ABSTRACT

Purpose- This study aims to examined the effect of cash flow and growth opportunity to the investment, and whether the exclusive relationship owned by the company with a government owned bank relationship moderates the effect of cash flow and growth opportunity on investment.

Design/methodology/approach- This study used a sample of data from 101 manufacturing companies listed on the Indonesia Stock Exchange in the period 2013-2017.

Findings- The multiple linear regression results show that cash flow and growth opportunity have a significant positive effect on investment, the government owned bank relationship weakens the effect of cash flow on investment but strengthens growth opportunity's influence on investment. This means that if the company has an exclusive relationship with a state-owned bank, it will reduce the dependence of cash flow to invest and increase investment opportunities.

Keywords: cash flow, growth opportunity, investment, government owned bank relationship.
CASH FLOW, GROWTH OPPORTUNITY, GOVERNMENT BANK RELATIONSHIP AND INVESTMENT

Rahmat Setiawan, Indira Nuansa Ratri*
Fakultas Ekonomi dan Bisnis, Universitas Airlangga, Surabaya, Indonesia
*Email: ndiranuansa37@gmail.com

Abstract

Tujuan- Penelitian ini bertujuan untuk menguji pengaruh arus kas dan peluang pertumbuhan terhadap investasi, dan apakah hubungan eksklusif yang dimiliki perusahaan dengan hubungan bank milik pemerintah memoderasi pengaruh arus kas dan peluang pertumbuhan terhadap investasi.


Temuan- Hasil regresi linier berganda menunjukkan bahwa arus kas dan peluang pertumbuhan memiliki efek positif yang signifikan terhadap investasi, hubungan bank yang dimiliki pemerintah melemahkan efek arus kas pada investasi tetapi memperkuat pengaruh peluang pertumbuhan pada investasi. Ini berarti bahwa jika perusahaan memiliki hubungan eksklusif dengan bank milik negara, itu akan mengurangi ketergantungan arus kas untuk berinvestasi dan meningkatkan peluang investasi.

Kata kunci: cash flow, growth opportunity, investment, government owned bank relationship.

1. Introduction

Along with the rapid development of technology makes the company easier to access all the needs needed to develop the company in order to increase value and improve the welfare of investors. Technological developments are also a contribution for the country to increase the economic stretch. This economic improvement makes the company must be able to survive amid intense competition. Companies need to have a strategy in the process to stay afloat. The strategic plan that must be determined by the company is related to investment in productive assets owned by the company. Considering that investment is a must for companies to develop a business that is being carried out and as a form of capital turnover used to improve company performance which in turn has an impact on increasing company value and investor welfare (Rianawati and Setiawan, 2015). When companies investing in productive assets, cant be separated from investment opportunities or growth opportunities that are proxied by Tobins’Q owned and the funds available to realize these investments. (Ahrends, Drobetz, & Puhan, 2018) stated that high cash holdings and investment opportunities will improve company performance.

Funds that companies use to invest can come from internal and external cash flows. The availability of funds sourced from internal company or cash flow makes the investment carried out very dependent on the amount of cash flow that is owned. According to Bringham and Hauston (2001) states that capital budgeting decisions must be based on cash flow not on the size of the profits earned by the company. Therefore, cash flow is a key factor that needs to be considered by managers as decision makers for investments to be made because the role of cash flows is related to increasing the value of the company. Dependence of cash flow to fund the company’s investment which then makes the company look for other sources of funds that
come from external to be able to continue to invest. Based on data from the Indonesia Stock Exchange (BEI) in manufacturing companies for the period 2013-2017, the decline in average cash flow was also followed by a decrease in average investment in the company.

![Investment vs Cash Flow](image_url)

Figure 1. Average Trends in 2013-2017 Investment and Cash Flow Ratios.

This shows that to invest, the company is very dependent on the source of internal funds which is cash flow. In addition to relying on cash flow, investments made are also inseparable from investment opportunities that are owned or growth opportunities which in this study are proxied by Tobin’s Q (Setiawan, 2009).

The company’s dependence on cash flow to make investments makes it necessary for companies to have other sources of funds to stabilize the investment to be realized. Another source of funds that can be utilized by the company to make investments in addition to cash flow that is owned is the source of funds from external companies.

In practice, companies often experience financial constraints or difficulties in obtaining external funds for investment funding. In general, imperfect capital market conditions characterized by information asymmetry cause external funding costs tend to be more expensive than internal funding (Fazzari, Hubbard, Petersen, Blinder, & Poterba, 1988). Companies that experience financial constraints face the difference between the cost of capital from internal funding sources and external funding, causing companies to experience difficulties in taking advantage of investment opportunities (Mykhayliv & Zauner, 2013). The relationship with intermediaries channeling funds is very important when companies experience financial constraints in order to maintain the availability of company funds to fund investment. (Shikimi, 2019) states that a close relationship between banks and companies in the long term can reduce information asymmetry problems and reduce financial constraints that will be faced by the company, in addition (Yildirim, 2019) also states that bank relationships with companies can reduce default risk company and increase company efficiency.

Therefore, companies that have a close relationship with banks are able to reduce their dependence on cash levels for investment. Companies that maintain exclusive relationships with state banks also have relatively lower investment cash flow sensitivity compared to other companies that do not (Srinivasan & Thampy, 2017). This study focuses on the relationship between companies and government-owned banks (government bank relationship) because in Indonesia itself, state-owned banks are banks with higher average loans compared to banks with other ownership. (Höwer, 2016) states that the characteristics that can be seen when a bank has an exclusive relationship with the company, among others, are banks that simplify...
collateral requirements or reduce loan interest rates. The state-owned banks in this study consist of state-owned banks and regional government-owned banks or BPD (Regional Development Banks).

The high average number of loans extended by state-owned banks indicates that state-owned banks are able to provide more funds than banks with other ownership. This indicates that when a company has an exclusive relationship with a state-owned bank, the probability of a company to get an external channel of funds is higher than when it has an exclusive relationship with another ownership bank. This is what underlies the authors to examine more closely related government bank relationships owned by companies. In addition, state-owned banks as channeling funds from external sources also have a role for companies to increase investment by increasing the realization of their investment opportunities.

Based on this explanation, the author would like to conduct further research on the effect of cash flow and growth opportunities on corporate investment by using a sample of manufacturing companies listed on the Indonesia Stock Exchange for the period 2013-2017. This sample is used because manufacturing companies are a reflection of the stock market in Indonesia. In addition, the authors also use government bank relationship as a variable that will moderate the relationship between cash flow and growth opportunities for investments made by companies. The method of testing using moderation especially on government bank relationship variables will provide new insights for academics considering how the company’s relationship with state-owned banks is still rarely studied in Indonesia even though state-owned banks in Indonesia have a large market capitalization, especially in the manufacturing industry. In addition, this research is expected to provide information to company stakeholders to manage cash flow efficiently, consider and make wise decisions relating to investment opportunities that will be carried out, as well as maintain the company’s financial condition to avoid financial constraints by maintaining an exclusive relationship with government bank. Not only that, for government banks this research is expected to be able to provide information to state banks to establish exclusive relations with companies so that Indonesia’s economic growth will increase. The phenomenon and scarcity of the variables and models used which then underlies the authors to conduct this research.

2. Literature review

Cash flow and investment

Cash flow has a positive effect on investment, this shows that when a company has a large amount of cash flow where cash flow itself is an internal flow of funds owned by the company, the company’s opportunity to fund investment is also getting bigger as the growth of cash flow is owned. Companies that have high cash flow in the amount of investment opportunities that have a positive NPV (Net Present Value) will also be easier to realize. Basically the implementation of the investment project was initiated and based on the use of internal funds, namely the company’s cash flow compared to external funds because in an imperfect market there is asymmetrical information which causes cost of capital for the use of external funds to be more expensive than internal funding.

The high cost of capital when using an external source of funds makes the company more vulnerable to financial constraints where the company has difficulty finding external funding sources because external funding sources tend to be more expensive so investment behavior is more directed to internal funding sources. The use of internal funding sources makes the company very dependent on cash flow to fund the investment to be carried out. Therefore, companies with a high availability of internal funds are able to realize more
profitable investment projects.

\[ H_1 : \text{Cash flow has a positive effect on investment.} \]

**Growth opportunity and investment**

Investment by the company will increase along with the increase in Tobin’s Q value, which indicates the growth opportunity owned by the company. Companies that have a high Q value indicate a high investment opportunity with a positive NPV owned so that the company can invest more than companies with a low Q value. The results of empirical research by Srinivasan and Thampy (2017), Mykhayliv et al., (2013), and (Setiawan, 2009) state that investment opportunities (Tobin’s Q) have a positive effect on investments made by companies. This is because the greater Tobin’s Q indicates the greater market value of the company’s assets compared to the book value of the company’s assets, the greater the investor’s willingness to make more sacrifices to own the company (Sukamulja, 2004). Companies with high Tobin’s Q value show good financial prospects, so the company can follow up on every opportunity it has.

\[ H_2 : \text{Growth opportunity has a positive effect on investment} \]

**Moderation effect of cash flow and government bank relationship on investment**

The relationship between state-owned banks and companies weakens the positive influence of cash flow on investment. This means that the positive influence of cash flow on investment is weaker when companies get cash flow loans from state-owned banks. In other words, when a company has an exclusive relationship with a state-owned bank, the dependence of investment activities on internal sources of cash (cash flow) is lower than other companies that do not establish an exclusive relationship with a state-owned bank. This is because state-owned banks have higher average loans than banks with other ownership so that when a company has an exclusive relationship with a state-owned bank, the company will find it easier to get external cash flow. This ease is due to the tendency of state-owned banks to channel more funds than banks with other ownership. In addition, the exclusive relationship established between the company and the bank makes the company have a backing source of funding other than internal funding sources, namely the source of funds obtained from banks as partners who have an exclusive relationship. So when a company has an exclusive relationship with a state-owned bank, it will tend to be easier in the process to get an inflow of funds into profitable investment funding.

According to Srinivasan and Thampy (2017) states that companies that have an exclusive relationship with a state bank tend to experience a risk of financial constraints up to 30%. Reducing the possibility of financial constraints makes companies have a better chance of realizing profitable investment projects because when their internal cash sources are insufficient, companies that have exclusive relationships with government banks will find it easier to obtain external funding sources to realize these investment projects. Therefore, it can be concluded that the company's relationship with a state bank will weaken the positive influence of cash flow on investment. This research was conducted in India using a sample of companies going public in 2000-2013. In this research, it is stated that when a company has an exclusive relationship with a state-owned bank, the company will tend to have less possibility to experience disruption of its cash flow to make investments, and when the company establishes an exclusive relationship with a state-owned bank, the investment opportunity owned will be increasingly due to the increased availability of company funds.
H₃ : government bank relationships weaken the positive influence of cash flow on investment.

Moderation effect of growth opportunity and government bank relationship on investment
The exclusive relationship that exists between state-owned banks and companies will strengthen Tobin’s Q’s positive influence on investment. This stronger effect is because when companies have high investment opportunities, the state-owned banks as partners who have an exclusive relationship with the company will further support the realization of these investment opportunities by channeling sources of funds, bearing in mind that state-owned banks are able to channel more loans than banks with other ownership such as domestic and mixed private sector. The high investment opportunities of the company coupled with support from banks in the form of increased availability of funds will increase the realization of profitable investments.
H₄ : government bank relationships strengthen Tobins’Q’s positive influence on investment.

![Research Model](image)

Figure 1. Research Model

3. Methods
This study uses a quantitative approach that is based on hypotheses that have been stated previously. The data used in this study are measurable and tested using certain statistical tools. Statistical testing is done using multiple linear regression methods and MRA (moderated regression analysis) so that conclusions can be generalized and able to answer the problem formulation.

The type of data used in this study is a secondary type of data that is data obtained from
other parties and has been published to the public. Secondary data in this study came from annual financial reports during the 2013-2017 study period in each company. Data obtained from the website www.idx.co.id and the official website of each company. Determination of the sample in this study using a purposive sampling method with consideration and limitations in accordance with predetermined criteria. The criteria are as follows:

1. Sample companies are publicly listed manufacturing companies listed on the Indonesia Stock Exchange during the 2013-2017 period.
2. The sample company has annual reports and financial reports for 2013-2017.
3. The company which in its financial reporting uses the Indonesian Rupiah.
4. Annual reports and financial statements of companies that are sampled during the period 2013-2017 provide the data needed for research in accordance with the variables used.

**Variable construction**

**Investment**

Investment is the current effort made by the company to get benefits and benefits in the future. Investment decisions are one of the important things that companies must consider and choose with regard to the selection and allocation of funds for assets to be used by the company to achieve the expected goals of increasing the value of the company. There are two investment decisions that can be taken by companies, namely short-term and long-term investment decisions (Hidayat, 2010). Long-term investment decisions are investments made in a period of more than one year, this means that the funds invested are projected back in a period of more than one year. The choice of long-term investment decisions is expected to increase the value of the company. Short-term investments are investments in assets with maturities of less than one year, which means that returns on invested funds are expected to return before one year. Investment in fixed assets is formulated by:

\[
INV_{it} = \frac{(Fixed\ Asset_{it} - Fixed\ Asset_{it-1}) + Depreciation_{it}}{Total\ Asset_{it-1}}
\]

The higher the INV value, the greater the investment in the form of fixed assets by the company.

**Cash flow**

Cash flow is an important part of the company because cash flow is a source of funds owned by the company that comes from within the company resulting from its operational business activities. Based on research conducted by Mykhayliv et al., (2013) cash flow is a proxy of internal funding sources generated by the company through its operational activities. According to Bringham and Hauston (2001) states that capital budgeting decisions must be based on cash flow not on the size of the profits earned by the company. Therefore, cash flow is a key factor that needs to be considered by managers as decision makers for investments to be made because the role of cash flow is related to increasing the value of the company, besides that cash flow is one very important part in a company because it can assess the company’s ability to generate cash from its own operational activities. In this study cash flow was formulated as follows:

\[
CF_{it} = \frac{Total\ Operating\ Cash\ Flow_{it}}{Total\ Asset_{it-1}}
\]
The formula indicates that the higher the CF value, the higher the total operating cash flow of the company resulting from the use of its total assets. The total operating cash flow of the company itself is obtained from the sum of earnings after tax with depreciation for the year.

**Growth Opportunity**

This research makes Tobin’s Q as a proxy to measure the growth opportunity of the company. Growth opportunity can be interpreted as an investment opportunity owned by the company to be run in the future. Tobin’s Q is a measure that shows the market valuation of a company’s assets against the book value held. Companies that have high Tobin’s Q value, the investment opportunity with a positive NPV will also be higher, so the company will be better able to execute its investment opportunities. Based on research by Srinivasan and Thampy (2017), investment opportunities proxied by Tobins’Q are measured by:

\[
\text{Tobin’s } Q_{it} = \frac{MVE_{it} + Debt_{it-1}}{TA_{it}}.
\]

**Government bank relationship**

In this study, bank relationship is used as a proxy to measure the exclusive relationship of companies with state-owned banks both state-owned banks and BPD as intermediaries for credit distribution. A state-owned bank or also called a state-owned company is a form of business / company owned by the state. According to Law Number 19 Year 2003 BUMN is a business entity whose entire or most of its capital is owned by the state through direct participation from separated state assets. Since 2001 all SOE entities have been under the supervision and management of the Ministry of SOEs led by the Minister of SOEs. Likewise with regional development banks or BPDs whose shares are mostly owned by regional governments as stipulated in PP number 54 of 2017, namely Regionally Owned Enterprises, hereinafter abbreviated as BUMD, are business entities that are wholly or largely owned by the Regions.

This exclusive relationship is important for companies to get easy access to external funding. The exclusive relationship between the company and the bank can be seen from the credit distribution. If the company gets a loan from a particular bank, the company and the bank can be said to have an exclusive relationship because when the bank decides to give credit to the company, of course the bank already has soft information such as the level of confidence about the company to be funded. Hower (2016) states that the characteristics that can be seen when a bank has an exclusive relationship with the company, among others, are banks that facilitate the requirements for collateral or reduce loan interest rates.

The measurement for bank relationship in this study uses a dummy variable, valued at 1 if the company has an exclusive relationship with a state-owned bank seen from loans provided by state-owned banks and a value of 0 otherwise.

**Leverage**

Leverage arises because companies in their operations use assets and sources of funds which create a fixed burden for Sudana companies (2011: 157). Setiawan and Rachmansyah (2019) stated that leverage itself is the company’s ability to issue debt. The decision to finance companies using leverage is one of the funding policies that companies can take (Pratama, 2016). Liabilities in the form of interest costs and loan principal costs will arise when companies use debt. The risk of default or failure to pay will also arise along with the selection
of the use of debt by the company, therefore when the company decides to use debt as its funding, the company needs to pay attention to the ability to generate profits. Leverage measurement in this study uses the following formula:

\[
\text{Lev}_{i,t} = \frac{\text{Short Term Debt}_{i,t} + \text{Long Term Debt}_{i,t}}{\text{Total Asset}_{i,t}}
\]

Size

Firm size is the level of wealth the company has. Companies with larger sizes tend to be able to generate higher profits than smaller companies due to several influencing factors such as market power, economic of scale, and market experience. The size of the company can also be seen from the total assets owned. Measuring measurements in this study are as follows:

\[
\text{SIZE}_{i,t} = \ln (\text{Total Asset}_{i,t})
\]

4. Results and Discussion

Following are the results of multiple linear regression tests using three models. The first model measures the cash flow and Tobin's Q on investment, the second model measures cash flow moderated with a government owned bank relationship to investment, and the third model measures Tobin's Q is moderated with a government owned bank relationship on investment.

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<th>Table 1. Results of Multiple Linear Regression Analysis</th>
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Source: SPSS Data Processed Results

***: Significance at the 1% level

**: Significance at the 5% level

(): Sig. T

Based on table 1 above, the results of multiple linear regression analysis in model 1 shows, the CF variable has a significant positive coefficient, which means that CF has a significant positive
effect on INV or cash flow of the company which has a significant positive effect on investment. The significance value of the CF variable is less than 0.01 so that $H_0$ is rejected and $H_1$ is accepted. This shows that the higher the company's cash flow, the investment the company can make will also increase. The same thing is also shown by the second independent variable, Tobin’s Q, which has a significant positive coefficient, the significance value shown by TobinsQ for INV is less than 0.01 so that $H_0$ is rejected and $H_1$ is accepted, this means that when the investment opportunity owned by the company increases, the company will can make and execute more investments. Model 2 and model 3 also respectively show that the two independent variables namely cash flow and Tobin’s Q have a significant positive effect on the dependent variable of investment.

The result of multiple linear regression analysis of model 2 shows that the CF * GOB variable has a significant negative coefficient, which means that CF * GOB has a significant negative effect on INV or government owned bank relationships weakens the positive influence of cash flow on corporate investment (Shen & Wang, 2005). The significance value of the moderating variable is less than 0.05 then $H_0$ is rejected and $H_1$ is accepted. This shows that the existence of an exclusive relationship established between state-owned banks and companies will weaken the positive influence of cash flow on corporate investment. The result of multiple linear regression analysis of model 3 shows if the TobinsQ * GOB variable has a significant positive coefficient with a significance value of less than 0.05 which indicates that $H_0$ is rejected and $H_1$ is accepted, this means that TobinsQ * GOB has a significant positive effect on INV or government owned banks relationship strengthens Tobin’s Q’s positive influence on investment. Based on table 1 above, the test results of model 1, model 2, and model 3 show that the leverage control variable has a significant negative effect on investment. This shows that as the company’s debt increases, the investment it can make will decrease. The second control variable company size has a significant positive effect on investment. This shows that the larger the size of the company, the investment can be made by the company will also increase.

The coefficient of determination or $R^2$ is used to find out how much the independent variable can explain the dependent variable. Model 1 shows that the value of $R^2$ is 0.281 which indicates that 28.1% of the investment dependent variable can be explained by the independent cash flow and Tobin’s Q variables and the control variables in this model are leverage and company size, while the remaining 71.9% are explained by other independent variables not used in this model. The coefficient of determination of model 2 is 0.325 which indicates that 32.5% of the investment dependent variable can be explained by the independent variable and the moderating variable governed bank owned relationship with cash flow and control variables while the remaining 67.5% is explained by other variables outside the independent variable and control variables used in the study. The coefficient of determination of model 3 is 0.323 which indicates that 32.3% of the investment dependent variable can be explained by the independent variable and the moderating variable governed bank owned relationship with Tobin’s Q and the control variable while the remaining 67.7% is explained by other variables outside the independent variable and control variables used in the study.

Model 4 is used to test the strength of the model used in research. From table 1 model 4 it is found that although models 1, 2 and 3 each test independent variables together or moderated separately each independent variable with moderating variables government owned bank relationship (GOB) still shows the results and direction of influence the same as significant. This states that the model used by the author in this study can be said to be robust.
or strong because even though the regression separately or together in model 4 shows consistent and significant results.

5. Limitations
The limitation of this research is that the grouping of government bank relationships does not lead specifically, where when companies receive loans from foreign banks or government banks in this study are also categorized as having a government bank relationship. In addition, this study only used data samples for five years. Future studies are expected to classify separate state banks so that the results obtained are not biased. In addition, it is better to use different moderation variables other than state-owned banks (GOB) on the effect of cash flow and Tobin’s Q on investment.

6. Conclusion
Based on the results of the analysis and discussion, conclusions are generated that cash flow as a source of funding from internal companies has a significant positive effect on investment. This shows that the level of investment depends on the level of cash flow owned by the company. The second conclusion is that growth opportunity has a significant positive effect on investment. This shows that, investments made by the company depend on investment opportunities they have. The higher the investment opportunity the company has, the greater the investment carried out by the company.

The third conclusion states that the GOB (government owned bank relationship) weakens the positive influence of cash flow on investment. This shows that when companies have an exclusive relationship with state-owned banks, the company’s dependence on cash flow as a source of funds will decrease because there are other sources of funding, namely banks. And the final conclusion states that the GOB (government owned bank relationship) strengthens Tobin’s Q influence on investment. This shows that when the company has an exclusive relationship with a state-owned bank, it will increase investment opportunities that are owned so that the investment opportunity that is indicated by the value of Q will increase in line with the increase in investment by the company.

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Setiawan, R & Ratri, I.N / cash flow, growth opportunity, government owned bank relationship ...


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Author Profile
Dr. Rahmat Setiawan, SE., MM., CFP is a Senior Lecturer in Financial Management and Director of the Master of Management Science Study Program at Airlangga University, Surabaya. He holds a Doctorate degree from Gadjah Mada University. He has researched many issues regarding corporate finance, not infrequently he has also been a speaker on many occasions both in companies and television stations related to financial issues. Indira Nuansa Ratri, SM herself is a master of management science student who is taking financial concentration.