

## THE EFFECT OF CASH FLOW AND CURRENCY EXCHANGE RATE ON FINANCIAL DISTRESS

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### ABSTRACT

*This study aims to test and obtain empirical evidence of the effect of cash flow and currency exchange rates on financial distress. This research was conducted at trading companies listed on the Indonesia Stock Exchange (IDX) during the 2014-2018 period. This research is a quantitative study using secondary data, namely data obtained from the company's annual financial statements that have been published by the Indonesia Stock Exchange (IDX). The population in this study are trading companies listed on the Indonesia Stock Exchange (IDX) during the 2014-2018 period. Sampling using purposive sampling method and obtained a sample of 51 companies. Data analysis used in this research is descriptive statistical analysis, classical assumption test using normality test, autocorrelation test, multicollinearity test, heteroscedasticity test, multiple linear regression analysis and hypothesis testing using the F test, T test and determination coefficient R<sup>2</sup> test. Processed with the help of the SPSS version 24 statistical program. The test results using a partial test show that cash flow proxied using operation cash flow is significant against financial distress and currency exchange rates are proxied using between significant profit comparisons to financial distress. Simultaneous test results show cash flow and currency exchange rates have a joint effect on financial distress. The test results using a partial test show that cash flow proxied using operation cash flow is significant against financial distress and currency exchange rates are proxied using between significant profit comparisons to financial distress. Simultaneous test results show cash flow and currency exchange rates have a joint effect on financial distress. The test results using a partial test show that cash flow proxied using operation cash flow is significant against financial distress and currency exchange rates are proxied using between significant profit comparisons to financial distress. Simultaneous test results show cash flow and currency exchange rates have a joint effect on financial distress.*

*Keywords: Cash Flow, Currency Exchange Rates, Financial Distress*

### ABSTRAK

Penelitian ini bertujuan untuk menguji dan memperoleh bukti empiris pengaruh *cash flow* dan nilai tukar mata uang terhadap *financial distress*. Penelitian ini dilakukan pada perusahaan perdagangan yang terdaftar di Bursa Efek Indonesia (BEI) selama periode 2014- 2018. Penelitian ini merupakan penelitian kuantitatif dengan menggunakan data sekunder yaitu data yang diperoleh dari laporan keuangan tahunan perusahaan yang telah dipublikasikan oleh Bursa Efek Indonesia (BEI). Populasi dalam penelitian ini merupakan perusahaan perdagangan yang terdaftar di Bursa Efek Indonesia (BEI) selama periode 2014- 2018. Pengambilan sampel menggunakan metode *purposive sampling* dan diperoleh sampel sebanyak 51 perusahaan. Analisis data yang digunakan dalam penelitian ini yaitu, analisis statistik deskriptif, Uji Asumsi Klasik dengan menggunakan uji normalitas, uji autokorelasi, uji multikolonieritas, uji heterokedastisitas, analisis regresi linier berganda serta uji hipotesis dengan menggunakan uji F, uji T dan uji koefisien determinasi R<sup>2</sup> dan diolah dengan bantuan program statistik SPSS versi 24. Hasil pengujian dengan menggunakan uji parsial menunjukkan bahwa *cash flow* yang diproksikan menggunakan arus kas operasi signifikan terhadap *financial distress* dan nilai tukar mata uang yang diproksikan menggunakan antar perbandingan laba signifikan terhadap *financial distress*. Hasil uji simultan menunjukkan *cash flow* dan nilai tukar mata uang berpengaruh secara bersama – sama terhadap *financial distress*.

Kata Kunci: *Cash Flow, Nilai Tukar Mata Uang, Financial Distress*

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## 1. INTRODUCTION

Developments in a very rapid world make the competition in a business increasingly competitive. Competition for a company today is not only within the country but also with companies outside the country. Advances in technology have made it easier for companies to communicate between countries. This finally begins to eliminate local restrictions of a company in running its business and being able to conduct free trade anywhere. If the company is not able to compete, the company will experience losses, which in turn will result in the company experiencing financial distress. (Srikalimah, 2017). Conditions like this have resulted in several companies in Indonesia experiencing financial distress prior to bankruptcy. This is due to investors who do not want to invest in companies in Indonesia. At times like this the company is required to be more active in managing management so that there is no bankruptcy.

The emergence of Financial Distress can provide an early warning about bankruptcy. This early warning allows the company to prevent bankruptcy as a whole (Harahap, 2017: 101). Reported in katadata published on September 7, 2015. According to Aria W. Yudhistira, the Indonesian economy is very vulnerable to turmoil in the global economy. Deposit funds in Indonesia are still low at around 40.7% of the total population, this number is lower than neighboring countries which are still above 50%. And judging from the capital market, the transaction value is still very low, only 45.2% of gross domestic product (GDP). Conditions like this make Indonesia dependent on foreign capital markets. This makes the government

Indonesia provides liquidation through the issuance of project-based sukuk and retail bonds. The government also encourages the issuance of regional bonds to spur development in the regions. Achieving financial stability requires effective financial transparency and rupiah stability. One of which can be done by increasing interbank repo transactions. (source: [www.katadata.co.id](http://www.katadata.co.id))

*Financial distress* is the stage of declining financial conditions that occurred before bankruptcy or liquidation. The global financial crisis in Indonesia caused various difficulties experienced by companies. The impact caused by the company being unable to manage and maintain financial stability, causing the company to experience operational losses and net losses from the company's activities. Another impact that causes companies in Indonesia is still very dependent on imported raw materials. This makes it vulnerable to fluctuations in the rupiah exchange rate. If this continues, the company will experience financial distress.

*Financial Distress* is a problem or situation that must be avoided by the company, by analyzing the financial statements can find out the steps that will be taken by the company to prevent bankruptcy or Financial Distress. There are several models to detect the occurrence of Financial Distress, one of which is the Altman Z-Score. The Altman Z-Score model was created by Dr. Edward I. Altman in 1968 at New York University using the Multiple Discriminant Analysis (MDA) method. In the MDA method, it takes more than one financial ratio related to bankruptcy to become a comprehensive model (Gustiyana, 2018).

In addition, cash flow can also be used to predict the occurrence of Financial Distress. Where the cash flow statement is used to determine the ability of

company to pay its debts. If the company's cash flow is of small value, then the company is considered to be experiencing financial problems or financial distress. Thus, the researcher wants to empirically prove the ability of cash flow information to predict the financial distress of a company.

According to Martani (2012:145), cash flow is a report that provides relevant information about cash receipts and disbursements within a certain time period. Every company in carrying out its business operations will experience cash inflows and cash outflows. Cash flow information is needed for creditors to determine the company's ability to pay its debts. If a company's cash flow is of small value, then creditors do not get confidence in the return of the credit given. If this happens continuously, creditors will not trust their credit to the company because the company is considered to be experiencing financial problems or Financial Distress.

Cash flow is a company activity that is related to profit, and is related to cash inflows and outflows of funds from various operating activities, such as providing credit to customers, investing in inventories, and obtaining credit from suppliers. In addition, the amount of cash flow from operating activities is an indicator that determines whether the company's operations can generate sufficient cash flow to repay loans, pay dividends, and make new investments without relying on external funding sources. Under these conditions, cash flow can be used as an indicator by creditors to determine the company's financial condition, this is because operating cash flow is closely related to the company's main activities and describes the company's condition in predicting financial distress. (Good,

One of the company's financial difficulties can be seen from the currency exchange rate factor. Currency exchange rates are differences between currencies in one country and another, where currency exchange rates can change at any time without prior notification. These changes occurred due to the large demand and supply in the foreign exchange market. The weakening of the exchange rate made the monetary crisis the initial trigger for the crisis in Indonesia and was followed by other crises.

According to (Sadono Sukirno, 2012: 397 in Ardelia 2018) the exchange rate or often called the exchange rate is the price of currency against other currencies. The exchange rate is one of the most important prices in an open economy given such a large influence on the current account balance and other macroeconomic variables. The strengthening of the rupiah exchange rate against foreign currencies also has a negative impact on import-based companies, this is because transactions used using foreign currencies will be converted into rupiah if the rupiah strengthens then the company must incur more costs. If this continues, the company may experience financial distress or financial distress.

Foreign exchange rates also affect Financial Distress. The weakening of the rupiah against the dollar made Indonesia experience an economic crisis that occurred in 1998 and was a financial crisis in Asia. And this incident caused the company to go bankrupt with the public's purchasing power of the products being sold decreasing and causing the company to suffer losses due to the weakening rupiah exchange rate. The high increase in the rupiah exchange rate against the US dollar from year to year will have an impact on trade

national and international from the company's export and import activities. Due to this condition, a company in Indonesia will be more vulnerable to the threat of financial distress.

Based on the explanation of the background and the phenomenon above, it is interesting to study whether Cash Flow and Currency Exchange Rates Affect Financial Distress. So the authors are interested in conducting research with the title "INFLUENCE OF CASH FLOW AND CURRENCY EXCHANGE RATE ON FINANCIAL DISTRESS (STUDY) EMPIRICAL ON COMPANY TRADING LISTED ON THE INDONESIA STOCK EXCHANGE 2014-2018)".

**1.1 Research Problem Formulation** Based on the background described above, so researcher formulate problem as follows:

1. Do Cash Flow and Rupiah Exchange Rate Affect Financial Distress?
2. Does Cash Flow Affect Financial Distress?
3. Does Currency Exchange Rate Affect Financial Distress?

### 1.2 Research purposes

The purpose of this research is very important so that the direction of the research being carried out does not deviate from its original purpose. The objectives of this research are as follows:

1. To test and prove whether there is an effect of Cash Flow and Currency Exchange Rate on *Financial Distress*.
2. To test and prove whether there is an effect of Cash Flow on Financial Distress.
3. To test and prove whether there is an effect of Currency Exchange Rate on Financial Distress.

### 1.3 Benefits of research

The benefits to be achieved in this research are:

#### 1. Theoretical Benefits

This research is expected to be used as a means of applying the benefits of Cash Flow and Currency Exchange Rates related to Financial Distress in trading companies listed on the Indonesia Stock Exchange in 2014-2018.

#### 2. Practical Benefits

##### a. For Companies

From this research, it is hoped that it can be used as input for companies to be able to identify Financial Distress from the start as a way to face economic competition and as consideration for the company's management to take corrective or preventive actions.

##### b. External Share

Provide an understanding of the financial distress condition of a company to assist external parties such as investors and creditors in making decisions before investing in a company.

##### c. For Academics

This research can be used to describe the assessment system in developing knowledge about financial distress and as a reference for student literature at Pamulang University.

##### d. For Next Researchers

This research is expected to be used as a means of additional consideration in further research in the same field, namely, the effect of Cash Flow and Currency Exchange Rates on Financial Distress.

### 2. Theoretical basis

#### 1. Signal Theory

Signaling Theory or Signaling Theory was developed by (Ross, 1977 in Septy et al, 2017), which explains the encouragement of companies to provide



information signal positive (good news) as well as negative signals (bad news) to parties external about condition company. In Theory Signal this disclose that how a company should give a signal to investors as users of the report finance. Signal this in the form of information about the contents of the report which state that company It's better than other companies.

According to Paramita (2014) signal theory is derived from pragmatic accounting theory. His research is centered on how information influences changes in the behavior of information users. In this signal theory, there is information asymmetry between the principal and the agent. An imbalance between principal and agent information will cause information asymmetry. By showing the existence of this information asymmetry, managers need to provide information for interested parties by issuing financial statements. In this case, managers usually have more information than investors, resulting in information asymmetry between managers and investors. Investors feel that having less information will pressure managers to present financial statements in accordance with the company's circumstances.

According to Suwardjono (2013: 583) states that Signaling Theory is useful for suppressing information that is very important to decisions in investing for parties outside the company. The information can be an important element for investors and business people, the information is in the form of information, notes or descriptions of the past, present or future conditions that are useful in survival. According to Utami (2016) in Septy, Dwi & An Nisaa (2017) the high value of the company's cash flow over a long period of time can indicate the company is able to pay its debts so that it is considered a positive signal.

because the creditors have the confidence to give loans to the company and the confidence to return the loans. Conversely, if the cash flow is of small value even to the point of experiencing losses in the long term, it will be considered a negative signal because the creditors will doubt and be unsure of the company's ability to pay debts. If this continues, creditors will no longer entrust their credit to the company because the company is considered to be experiencing financial problems or financial distress.

The author uses signal theory, because there is a link between the financial statement information issued by the company is in accordance with the completeness of relevant and accurate data as information for external parties that the company has good or bad financial conditions. Financial statements are used to provide confidence to investors that the company is able to pay dividends. From these financial statements, investors can find out the condition of the company that cannot make payments on its obligations in the short and long term and has a declining cash flow. This causes doubts in investors and will be a condition for companies experiencing financial distress.

## 2. *Financial Distress*

*Financial distress* is condition of the company that is experiencing financial difficulties. This can be seen from the company's unhealthy financial condition or crisis and the company's cash flow is not sufficient to meet the company's obligations (such as interest and credit costs). The financial problems faced by the company if allowed to drag on, it can lead to bankruptcy.

Information about a company's Financial Distress is very important to know so that management can

immediately take corrective action to avoid bankruptcy. Financial distress is defined as the stage of declining financial conditions that occurred before bankruptcy or liquidation. Financial distress begins with the inability to fulfill obligations, especially short-term obligations, including obligations in the solvency category. The emergence of financial distress can provide an early warning about the occurrence of financial distress. This early warning will enable the company to prevent bankruptcy as a whole (Fahmi, 2013:158).

According to (Brigham and Gapenski, 1994 in Febriyan et al, 2019) there are several definitions of financial difficulties according to their type, namely:

1. *Economic failure*

*Economic failure* or economic failure is a condition where the company's income cannot cover the total costs, including the cost of capital. This business can continue its operations as long as the creditors or provide capital and the owner is willing to accept a rate of return (rate of return) below the market. Although there is no new capital injection when old assets have to be replaced, the company can also become economically healthy.

2. *Business failure*

Business failure is defined as a business discontinuing operations with consequent losses to creditors.

3. *Technical insolvency*

As a company, it is said to be in a state of technical insolvency if it cannot meet current obligations when they fall due. The inability to pay debt technically indicates a temporary lack of liquidity, which if given time, the company may be able to pay its debts and survive. On the other hand, if technical insolvency is an early symptom of economic failure, it may be the first stop to financial distress.

4. *Insolvency in bankruptcy*

A company is said to be in a state of Insolvent in bankruptcy if the book value of debt exceeds the market value of the assets. This condition is more serious than technical insolvency because in general, this is a sign of economic failure, and even leads to business liquidation. Companies that are insolvent in bankruptcy do not need to be involved in a legal bankruptcy lawsuit.

5. *Legal bankruptcy*

The company is said to be legally bankrupt if a lawsuit has been filed officially by law.

According to Vinh (2015) financial distress is an economic problem experienced by companies that experienced a decline in performance before the company went bankrupt. The mildest symptom of financial distress is an increase in raw materials which results in an increase in the cost of a product, a decrease in company sales, and termination of employment (PHK).

*Financial distress* is financial condition that existed prior to bankruptcy or liquidation. Bankruptcy or bankruptcy is usually interpreted as a company's failure to carry out company operations to generate profits in accordance with its main goal of maximizing profits (Murniati and Enny Arita, 2016:101). This condition can affect investors, creditors and company stakeholders, this is due to several factors that occur in the company's internal where the company is not able to respond to problems or bad management, but many researchers have found that there are external factors that can be seen from fluctuations in the company. exchange rates, export and import policies that cause companies to experience financial distress (financial distress).

*Financial Distress* defined as a condition that must be experienced

by almost all companies, where the results or operating profits of the company are less than the company's obligations, so the company is unable to pay off its obligations. In Alfi's research (2016) the financial distress variable is measured or proxied using the equation as in Oktita and Agus' research (2013, namely the interest coverage ratio ICR). The interest coverage ratio looks at the company's ability to fulfill its obligations, this ratio is used to define the financial distress condition of a company. Companies that have an interest coverage ratio of less than one are declared as financial distressed firms.

Predicting the financial distress condition of a company is the concern of many parties. The parties who use this model include (Purwanti, 2005;29 in Mamang, 2018):

1. Lender

Research related to financial distress predictions has relevance to lending institutions, both in deciding whether to provide a loan and determining policies to monitor loans that have been given.

2. Investors

The financial distress prediction model can help investors when assessing the possibility of a company's problems in making principal and interest payments.

3. Rule Maker

Regulatory bodies have the responsibility to monitor debt serviceability and stabilize individual companies. This causes the need for an applicable model to determine the company's ability to pay debts and assess the company's stability.

4. Government

Prediction of financial distress is also important for the government and antitrust regulation.

5. Auditor

Financial distress prediction model can be a useful tool for auditors in making a going concern assessment of a company.

6. Management

If company experience bankruptcy, the company will bear direct costs (accountants and lawyers fees) and indirect costs (sales losses or forced losses due to court decisions) so that with the financial distress prediction model, it is hoped that the company can avoid bankruptcy and automatically avoid direct and indirect costs. from bankruptcy.

In predicting the financial condition of a company, the financial distress model is very important for internal companies, investors, creditors and the government. Predicting financial distress with a good model can determine the condition of the company before going bankrupt. There are several models to detect the occurrence of financial distress, one of which is the Altman Z-Score model.

According to Altman in Sri Yati (2017) defines financial distress using the numbers in the financial statements and presenting them in a proxy or model, namely the Altman Z-Score which can be a reference whether the company has the potential to go bankrupt or not. In this study the proxy or model used to assess financial distress is the Modified Altman Z-Score model (1995) in Annisa & Khairunnisa (2019):

$$Z = 6.56X1 + 3.26X2 + 6.72X3 + 1.04X4$$

Description:

X1 = Working capital/Total Assets

X2 = Retained Earnings/Total Assets

X3 = EBIT/Total Assets

X4 = Book Value of equity/Book Value of Liabilities

The Z-Score model is one method for predicting financial distress. The Z-Score model was developed by Altman in 1968. Altman

using 5 financial ratios that are used to predict financial distress (Fachrudin: 2008 in Sabrina and Cacik 2019).

1. For companies going public (Original Z-Score)

$$Z = 0.012X_1 + 0.014X_2 + 0.033X_3 + 0.006X_4 + 0.999X_5$$

Description:

X<sub>1</sub> = working capital to total assets

X<sub>2</sub> = retained earnings to total assets

X<sub>3</sub> = earnings before interest and taxes to total assets

X<sub>4</sub> = market value of equity to book value of total debt

X<sub>5</sub> = sales to total assets

Z = overall index

2. For companies that do not go public (Revised Altman Model)

$$Z = 0.717X_1 + 0.847X_2 + 3.107X_3 + 0.420X_4 + 0.998X_5$$

Description:

X<sub>1</sub> = working capital to total assets

X<sub>2</sub> = retained earnings to total assets

X<sub>3</sub> = earnings before interest and taxes to total assets

X<sub>4</sub> = market value of equity to book value of total debt

X<sub>5</sub> = sales to total assets

Z = overall index

3. For nonmanufacturing companies (Modified Altman Model)

$$Z = 3.25 + 6.56X_1 + 3.26X_2 + 6.72X_3 + 1.05X_4$$

Description:

X<sub>1</sub> = working capital/total assets

X<sub>2</sub> = retained earnings/total assets

X<sub>3</sub> = operating profit (EBIT)/total assets

X<sub>4</sub> = book value of equity/total debt

Research on financial distress is known to still give different results. As in the financial distress research conducted by Moh Halim (2015) and Fitria (2010) by using the cash flow variable which turned out to give different results. Therefore, it is still possible

to return to research on finance

*distress* in order to obtain clear results regarding the effect of financial distress.

### 3. *Cash Flow*

Cash describes purchasing power and can be transferred immediately in a market economy to every individual and organization in obtaining goods and services that are needed (Wahyuningtyas, 2010). Cash flow information has a very important influence for the company and as a whole important for know company activities. Cash flow information obtained from the results of the cash flow statement can see the stability of the company's performance.

Every company needs cash to carry out its business activities, both as a medium of exchange in obtaining goods or services or as an investment in the company. Cash is one of the indicators in the company, the greater the cash value, the more the company's performance. According to (Wild 2010 in Radiansyah 2013) cash is the most liquid asset and offers liquidity and flexibility for the company. Cash is used to pay debts, on equipment, expand facilities and pay dividends, not profits.

The cash flow statement aims to report the cash inflows and outflows of the company during a certain period. Cash Flow / Cash flow is useful to see the ability company in generate future cash flows to provide relevant information about cash receipts and disbursements. A company in a certain period by classifying transactions in operating, financing, and investment activities. To see the stability of the company's performance in predicting financial distress (financial difficulties). Cash flow ratio analysis reveals that cash flow information has the ability to explain in detail the overall activities of the company. Cash flow information obtained from the statement of cash flows is able to describe the general relationship between failing and non-failing entities. The higher the ratio calculated from the statement of cash flows,





the more

If the company has low probability of experiencing financial distress, the company will give a signal to investors that the company has good cash flow so that the possibility of the company experiencing financial distress will be lower (Sofyan, 2015: 257).

Srengga (2012) states that the cash flow statement can reflect the company's net income related to the value of the company so that if the cash flow increases, the company's profit will increase and this will increase the company's value and will also increase the company's profit. According to Fitria (2010), cash flow information is needed by creditors to determine the company's ability to pay its debts. If the cash flow of a company is large, then the creditors get confidence in taking the credit given. If the company's cash flow is small, creditors do not have confidence in the company's ability to pay debts.

Cash flow is part of the financial statements that can provide information about cash receipts and disbursements in a period by dividing it into two parts, namely financing and investment operations (Harahap, 2010:257). Cash flow statements in addition to being useful for companies, cash flow also has benefits for investors, creditors and others. The existence of a cash flow statement can assess how the company can be able to pay its obligations, conduct investment transactions.

Cash is the most important account in the balance sheet of financial statements. Cash consists of cash balances and company checking accounts, directly or indirectly cash is the most widely used transaction by the company. This is in accordance with the characteristics of cash, namely (Pakpahan, 2009 in Wahyuningtyas, 2010):

1. Cash is too often involved in almost all company transactions.

2. Cash is a property that is ready and easy to use in transactions and exchanged for other assets, easy to move and diverse without the owner's sign.
3. The amount of cash held by the company must be maintained in such a way that it is neither too much nor too little.

In cash processing can be categorized as follows:

1. recognized by general as tool valid payment.
2. Could used right every moment when desired.
3. Use freely.
4. Received in accordance with the nominal value when cashed.

According to (Reeve et al, 2010 in Mamang, 2018) the cash flow statement is one of the basic financial statements in a company. A statement of cash flows (statement of cash flows) reports the main cash inflows and outflows of a company during a certain period. The cash flow statement provides useful information about a company's ability to generate cash from operating activities, maintain and increase operating capacity, meet financial obligations, and pay dividends. As a result, cash flow statements are often used by managers in evaluating past operating activities and in planning future investment and financing activities. This report is also used by investors, creditors, and other parties in assessing the possible profit earned by the company. On the other hand, The cash flow statement is the basis for assessing the company's ability to pay its maturing debts. The cash flow statement reports cash flows from three types of activities, namely:

1. Cash flows from operating activities are cash flows from transactions that affect net income. An example is a transaction that includes the purchase and sale of goods by a retailer.

2. Cash flows from financing activities are cash flows from transactions that affect investments in non-current assets. Examples are transactions that involve the sale and purchase of fixed assets, such as equipment and buildings.
3. Cash flows from financing activities are cash flows from transactions that affect the company's debt and equity. Examples are transactions that involve the issuance or termination of equity and debt securities.

#### 4. Currency Exchange Rates

The foreign currency exchange rate is the unit price of money in the currency of another country. Foreign exchange rates are determined in the foreign exchange market, namely the market where various currencies are traded (Samuel and Nordhaus, 2004 in Rega, 2017). Currency exchange rates are very influential on the economic development of a country, the exchange rate of a country's currency can change, this is because the balance point is influenced by the supply and demand sides of both currencies.

Exchange rates are determined by the amount of demand and supply in the market for currencies. Experts say there are two exchange rates, namely the nominal exchange rate and the real exchange rate (Sukirno, 2010:397). The nominal exchange rate is the price of a currency against other currencies while the real exchange rate is the real exchange rate equal to the nominal exchange rate of the domestic price level and the price level abroad (Ferry, 2015). In Muchlas and Alamsyah (2015) from STIE Asia Malang explained that the currency exchange rate or exchange rate is the exchange rate of a country's currency against other foreign currencies. A more complete definition of the exchange rate (exchange rate) is the exchange between two different currencies, which is a comparison of the value or price between the two exchange rates (exchange rate).

The exchange rate is some money that comes from a certain currency and is used for exchange with other countries' currencies (Darmawan, 2017). According to Darmawan (2017) the measure used in the exchange rate is the middle rate, which is calculated by adding up the selling rate and buying rate after dividing by 2 to find the middle value. The source of research data comes from the middle exchange rate at Bank Indonesia. The comparison of the selling rate is the bank or money changer who sells foreign currency or in other words exchanges the value of the rupiah currency to US dollars, while the buying rate is the exchange of us dollars to rupiah.

Basically the exchange rate system influences the policies of each country. According to Ferry (2015) the exchange rate of a currency is defined as the relative price of a currency against other currencies. There are basically three exchange rate systems, namely:

1. *Fixed exchange rate* or a fixed exchange rate system, in this system the exchange rate or the exchange rate of one currency against another currency is set at a certain value, for example the exchange rate of the rupiah against the us dollar currency which has been determined by the state or institution.
2. *Managed floating exchange rate* or a controlled floating exchange rate system. It is a system that is in between the two systems of fixed exchange rates and floating exchange rates. In this exchange rate system, the central bank sets limits for a certain range of exchange rate movements called the intervention band. The exchange rate will be determined according to the market mechanism as long as it is within the range of the intervention band. If the exchange rate penetrates the upper or lower limits of this range, the central bank will automatically intervene in the foreign exchange market so that

the exchange rate moves back into the intervention band.

3. *Floating exchange rate* or a floating exchange rate system. In an expanding exchange rate system, the exchange rate is allowed to move according to the forces of supply and demand that occur in the market. Thus, the exchange rate will strengthen if there is an excess supply of foreign currency and conversely the exchange rate for the domestic currency will weaken if there is an excess in the market.

The economic condition of a country will determine the bargaining power of the domestic currency in the international world. This affects the movement of exchange rates in the international market and in the movement of exchange rates there are several factors that influence them (Madura, 2010 in Shindita 2020):

1. Fundamental factors, these factors are related to economic indicators such as inflation, interest rates, relative differences in income between countries, market expectations and central bank intervention.
2. Technical factors, these factors are related to the conditions of supply and demand for foreign exchange at certain times. If there is excess demand, while supply remains, the foreign exchange price will rise and vice versa.
3. Market Sentiment, this factor is mostly caused by rumors or incidental political news, which can push forex prices up or down sharply in the short term. If the rumors or news have passed, the exchange rate will return to normal.

This study uses a floating exchange rate system (Floating exchange rate). This is in accordance with the exchange rate system that has been implemented in Indonesia since 1997 – now. Basically, the exchange rate system in Indonesia is determined by Bank Indonesia, which can be seen from the movement of demand and supply in the foreign exchange market and in response to fluctuations.

global economy and finance that has an impact on the rupiah exchange rate, so that Bank Indonesia determines the floating exchange rate system in Indonesia.

## 2.1 Hypothesis Development

The hypothesis is a provisional assumption of the research problem formulation, where the research problem formulation has been stated in the form of a statement sentence. It is said to be temporary, because the answers given are only based on relevant theories, not yet based on empirical facts obtained through data collection (Sugiyono, 2016:64). Based on the description above regarding the study of theory and problem formulation, the framework of thinking mentioned above, the proposed hypothesis is as follows:

### 1. Effect of Cash Flow and Currency Exchange Rates on Financial Distress.

Cash flow statements can help users to see how the balance of cash and cash equivalents in the company's balance sheet changes from the beginning to the end of the accounting period and what these changes mean for the company, whether it shows positive or negative performance (Fitria: 2010). According to Mahyus Ekananda (2014:168) that the exchange rate is the price of a currency relative to the currencies of other countries. Exchange rates play an important role in spending decisions, because they allow us to translate prices from different countries into the same language.

According to Bhattacharyya (2012: 447) the factors that cause companies to experience financial distress can come from within the company or outside the company. One of the company's internals is the lack of managerial ownership structure and negative cash flow, while the company's external factors are one of them the exchange rate, the exchange rate is very influential if

company using materials from abroad and dealing directly with foreign traders. In Djumahir (2012)



micro variables consist of cash flow, retained earnings, operating profit, working capital, ownership structure and macro variables consisting of interest rates, inflation and exchange rates can simultaneously predict the company's financial distress. In line with Ira's research (2016) which states that simultaneously managerial ownership structure, operating cash flow, exchange rate have an effect on financial distress.

**H1: It is suspected that there is an influence of Cash Flow and Currency Exchange Rates on Financial Distress.**

## **2. Effect of Cash Flow on Financial Distress**

*cash flow* is a company's financial activity that can be seen how many incoming fund transactions and outgoing transaction costs in a certain period. In its cash flow activities, there are several activities including operating cash flow activities, investing activities and financing activities. These activities are information contained in the company's financial statements that experience a net increase or decrease in the cash flow of a company during a certain period.

As stated by Moh Halim (2015), it can be concluded that the cash flow variable has a significant effect on finance and can be used to predict financial distress conditions. Which means that cash flow has the ability to predict the financial distress of a company.

Research by Annisa & Khairunnisa (2019) states that cash flow proxied by operating cash flow has a positive and significant effect on the occurrence of financial distress. The same thing was also found in Bagus (2013)'s study which stated that operating cash flow had a significant influence in predicting financial distress conditions.

**H2: It is suspected that there is an influence of Cash Flow on Financial Distress.**

## **3. The Effect of Currency Exchange Rates on Financial Distress**

Currency exchange rates describe an

open economic system that is a transaction of buying and selling goods/services between residents of a country using different currencies. Foreign currency transactions are increasingly influenced by demand and supply movements from various countries. With the rapid development of the exchange rate, it can affect companies that carry out transactions between countries that require exchanging rupiah currency into foreign currencies. This makes changes in exchange rates unstable and currency instability can affect financial distress.

Currency exchange rate is the exchange of one country's currency for another. In a study conducted by Sabrina & Cacik (2019) based on the results of the t test, the Exchange Rate partially has a significant effect on Financial Distress. The resulting effect of the weakening of the rupiah against the dollar is an increase in foreign demand for domestic products. This condition is logical because when domestic goods are sold referring to rupiah, of course, importers who buy them by converting their dollars to rupiah will get goods in larger quantities than when the rupiah strengthens. Meanwhile, imported goods will be expensive and will affect companies that buy raw materials from countries that use USD.

The results of Shindita's research (2020) state that the exchange rate has a significant effect on the financial distress of conventional banks in 2016-2019. This is because working capital loans followed by consumption experience a significant impact when exchange rate volatility occurs. In Taufik's research (2016) which states that it has a positive but not significant effect in predicting financial distress conditions.

### **H3 : It is suspected that there is an influence of Currency Exchange Rates on Financial Distress.**

#### **3.1 Types of research**

The type of research used in this research is quantitative research. Where in this study the data source used is secondary data in the form of annual financial reports of trading companies listed on the Indonesia Stock Exchange 2014-2018. Quantitative research is research that is presented with numbers that will be processed in calculations through the SPSS application. Sugiyono (2016:8) states that quantitative methods can be interpreted as research methods based on positive philosophy, used to examine certain populations and samples, data collection using research instruments, data analysis is quantitative or statistical, with the aim of testing the applied hypothesis.

#### **3.2 Research Place and Location**

To obtain data related to the problem to be studied in this study, the authors took data from the financial statements of trading companies listed on the Indonesia Stock Exchange. The source of data in this study is secondary data, namely data obtained from existing sources. So the research conducted is observation or indirect data obtained on the site [www.idx.co.id](http://www.idx.co.id) or [www.idn.financial.go.id](http://www.idn.financial.go.id).

#### **3.3 Population And Sample**

##### **1. Population**

According to Sugiyono (2016: 80) population is a generalization area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions. The population used in the study

these are all companies that have been listed on the IDX in trading companies. The data used are 164 companies in the 2014-2018 period to predict financial distress conditions. The reason the author chooses trading companies as the object of research is because trading companies listed on the

Indonesia Stock Exchange consist of several industrial sub-sectors so that they can know the reaction of the capital market as a whole.

#### **2. Sample**

The sample used in this study is all companies in trading companies listed on the Indonesia Stock Exchange in 2014-2018. Where the sampling that will be used using purposive sampling technique, namely sampling selected based on research objectives with special criteria. The sampling criteria in this study include the following:

1. Trading company listed on the Indonesia Stock Exchange (IDX) 2014-2018
2. Trading company that publishes financial reports on the Indonesia Stock Exchange (IDX) in a row in 2014-2018.
3. Trading companies that present financial statements using the rupiah currency during the 2014-2018 period.
4. Trading companies that meet the criteria according to the variables studied.

#### **3.4 Data collection technique**

In this study, the data used is secondary data. The data collection technique used is by way of observation without going directly to the field or the method of documentation, namely data collection carried out by studying or collecting notes or documents related to the problem under study and library research (library).

research) and using document recording techniques by downloading data on the annual financial statements of companies listed on the Indonesia Stock Exchange in 2014-2018 which can be downloaded via the link: [www.idx.co.id](http://www.idx.co.id) and [www.idn.financial.go.id](http://www.idn.financial.go.id). And Currency Exchange Rate data is obtained by quoting directly through the [statistic.kemendag.go.id](http://statistic.kemendag.go.id) website.

### 3.5 Data analysis technique

According to Sugiyono (2016:147) in quantitative research, data analysis is an activity after data from all respondents or other data sources are collected. Activities in data analysis are grouping data based on variables and types of respondents, tabulating data based on variables from all respondents, presenting data for each variable studied, performing calculations to answer the problem formulation, and performing calculations to test hypotheses that have been proposed. For research that does not formulate a hypothesis, the last step is not carried out.

The data analysis technique used in this study is multiple linear regression analysis with the help of the IBM Statistical Package for Social Sciences (SPSS) version 24. This study uses multiple linear regression because in this study it uses more than one variable and the measurement scale uses ratios. The results of regression analysis can have serious problems. Therefore, the researcher also conducted several classical assumption tests to get the best results. These tests include normality test, autocorrelation test, heteroscedasticity test and multicollinearity test to determine the effect of cash flow and currency exchange rates on financial distress.

#### 1. Descriptive statistics

Descriptive Statistics are statistics used to analyze data by describing or

describe the data that has been collected as it is without intending to make conclusions that apply to the general public or generalizations (Sugiyono, 2016:147). According to Imam Ghozali (2016: 19) descriptive statistics provide an overview or description of a data seen from the average (mean), standard deviation, variance, maximum, minimum, sum, range, kurtosis, and skewness (distribution sloping). Skewness and kurtosis are measures to see whether the data is normally distributed or not. Skewness measures the skewness of the data and kurtosis measures the peak of the data distribution.

#### 2. Classic assumption test

A good regression test must meet several assumptions. In this study, the classical assumption was tested which included several tests including the Normality Test, Autocorrelation Test, Heteroscedasticity Test and Multicollinearity Test. In fulfilling the classical assumption test, the regression coefficient value of the estimated model can be close to the actual value.

##### 2.1 Normality test

Normality test aims to test whether in the regression model, the confounding or residual variables have a normal distribution. As it is known that the t and f tests assume that the residual value follows a normal distribution. If this assumption is violated, the statistical test becomes invalid and the number of samples is small (Ghozali, 2016:154). To detect the normality of the data can also be done with non-parametric statistics with the Kolmogorov-Smirnov (KS) test. with the test hypothesis, namely:

H<sub>0</sub> : data are normally distributed  
H<sub>a</sub> : data is not distributed by normal

Testing of this hypothesis is carried out using  $\alpha = 0.05$  the basis for making decisions are:

If the significance value is  $> 0.05$ , then the conclusion is that the data is normally distributed

If the significance value is  $< 0.05$ , then the conclusion is that the data is not normally distributed.

## 2.1 Autocorrelation Test

Autocorrelation test aims to test whether in the linear regression model there is a correlation between the confounding errors in the  $t-1$  period (previous). If there is a correlation, it is called an autocorrelation problem. Autocorrelation arises because consecutive observations over time are related to each other (Ghozali, 2016:107). The method that can be used to detect the presence or absence of autocorrelation is the Durbin-Watson test (DW test). The Durbin – Watson test is used for first order autocorrelation and requires an intercept (constant) in the regression model and there is no lag variable between independent variables. The tested hypotheses are:

$H_0$  : no autocorrelation ( $r = 0$ )  $H_a$  : no autocorrelation ( $r \neq 0$ )

Testing the author's hypothesis will compare it with the table value using a significance of 5%, the number of samples ( $n$ ) and the number of independents ( $k$  = independent variable). A good regression model is a regression that is free from autocorrelation or there is no autocorrelation. The basis for decision making is:

1. If  $0 < d < d_l$ , then the decision is rejected or there is no positive autocorrelation.
2. If  $d_l \leq d \leq d_u$ , then the decision has no conclusion or no positive autocorrelation.
3. If  $4 - d_l < d < 4$ , then the decision is rejected or there is no negative autocorrelation.
4. If  $4 - d_u \leq d \leq 4 - d_l$ , then the decision has no conclusion or no negative autocorrelation.
5. If  $d_u < d < 4 - d_u$ , then the decision is not rejected or there is no positive or negative autocorrelation.

## 2.3 Multicollinearity Test

Multicollinearity test aims to test whether the regression model found a correlation between the independent variables (independent). A good regression model should not have a correlation between the independent variables. If the independent variables are correlated with each other, then these variables are not orthogonal. Orthogonal variables are independent variables whose correlation value between independent variables is equal to zero. To detect the presence or absence of multicollinearity problems in this study, the tolerance and VIF (variance inflation factor) values were used. To show the existence of multicollinearity is the tolerance value

0.10 or equal to the VIF value 10. (Ghozali, 2016:103-104).

## 1.4 Heteroscedasticity Test

Heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another observation. If the residual variance from one observation to another observation remains, it is called Homoscedasticity and if it is different it is called Heteroscedasticity. Regression model which good is Homoscedasticity or not Heteroscedasticity occurs. Most cross-sectional data contain heteroscedasticity situations because this data collects data that represents various sizes of small, medium and large. To detect the presence or absence of heteroscedasticity in this study using the Park Test. Where the park test suggests that the variance ( $s^2$ ) is a function of the independent variables stated in the equation. If the coefficient of the beta parameter from the regression equation is statistically significant, this shows that in the estimated empirical model data there is heteroscedasticity, and vice versa if the beta parameter is not statistically significant, then the assumption of homoscedasticity is



on the data model cannot be rejected. (Ghozali, 2016:134-137).

### 3. Hypothesis testing

The hypothesis is a temporary answer to the research problem formulation, where the research problem formulation has been stated in the form of a question sentence (Sugiyono, 2016: 64). This test aims to test whether the value of the regression coefficient is not statistically equal to zero. The hypothesis test consists of the F test (simultaneous), the t test (partial) and the coefficient of determination (adjusted R<sup>2</sup>).

#### 3.1 Multiple Linear Regression

**Analysis** In analysis regression,

Besides measuring the strength of the relationship between two or more variables, also shows the direction of the relationship between the dependent variable and the independent variable.

Assumed dependent variable random/stochastic, which means it has a probabilistic distribution. Variable independent/free assumed has a fixed value (in sampling repeated)

(Ghozali, 2016:94). This study aims to see the influence between the independent variable and the dependent variable with the ratio measurement scale in something equality linear, in study this use analysis multiple linear regression. Linear regression analysis multiple used for know Cash Flow (X1), Currency Exchange Rate Money (X2), to *Financial Distress* (Y). equation regression linear simple can be searched with the formula:  $Y =$

$$+ x_1 + \beta x_2 + e$$

Where:

Y= Financial Distress

= Constant Value

= Regression Coefficient

(Beta) X1= Cash Flow

X2= Currency Exchange

Rate e= Standard Error

#### 3.2 Simultaneous Significance Test (F Test)

The F test shows the simultaneous effect of independent variables on the dependent variable (Ghozali, 2013:98). Basically it shows whether all the independent variables

included in the model have a joint influence on the dependent variable. Decision making is based on the probability level of significance > 0.05 then H<sub>0</sub> is accepted and if the probability is significant < 0.05 then H<sub>0</sub> is rejected. In addition, decision making can also be done by comparing the value of F table with calculated F. The value of F table can be formulated. Test  $F = (df(nk-1))$ . Where n is the number of samples and k is the number of independent variables. If F count > F table then H<sub>0</sub> is rejected and if F count < F table then H<sub>0</sub> is accepted.

#### 3.3 Partial Significance Test (T Test)

This test method is used to partially test the regression coefficient of the independent variable (free) to the dependent variable (bound) with the hypothesis put forward. T-test basically shows how far the influence of one independent variable individually in explaining the variation of the dependent variable. Decision making based on the level of significance:

1. If the probability is significant > 0.05, then H<sub>0</sub> is accepted, meaning that an independent variable has no significant effect on the dependent variable.
2. If the probability is significant < 0.05, then H<sub>0</sub> is rejected, meaning that an independent variable has a significant effect on the dependent variable.

Besides that, decision making can also be done by comparing the value of T table and T count. T table can be formulated T test = (df(nk-1)). Where n is the number of research samples and k is the number of independent variables. If T count > T table then H<sub>0</sub> is rejected and if T count < T table then H<sub>0</sub> is accepted.

#### 3.4 Coefficient of Determination Test (R<sup>2</sup>)

Coefficient of Determination (R<sup>2</sup>) to measure how far the model's ability to

explain the independent variables. The value of the coefficient of determination is between zero and one. A small  $R^2$  value means ability

independent variable in explaining the very limited dependent variable. A value close to one means that the independent variable provides almost all the information needed to predict the dependent variable (Ghozali, 2016: 95). Time series data has a high coefficient of determination. Adjusted  $R^2$  value can increase or decrease if one independent variable is added to the model.

## CHAPTER IV RESULTS AND DISCUSSION

### 4.1 Overview of Research Objects

This study uses a population of trading companies listed on the Indonesia Stock Exchange (IDX) for the 2014-2018 period. During that period, the total number of trading companies listed on the IDX was 164 companies. From the population, the sample was selected by purposive sampling where the sample was selected based on certain criteria. This study focuses on looking at the effect of Cash Flow and Currency Exchange Rates on Financial Distress.

### 4.2 Research Discussion

#### 1. Effect of Cash Flow and Currency Exchange Rates on Financial Distress

The results of the multiple linear regression analysis in the f test show that the independent variables cash flow and currency exchange rates simultaneously have a significant effect on the dependent variable financial distress for the 2014-2018 period in trading companies listed on the Indonesia Stock Exchange (IDX). Simultaneous analysis results show that the significance value is 0.000. The significance value is smaller than the value of  $\alpha = 0.05$ , this indicates that the two independent variables together can affect

financial distress.

These results indicate that if the company has cash flow generated from operating cash flows that have a low value, the creditor will doubt that the company is able or unable to pay off its current obligations. This is in line with the weakening currency exchange rate against the US dollar which can cause macroeconomic conditions in the company and become a negative signal for companies. When this happens together and continuously, the company can experience financial distress.

This result is in accordance with the third hypothesis of the study, where cash flow and currency exchange rates simultaneously affect financial distress. The results of this study are also supported by previous research conducted by Ira (2016) which states that cash flow and exchange rates have a simultaneous effect on financial distress.

#### 2. Effect of Cash Flow on Financial Distress

The results of the calculation of multiple linear regression analysis in the t test show that the significance value of the cash flow variable ( $X_1$ ) is 0.000 where the value is smaller than the value of  $\alpha = 0.05$ . This indicates that this study partially states that the cash flow variable ( $X_1$ ) has a positive effect on financial distress.

Based on the results of this study, it is known that the cash flow variable proxied by the ratio of operating cash flow to total assets has a significant effect on predicting financial distress. Cash flow can be used to assess the company's financial statements and management company in decision-making. So that the higher the company's cash flow, the company's business continuity can be ensured to be safe. A low operating cash flow value can indicate that from operating activities it can be seen that the company will be unable to pay off its current liabilities that have fallen

the tempo is on time so that the potential *financial distress* will get bigger.

The results of this study are in accordance with Annisa (2019) which shows that operating cash flow has an effect on financial distress. And the results of other researchers Bagus (2013) which states that operating cash flow has a significant influence in predicting financial distress conditions because in general the operating cash flows generated by the company can be used to assess the quality of management decisions from time to time and their impact on operating results and company's financial position.

The results of this study are also in line with the results of Moh. Halim (2015) which states that the cash flow variable has a significant effect and can be used to predict the probability of the financial distress variable. This means that cash flow has the ability to predict the financial distress of a company.

### 3. The Effect of Currency Exchange Rates on Financial Distress

Regression analysis calculation results

Multiple linearity in the t-test shows that the significance value of the currency exchange rate variable (X2) is 0.015 where the value is smaller than the value of  $\alpha = 0.05$ . This indicates that this study partially states that the currency exchange rate variable (X2) has a positive effect on financial distress.

These results indicate that unstable exchange rates can destabilize international trade activities. This affects the company's economy through which imported goods are still higher than exports. The weakening of the rupiah against the dollar causes the value of imported goods to be higher. This is because the company must convert the rupiah against the US dollar so that it can cause financial distress for the company.

Research conducted by Shindita (2020) reveals that the exchange rate has a positive and significant effect on financial distress. This happened because working

capital credit followed by consumption experienced a significant impact when exchange rate volatility occurred, indicating that imports still dominate over exports.

This study also succeeded in proving that currency exchange rates had a significant effect on financial distress. This result is also supported by previous research conducted by Sabrina & Cacik (2019). The results of this study stated that the exchange rate had a significant effect on financial distress.

In contrast to the results of research conducted by Erik & Musdholifah (2020) which states that the exchange rate is non-significant to financial distress. The absence of the influence of the independent variable on the dependent variable is most likely due to the company in the study conducting hedging so that the company's financial condition is not affected by exchange rate fluctuations.

## 5.1 Conclusion

This study was conducted to analyze the effect of Cash Flow and Currency Exchange Rates on Financial Distress in trading companies listed on the Indonesia Stock Exchange (IDX) in the 2014-2018 period. Based on the data collected and the results of the tests that have been carried out as well as the discussion in the previous section, the following conclusions can be drawn.

1. *Cash Flow* significant effect on the financial distress of trading companies. This is because the cash flow generated from operating cash flows has a low value and can be a signal for companies to detect financial distress.
2. Currency exchange rates have a significant effect on the financial distress of trading companies. This is due to currency exchange rates during the study period fluctuating which weakened the rupiah against the US dollar.
3. *cash flow* and currency exchange rates

simultaneously affect the financial distress of trading companies. Because if the company has a low operating cash flow value and the rupiah exchange rate against the dollar weakens, it means that it will cause financial difficulties on company trading.

## 5.2 Suggestion

This research was conducted with the hope of providing information and contributing to the development of accounting science, particularly regarding financial distress. And is expected to provide additional information about the factors that can affect financial distress. In the process of this research, the researcher feels that there are still many limitations. From the limitations felt by the researchers during this research, the researchers provide suggestions for the development of further research related to financial distress activities. Further research is expected to provide maximum and higher quality results by considering the following suggestions:

1. Further researchers are advised to use samples other than trading companies or to expand the research sample by using all companies listed on the Indonesia Stock Exchange to see the influence of related variables in other industries on financial distress.
2. Further research is recommended to add or replace other variables besides the variables that have been included in this study such as Cash Flow and Currency Exchange Rates.
3. Further research is suggested to add a longer research period so that it can provide better and more accurate research results.

## BIBLIOGRAPHY

Alamsyah, Agus R., and Muchlas, Zainul. 2015. "Factors Influencing the Exchange Rate of the Rupiah Against the US Dollar Post-Crisis (2000-2010)". *Journal JIBEKA* Vol. 9 No. 1, 76-96.

Alfi, R. (2016). The Effect of Financial Indicators, Firm Size and Institutional Ownership on Financial Distress. Surabaya: Thesis: Perbanas University .

Annisa & Khairunnisa. (2019). Effect of Operating Capacity, Sales Growth and Operating Cash Flow on Financial Distress. *JRKA* , Vol. 5 Pg. 75-82.

Good, R (2013). Effect of Operational Efficiency, Operating Cash Flow, and Company Growth in Predicting Financial Distress. Padang: Thesis of Padang State University.

Bhattacharyya, Debarshi. 2012. Financial Statement Analysis Noida: Doring Kimsdey, Licensees of Person Education in Sourth Asia.

Brigham, Eugene F and Louis C. Gapenski (1994). Financial Management Theory and Practice, The Dryden Press, Seventh Edition.

Darmawan, S. (2017). Analysis of the Effect of Corporate Governance, Macroeconomic Variables on Financial Distress with Control Variables Company Size and Type of Ownership. *Effective Journal of Economics and Business*, 7 (1) p. 100-122.

Debby, d. (2019). Effect of Profitability, Leverage, Total Cash Flow and Firm Size on Financial Distress. *Journal Sharia Economics & Economics* , Vol. 2 No. 2 Pg. 340-349.

Djumahir, 2012. The Effect of Micro Variables Macro Variables on Financial Distress in Food and Beverage Industrial Companies listed on the Jakarta Stock Exchange. Online Journal.

Erik, & Musdolifah. (2020). Structure Effect Ownership, Profitability, Liquidity, Leverage and Exchange Rates Against Financial Distress. *Journal of Management Science*, p. 51 - 61.



- Fachrudin, KA 2008. Corporate and Personal Financial Difficulties. Medan: USU Press.
- Fahmi, A. (2013). Financial Statement Analysis . Jakarta: Alfabeta.
- Febriyan, & P. (2019). Effect of Operating Cash Flow, Liquidity, Leverage, Diversification, and Company Size on Financial Distress. Journal of Accounting, Vol. 8 No. 1 Pg. 103-114.
- Ferry, S. 2015. Concept, Dynamics and Response of Exchange Rate Policy in Indonesia. Central Banking Series No. 24.
- Firasa, & S.(2018 ). Use of Profitability, Liquidity, Leverage and Cash Flow Ratios to Predict Financial Distress. Journal of Business Administration, Vol. 61 2 Pg 136-142.
- Gustiyana, MR (2018). Bankruptcy Potential Use Zavgren and Altman's Model in the Textile and Garment Subsector on the IDX.
- Ghozali, I. (2016). Application of Multivariate Analysis With IBM SPSS Program 23. Semarang: Diponegoro University Publishing Agency.
- Harahap, SS (2010). Critical Analysis of Financial Statements . Jakarta : Rajawali Persada .
- Harahap, Sofyan Syafri 2015. Critical Analysis of Financial Statements. Edition 1-10 Jakarta : Rajawali Press.
- Madura, J. (2010). International Corporate Finance. Salemba Four.
- Mahyus Ekananda, International Economics, (Jakarta: Erlangga, 2014), p. 168
- Mamang, H. (2018). Effect of Profit and Flow Cash To Condition Financial Distress. Journal of Assets Accounting and Investment Vol. 3 No. 1, Pages : 44 -58 .
- Martani, Dwi et al. 2012. Intermediate Financial Accounting: Based on PSAK. Book 1. Salemba Four. Jakarta.
- Moh. Halim. 2015. Use of Profit and Cash Flow to Predict Financial Distress Conditions (Empirical Study on Manufacturing Companies Listed on the IDX in 2013-2014). Online Journal: Unmuh. Jember.
- Murniati and Enny Arita. 2016. Altman Discriminant Analysis (Z-Score) To Predict Financial Distress Condition of Consumer Goods Industry Companies Listed on the Indonesia Stock Exchange (IDX) 2009-2013. Dharma Andalas Journal of Economics and Business, Volume 18 No. 1, January 2016.
- Oktita Earning Hanifah and Agus Purwanto. 2013. Effect of Corporate Governance Structure and Financial Indicators on Financial Distress Conditions. Diponegoro Journal of Accounting. 648-662.
- Pakpahan, Hombar. 2009. "Definition Cash." <http://sciencecomputer2blogspot.com/2009/10/pengertian-kas.html>. Retrieved March 5, 2010.
- Paramita, RW (2014). Timeliness as an Intervening Variable for the Effect of Firm Size on Profit Response. WIGA Journal, 4 (1) p. 34-42.
- Puspita, Ira. 2016. Effect of Managerial Ownership Structure, Cash Flow, and Exchange Rate (USD/IDR) Towards Financial Distress Conditions in Manufacturing Companies in the Basic Industry and Chemicals Listed on the IDX in 2010-2014.
- Reeve, James et al. 2010. Introduction to Indonesian Adapted Accounting: Salemba Empat Publishers. Jakarta.
- Ross, Stephen. A. 1977. "The Determination Of Financial Structure The Incentive Signaling Approach. The Bell Journal Go Economics. Vol. 8, No.1.
- Sabrina, & C. (2019). Effect of Inflation,

- Exchange Rates and Interest Rates on Financial Distress. *Journal of Business Administration*, Vol. 72 No. 2 Pg. 186-193.
- Samuel and Nordhaus. 2004. *Knowledge Macroeconomics, Seventeenth Edition*. Jakarta: PT. Global Media Education. Saputra, Reg. 2017. Effect of BI Rate, Inflation, Rupiah Exchange Rate, and Bank Indonesia Sharia Certificates (SBIS) Against the Indonesian Sharia Stock Index (ISSI). Thesis: UIN Raden Fatah. Palembang.
- Septy, d. (2017). Effect of Profit, Cash Flow and Corporate Governance on Financial Distress. *Al-Buhuts Journal*, Vol. 13 No. 1 Case. 01-22.
- Shindita, N. (2020). Analysis of the Effect of Financial Ratios and Macro Variables on Prediction of Financial Distress. Salatiga : IAIN Thesis .
- Srengga, M. (2012). Financial Ratio Analysis to Predict Financial Distress Condition of Manufacturing Companies Listed on the Indonesia Stock Exchange. Thesis. University of Jember : Faculty of Economics .
- Srikalimah. (2017). Influence Profitability, Liquidity, and Leverage in Predicting Financial Distress. *FE Journal of Accounting and Economics*, Vol. 2 No. 1.
- SriYati, KI (2017). Analysis of Financial Distress Assessment Using the Altman Model (Z-Score) in Pharmaceutical Companies Listed on the Indonesia Stock Exchange for the 2013-2015 Period. 5.
- Statistics.kemendag.go.id
- Subrayaman KR and John J. Wild. 2010. *Analysis of Financial Statements*. Tenth Edition. Jakarta: Salemba Empat.
- Sugiyono. (2016). *Quantitative, Qualitative, and R&D Research Methods*. Bandung : Alfabeta.
- Sukirno, S. (2010). *Macroeconomics: Introductory Theory Third Edition*. Jakarta : Rajawali Press .
- Surya, D. (2017). Analysis of the Effect of Corporate Governance, Macroeconomic Variables on Financial Distress with Control Variables Company Size and Type of Ownership . 7 (1) p. 100-122.
- Suwardjono. (2013). *Engineering Accounting Theory Reporting Finance (Issue III)*. Yogyakarta : BPFE.
- Taufik, S. (2016). Analysis of Financial Ratios and Macroeconomic Variables in Predicting Financial Distress. 1-19.
- Utami, Erika Regni. 2016. "The Influence of Ownership Structure and Cash Flow on Financial Distress. Essay. Faculty of Economics and Business, Diponegoro University. Semarang.
- Vinh, VX (2015). Using Accounting Ratios in Predicting Financial Distress . *Journal of Economics and Development* , (1) 41-49 .
- Wahyuningstiyas, F. (2010). Use of Profit and Cash Flow to Predict Financial Distress Conditions (Case Study of Non-Bank Companies Listed on the Indonesia Stock Exchange for the Period of 2005-2008.
- [www.idn.financial.com](http://www.idn.financial.com)
- [www.idx.co.id](http://www.idx.co.id)
- [www.katadata.co.id](http://www.katadata.co.id)
- Yudistira, M. (2018). Effect Of Liquidity, Leverage, Profitability, And Cash Flow On The Financial Distress. Surabaya : Thesis of Perbanas University .
- Yulia Purwanti. 2005. Financial Ratio Analysis in Predicting the Financial Distress of Manufacturing Companies Listed on the JSX; Thesis, Indonesian Islamic University.