

Corporate Environmental Responsibility, Growth and Life Cycle of Cash Holding

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Abstract

This writing examines the effect of environmental responsibility, growth and company life cycle on cash holding – In this study, the use of secondary data in the form of annual report of manufacturing companies obtained through the official website of the Indonesia Stock Exchange (www.idx.co.id), a sustainability report that can be obtained through the company's website and GRI-Database during the 2018-2020 period with a total sample of 195 samples. The results of multiple linear regression analysis can be concluded, that environmental responsibility affect cash holding negatively, growth has a positive influence direction on cash holding and the Company's life cycle in the stagnant stage has a positive effect on cash holding.

Keywords

cash holdings; growth; life cycle; environmental responsibility



I. Introduction

One of the industrial sectors that are trying to harmonize the conditions of external parties in order to achieve accuracy in investment policies, funding, and asset management is the manufacturing industry. This is because the manufacturing industry sector is one of the backbones of a country whose production of goods and services contributes to the growth of Gross Domestic Product (GDP), creates jobs, increases exports and increases investment. Development is a systematic and continuous effort made to realize something that is aspired. Development is a change towards improvement. Changes towards improvement require the mobilization of all human resources and reason to realize what is aspired. In addition, development is also very dependent on the availability of natural resource wealth. The availability of natural resources is one of the keys to economic growth in an area. (Shah, M. et al. 2020)

Based on an official statement from the Deposit Insurance Corporation, Didik Madiyono, a member of the LPS Board of Commissioners, stated that economic recovery is likely to occur in 2021 and 2022 considering that the movement in the second quarter of 2021, the Indonesian economy is projected to grow positively year on year by looking at real economic indicators such as manufacturing PMI, consumer confidence survey, business activity survey, retail sales growth, and motor vehicle sales.

For other cases such as assets, companies are more likely to keep non-current assets such as machinery, land, and buildings, whereas when companies make investment decisions, companies that influence the company's decision to hold cash are directly based on the company's financial flexibility. Therefore, covering the lack of funds is difficult because machinery, land, and buildings are included in the category of non-current assets. The cash in the company is termed as cash holding.

Cash holdings are available to be used as physical assets and distributed to investors. Thus, cash holdings are treated as cash or cash equivalents that are liquid enough to be converted into cash. The cash can then be used as an asset to take advantage of future opportunities.

Various factors can be used to analyze cash holding such as environmental responsibility. With the company's environmental practices can weaken the demand for prudent cash reserves to protect the company from unforeseen risks (Tsendsuren, et al., 2021). Furthermore, Chang et al., (2019), cash holding companies are positively related to corporate CSR and Liem et al., (2021) say that corporate social responsibility (CSR) and board size have a negative effect on cash, which means that both factors it acts as an effective mechanism to reduce excessive cash flow that can jeopardize the company's operations, as proposed in agency theory.

Growth factor becomes the next indicator. Growth here is the company's opportunity to grow. Sola et al., (2018) in their research on SMEs revealed that there are greater growth opportunities to adjust more quickly to the level of money storage with their target to maintain financial flexibility and to be able to take advantage of profitable investment opportunities as they arise by increasing innovative capabilities and promoting realization innovative products that will ultimately increase the company's growth.

Then, Thu et al., (2018) revealed that company size and company growth were not identified as a significant impact of cash holding in energy companies listed in Vietnam. According to Arfan et al., (2017) in his writing empirically found that the level of growth opportunities had a positive effect on the cash holding of each company.

Next is the company life cycle factor. Writing from Chireka, (2020) overall found no significant relationship between life cycle stage and firm cash holdings, suggesting that corporate cash holdings for South African firms are driven by factors other than life cycle resource location. Furthermore, Alzoubi et al., (2019) provides a statement with the results in the introduction and growth phases, the decision to hold cash is not appropriate, while during the maturity and decline stages, holding cash has a significant negative relationship.

Departing from the above explanation and the results of previous research, this paper is important to be tested because the situation before and during the Covid-19 pandemic, the company needs to get attention from the manager so that the company does not save too little cash and interferes with meeting its short-term needs which raises doubts among the parties. others in the company.

II. Review of Literature

2.1 Agency Theory

This writing uses the agency theory of Jensen and Meckling (1974). which is believed to be able to answer and become the basis for thinking from the development of writing hypotheses. This is because if the agent does not act according to the interests of the principal, there will be an agency conflict, thus triggering agency costs. Agency problems trigger a conflict of interest between shareholders and management. The existence of this conflict is due to differences in interests, and each principal and agent is motivated to fulfill their own interests. The difference in interests between the agent and the principal will have a negative influence on the company.

2.2 Cash Holding (CH)

Djohanputro in the book *Corporate Financial Management* (2008:323) explains that another approach to determining cash holding is determined by management decisions based on management experience and management's courage to face risks related to cash availability, such as liquidity risk and the desire to reduce borrowing costs. The amount of cash according to this approach ranges from 1 month to 3 months for operational costs.

Cash Holding has a relationship with agency theory where if the cash holding is high it will create a tendency to be misused by managers for their personal interests, which also reflects a conflict of interest between the main goal of management in welfare and the manager's personal interest in improving individual welfare.

2.3 Environmental Responsibility (CER)

The agency motive occurs in higher cash holdings thus enabling socially responsible companies to demonstrate their ability to maintain implicit commitments to stakeholders and encourage social capital (Chang et al, 2019). In the end it gave rise to agency conflicts by the company because it tried to satisfy different stakeholders at the same time.

2.4 Corporate Growth (GO)

The company's growth reflects the growth of resources in the form of assets owned by the company and is measured by the difference in the value of total assets each year. The company's growth shows the allocation of asset investment by the company. Then, the company's growth rate can show how much the company is able to manage cash. Thus, it can be very important for the principal to the results in the form of financial statements. The growth of the company describes how the development of a company managed by an agent.

2.5 Enterprise Life Cycle (LC)

Kreitner & Kinicki, (1998) explain that the people who make up the organization, the organization they live in, also goes through a life cycle. Then the author assumes that the company's life cycle is like all living things, including plants, animals, and humans, through a series of stages, from birth to death.

This company life cycle reveals that the company goes through certain phases in its journey. There are several life cycle models used by the authors, namely the five-stage, four-stage, and three-stage models. Each of these models is supported by the life cycle literature and can be seen in full in the writings of Quinn and Cameron (1983). These phases are introduction/start-up, growth (growth), mature (mature), and decline (decline). As explained by Prurwaningsih and Nurna (2019), the stages of the company's life cycle have the following characteristics: first, the start-up stage, the company experiences sales growth, profits are sluggish and net income still tends to be negative. The growth stage, where the company experiences a higher level of sales and net income. Mature stage, where the company's sales level has increased greatly and the level of liquidity is high. The decline stage, where the company's profitability and net income have decreased. This study classifies the company's life cycle into three stages, namely growth, mature, and stagnant.

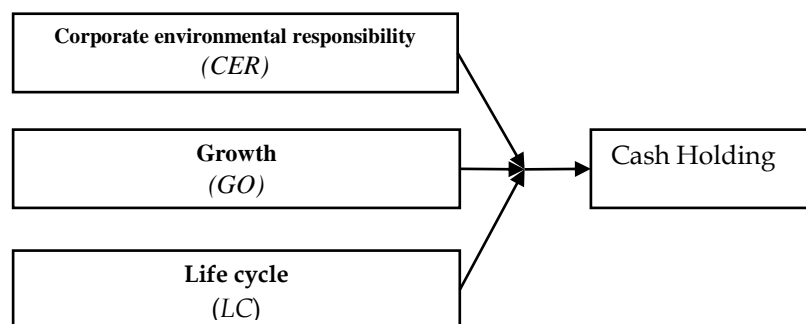


Figure 1. Research Model
Source: Research Data, 2022

2.6 Hypothesis Development

a. Corporate environmental responsibility on cash holding

Tsendsuren et al., (2021), in their writings show that the company's environmental practices can weaken the demand for prudent cash reserves to protect the company from unexpected risks. Furthermore, according to Chang et al., (2019) the company's cash holding is positively related to the company's CSR. Big profits are obtained from more efficient management of cash resources and will increase the company's cash holding. CSR activities have a significant positive relationship with corporate cash holding (Cheung, 2016). Based on the description above, a hypothesis is formed:

H 1: environmental responsibility has a positive effect on cash holding

b. Growth on cash holdings.

Growth is the added value of assets controlled by the company. Company assets are assets that are used to increase business operational productivity in achieving maximum profits and company policy to hold cash temporarily High Growth Opportunity in order to fund investment opportunities. In writing Sola et al., (2018), Thu et al., (2018) and Arfan et al., (2017) found the level of opportunity for companies to influence each other.

H 2: growth has a positive effect on cash holding

c. Life cycle on cash holding

Companies at the mature stage are in a condition ready for investment, because the company is entering a stage where the managers are starting to become professional and already have competitive advantages. According to Duggan (2000), the company is in a mature phase when conducting an IPO and the company will be in a stagnant stage when after the IPO (post IPO) (Alzoubi et al., 2019) gives results during the introduction and growth stages, the decision to hold cash is irrelevant, whereas in the maturity and decline phases, holding cash becomes related.

H 3: the company's life cycle has a negative effect on cash holding

III. Research Method

The object and scope of this paper is *Cash Holding* from a manufacturing industry sector company located in Indonesia for the 2018-2020 period. The choice of the manufacturing industry because it is one of the most influential parts of the industry both in business and driving the country's economy in Indonesia.

The writing uses secondary data and the method of writing with causality that examines the relationship between variables based on previous writings. Then, the Eviews 10 application becomes a tool in processing and analyzing further writing data.

3.1 Population and Sample

The population in this paper are companies in the manufacturing industry that are listed on the Indonesia Stock Exchange (IDX) and publish financial reports and sustainability reports with an observation period in this writing 2018-2020. The sample is a series of data drawn or sorted from a population (Santoso, 2001) obtained from the *annual report* of manufacturing companies obtained through the official *website* of the Indonesia Stock Exchange (www.idx.co.id) and sustainability reports (sustainability reports). Obtained through the company's website and GRI-Database and other supporting sources both from book literature, journals, articles, and internet sites.

The use of the purposive sampling method was carried out in determining the sample in this paper where the sample was sorted through certain targets or criteria (Sekaran, 2006). The criteria used in the selection of the sample are

1. Manufacturing companies listed on the IDX that present complete annual reports and financial ratios for the 2018-2020 period,
2. Manufacturing companies listed on the IDX that report sustainability reports which can be obtained through the company website and GRI-Database during the 2018-2020 period,
3. Not *delisted* from the Indonesia Stock Exchange for 3 consecutive years, 2018, 2019, and 2020.

3.2 Data analysis method

After the data is collected, the author runs techniques to analyze the effect of the data on each variable. The author analyzes through descriptive statistics, classical assumption testing, multiple linear regression analysis and hypothesis testing.

3.3 Multiple Regression Analysis

Techniques for analyzing data in statistics include regression analysis which aims to examine the effect of certain variables being tested (Gujarti, 2014). This writing examines the effect of Environmental Responsibility, Growth and Company Life Cycle variables on *Cash Holding*. Based on this description, the estimation model used is:

$$CH = b_0 + \beta_1 CER + \beta_2 GO + \beta_3 LC + e$$

Information:

- CH = Cash Holding
CER = Corporate Environmental Responsibility
GO = Company Growth
LC = Life Cycle
e = Error term, assumed 0
b₀ = Constant
 $\beta_1, \beta_2, \beta_3$ = Regression coefficient

According to Ghazali (2013: 229), goodness of fit is able to estimate the actual value in order to achieve the accuracy of the regression function by looking at the value of the coefficient of determination test, the test results for the *k F* statistic, and the test results for the *k t* statistic.

3.4 Coefficient of Determination (R²)

the coefficient of multiple determination (R²) is able to show a good level of regression accuracy and is reflected in values between 0 to 1. If the resulting Adjusted *R Square* value is almost 1 (one), it illustrates that the ability of the independent variable as an explanatory variable dependent the stronger and the more precise the research model formulated.

IV. Result and Discussion

4.1 Statistics Descriptive

Table 1. Results of Descriptive Statistical Analysis

	CH	GO	LC	CER
Mean	0.166154	2.366974	0.196051	0.196718
Median	0.090000	1.540000	0.120000	0.170000
Maximum	3.320000	29.98000	3.510000	0.340000
Minimum	0.000000	0.000000	0.000000	0.100000
Std. Dev.	0.301460	3.538611	0.415238	0.063315
Skewness	7.252513	5.354538	6.529286	0.902405
Kurtosis	69.27022	38.69428	48.38475	2.518197
Jarque-Bera Probability	37392.37 0.000000	11283.73 0.000000	18121.20 0.000000	28.35199 0.000001
Sum	32.40000	461.5600	38.23000	38.36000
Sum Sq. Dev.	17.63042	2429.223	33.45006	0.777699
Observations	195	195	195	195

Source: Results processed by Eviews, 2022

Based on the el tab above, it can be seen that the sample in this writing is 195 with details of 89 manufacturing companies. Descriptive analysis of this research, starting from the old age (CH) states that the minimum value obtained is 0.000, while the maximum value is 3.320. For the average value of 0.090 and a standard deviation of 0.301. Furthermore, environmental responsibility (CER) has the lowest value of 0.100 with the highest value of 0.340. The mean value is 0.197 and the standard deviation is 0.063. On growth (GO) shows the lowest value of 0.000 and the highest score is 29,980. For the mean value of 3.367 and standard deviation of 3.539. Then, the company life cycle (LC) has the lowest value of 0.000 with the highest value of 3.510. The mean value is 0.196 and the standard deviation is 0.415.

4.2 Classic assumption test

The initial stage before the regression analysis, the authors test the classical assumptions in order to make the regression model fit and in line with the BLUE criteria (Best, Linear, Unbiased, and Estimated). Classical assumption testing through multicollinearity test, autocorrelation test, and heteroscedasticity test. The following are the results of testing the classical assumptions of this writing:

4.3 Inarity Multicol Test

Multicollinearity test aims to detect the relationship between independent variables in the regression model. We will see the multicollinearity test in this writing from:

Table 2. Multicollinearity Test Results

	CH	CER	GO	LC
CH	1.000000	-0.061996	0.710085	0.668316
CER	-0.061996	1.000000	0.113014	-0.009573
GO	0.710085	0.113014	1.000000	0.737169
LC	0.668316	-0.009573	0.737169	1.000000

Source: Results processed by Eviews, 2022

Table 2 proves that there is no relationship between the independent variables. The partial correlation value between independent variables does not exceed 0.80

4.4 Autocorrelation Test

The right regression model ensures that there is no correlation between the confounding errors of the first period and the previous period used. The autocorrelation test tool in this writing is through the *Run-test test*. The results of the autocorrelation test can be seen in:

Table 3. Autocorrelation Test Results

R1	55.00000
R2	2.11E-09

Source: Results processed by Eviews, 2022

Table 3 shows that there is no autocorrelation, because R2 as a probability is already above 0.05.

4.5 Heteroscedasticity Test

The difference in variance of the residual value between one observation and another is done to get the right regression model. How to see heteroscedasticity by ascertaining the variance from the value of one observation to another observation of homoscedasticity. Different residual values are shown from the test results that exceed the level of significance, then heteroscedasticity occurs. This writing uses the Harvey test to detect heteroscedasticity. The following heteroscedasticity test can be seen in Table 4.

Table 4. Heteroscedasticity Test Results

Heteroskedasticity Test: Harvey			
F-statistic	6.976891	Prob. F(3,191)	0.0002
Obs*R-squared	19.25857	Prob. Chi-Square(3)	0.0002
Scaled explained SS	23.53900	Prob. Chi-Square(3)	0.0000

Source: Results processed by Eviews, 2022

The results of the author's data explain that the p-value/Prob. Chi Square is 0.0002 where > 0.05 . It means that H_0 is accepted and it means that the error variance is homoscedasticity. For the assumption test used in the Harvey test, the result is the value of Obs*R – Squared 19.25857, which means it is free from heteroscedasticity because the value of Obs*R – Squared (probability) $> 5\%$.

4.6 Analysis Multiple Regression

This writing uses multiple linear regression analysis, namely:

$$CH = 0.131251 + -0.554518 CER + 0.043177 GO + 0.213141 LC + e$$

Table 5. Test Results Multiple Regression

Dependent Variable: CH
Method: Least Squares
Date: 02/02/22 Time: 14:42
Sample: 1 195
Included observations: 195

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.131251	0.047603	2.757181	0.0064
CER	-0.554518	0.231356	-2.396820	0.0175
GO	0.043177	0.006126	7.048257	0.0000
LC	0.213141	0.051872	4.108948	0.0001
R-squared	0.563316	Mean dependent var		0.166154
Adjusted R-squared	0.556457	S.D. dependent var		0.301460
S.E. of regression	0.200770	Akaike info criterion		-0.353017
Sum squared resid	7.698915	Schwarz criterion		-0.285879
Log likelihood	38.41920	Hannan-Quinn criter.		-0.325834
F-statistic	82.12918	Durbin-Watson stat		1.347403
Prob(F-statistic)	0.000000			

Source: Results processed by Eviews, 2022

Based on hypothesis test from table on so conclusions drawn that:

1. Variable not quite enough answer environment (CER) against *cash holding* show mark coefficient regression negative is -0.554518 and has mark 0.0175 more significance small of 0.05 means CER by negative influential to *cash holdings*. Conclusion is Hypothesis 1 reject and result writing this in line with (Tsendsuren, et all., 2021) and Liem et all., (2021) who said that practice environment company own effect negative on cash, which means that factor this Act as effective mechanism for reduce excessive cash flow that can endanger operation company, as stated _ in theory agency.
2. Furthermore, on the results writing in Table 5 got that growth (GO) against *cash holding* worth coefficient regression positive is 0.043177 and has mark 0.0000 more significance small of 0.05 means that GO affects cash *holding* positive. because of that conclusion is Hypothesis 2 is accepted. Suitability with theory agency where at level growth company could show how much big company capable manage cash. So that, can Becomes very important for principal to result in the form of report finance. Growth company describe how development company managed by agent. Writing result this in line with Sola et all., (2018) and Arfan et all. (2017) who provide influence positive to *cash holdings*.
3. On the examiner related influence cycle life company (LC) against *cash holding* has mark coefficient regression positive is 0.213141 and has mark 0.0001 more significance small of 0.05 means that LC affects by positive cash holding and in line with writing Midiastuty et all., (2021). Result of writing this show that every increase in LC can be lower policy *cash holdings*. That thing makes cash statement presented reliable and *cash holding* awake. Then, the result testing hypothesis 3 writing this is rejected so that no in line with results from what have displayed writer before.

4.7 Coefficient of Determination Test (R2)

Referring to Table 5, it can be seen that the adjusted R-squared obtained of 0.556457. The figure show that variable not quite enough answer environment, growth and cycle life company capable explain *cash holding* of 0.556457 or 55.65%. So that, at writing this give conclusion still many variables that represents or influence *cash holdings*.

V. Conclusion

Writing this done for prove is variable not quite enough answer environment, growth and cycles Life Company to cash holdings. Through results testing analysis multiple linear regression conclusions that can be taken, that not quite enough answer environment own influence negative to cash holding, growth own direction positive influence to cash holding and cycle Company life in Step stagnant by positive influence cash holdings.

Limitations

Writer recommends for apply methodology this to another sample for confirm results and authors faced there are 72 outliers, so that should be issued from research data and considered as limitations.

Suggestions For Further Writing

Advice in writing next to do extension period observation so that could find existence influence of the related variables, can presenting other variables that can be give influence to cash holding or with added another model for improvement writing this in the future.

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