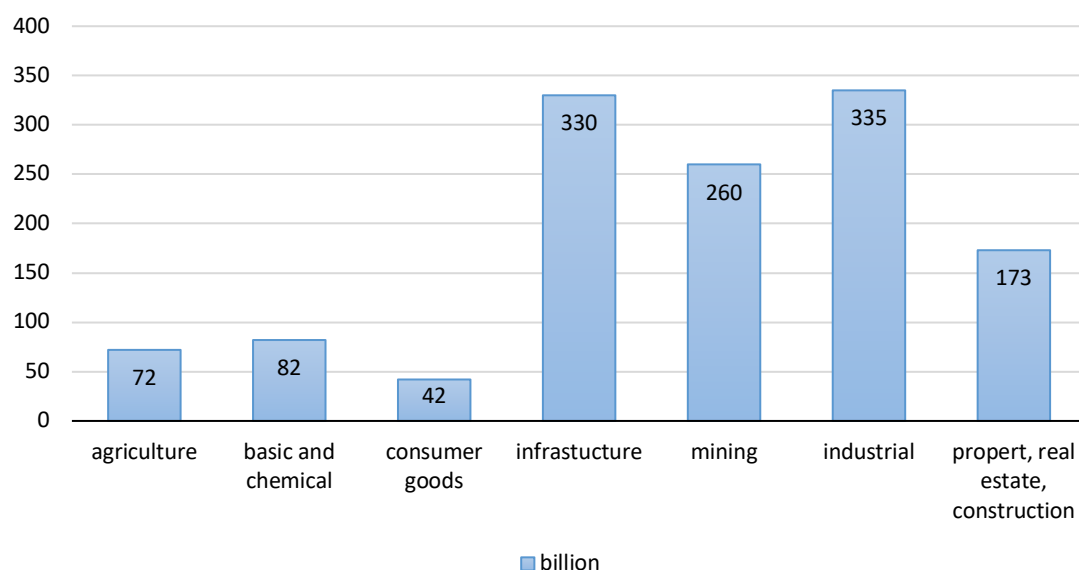


Figure 1. The investment performance of the non-financial industry in the last 10 years
Source: Reprocessed from IDX (2020).

Based on the figure, there has been an increase and decrease in the average stock trading of each firm sector on the Indonesia Stock Exchange (IDX) in the last 10 years. The first sector with the highest average stock trading of 355 billion shares is in various industries. The second sector is infrastructure, utilities, and transportation (330 billion), the third sector is mining with stock trading (260 billion), the fourth sector is property, real estate, and building with stock trading (173 billion), the fifth sector is basic and chemical industry (82 billion), the sixth sector is agriculture (72 billion), and the sector with the lowest value is the goods and consumption industry with stock trading (42 billion). The consumer goods industry sector has the lowest average share trading volume compared to other sectors; this indicates that the condition of the industry is interpreted as not improving. Therefore, it is necessary to identify the factors that cause the state of the consumer goods industry sector not to improve.

Farooq et al (2022) describe the urgencial of a stable economic condition for an organization's success. Any fluctuation in economic policy directly influences corporate-level decisions as well as corporate investment decision.

Investment is also one of the references to increase economic growth; in essence, investment is a step to develop economic growth activities. In general, investment is divided into two: investment in financial assets (financial assets) and investment in real assets (real assets). Investments in financial assets are carried out in the money market, for example, in the form of certificates of deposit, commercial paper, money market securities, and others. Investments can also be made in the capital market, for example, in stocks, bonds, warrants, options, etc. Meanwhile, investment in real assets can take the form of purchasing productive assets, establishing factories, opening mining, and opening plantations. Investment is utilizing several funds in an asset for a certain period to obtain a profit or increase wealth.

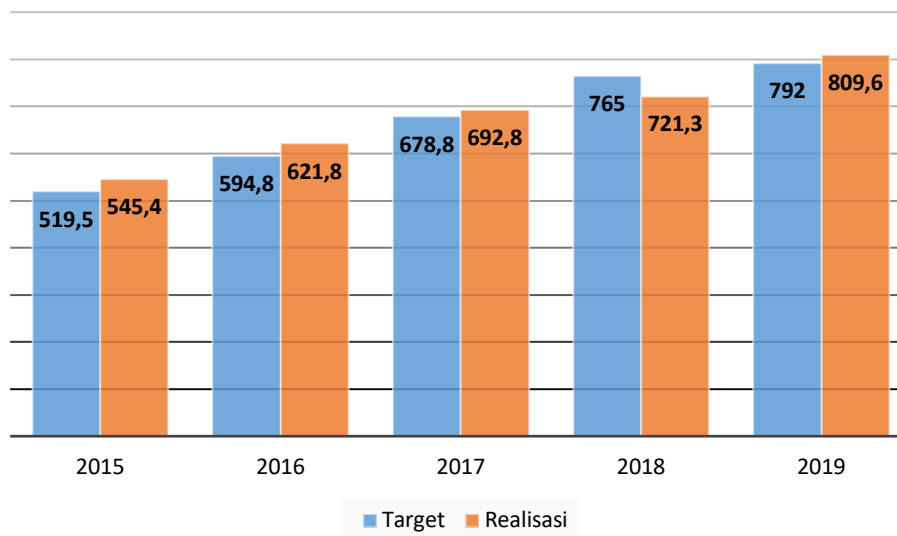


Figure 2. Indonesian Investment Realization 2015-2019
Source: BKPM (2020).

Indonesia's investment realization for five years show that Indonesia's investment realization in 2016 rose to 48.4% from 2015's realization, which amounted to Rp 545.4 trillion. Meanwhile, compared to 2018, the realization rose 12.24% from Rp 721.3 trillion. The largest contribution came from foreign investment (PMA), with the realization (PMDN) of domestic investment amounting to Rp 386.5 trillion, up 17.6% compared to the previous year, which amounted to Rp 328.6 trillion. The Investment Coordinating Board (BKPM) recorded investment realization that the investment achievement in 2020 from January to December managed to penetrate Rp. 826.3 trillion (101.1%) on the target of Rp. 817.2 trillion. Throughout 2020, realized investment for domestic investment (PMDN) was Rp.413.5 trillion (50.1%), while PMA or foreign investment was Rp.412.8 trillion (49.9%). The achievement in 2020 was able to absorb Indonesian workers with a total of 153,349 investment projects, even though Indonesia's economic conditions had experienced shocks due to the Covid-19 pandemic. In 2020 the investment target of Rp. 817.2 trillion can be achieved. The achievement of this target cannot be separated from the role of PMDN, which is more contributing compared to PMA during the Covid-19 period.

One of the investments that are considered profitable comes from non-financial industries such as the agricultural sector (Agriculture), the basic and chemical industrial sector (Basic Industry & Chemical), the consumer goods industry sector (Consumer Goods), the infrastructure, utility, and transportation industry sector, the industrial sector. Mining, various industry sectors (Miscellaneous Industry), property, real estate, building construction industrial sectors, trade, services, and industrial investment sectors.

Investment become a fundamental issue in corporate finance as well as an important driver of the corporate performance (Sanford and Yang, 2021). Investing in goods and capital increases the firm's value and therefore the firm's performance needed during the Covid-19 period that will be different during the economic crisis and normal conditions. Uncertain economic environment mitigates the legal protection of investors' rights, thus leading to harm the investor's confidence to make any investment (Zhang, 2019) then business activities are threatened and firm performance may decline.

Firm performance is a firm's overall achievement in achieving the strategic objectives determined in the chosen strategic initiative. firm performance can also be interpreted as achieving its goals through the effective and efficient use of resources.

The contribution of several industries based on the table data above shows an increase and decrease in the 2017-2019 normal period and the 2018-2020 financial crisis and pandemic, where the sectors that experienced a rise in normal times were the construction, transportation and warehousing, information and communication, services sectors. Finance and insurance, and corporate services. The companies that experienced a decline in normal times were the agriculture, fishery, and forestry sector, the mining sector, the processing industry sector, the electricity and gas procurement sector, the wholesale and retail trade sector for car and motorcycle repairs, the accommodation and food and beverage supply sector, and the real estates' sector.

Companies that can survive during the financial crisis and the COVID-19 pandemic can even experience an increase in income, namely in the agriculture, forestry, and fishery sectors, the processing industry sector, the construction industry sector, the information and communication industry sector, the financial services, and insurance industry sector, and the insurance and financial services sector. Real estate industry and the corporate service industry sector. The companies that experienced a decline during the financial crisis and pandemic were the mining industry sector, the electricity and gas supply industry sector, the wholesale and retail trade industry sector, the transportation and warehousing industry sector, and the accommodation and food and beverage supply industry sector.

Performance during the crisis has a clear impact on the economic sector. Efforts to minimize the impact of declining performance can be done by corporate restructuring, portfolio mapping and Strategic Business Units (SBU), leadership factors, financial performance factors, and organizational performance factors. It is clearly visible in normal times and now the Economic Crisis being affected by Covid 19, one determinant of performance is company investment to restore the crisis. The most important level of the investment decision process is the performance of the corporate's investment. A delayed investment in response to higher uncertainty is part of the corporate's abilities in real options framework (Sanford and Yang, 2022).

Signaling theory states that the superiority of investor decisions can be influenced by the superiority of information disclosed by the company in the financial statements, excellence. This information aims to minimize information asymmetry that arises when managers are more aware of internal information and corporate's prospects in the future than corporate's external parties. Good financial performance strengthens investor confidence in the corporate which refers to several criteria of good financial performance,

including increasing profits, good governance, and efficiency so as to increase company investment. Fakhroni (2018) found that free cash flow is positively related to profit management and asset investment inefficiencies mediate the relationship between free cash flow and profit management. Furthermore, the quality results of financial performance are a positive determinant of overinvestment conditions. (Fadilah et al, 2021).

The examination of corporate performance linked to its investment still becomes an interesting topic. Previously, those who examined the topic of investment and performance showed a variety of units of analysis, namely manufacturing companies, mining companies, etc. in a range of 2012-2015. We focus on analysis the effectivity of investment decision in industry level especially non financial industry. As is known, the contribution of the non-financial industry to the Indonesian economy is significantly growing, but during the pandemic period there was a decrease in profits and assets. This requires identifying the causes associated with the corporate's investment decisions during the pandemic that are connected to its financial performance.

The researcher uses the analysis unit of non-financial industrial companies listed on the IDX for the 2017-2021 period, with the 2019-2021 crisis points, 2020, and 2021 as the novelty values in this study. Furthermore, we use OPM (Operating Profit Margin) as a measurement of corporate performance follow to Fadilah et al (2021) because OPM ratio describes the pure profit of sales. According Juca and Fishlow (2021), the firm, investment proxied by Capex (Capital Expenditure) and Net Working Capital (NWC) that describe the long and short investment of corporate. In particular, we continue Juca and Fishow's research (2021) on the differences in the corporate's investment in times of crisis by using cut-offs throughout crisis periods, both financial crises and pandemic crises. The wider of industry analyzis from Quddus et al (2022), the discussion of this research is expected to contribute positively to the study of the development of investment theory and corporate performance in normal periods and crises. In practical terms, the findings obtained will be taken into consideration by the company in making decisions on the level of investment chosen according to the situation and conditions of uncertainty in the external environment it faces.

LITERATURE REVIEW

Signaling Theory and Corporate Competitive

A corporate competitive can build by sustainability financial reporting. The signaling theory state that the content of corporate reports becomes consideration and signal for strengthening of investor's trust about the corporate performance. Its influence stakeholders' perceptions, create positively impact the corporate image (Amaya et al, 2021). The corporate's activities generate signals to users of financial statements. This signal can be in the form of information on activities that management has carried out in realizing the wishes of the owner. These signals can be funding, investment, financial, promotional, and other strategy information that shows the corporate's superiority over other companies. The corporate's performance is important for investors who are informed through the publication of its financial statements. Changes in the corporate's performance are considered by investors as an option to place their funds in the company or transfer them to another company. During the crisis, investor decisions become more

sensitive and monitor the development of the corporate's performance through the decisions it takes such as funding decisions, investment decisions, and dividend decisions. Signals of the corporate's superior performance both in normal times and crises need to continue to be conveyed to investors, so as to generate investor confidence and willingness to invest in the corporate.

Corporate Performance

Corporate performance is one of the most important elements for the firm's survival; firm performance determines whether the firm will develop or not. It is an achievement of success from a series of firm activities in several strategies determined. The firm's performance is the result of a series of business processes that utilize human resources and firm finances so that the firm generates the maximum profit.

Financial performance is one of the important elements in a firm; it will assess the potential for good development for a firm. Economic performance is the prospect or future regarding a firm's growth and good development potential by utilizing financial performance information to assess a potential change in the firm's economic resources. It is achieving success activity by the firm, which can also be interpreted as an achievement by the organization or someone in action. In other words, financial performance analyzes what has been done by the firm and whether it has carried out finances properly and correctly based on financial implementation rules.

According to and seen by stakeholders in decision-making, the main factor is financial performance. According to Pan. et al. (2014) companies want good performance by generating maximum profits, so economic performance can be considered very important. According to Shakil et al (2019), comparing the firm's financial performance in the previous year allows stakeholders to see the achievement of the results received in the activities carried out by the firm in other activities. Good firm performance is important and affects the firm's progress. The firm's business activity processes that generate the maximum profit will also indicate that the financial arrangement is healthy (Bodhanwala, 2018). The significance of multiple factors for company performance: sector, size, participation in exports and market demand for firms' products. Financing solutions during the coronavirus pandemic period include equity contributions, followed by firms' cash balances and debt (Golubeva, 2021).

In this study, firm's performance using OPM is a measure of the firm's ability to increase earnings before interest and taxes compared to sales achieved by the firm (Sherman, 2015). The Operating Profit Margin ratio can describe the pure profit received for each sale made. Operating Profit is called pure if the amount received is obtained and the results of the firm's operations by ignoring financial obligations such as interest and taxes.

Corporate Investment

Investment is one of the most important elements for a firm. It is an investment for a firm so that the firm can make a profit in the future. The increased investment of firms makes it have more competitive power compared to others because of a larger market share, better access to capital, experience, and operational efficiencies (Ichev and Marinc, 2018). Contrastly, the decline in private sector investment results in not achieving the target multiplier effect on national income (Investment is an activity aiming to obtain earnings

in the future period by utilizing capital or assets at present. There are three types of investment spending, namely, business fixed investment, residential investment, and inventory investment. Business fixed investment or fixed investment, which includes the purchase of various types of capital goods, such as production equipment, computers, and machines (Saif et al, 2020). The residential investment provides assets to build houses for offices, residences, factory buildings, and other buildings. Inventory investment is the increase in the value of the stock of goods that have not been sold, both finished goods and raw goods (Mankiw, 2000). One of the investment factors that can affect the performance of a capital expenditure (capex) firm is when a firm spends several funds to acquire new equipment, or it increases fixed assets for one year or more in its business operations. These fixed assets include long-term investments such as office equipment, computers, vehicles, land, buildings, production machinery, software, trademarks, patents, and licenses. Companies that implement a capex strategy will certainly improve firm performance because the firm will increase fixed assets for use in the future.

$$\text{Capex} = \text{Current PP\&E} - \text{Old PP\&E} + \text{Current Depreciation Expense}$$

Companies that implement a capex strategy will certainly improve firm performance because the firm will increase fixed assets to be used in the future. Of course, it can increase firm investment.

In addition, the determinant of the firm's investment is the Net Working Capital (NWC) which is the difference between the firm's current assets and liabilities in the balance sheet. That means net working capital measures the firm's liquidity in its ability to pay off short-term debt. Companies implementing NWC are certainly growing, and corporate investments will improve performance. Because of liquidity when the firm can meet its obligations to pay short-term debts, namely tax debt, trade payables, dividends payable, etc.

$$\text{Net Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$

This study followed Juca and Fishlow (2021) as well as Saif et al (2020) who used measurements of Capital Expenditure (CAPEX) and Net Working Capital (NWC).

Corporate Investment and Corporate Performance

According to (Mankiw, 2000), investment is an investment in a firm aiming to increase the wealth of a corporation or firm. Investments are goods purchased by individuals or companies to increase their capital stock (Mankiw, 2000). The influence of investment decisions on the value of service companies. Corporate investment can be reflected in the size of Capital Expenditure (Capex) and Net Working Capital Ratio (NWCR).

Capex is a corporate expenditure to acquire new equipment or upgrade fixed assets for use for one year or more in its business operations. These fixed assets include long-term assets such as office equipment, computers, vehicles, land, buildings, production machinery, software, trademarks, patents and licenses. The corporate that implement a capex strategy will certainly improve company performance because the company has additional fixed assets to be used in the future.

H_{1a}: There is an influence of corporate investment as proxied by CAPEX on the firm's Performance.

The corporate's investment can also be measured by the difference that occurs between the company's current assets and liabilities in the balance sheet called net working capital (NWCR). The NWCR is a measure of a company's liquidity in its ability to pay off short-term debt. The corporate that have a high NWCR will have the opportunity to develop the company and invest in order to improve its performance. A better liquidity capabilities can encourage companies to fulfill obligations to pay their short-term debts, such as tax debts, business debts, dividend debts and others.

H_{1b}: There is an influence of corporate investment as proxied by NWCR on the firm's Performance.

There is a relationship between investment and firm value in that investment can improve firm performance, and firm investment decisions can have different performance achievements in normal and crisis times. Using the financial data of listed Chinese companies, Shen et al (2020) find the negative impact of COVID-19 on corporate performance. According Quddus et al (2022), there is sufficient empirical data to suggest that uncertainty worsens business cycles by influencing corporate actions as well as investment decision. It is more pronounced when a firm's investment scale or sales revenue is smaller. Then we build the hypothesis below :

H₂: There are differences in Corporate Investment on firm Performance during normal and crisis times.

To be able to explain further hypothesis the flow of thought regarding the research to be carried out, the authors make a framework chart as follows:

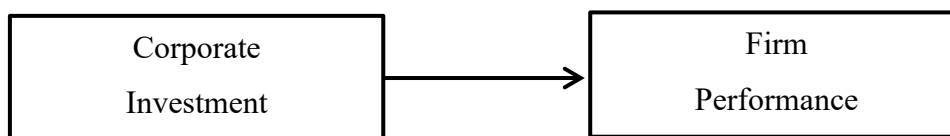


Figure 3. Research Model

Source: Authors, 2022 (developed from Juca & Fishlow, 2021).

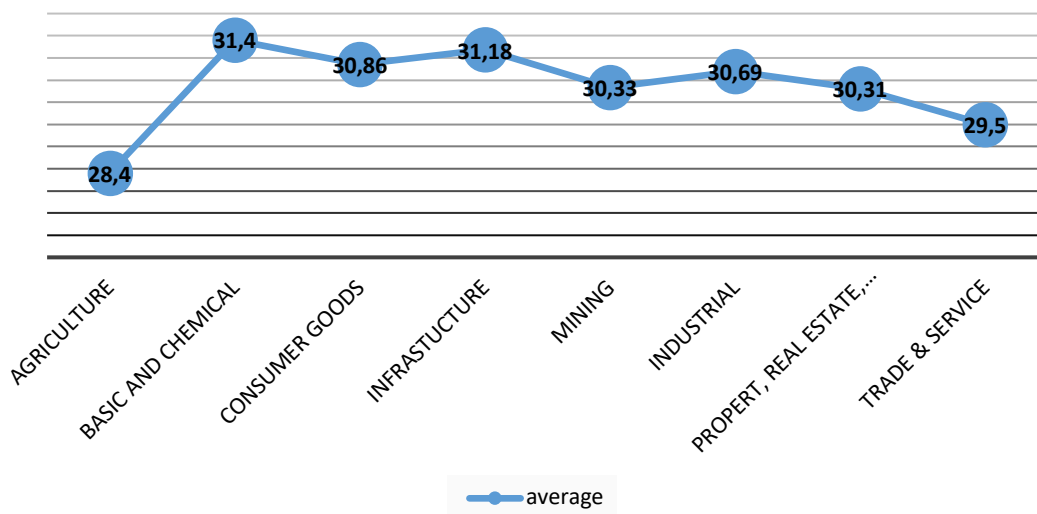
RESEARCH METHOD

This study analyzes the influence of corporate investment on firm performance in normal and crisis times with the analysis unit of non-financial industrial companies on the IDX in 2017-2021. The research analysis unit focuses on non-financial industrial companies, with a sample of up to 234 companies representing the infrastructure, industrial, health, basic material, and non-primary sectors. Purposive sampling was used to get the sample data that match certainty criteria such as several pieces of information relevant to this study from financial and annual reports examples. amount of Capex and NWCR. We exclude the firms that incomplete financial data during the research period. Corporate investment is promoted with capital exposure and net working capital following research by Juca and Fishlow (2021) and Operating Net Margin (OPM) to measure firm performance. Furthermore, this study also conducted a different effect test by grouping normal period data, namely 2017-2019 data and 2020-2021 data crisis based on the argument uncertainty of economic influences investment decisions (Quddus et al, 2022).

This study also uses a control variable in the form of firm size. We use panel regression for testing the hypotheses and also paired T-test to determine the difference in the relationship between corporate investment and corporate performance during normal and crisis periods.

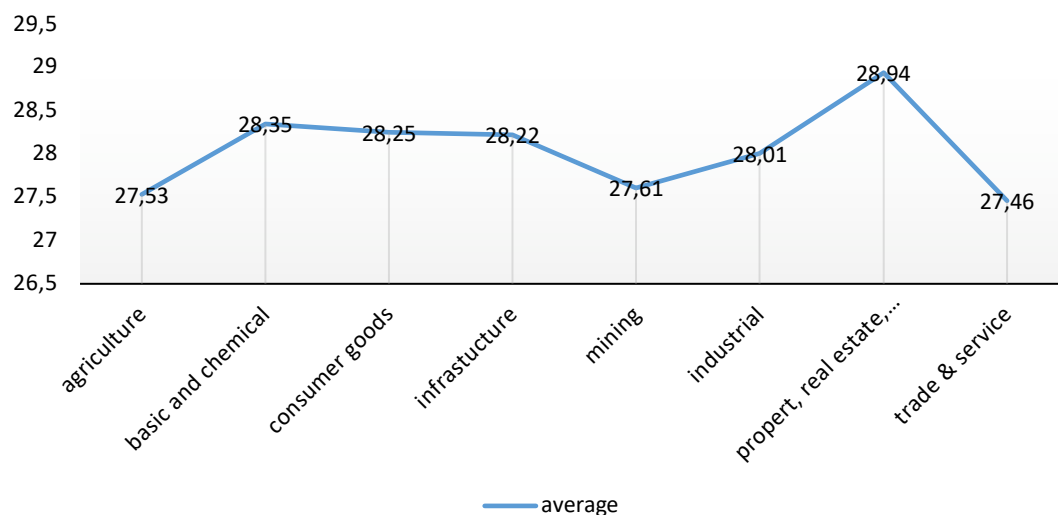
RESULT AND DISCUSSIONS

This study measures Corporate Investment with Capital Expenditure (Capex) and Net Working Capital Ratio (NWCR) to find out the condition of the firm's investment; according to Juca and Fishlow (2021), good results can be obtained from these measurements.



Graph 1. The Capital Expenditure of Non Financial Industry 2017-2021
Source: Authors, 2022.

Graph 1 shows that the lowest average value in the last 5 years is in the agricultural industry sector, and values that are above the average are in the basic and chemical industry sector, the consumer goods and industrial sector, the infrastructure industry sector, utilities and transportation, the various sector. Industry means companies with above-average values in the last five years spend several funds to acquire new equipment or increase fixed assets for one year or more in their business operations. These fixed assets include long-term investments such as office equipment, computers, vehicles, land, buildings, production machinery, software, trademarks, patents, and licenses. Companies that implement a capex strategy will certainly improve firm performance because the firm will increase fixed assets for use in the future. In the non-financial Indonesian industry, there are more companies that have an average value of Capex above their industry value. It means the companies use their budget effectively to acquire, reproduce, or maintain physical assets such as buildings, factories, technology, and equipment.



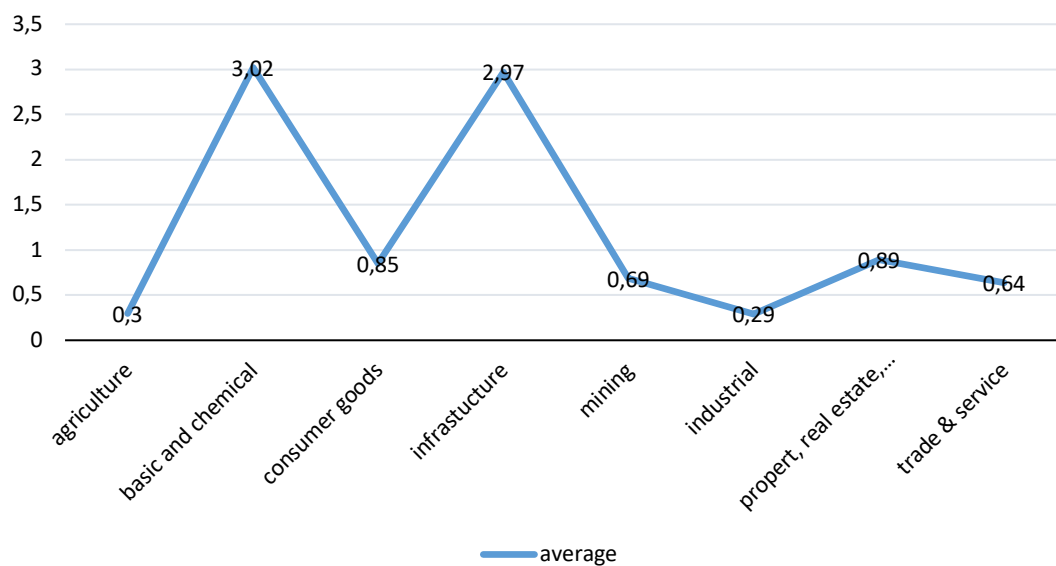
Graph 2. Net Working Capital of Non-Financial Industry 2017-2021
Source: Authors, 2022.

Graph 2. shows the lowest average value in the last 5 years for the agricultural industry, mining industry, various industrial sectors, and the service trade sector. The highest average value in the previous 5 years is in the basic and chemical industry, goods and consumption industry, infrastructure, utilities and transportation, property industry, real estate, and building construction.

The average value of NWCR in non-financial companies of non-financial above the industry average value. It means the company ensures that the net working capital is truly factual so that the company pays attention to conditions (liquidity) to meet short-term debt or current liabilities such as trade debt,

Furthermore, the firm's investment firm will improve its performance because of liquidity when it can meet its obligations to pay its short-term debts, such as tax debt, trade payables, dividends payable, and others.

Then the corporate performance in this study is measured by Operating Profit Margin (OPM) to find out the condition of the firm's performance according to Fadillah et al. (2021), good results can be obtained from these measurements.



Graph 3. Corporate Performance of Non-Financial Industry 2017-2021
Source: Authors, 2022.

Graph 3. shows the average corporate performance in the non-financial industrial sector for the last 5 years the highest values are in the basic and chemical industry sectors and the infrastructure, utilities, and transportation sectors. Companies with values above the average can describe conditions with profits. Pure or good pure profit on every sale made. In contrast to the industrial firm sector, with a value below the average firm with conditions during the financial and economic crisis, the profits obtained are not optimal, so the firm's performance conditions decline.

Table 2. Statistic Descriptive of Data

Corporate Performance	Corporate Investement		
	Capital Expenditure (Capex)	Net Working Capital Ratio (NWC)	
Mean	1.215	30.34	3.40
Median	0.084	30.36	3.41
Maximum	235.9	44.5	3.79
Minimum	1.06E-05	14.81	2.69
Std. Dev	11.82	3.768	0.129
Skewness	15.11	-0.121	-0.759
Observation	1215	1215	1215

Source: Researcher data (2022).

The results of descriptive data analysis show that the non-financial industry in Indonesia during normal times and crises does not pay attention to the condition of current assets and liabilities so the firm's performance in normal periods and corporate crises does not run well. However, the corporate's investment decisions, especially in the property, plant, and equipment sectors, pay attention to normal conditions and crises in considering depreciation costs so as to control the performance of current assets and current liabilities.

Table 3. Regression Results

Dependent Variable: <i>Corporate Performance (Operating Profit Margin - OPM)</i>		All Sample
Independent Variable		
<i>Capex</i>		0,3022* (0,079)
<i>NWCR</i>		-12,11* (2,779)
Year dummies		Not Included
Constant		Included
Method		FE
Adjusted R-squared		0.5915

This table presents the results of fixed effect panel data for all of the research samples. The dependent variable is corporate performance provided by the Operating Profit Margin (OPM); the independent variable is corporate investment proxied by capital expenditure (Capex) and net working capital ratio (NWCR). The values in parentheses are standard errors.

*significant 1%.

The panel regression analysis to test the hypotheses showed that Corporate Investment with Capex and NWCR as its proxies has a positive effect on firm performance and it is in line with Saif et al (2020). These results contrast with Shen et al (2020) which finds the negative impact of corporate investment on corporate performance.

Then we found that company size plays a significant role as a control variable. Companies with asset sizes that are smaller or below the industry average will tend to have greater financial problems during times of crisis than companies with large asset sizes so it will be more difficult to make investment decisions that can have an impact on company performance.

Furthermore, this study used the paired sample T-test to compare the difference between the impact of corporate investment on corporate performance during normal and crisis, and as expected, there is a significant difference in corporate investment decisions in both periods.

In normal times, companies continue to invest by spending capital to acquire new equipment or increase fixed assets so that company performance can increase. Meanwhile, during a crisis, companies do not invest in the company and tend to survive so the increase in company performance is not significant. In normal times, companies continue to invest by spending capital to acquire new equipment or increase fixed assets so that company performance can increase. Meanwhile, during a crisis, companies do not invest in the company and tend to survive so the increase in company performance is not significant.

Table 4. Different test of Capex and OPM

Method	df	Value	Probability		
Wilcoxon/Mann-Whilney		42.04620	0.0000		
Wilcoxon/Mann-Whiiney (te-adj.)		42.04620	0.0000		
Med. Chi-square	1	2350.658	0.0000		
Adj. Med. Chi-square	1	2346.726	0.0000		
Kruskal-Wallis	1	1767.885	0.0000		
Kruskal-Wallis (te-adj	1	1767.885	0.0000		
van Ger Waerden	1	1468.967	0.0000		
Category Statistics					
> Overall					
Variable	Count	Median	Median	Mean Rank	Mean Score
Y	1215	0.084389	10	617.0486	-0.775480
XIB	1215	3.413208	1205	1813.951	0.775480
All	2430	3.119318	1205	1215.500	1.82E-09

Source: Researcher data (2022).

Tables 4 and 5 showed there were differences of impact corporate investment on corporate performance during the normal and crisis periods. This is in line with Quddus et al (2022) that the uncertainty economic period decreases corporate investment and corporate performance.

Table 5. Different test of NWCR and OPM

Method	df	Value	Probability
Wilcoxon/Mann-Whilney		4051231	0.0000
Wilcoxon/Mann-Whiiney (te-adj.)		4051231	0.0000
Med. Chi-square	1	2188.328	0.0000
Adj. Med. Chi-square	1	1 2184.533	0.0000
Kruskal-Wallis	1	1641250	0.0000
Kruskal-Wallis (te-adj)	1	1641250	0.0000
van Ger Waerden	1	1308.614	0.0000
Category Statistics			
> Overall			

Variable	Count	Median	Median	Mean Rank	Mean Score
Y	1215	0.084389	31	638.8807	-0.731931
XIB	1215	3.413208	1184	1792.119	0.731931
All	2430	3.119318	1215	1215.500	1.84E-09

Source: Researcher data (2022).

This finding supports Juca and Fishlow's research that the reduction of long-term investments as well as short-term investments level of cash reserves during the crisis period. The study points out that corporate's capital expenditures are reduced during a crisis. It is in line with Sanford and Yang (2022) who provide empirical evidence that corporate investment responsiveness to (uncertainty about) growth opportunities is determinant by capital expenditure of R&D. The coronavirus pandemic period impacted to corporate's cash balance and led to NWCR financing solutions including equity contributions (Golubeva, 2021).

CONCLUSIONS

This study aims to analyze the effect of corporate investment on firm performance in non-financial industrial companies (IDX) for the 2017-2021 period. Based on the average value of the firm's Capex with a value above the average, the firm uses the budget to obtain, multiply, or maintain physical assets such as buildings, factories, technology, and equipment. A firm whose value is below the average, when it spends capital on acquiring new equipment or increasing its fixed assets, is not carried out with the existing crisis factors because the firm did not invest during the crisis. The firm only survived during these conditions. The firm can grow based on the average NWC value of the firm with a value above the average positive value. It means the firm ensures the net working capital of the firm is factual so that it pays attention to conditions (liquidity) to meet short-term debt or current obligations such as trade payables, sales tax expense, wages, salaries payable, and insurance. Several things can affect the NWCR value even though it is negative in changes in assets and liabilities, such as stock turnover, firm income, sale of shares, and sale of fixed assets.

Corporate performance in normal and crisis periods measured by OPM based on discussion results value above the average. The firm is considered to have good pure profitability, so it is categorized as having good and promising profit; it will easily attract many investors, and the stock price will be pushed higher. The previous discussion shows that in normal and crisis conditions, from the shape of firm performance and corporate investment, it is proxied by capex during normal and problem periods. The firm's performance pays attention to the state of current assets and liabilities so that the performance in the normal period and the firm's crisis goes well. Still, the shape of corporate investment in normal and problem periods, the firm pays attention to the current and old states of property, plant, and equipment and pays attention to current depreciation costs, current assets, and current liabilities so that corporate investment during normal and crisis periods are still running well. It means that corporate investment can help the firm increase profits so that its performance can run well.

The test results show that the firm's investment with capex measurement affects the firm's performance. The results of the industrial sector table show that the highest average discount is in the basic and chemical industry sectors and the lowest is for agricultural companies when companies spend capital to acquire new equipment or increase fixed assets such as land, buildings, computers, vehicles, production machines, office equipment, firm software, trademarks, patents, or licenses. The corporate performance in this sector will increase.

For firm investment, the firm in the industrial sector has the highest average value and the firm pays attention to conditions (liquidity) to meet short-term debt or current liabilities such as trade payables, sales tax costs, wages, and salaries payable, as well as insurance, the firm's performance will increase.

The different effect test shows a difference in corporate investment's effect on corporate performance in normal and crisis periods. The firm normally continues to invest because of its stable financial condition. During a problem, the firm can not make investments triggered by uncertainty in economic conditions due to the crisis, financial pressure, and pandemic.

The findings of corporate investment in this study can be used as information material for non-financial industrial companies in Indonesia. It is better to increase the investment in the firm by doing other strategies because we do not know in normal and crisis times, the firm will be able to survive or not. The findings regarding firm performance with OPM proxy, which in this study, can be used as information material for companies and readers so that the firm's wishes can run the firm's performance by getting the maximum profit and increasing firm performance.

We only focus on using non-financial industry as an observation analysis the next research can extend it to other industries to clearly impact the corporate investment on corporate performance. Furthermore, this study measures the corporate investment with Capex and NWCR then next it can add other proxies such as R&D cost, amount of assets, or others. Then performance should add or replace another measurement such as ROA, ROI, or Net Interest Margin (NIM), to complete this research.

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