




Financial and non-financial factors affecting future cashflow and their impacts on financial distress

Muhamad Safiq^(a), Rinda Selviana^(b), Widyahayu Warmmeswara Kusumastati^(c) 

^(a,b) School Faculty of Economic and Business, President University, Cikarang-Bekasi, 17550, Indonesia.

^(c) Faculty of Economic and Business, Jenderal Soedirman University, Purwokerto, 53122, Indonesia

ARTICLE INFO

Article history:

Received 15 August 2020

Received in rev. form 05 Sept. 020

Accepted 08 September 2020

Keywords:

Earnings, Future Cash Flow, Accrual Component, Working Capital, Financial Distress

JEL Classification:

M410, M00

ABSTRACT

This study aimed to determine financial and non-financial factors influencing future cash flow and their impacts on company's financial distress. This study uses earnings, cash flow from operations, accrual components, working capital (financial), inflation (nonfinancial) as independent variables that are thought to have an effect on future cash flow. In addition, this research also suspects that there is an impact of this influence on company financial distress. The sample used in this study was 30 food and beverage manufacturing companies listed on the Indonesia Stock Exchange from 2013 to 2015. Hypothesis testing, in this research, used Structural Equation Model (SEM) method with AMOS 24 statistic. The result showed that earnings, accrual component, and working capital had a significant positive effect on future cash flow. Furthermore, cash flow from operation had significant negative effect on future cash flow, but inflation did not affect company's future cash flow. These results indicate that financial variables have a significant effect, both positive and negative, on the company's future cash flow. Meanwhile, non-financial variables have no significant effect. Other test resulted that future cash flow had a significant negative effect on financial distress. Based on the results of this study, it can be seen that stakeholders, especially investors, really pay attention to the company's financial performance compared to non-finance. This is due to the significant influence of financial variables on the company's future cash flow and it can have an impact on financial distress. Therefore, future research is expected to explore other financial factors that affect the company's future cash flow, for example, the company's financial risk.

© 2020 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

Introduction

The need for accounting information before making a business decision is important. In addition to information about financial position reports and financial performance reports, information about cash flows is also important. The emergence of the necessity to report cash flows for the company is illustrated by some companies whose performance and financial condition are good but are unable to finance their short-term needs. This condition has received serious attention by the standard drafting body, as stated in the 1978 Financial Accounting Standard Board (FASB) statement on the Statement of Financial Accounting Concept No.1 stating that every financial report presented must be able to provide information that is important to all stakeholders to evaluate the ability companies in generating sufficient cash to pay their debts due, to pay dividends, to buy raw materials, to conduct new investment activities and to predict the company's cash conditions in the future (future cash flow) (FASB, 1978).

Some researchers provide an explanation that the main purpose of conducting corporate financial analysis is to predict future cash flows and to evaluate finance and investment (Krishnan and Largay, 2000; Farshadfar and Monem, 2013). Furthermore, they said that cash flows reflect investment returns and reflect the ability of the company to achieve earnings in the payment of dividends. That is why, this is a crucial problem in the financial valuation model. This condition encourages researchers to conduct research that focuses on future cash flows, factors influencing and their implications. This study tried to explore and analyzed further about the factors that affect future cash flow and then examine their implications for the possibility of financial distress. There are a number of things that researchers suspect can affect the company's future cash flow. Components of earnings (such as company cash flow,

* Corresponding author. ORCID ID: 0000-0002-2478-698X

© 2020 by the authors. Hosting by SSBFNET. Peer review under responsibility of Center for Strategic Studies in Business and Finance.

<https://doi.org/10.20525/ijrbs.v9i5.859>

accounts receivable, etc.) can have a significant effect on the company's future cash flows rather than yearly cash flows in that period (Ebaid, 2010). This indicated that the company's future cash flow can be predicted using the components that make up profits as documented by Ebaid.

In addition, accounting earnings and operating cash flow are also thought to affect future cash flows. As reported by Jemâa (2015) that accounting earnings and operating cash flow have the capacity to predict future cash flows. Although the study uses very limited data, it is done on companies listed on the Tunisia stock exchange, but this can be an inspiration for the author to develop the research in the context of the capital market in Indonesia. Then, many analysts also believe that cash flow from operations is a guarantee of financial performance that is better than net income, because profits are more subjective to distortions resulting from different accounting practices. (Dechow, 1994). However, De Fond and Hung (2003) documented that financial statement analysts tend to question cash flow predictions for companies with different accounting policies. Some evidence showed that analysts tend to make predictions related to cash flow for companies that have a higher volatility in accounting earnings than cash flow.

Furthermore, the tendency of prices to always increase results in cost-push inflation which is characterized by rising prices of goods and services that will increase production costs. Increased production costs will have an influence on the company's cash, the company must spend more to buy raw materials. So that the consequences that will be obtained by the company when production costs rise, in which the company will increase the selling price or change the quality of raw materials and will risk declining goods or output sold. The decline in sales levels will affect the cash income that is easily received by companies. When the company gets low cash it will be a question whether the company is able to carry out its business activities by using cash owned by the company or the company will seek additional funding from outside parties. It can be seen that the condition of the company's operational cash flow can be used as an indicator in assessing the company's financial condition. Gentry, et al. (1990) explained that companies that have negative cash flow will influence financial distress conditions. Furthermore, there is a significant difference in the incidence rate of financial distress between the companies with different cash flow compositions in one, two and three years before distress. Thus, the financial distress can be predicted on the basis of the content and composition of the information contained in the cash flow statement.

Based on the explanation above, the researcher is interested in further examining the factors that affect future cash and their implications for the possibility of corporate financial distress. If we look further, the factors that are thought to affect the company's future cash flow can be divided into two, namely financial factors (earnings, cash flow from operations, etc.) and non-finance factors (inflation). This is what encourages researchers to simultaneously test these factors on future cash flows. Another motivation relates to the researcher's desire to know the implications of this effect on the possibility of financial distress. Researchers predict that all financial factors (finance) will affect the company's future cash flow, as well as non-financial factors (inflation). Predictions of the influence of financial factors are motivated by the fact that these factors are identical to the company's annual financial statements. For example, if the company can produce a high net operating cash flow in the current period, it is expected to provide information on the ability of the company's operating cash flows in the future to finance its operational activities. However, if the operational net cash flow produced by the company is less or even negative, it will be a question whether the company is able to finance operational activities in the future. The company's negative or positive operating cash flow in the current period will have an impact on the company's future cash flows. Negative cash flows in the current period provide information that companies will experience financial difficulties or financial distress (Natariasari and Miko, 2014). Meanwhile, the company's financial statements are the main source of information for stakeholders in making business decisions. Meanwhile, the prediction of the effect of inflation on future cash flows because inflation will suppress people's purchasing power, which will have an impact on company performance. Next, researcher predict that future cash flow can affect the company's ability to meet its obligations. Thus, all factors, both financial and non-financial, are thought to affect future cash flows and have an impact on the company's financial ability to meet its obligations (financial distress). Because the pattern of the relationship between these variables forms a certain (tiered) structure, the researcher uses a structural equation model analysis tool.

Literature Review

Theoretical Background and Conceptual Framework

Signalling Theory

Signalling Theory provides information or signals that should be given by the management of the company to all users of financial statements (stakeholders). The existence of signalling theory is due to the fact that each side of the party, namely the management side and also the parties that have the interests of the information that are different so that the emergence of information metrics. Asymmetry information is a difference in information, where things are one party that has better information than the other party. For example, the management of the company must have information that is more concerned with corporate prospects, which are likely to come from stakeholders. So that stakeholders will have difficulties in distinguishing companies that have good or low quality.

Spence (1973) first introduced signalling theory utilizing the labour market as a model of educational signalling functions. Potential entrepreneurs lack information about the quality of job candidates. Therefore, candidates get education to show their quality and reduce information asymmetry. This may be a reliable signal because lower-quality candidates will not be able to withstand the rigors

of higher education. Basically, signalling describes the reduction of information asymmetry between two parties (Spence, 2002). As Spence (1973) has illustrated that high-quality candidates distinguish themselves from low-quality candidates through expensive signals from strict higher education. The results of this study have sparked a large amount of literature applying signalling theory to selection scenarios that occur in a variety of disciplines from anthropology to zoology (Bird & Smith, 2005). In a variety of disciplines, signalling theory can help explain the effects of information asymmetry in a variety of research contexts. For example, when it comes to governance, CEOs signal the unobservable quality of their company to potential investors through the observable quality of their financial reports (Zhang & Wiersema, 2009).

Then, Connelly et. al (2011) explains that signalling theory is useful for describing behavior when two parties (individuals or organizations) have access to different information. Next, they provide a brief synthesis of key theories and concepts, review their use in the management literature, and advance direction for future research that will encourage scholars to use signalling theory in new ways and to develop more complex formulations and variations -various nuances of theory. Furthermore, Kirmani and Rao (2000) provide examples of signalling by distinguishing between two entities: high-quality companies and low-quality companies. Even though companies in this example know their own true qualities, outsiders (eg, investors, customers) do not know, so there is information asymmetry. As a result, every company has the opportunity to give a signal or not signify true quality to outsiders.

Conceptual Framework

Based on the theoretical exposures above, here is a framework of theoretical thinking as a flow of thought in this study:

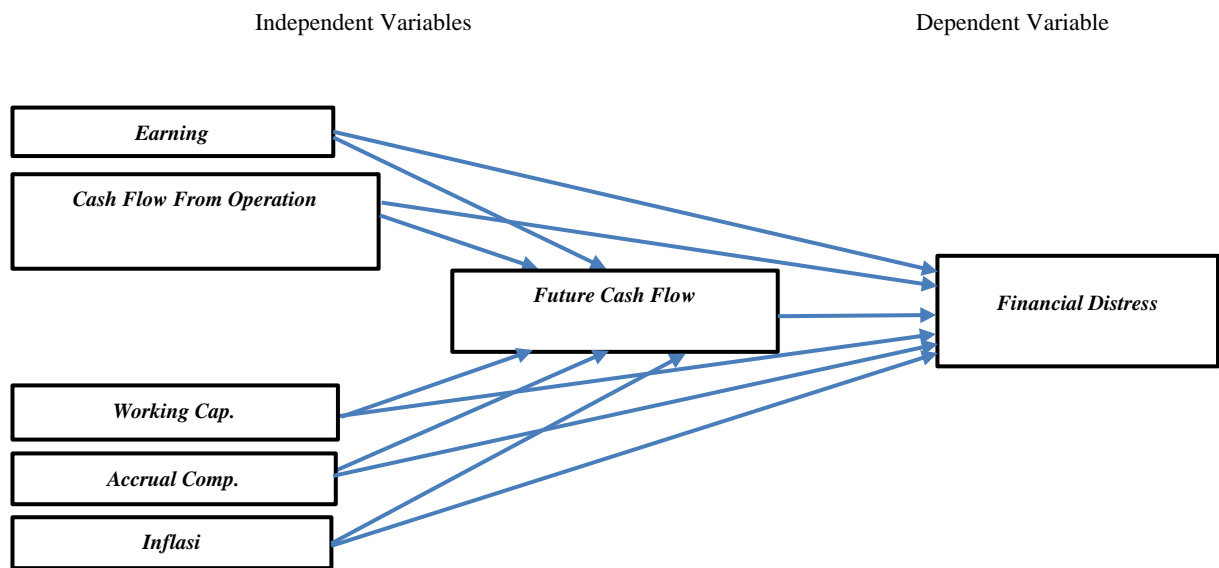


Figure 1: Theoretical Framework

Empirical Review

Research related to the ability of the company's future cash flow and prediction of financial distress has been done by many previous researchers both domestically and abroad. This is done of course so that the cash held by the company can be used effectively and efficiently and prevents the company from experiencing undesired losses. Results in Indonesia context, Sulistyawan and Septiyani (2015) examined the effect of net income, operating cash flows and accrual components in predicting future cash flows of companies and the results of the study state that the independent variable used to predict the company's future cash flow is account receivable, accounts payable, inventory, depreciation expense has a significant effect. Other results also show similar results (Prima and Gunawan, 2015). They report that company profits have an influence on the company's future cash flows. The higher the company's profits obtained in the current year, it will affect the amount of cash received by the company. Ebaid (2010) examines the role of earnings, cash flows, changes in accounts receivable, changes in debt, changes in inventory and changes in depreciation expenses against future cash flows. The results show that the earnings component can have a more significant effect on predicting the company's future cash flow than the cash flow of the year.

Financial Distress

Financial Distress is the condominium who has experienced financial difficulties before the company actually goes bankrupt. This condition is characterized by a reduction in the number of employees, delays in paying obligations, delays in paying dividends to investors, decreasing the quality of the product. Kordestani, et.al. (2011) provide a model that predicts financial difficulties of a company based on operational components, investment and financing from its cash flow statement. To prevent bankruptcy and the negative consequences of this include misuse of creditors, investors, management, and employee rights, predictions of financial

difficulties and possible consequences such as bankruptcy are very important. They documented that there was a significant difference in the incidence of financial distress between companies and the composition of different cash flows in one, two and three years before financial distress occurred. In other words, financial difficulties can be predicted based on the content and composition of the cash flow statement.

Gentry, et. al. (1990) states that a company experiencing financial distress can be seen from the level of the economy that includes the process and the exit of the company. If the problem is lower than the outside market, it can be said that the company is experiencing financial distress. With the decline in the level of profitability of the company, it is likely that the company is unable to pay its obligations and interest to the creditor.

Cash flow statement and Cash Flow Operating Activities

According to SFAS (Indonesia) No. 2 revised in 2009, information contained in the financial statements of the company's cash flow can be used by stakeholders as a basis for decision making, the basis for decision making, as an assessment of company performance in terms of producing cash and cash equivalents and also predicting future cash flows. Every company is required to report the company's financial reports every period. The financial statement report is classified into three parts, the operating cash unit, investment and funding. Cash flow from company operations, describing activities or transactions in the company that occur repeatedly which have an influence on cash in and cash out of a company. Included in the class of cash flows from the company's operating activities are transactions or activities that are the principal revenue-producing activities and also other activities that are not included in the category of investment activities and funding activities.

Revised SFAS (Indonesia) No. 02 of 2009, describes the presentation of financial statements of cash flows from operating activities as follows:

"The flow of assets and activities of firms is the main factor that determines whether the operations of companies can produce cash and cash equivalents which can be used to finance the company's operations, pay off debts, pay dividends to investors and can carry out investment without the financial assistance from outsiders". Included in the category of company operations are the revenue-generating activities for the company as well as other activities that affect the amount of net profit or loss of the company that is not included in the investment activity category and funding activities".

Working Capital

Working Capital is used as an assessment of company liquidity by looking at how much the company has current assets when compared to current liabilities owned by the company. If the company has current assets greater than current liabilities, it can be said that the company is able to pay short-term obligations immediately. Conversely, if the company has current liabilities greater than current assets this will affect the survival rate of the company. This means that the company does not have enough current assets to pay off the company's short-term liabilities. The formula for calculating the company's working capital:

Working Capital = Current Assets - Current Liabilities

According to Santoso (2013), working capital is a single problem that is very important for the company because the work capital can be used as an indicator of the running of a company's short-term operational activities that have an influence on the income that will be obtained by the company. If the company can generate profits in a sustainable manner, this indicates that the company can use working capital effectively and efficiently. Working capital from operations can guarantee the survival of the company in a proud way to come, assessing the company's ability to pay off its obligations and can also be used to predict the company's future cash flow that is used to finance the company's operating activities.

Net profit/ Earnings

Profit can be used as an indicator in terms of evaluating company performance. Based on PSAK No.25, the financial statements of corporate income are one form of management accountability for its performance during that period, providing information about the company's profitability that can be used by users of financial statements for decision making processes, to assess the amount of dividends to be received, share price per share, to assess the amount of tax to be paid. Profit is obtained from the difference between income minus the expenses incurred by the company relating to the company's operations. According to Joni (2010) that profit is one indicator that can predict the company's future cash flow. The users of financial statements use earnings information as an evaluation of the company's performance in the past, present, even for the future period. Earnings information is used for the decision-making process to reduce the possibility of uncertainty risks that occur.

Accrual Component

Based on Indonesia Accounting Standard or PSAK or SFAS (Indonesia) No.25 (2009) explains that each company presents financial statements (except cash flow financial statements) using the accrual basis method. Companies using accrual basis in preparing financial statements recognize income and costs at the time of the activity on the transaction, not when the income is received or the fee is paid. The components included in the accrual component are as follows:

Account Receivable

Receivables arise from the existence of credit sales to the customers made by the company. Trade accounts receivable are income that will be received by the company in the future. According to Indonesia Accounting Standard No. 09 receivables are categorized into two types of receivables which are payable in other debt. Entrepreneurship occurs due to the sale and purchase of goods / services on credit, which is continued with the billing process until the last process is the payment transaction for the sale or delivery of services on credit. Other receivables arise as a result of transactions outside the company's main activities. Such as sales of waste, sales of company buildings that do not originate from the company's main business operational.

Account Payable

Debt arises from the existence of a credit purchase from the supplier made by a company that must be paid without the arrival of what has been determined. So that it will affect the company's cash flow to pay off debts that arise. Indonesia Accounting Standard No. 09 trade debt is included in the company's short-term obligations which are expected to be repaid in one accounting period.

Inventory

Based on Indonesia Accounting Standard No. 14 (2008) understanding of inventory is as follows; a) Goods that are available or there are finished good, b) Goods that are in the process of production (work in process) or goods that are in transit, c) Goods in the form of raw material.

Depreciation

Definition of depreciation based on Indonesia Accounting Standard No. 17 (2004) is an allocation that is estimated to be depreciated from the value of an asset based on the useful life of an asset. So that it will reduce the value of an asset every year. The amount of the depreciation result of an asset will be a depreciation expense which will later be reported in the profit and loss report and also the report of the cash flow section originating from the company's operations. so that it will reduce the company's income either directly or indirectly.

Inflation

Inflation is an important factor that can affect the economy of a country. Inflation occurs due to rising prices continuously due to the imbalance between demand and supply. The increase in the price of an item or service occurs when there is an increase in demand from the community but the supply of goods is not sufficient. So that it will affect the price of an item or service has increased. When an increase in the price of an item or service indirectly affects the decline in the value of the currency. This is in accordance with the theory of Na'im (1993) which explains the increase in prices that occur continuously will have an impact on the price of a production of goods and services measured in units of currency so that it will affect the company's future cash flows. Suyati (2015) stated that the impact of inflation will also affect stock returns that will be obtained by investors, because with the occurrence of inflation, investors will get a small return or return.

Hypotheses Development

Earnings, Future Cash Flow, and Financial Distress

Weygant et al. (2007; 140) states that earnings information delivered in the company's income statement describes the company's performance in generating cash for a certain period. So that profit can be used as an assessment of the company's performance for external and external parties in the decision-making process before finally making an investment (for investors), providing loans (for creditors), calculating the company's tax base (for company management) and others. The amount of profit obtained can provide predictions for the company's future cash flows. Companies that obtain a positive profit in the current period besides increasing the company's cash flow in the current period will also have an influence on the company's ability to increase cash flow in the coming period, so that the company is prevented from the financial and stress conditions. Companies that have positive cash flow can be said to be protected from financial distress, because the company is able to finance its operational activities using the company's cash obtained from profits. McClue (1991) defines the condition of financial distress characterized by a negative cash flow condition of the company, so that the flow of corporate assets can be used to provide predictions about the financial stress before finally going into bankruptcy conditions.

H1a: Earning affects the company's future cash flow.

H1b: Future cash flow mediates the effect of earnings on financial distress.

Cash Flow From Operation, Future Cash Flow and Financial Distress

SFAS No. 02 (2009) The report on the company's operating cash flows can be used as an indicator in evaluating the company's performance in producing outputs and equivalents. Whether the cash and cash equivalents produced by the company from the company's operational activities can be used to fulfill the company's operational activities such as being able to pay off corporate loans, maintain operating capabilities, pay dividends to investors, be able to invest in new capital or borrow from outside parties. So

that the cash flow that comes from the company's operations is able to provide a good signal for investors and creditors in assessing the condition of the company and predicting operating cash flows in the future (Ebaid, 2011).

Bandi & Rahmawati (2005) states that the prevalent factors of the company's operations are able to predict a company's future cash flow. Information on operating cash flow in the current period is very important for internal and external companies because it is expected that in the long term the company will be able to generate net cash flow positive operations for the survival of the company in the future. If the company produces a positive net operating cash flow in the current period, it will provide information that the company is able to generate cash to finance its operational activities in the coming period and is expected to be able to generate positive cash flows in the coming period. So that the possibility of companies avoiding the problem of financial distress is getting thinner. However, if in the current period the company generates a negative operating net cash flow, it can be said that the company is unable to finance its operational activities due to insufficient cash obtained by the company. This will also illustrate that the company will experience financial distress in the coming period. Information about the company's operational cash flow can provide an overview of the company's future ability to generate cash

H2a: Cash flow from operation has an effect on the company's future cashflow.

H2b: Future cash flow mediates the effect of cash flow from operations on financial distress.

Accrual Components, Future Cash Flow, and Financial Distress

Based on SFAS No. 25 (2009) each company presents financial reports and uses the basic method of accruals (except the financial statements). The company using the accrual basis in the preparation of financial statements recognizes revenue and costs at the time of the occurrence of activities on the transaction, not when the income is received or the fee is paid.

Accrual components that can predict the company's future cash flow (accounts receivable) (Triyono, 2011). Other accrual components that can predict the company's future cash flow are accounts payable, inventory, depreciation expenses The accrual component is very helpful in predicting the company's future cash flow Information provided by accrual components is not only information that comes from the past, but also can provide information for the future. The amount of accrual components in the current period identifies the occurrence of revenue and expenditure cash in the future so that it will affect the company's future cash flows.

H3a: Accrual component affects the company's future cash flow.

H3b: Future cash flow mediates the effect of accrual component on financial distress.

Working Capital, Future Cash Flow, and Financial Distress

Working capital is a factor that determines the running of a company's operational activities in the short term, the employment mode results from the difference between the net asset and the lack of the cost of the company. Working capital has an important role for companies in carrying out operational activities, because the availability of work capital must be in accordance with the company's operational needs to run efficiently and economically to avoid the occurrence of idle funds due to excess funds from working capital or vice versa if available operating capital is less likely finance to finance operational activities will occur. So that the management of the company will make a loan of funds from the creditor.

Santoso (2013) explained that the most influential indicators to support operational activities went smoothly, namely working capital. Because working capital provides value for the company to continue operating activities in the next period, provide information about the company's ability to pay off its short-term obligations, provide information for management or stakeholders to assess future cash flows used to finance operating activities. Poor management of working capital in the current period will have an impact on the performance of the company's operating cash flows in the current and future periods. Given the short-term nature of working capital, poor working capital management will have an impact on insufficient funds to meet obligations that have matured so that it will affect the performance of the company's operating cash flows. When the condition of the company's operating cash flow has decreased it will have an impact on financial distress. Based on the explanation above, the fourth hypothesis can be stated as follows.

H4a: Working capital affects the company's future cash flow.

H4b: Future cash flow mediates the effect of working capital on financial distress.

Effect of Inflation on Future Cash Flow and Financial Distress.

Simple inflation can be interpreted as a condition in which prices increase which occurs sustainably. The occurrence of inflation can be due to the existence of demand-pull inflation and price-pull inflation. Inflation originating from the demand side (demand-pull inflation) occurs because of an increase in demand for goods with too large a capacity and cannot be met by production capacity. While inflation caused by price increases (cost-pull inflation) occurs due to rising prices of production shoulder material resulting in a decline in production.

The impact of the phenomenon of inflation which is marked by rising prices will affect the company's financial condition. Rising prices of goods and services are an obstacle for companies, because of course companies must spend additional money to purchase raw materials for production. On the other hand the company cannot directly increase the selling price of the product because it will

have an impact on the decline in sales. When a company's sales decline, it will also have an impact on the income that will be received by the company. Low company income will affect the company's ability to finance its operations, because it is likely the company does not have enough cash. Research on inflation has been carried out by Nurhidayah and Rizqiyah (2017) and the results of showing inflation have an effect on the company's cash flows and also influence financial distress. The increasing amount of money in circulation will have an impact on increasing demand for goods or services and also followed by increases in prices of manufactured goods. This is certainly a problem for every company because it will affect the company's operating cash flow both in the current period and in the coming period. When the company is unable to finance the company's operational activities due to price increases, the company will experience financial difficulties which will then make loans to third parties. Based on the explanation above, the fifth hypothesis can be stated as follows.

H5a: Inflation affects the company's future cash flow.

H5b: Future cash flow mediates the effect of inflation on financial distress

Future Cash Flow and Financial Distress

To assess the financial condition of a company is very necessary for the users of financial statements (stakeholders). Financial distress is the initial symptom of the company experiencing a decline in financial conditions before the company experiences bankruptcy. Companies that are experiencing financial distress will manipulate their financial statements or make loans from third parties, consolidating so that it looks as if the condition of their company is fine. Operational cash flow information is very helpful to stakeholders in distinguishing companies that experience financial distress and also companies that do not experience financial distress Jones and Sharma (2001). The assessment of the company's future cash flow is seen from operating cash flows in the period after the observation year. If the company's future cash flow is positive, it can be concluded that the company is able to finance the company's operations with cash held by the company. However, if the company has a negative future cash flow, it can be concluded that the company will not be able to finance the company's operations due to insufficient cash. McClue (1991) defines the condition of financial distress characterized by the condition of a company's negative cash flow, so that the flow of companies can be used to provide predictions about financial distress before eventually going into bankruptcy conditions. Based on the explanation above, the seventh hypothesis can be stated as follows.

H6: Future cash flow affects financial distress.

Research and Methodology

Research Approach

This research uses secondary data in the form of manufacturing finance companies that are published on the Indonesia Stock Exchange starting from the period 2013-2015. In this research using quantitative research methods because this research uses existing data sources, namely annual financial report documents and numbers that can be measured to answer or prove the relationship of several variables with existing theories. This research was conducted to prove the relationship or influence both directly and indirectly from each independent variable and dependent variable.

Variable Operationalization

Endogenous variable

Future Cash Flow

Future cash flow variables in this study were obtained from the financial statements of the company's cash flow operating cash flow section in the year of observation measured using the ratio scale included in the metric data type because it uses numbers.

CFO_{t+1} = cash flow from operation the following year.

Financial Distress

Financial distress is the condition where a company experiences insufficient funds to pay off its obligations which will have an impact on the inability of the company to continue its business or experience bankruptcy. The measurement of financial distress uses the method created by Springate (1978) to predict bankruptcy. Springate (1978) uses 4 variables in the S-Score model:

$$P1 = (\text{Working Capital}) / (\text{Total Asset})$$

$$P2 = (\text{Net profit before interest and tax}) / (\text{Total Asset})$$

$$P3 = (\text{Net profit before tax}) / (\text{Current Debt})$$

$$P3 = (\text{Net profit before tax}) / (\text{Current Debt})$$

$$P4 = (\text{Sales}) / (\text{Total Assets})$$

$$S\text{-Score} = (1.03 * P1) + (3.07 * P2) + (0.66 * P3) + (0.4 * P4)$$

Based on Springate (1978), if the s-score is <0.862 , the company experiences bankruptcy and is given a value of 1. If the s-score is >0.862 then it is predicted not to go bankrupt and be given a value of 0.

Independent Variables (Exogenous Variables)

Independent variables (independent variables) in this study there are 6 variables, following the definition and measurement of each variable:

Earnings

Underdeveloped profits in this research are net assets after tax in the year of observation. The scale used to measure the company's net profit after tax uses a dummy variable. Given a value of 1 if the company generates negative profit in the period of observation, and is given a value of 0 if the company generates positive profits in the period of observation.

Cash Flow From Operation

In this study, cash flow from operation is obtained from the company's cash flow statement, part of the cash flow derived from operating activities in the year of observation. The scale used for measurement in this study uses the ratio scale included in the metric data type because it uses numbers. This research model uses the research model that is used by Prima and Gunawan (2015) with the formula:

CFO_{t+1} = Cash flow from operation observation period

Accrual Component

Accrual component in this study consists of: change of account receivable, payable change of account, change of inventory, change of depreciation expense obtained from financial statements that have been audited during the observation period. The scale used for measurement in this study uses the ratio scale included in the metric data type because it uses numbers. The research model according to Ebaid (2011) is as follows:

$$ACC = CFO_t + \Delta A/R_{it-1} + \Delta A/P_{it-1} + \Delta INV_{it-1} + \Delta DEPRE_{it-1}$$

Explanation:

ACC = *Accrual component.*

CFO_t = *Cash flow from operation observation period*

$\Delta A/R_{it-1}$ = *Account receivable observation period – account receivable of the previous period*

$\Delta A/P_{it-1}$ = *Account payable tahun pengamatan – account payable of the previous period*

ΔINV_{it-1} = *Inventory tahun pengamatan – inventory the following periode*

$\Delta DEPRE_{it-1}$ = *Depreciation of the year of observation - depreciation of the previous year*

Working Capital

Working Capital is obtained from the reduction in current assets owned by the company minus current liabilities held by the company. The scale used for measurement in this study uses the ratio scale included in the metric data type because it uses numbers. Working capital is valued as the company's ability to finance the company's operations by using capital owned by the company without funding from other parties. This research model uses the research model of Takhtaei and Karimi (2013) namely:

$WC = CA - CL$

Inflation

Inflation is a condition in which prices of goods and services increase gradually or fluctuatively. Inflation assessment is obtained from the central statistical body (www.bps.go.id), the scale used for inflation measurement uses a ratio scale and is included in the metric scale type.

Sampling

This research uses a population of all manufacturing companies listed in Indonesian Stock Exchange (IDX). The method in sample selection uses the purposive sampling method that takes samples from a particular population based on the criteria that can be specified. The data in this study uses archive data (secondary) with the required documents, namely financial reports (annual reports) obtained from the IDX website (www.idx.co.id). According to Joreskog & Sorbom (1996) to calculate the number of samples used in the study using the SEM method can be calculated using the following formula.

$$\frac{k(k+1)}{2}$$

Where k: number of variables.

In this study using variables as many as 7 variables, therefore if it is calculated using a formula according to Joreskog and Sorbon at least 28 samples were used in this study. In this study using a sample of 30 food and beverage manufacturing companies in the 2013-2015 observation period.

Data analysis

This research uses the method of analysis of SEM (Structural Equation Modeling) and AMOS 24 analysis techniques. This study uses SEM because the independent variables in this study are metric and non-metric variables and the dependent variable in this study is the metric and non-metric variables. Because the number of samples in this study is limited so there is no need for testing normality of data, because there will be data that is wasted and not used as a sample in this study.

Model Development

The first step that must be taken is to understand the research topic that will be researched and relate it to the existing theory. Because SEM analysis techniques are used to assess the feasibility of a path analysis model from a study. SEM analysis techniques can also provide information on whether there is a direct or indirect influence between independent and dependent variables conducted by the study.

Path Diagrams and Structural Equations

The step of the study is using the SEM analysis method, which describes the path diagram and makes a model of the research equation. Path diagrams that are made to describe the research model that will be carried out and make it easier to assess the relationships between variables.

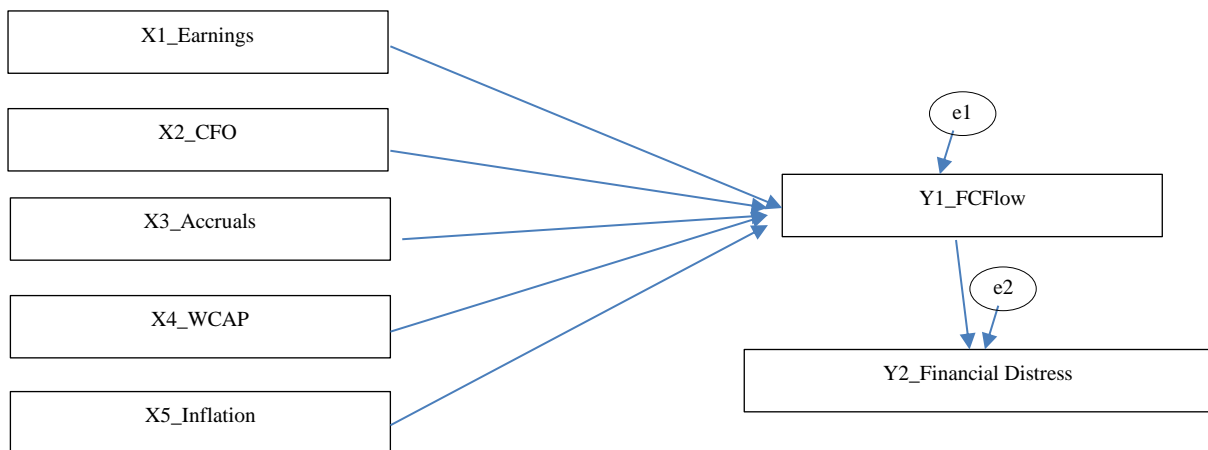


Figure 2: Research Path Diagram

Source: results of path analysis output with AMOS 24

After the theoretical model has been developed in the form of a path diagram, the next step is to make structural equations to conduct research. The structural equation developed in this study is as follows:

Endogenous variable = Exogenous variable + endogenous variable + error

Endogenous variable = endogenous variable + error

Hypothesis testing

The hypothesis in this study was carried out by testing using the technique of Structural Equation Modeling (SEM). By using SEM analysis techniques it can be seen whether or not a relationship is a relationship from the path analysis model that has been formed and also to find out how much influence is generated from the independent variables and the dependent variable either directly or indirectly. The model of the equation formed is as follows:

Endogen Variable = Variabel Eksogen + Variabel Endogen + eror

Endogen Variable = Variabel endogen + eror

$$Y_1 = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e_1$$

$$Y_2 = Y_1 + e_2$$

Y_1 = Future Cash Flow

Y_2 = Financial Distress

X_1 = Earning

X_2 = Cash Flow From Operation

X_3 = Accrual Component

X_4 = Working Capital

X_5 = Inflation

β = regression weight

e = error

Result and Discussion

Statistical description

Company manufacture of food and beverage is listed in Indonesia stock exchange of the research object is below.

Table 1: Research Sample n

No. .	Information	Total
1	Companies manufacturing food and beverage that are listed on the Stock Exchange from the year 2013-2015	14
2	Company n that do not use the value of the rupiah currency	(0)
3	Company that have no the completeness of the data a report n the financial	(4)
4	Company which financial reporting end date is not December 31	(0)
	Number of samples per year	10
	Total observation sample (30x3 = 90)	30

Source: Secondary data processed in 2018

Test Criteria (Goodness of Fit)

The first step is to do a chi-square assessment of the data. In AMOS 24, the results of the chi-square test are calculated:

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	28
Number of distinct parameters to be estimated:	13
Degrees of freedom (28 - 13):	15

Results obtained from the above calculations using AMOS:

Table 2: Chi-Square Test Results

Chi-Square	229,023
Degrees of freedom	15
Probability level	0,000

The chi-square value was obtained 229,023 with a probability value of 0,000 lower with a predetermined probability level of 5%. Thus it can be concluded that there is no significant difference between the covariance matrix of the sample and the population covariance matrix.

Tabel 3: Test Results Criteria (*Goodness of Fit*)

Measurement of Goodness of Fit	Recommended Value	Results	Information
Chi-square	Expected to be small	229.03	Small
Probability	≤ 0.05	0,000	Well
RMSEA	≤ 0.08	0,070	Well
GFI	,0,90	-,115	Not good
AGFI	,0,90	0.403	Not good
CMIND / DF	≤ 2.00	15,268	Not good
TLI	≥ 0.95	-,139	Not good
CFI	≥ 0.94	0.187	Not good

The evaluation results of the testing criteria (*goodness of fit*) states do not all show the evaluation results of a good model, it is not a problem because of all the variables used in this study was in accordance with the existing data in which the data has been supported also by the existing theory . Because testing using SEM analysis is done to assess the relationship of a variable with other variables, not to create a new model.

Test for Significance (Regression Weights)

Tabel 4: Result Hypothesis Testing

	Estimate	CR	P	Information
Y1_FCFLOW <--- X1 Earning	.811	6,372	0,000	Significant
Y1_FCFLOW <--- X2 CFO	-1,396	-18,341	0,000	Significant
Y1_FCFLOW <--- X3 ACRUAL	1,132	17.134	0,000	Significant
Y1_FCFLOW <--- X4 WCP	.244	7.326	0,000	Significant
Y1_FCFLOW <--- X5 INFLATION	-117728428059,323	-1.661	0,097	Not significant
Y2_Financialdistress <--- Y1_FCFLOW	.000	-2,164	0,030	Significant

Source: Significance test output processed by AMOS

In the table above the sig value of variable X1 = 0,000 <0.05 and the value of CR 6.372 . It means that this independent variable partially has a positive and significant effect on the variable Y1_FCFLOW. The higher the profit will be followed by the increase in *future cash flow* as well as vice versa if the company's earnings experience decline, it will affect the decline in *future cash flow*. For the X2_CFO variable the sig value obtained is = 0,000 <0.05 and the CR value is -18,341, which means that this independent variable partially has a negative effect and significant to the variable Y1_FCFLOW. Higher *cash flow from operation* will be followed by a decrease in *cash flow futures* and vice versa. X3_Accrual on the table above the sig value of variable X3 = 0.00 <0.05 and the value of CR 17.134, which means that this independent variable partially has a positive and significant effect on the variable Y1_FCFLOW. The higher *accrual component* will be followed by the increase in *future cash flows* of companies, vice versa. In the table above the sig value of variable X4_WCP = 0.00 <0.05 and the value of CR 7.326 which means that this independent variable partially has a positive and significant effect on the variable Y1_FCFLOW. The higher the company's *working capital* will be followed by the increase in *cash flow futures*, and vice versa. For variable X5_ Inflation, the value of sig variable X5 = 0.097 > 0.05 and the value of CR -1,661 which means that this independent variable partially does not significantly influence the variable Y1_FCFLOW. Y1 variable *future cash flow* has a value of sig 0.03 <0.05 and the value of CR -2,164 which means that this independent variable is partially negative and significant for the Y2 *financial distress* variable . The higher value of *future cash flow* will be followed by a decrease in *financial distress* .

Based on the discussion above, it can be concluded for the estimation equation in this study, namely:

$$Y1 = 0.811 * X1 - 1.396 * X2 + 1,132 * X3 + 0.244 * X4 - 117728428059.323 * X5$$

$$Y2 = 0,000 * Y1$$

Test Direct, Indirect and Total Effects

The direct effect is directly visible effect between exogenous and endogenous variable or of endogenous variables to the endogenous variables. Indirect influence is the influence between variables through other variables. Total influence is the result of combining direct effects and indirect influences in research.

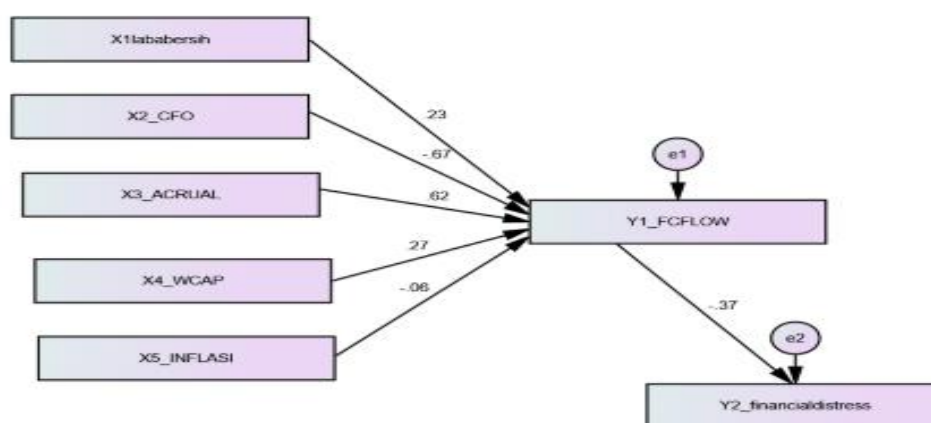
Table 5: Results of Tests Direct, Indirect, and Total Effects

		X1	X2	X3	X4	X5	Y1	
Driving influence ng	direct	Y1	0.232	-0,667	0.623	0.266	-0,060	0,000
		Y2	0,000	0,000	0,000	0,000	0,000	-0,373
Indirect Effects		Y1	0,000	0,000	0,000	0,000	0,000	0,000
		Y2	-0,086	0.249	-0,232	-0,099	0.023	0,000
Total Influence		Y1	0.232	-0,667	0.623	0.266	-0,060	0,000
		Y2	-0,086	0.249	-0,232	-0,099	0.023	-0,373

Source: Secondary Data processed by AMOS 24, 2018

The output of the results can be seen the direct effect of each variable is as follow. Variable X1 net income have a direct impact on *future cash flows* (Y1) with a value of 0.232 or 23%. The effect of *cash flow from operation* (X2) has a direct influence on *future cash flow* with a value of -0.667 or -66%. The *accrual component* (X3) variable has a direct influence on *future cash flow* with a value of 0.62 or 62%. Variable *working capital* (X4) has a direct influence on *future cash flow* with a value of 0.266 or 26%. The inflation (X5) variable has a direct effect on *future cash flow* with a value of -0.06 or 6%. *Future cash flow* (Y1) variable in this study has a direct influence on *financial distress* (Y2) variables with a value of -0.373 or -37%.

In this study, *future cash flow* becomes mediation for independent variables (*earnings, cash flow from operations, accrual component, inflation capital and inflation*) to assess indirect influence on *financial distress*. The table above provides an explanation as follows. Variable X1 *earnings* do not have a direct influence on Y2 *financial distress*, but have an indirect effect through Y1 variable *future cash flow* with a value of -0.086 or 8.6%. The variable X2 *cash flow from operation* also has no direct influence on Y2 *financial distress*, but it has an indirect influence through the *future cash flow* with a value of 0.249 or 24.9%. The *accrual component* variable does not have a direct influence on *financial distress*, but has an indirect effect through the *future cash flow* with a value of -0.232 or -23%. *Working capital* variable does not have a direct effect on *financial distress* variables, but has an indirect effect through *future cash flow* with a value of -0.099 or 9.9%. The inflation X5 variable has no direct influence on *financial distress*, but through Y1 the *future cash flow* has an indirect effect with a value of 0.023 or 2.3%.



Chi-square: 229,023; probability: 0,000

Figure 3: Chart of Direct Effects and Indirect Effects

Implications

Based on hypothesis testing, the results showed that earnings, accrual components, and working capital had significant positive effect and significant negative influences, namely cash flow from operation, on future cash flow. It shows that financial factors affect a company's future cash flow. The results of this study confirm some previous research conducted by Sulistyawan and Septiyani (2015),

Prima and Gunawan (2015), Ebaid (2011), and Santoso (2013). The results suggest that financial factors can have both positive and negative effects on the company's future cash flow. These results contribute to the users of financial statements, especially stakeholders, to pay more attention to financial factors due to their significant impact on future cash flow. Factors such as earnings, accrual component, and working capital contribute positively to future cash flow, but cash flow from operation can negatively affect future cash flow. Meanwhile, non-financial faktor, namely inflation, does not affect future cash flow. This result rejects the notion that the state of the economy that is experiencing inflation does not affect the future cash flow. As previously explained that inflation that can affect the economic condition of a country and ultimately affect the economic condition of the company does not significantly affect the future cash flow of the company. These results still need to be confirmed with data or research from other countries. Thus, there is a difference between financial and nonfinancial factors against the company's future cash flow.

Subsequent results documented that the implications of the impact of financial and nonfinancial factors on future cash flows on the possibility of financial distress of the company showed a significant negative influence. This indicates that if the future cash flow is disrupted it may affect the company's financial ability to meet its obligations (financial distress). The results of this study clarify the role of information about future cash flow for business decision making for stakeholders. These results confirm previous research conducted by Kordestani, et.al. (2011) and Gentry, et. al. (1990). Thus, the results of this study contribute clearly to existing literacy, especially those related to factors that affect future cash flow, as well as its implications for the company's financial distress. These results clarify the role of financial information for users of financial statements in making business decisions.

Conclusions

Earning has a significant positive effect on the company's *future cash flow*. The net profit obtained by the company in the current period will affect the additional cash of the company which will be used to finance operational activities in the coming period. *Cash flow from operations* has a significant negative effect on the company's *future cash flow*. *Accrual component* has a significant positive influence on the company's *future cash flow*. *Accrual component* which consist of account receivable, account payable, inventory and depreciation, each of which has a significant effect. *Account Receivable* identifies credit sales made by the company, where the company will receive cash in the coming period which will certainly affect the amount of cash that will be used for its operational activities. *Account payable* identifies the existence of credit purchases made by the company, where credit purchases will arise as a company liability which will later have to be paid according to the specified period and certainly will reduce the amount of cash owned by the company. *Inventory* identify the availability of inventory owned by companies that are ready for sale that are expected to generate cash for the company for at least the next year. Furthermore, *for working capital* has a significant positive effect on *future cash flows*. *Working capital* is an important factor for every company to run its business in the short term. Companies that have a positive *working capital* in the current year identify companies capable of carrying out their operational activities by using the capital owned by the company itself.

These results provide support or evidence against the researchers' predictions as stated in the hypothesis. Evidence of the influence of financial factors such as earnings, cash flow from operation, accrual components, and working capital on future cash flow shows that stakeholders in making business decisions tend to emphasize this information. The positive effect of earnings, accrual component, and working capital on future cash flow proves that the increase in the value of this financial statement component is able to generate future cash flow, as previously explained. However, for cash flow from operation factors that have a negative effect in this study, it indicates that the more cash used to finance company operations will reduce the company's ability to generate future cash flow. Thus, stakeholders need to pay attention to this component in making decisions. Meanwhile, for the inflation factor, this study shows no significant effect on future cash flow. This condition is contrary to the prediction of the researcher that the economic condition which has increased inflation will not affect the economic condition of the company.

Other results indicate the effect of future cash flow on financial distress. This proves that information about future cash flow is very important. If the company's future cash flow is in trouble, it can be a signal that the company is experiencing financial distress. Conversely, if the future cash flow increases, it means that the possibility of the company experiencing financial distress is also getting smaller. In addition, the results of this study also document the impact of the influence of independent variables on endogenous variables (future cash flow) on endogenous variables (financial distress). This means that the independent variables (earnings, cash flow from operations, working capital, and accrual components) will have an impact on financial distress if the company experiences future cash flow problems.

Although the results of this study are able to show evidence that financial factors have more influence on future cash flow than non-financial variables, the researchers admit that there are still a number of things that need to be improved. For example, regarding data problems, this study uses data with different levels, such as earnings and inflation. This study also only uses samples from one industry, and the time period the data used is still limited. Therefore, future research is expected to overcome some of these weaknesses. Then, further researchers are expected to be able to further explore other financial and non-financial variables that are thought to affect the company's future cash flow.

References

- Bandi, B., & Rahmawati, R. (2012). Relevansi kandungan informasi komponen arus kas dan laba dalam memprediksi arus kas masa depan. *Jurnal Akuntansi dan Bisnis*, 5(1).
- Bird, R. B., & Smith, E. A. (2005). Signalling theory, strategic interaction, and symbolic capital. *Current Anthropology*, 46(2), 221-248.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Ruetzel, C. R. (2011). Signalling theory: a review and assessment. *Journal of Management*, 37(1), 39-67.
- Dechow, P. M. (1994). Accounting earnings and cash flows as measures of firm performance: the role of accounting accruals. *Journal of Accounting and Economics*, (18), 3-42.
- Dewi, Sofia Prima and Gunawan, Venny. (2015). Pengaruh earnings, cash flow from operations, working capital from operations, dan accrual components terhadap future cash flow pada perusahaan manufacturing yang terdaftar di Bursa Efek Indonesia, *Jurnal Ekonomi*, (20)2, 304-319
- Ebaid, IE-S. (2010). Accruals and the prediction of future cash flows. *Management Research*, (34)7, 838-853.
- Farshadfar, S., and Monem, M. (2013). The usefulness of operating cash flow and accrual components in improving the predictive ability of earnings: a re-examination and extension. *Accounting & Finance*, 53(4), 1061-1082.
- Financial Accounting Standards Board (FASB). (1978). Statement of Financial Accounting Concepts No.1: Objectives of Financial Reporting by Business Enterprises (FASB, Stamford, CT).
- Gentry, J.A., Vaidyanathan, Lee, R., and Wai, H. (1990). A Weighted Cash Conversion Cycle. *Financial Management*, (19) 1, 90-99.
- Indonesian Accounting Association (IAI). (2008). Accounting for Depreciation, SFAS 17. IAI Jakarta
- Indonesian Accounting Association (IAI). (2008). Accounting Policies Changes in Accounting Estimates and Errors, SFAS 25. IAI Jakarta
- Indonesian Accounting Association (IAI). (2008). Cash Flow Statement., SFAS 2. IAI Jakarta
- Indonesian Accounting Association (IAI). (2008). Inventory, SFAS 14. IAI Jakarta
- Jemâa, O.B., Toukabri, M., & Jilani, F. (2015). The examination of the ability of earnings and cash flow in predicting future cash flows: Application to the Tunisian context. *Accounting and Finance Research*, 4(1), 1-16
<http://dx.doi.org/10.5430/afr.v4n1p1>.
- Jones, S. and Sharma, R. (2001). The impact of free cash flow, financial leverage and accounting regulation on earnings management in Australia's "old" and "new" economies. *Managerial Finance*, (27)12, 18-39. <https://doi.org/10.1108/03074350110767420>
- Joni and Lina. (2010). Factors Affecting Capital Structure. *Journal of Business and Accounting*, (12) 2, 81-96.
- Joreskog, K. G., & Sorbom, D. (1996). LISREL8: User's reference guide. Mooresville: Scientific Software.
- Kieso, Donald E., Weygant, Jerry. J., Warfield, and Terry. D. (2008). *Intermediate Accounting (12th Ed Indonesian Language)*. Jakarta: Erlangga.
- Kirmani, A., & Rao, A. R. (2000). No pain, no gain: a critical review of the literature on signalling unobservable product quality. *Journal of Marketing*, 64(2), 66-79.
- Kordestani, G. et al. (2011). Ability of Combinations of Cash Flow Components to Predict Financial Distress. *Business: Theory and Practice*. (12)3, 277-285.
- Krishnan, G.V., & Largay III, J.A. (2000). The predictive ability of direct cash flow information. *Journal of Business Finance and Accounting*, 27 (1-2), 215-245.
- Kurniawan. YJ. (2014). Analysis of the Influence of SBI Interest Rates, Inflation, World Oil Prices, World Gold Prices, Rupiah Exchange Rates against the US Dollar, Nikkei 225 Index, and Dow Jones Index on the Composite Stock Price Index (Case Study on the JCI on the IDX 2003-2012 Period). Article.
- McClue, MJ. (1991). The use of cash flow to any financial distress in California hospitals. *Hospital and Health Service Administration*, 36, pp.223-241.
- Naim, Ainun. (1993). *Inflation Accounting (1st Ed)*. Yogyakarta: BPFE.
- Natariasari, R. dan Indarto, Miko. (2014). Manfaat Laba dan Arus Kas Untuk Memprediksi Financial Distress. *Jurnal Sosial Ekonomi Pembangunan*, (4) 11, 152-173.
- Nurhidayah and Rizqiyah, Fitriyatur. (2017). Kinerja Keuangan dalam Memprediksi Financial Distress. *JIBEKA Journal*, (11)1, 42-48
- Prabowo, R., & Wibowo. (2015). Analisis Perbandingan Model Altman Z-Score, Zmijewski, dan Spingate dalam Memprediksi Kebangkrutan Perusahaan Delisting di BEI. *Account, Jurnal Akuntansi Keuangan & Perbankan*, 1(3), 195-203. <https://doi.org/10.1007/s10661-011-2291-4>
- Santoso, Clairane EE (2013). Working capital turnover and account receivable turnover influence on profitability at PT. Pegadaian (Persero). *Journal of Economic Research, Management, Business and Accounting*, (1) 4, 1581-1590.
- Spence, M. (1973). Job market signalling. *Quarterly Journal of Economics*, (87) 3, 355-374
- Spence, Michael. (2002). Signalling in Retrospect and the Informational Structure of Markets . *American Economic Review*, (92) 3, 434-459. <https://doi.org/10.1257/00028280260136200>

- Springate, Gordon L.V. (1978). Predicting the Possibility of Failure in a Canadian Firm. Unpublished Masters Thesis. Simon Fraser University
- Sulistiyawan, Wahyu and Aditya, Septiani. (2015). Pengaruh Laba Bersih, Arus Kas Operasi, dan Komponen-Komponen Akrua dalam Memprediksi Arus Kas Operasi di Masa Depan. *Diponegoro Journal of Accounting*, (4) 4, 1-11.
- Suyati, Sri. (2015). Pengaruh Inflasi, Tingkat Suku Bunga dan Nilai Tukar / US Dollar terhadap return Saham Properti yang Terdaftar di Bursa Efek Indonesia.. *UNTAG Scientific Journal Semarang*, (4) 3, 71-86
- Takhtaei, Nasrollah and Karimi, Hassan. (2013). Relative Ability of Earning Data and Cash Flow in Predicting Future Cash Flows. *International Journal of Accounting and Financial Reporting*, (3) 1, 214-225 <https://doi.org/10.5296/ijaf.v3i1.3803>
- Zhang, Y., & Wiersema, M. F. (2009). Stock market reaction to CEO certification: The signalling role of CEO background. *Strategic Management Journal*, (30), 693-710. <https://doi.org/10.1002/smj>

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.