Profitability and Discretionary Accrual through Supply Chain Management: Evidence of Manufacturing Firms using GMM Estimates in Indonesia

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Abstract **– This study examines supply chain power in the context of real earnings management. Accrual-based models are often used to examine the motives of managers in conducting discretionary accruals. Discretionary accruals by managers has a very broad impact and may mislead users of financial statements. This study analyses and examines the effect of company profitability on discretionary accruals, especially in emerging markets in Indonesia. This empirical study samples manufacturing sector companies listed on the Indonesia Stock Exchange from 2006 to 2016 and uses dynamic models with Generalised Method of Moments (GMM) estimation. This paper finds that the motives for signalling managers still influences the existence of discretionary accruals, and ROA, PBV, and EPS have a positive and significant effect on discretionary accruals. These findings prove that managers engage in discretionary accrual when reporting the profitability of the company. Leverage negatively affects discretionary accrual and the control mechanism of the current debt even though the effect is marginal. This study only examines the profitability motives of managers in conveying information to outsiders, and acknowledges that discretionary accruals may be influenced by variables beyond this study.**

Keywords – *Discretionary Accrual, Supply chain management, signalling motive, profitability, and leverage.*

1. Introduction

Interorganizational relationships create both opportunities and risks in supply chain management (SCM). Prior research on relationships examines the performance effects of firm power, supply chain (SC) membership, and SCM competence, where power refers to the ability of one SC partner to influence the actions of another Managers often use discretionary accruals in earning management [1]. Testing the motives of managers in conducting accrual discretion is an interesting topic for researchers in testing earnings management [2]. Accrual-based models are often used to test the motives of managers to make accrual discretion in the reporting of financial statements. Although they have weaknesses, they are still a reference for researchers in measuring earnings management [3-4]. Discretionary accrual in earnings management practices has a very broad impact on the economy of a country [5]. There are many cases where immoral financial managers negatively influence society. The case of Enron and WorldCom is evidence of the practice of accrual discretion that misleads users of financial statements [6].

Discretionary accrual is mostly practised by companies when going public [7]; companies that experience financial difficulties, meet incentive managers, control stock prices, renegotiate debt, and maintain company performance [8]. Managers engage in accounting choices when performing discretionary accruals. It is not a significant problem in developed countries, but a problem in emerging markets wherein company ownership is highly concentrated and investor protection is poor [9].

Concentrated ownership has the power to organise management to work based on the wishes of the owner so that they influence outsiders to achieve specific purposes. The board of directors as observers does not function as intended where managers tend to use them to give good signals, even though they practice abnormal accruals [10].

Managers who have different interests from the owner will usually be bound by a contract (nexus of contract) to avoid asymmetric information in the form of moral hazard and adverse selection [11]. Furthermore, Laela & Ermaya [12] find no significant relationship between asymmetric information with earnings management. Good financial statement information can increase company transparency, corporate competitiveness, and reduce the occurrence of adverse selection and moral hazard [13]. The higher asymmetric

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information between the agent and principal provides evidence of the practice of accrual discretion by managers.

In this paper, we examine the earnings management motives carried of managers using the signalling theory approach in reporting earnings to outsiders. Managers convey profits as one of the signals sent to competitors, customers, suppliers, or other interested stakeholders (for example, the government, shareholders, the public) with various interests [14]. The development of accounting information does not yet conveying quality information comprehensively, so stakeholders need to understand the impact of asymmetric information on decisions taken, especially when managers are under stress [15]. Such information is widely available in emerging markets, especially in informing outside parties about performance.

Signalling theory is related to reducing information asymmetry between two parties [16]. Management researchers have also applied signalling theory to help explain the influence of information asymmetry in various research contexts. For example, a recent corporate governance study shows how CEOs observe the quality of signals from their companies to attract potential investors through the quality of their financial statements [17].

The Indonesian capital market over the past 10 years has experienced good development, and CSPI has experienced a gain of 193.36%, which is the highest increase among the major exchanges in the world. Capital market growth must also be followed by efficiency levels in the market and compliance of issuers in providing relevant information for investors. At present, the Indonesian capital market is still in the category of emerging markets and has a low level of corporate governance among other countries in Asia [12]. Ownership of public companies in Indonesia is highly concentrated among foreign investors [18] and family firms [19]. This constitutes the basis of why investor protection is a problem that needs to be studied, and to provide full input on good capital market management. Concentrated ownership creates agency problems between managers and outside ownership and conflicts between shareholders [20].

Discretionary accrual in the financial statements is something that must be considered by the regulator. Investors will be sceptical in seeing earnings reports presented by management, especially the declining performance in quarterly reports after annual earnings announcements [21]. Managers, as representatives of company owners, have high incentives and the authority to manipulate and deceive financial statements to obtain direct benefits for personal or indirect benefits for the company [22]. As a language of business, accounting information must be able to bridge between standards and practices [23-24].

This study examines how company profitability in financial statements affects discretionary accrual by considering the SCM. We use the Generalised Method of Moments (GMM) estimation method as one of the tools that researchers have not used before, to determine the profitability motives for discretionary accruals in financial statements. This model can solve the endogeneity problem that results in parameter estimation being biased and inconsistent [25] and getting more robust results [26]. Studies have found endogeneity problems that are interrelated between dependent variables and discretionary accrual [27]. This happens when the explanatory variable correlates with the error term [28]. GMM can eliminate the problem of endogeneity by using instrumental variables so that estimates are consistent.

Research has found evidence of asymmetrical information between managers and investors due to manager/individual behaviour conveying information to incomplete users, especially in inefficient markets [24]. They will use accruals in manipulating accounting information to meet analyst expectations, avoiding losses, maximising manager compensation, debt negotiating, and maximising stock prices when IPOs [29].

Instead, managers will convey information in the form of good signals to outsiders by providing information such as dividend policy [30] to obtain loans [31] by providing quality information about the company [32]. Managers convey good signals from their companies to potential investors through the observable quality of their financial statements, shareholders [33], and marketing good products. Company executives have more information concerning the company and its performance. This encourages managers to convey this information to potential investors to increase the stock prices of the company [33]. Information conveyed by managers will give signals to investors in making investment decisions. The market will react regardless of whether the information is positive or negative. The signalling theory in financial statements states that increasing the level of forward-looking information in the annual report narrative is an important mechanism for delivering corporate revenue signals in the future [34].

Our study contributes to the literature in two respects. First, this research is expected to be an input for a review of the standard setters regarding the standardisation of financial statement submission that is free from various interests in the capital market, and creates a healthy capital market condition. To date, no regulations have been issued by the Indonesian government to protect investors such as mispricing in determining the value of existing companies. Second, this study is expected to provide input to governments, especially in providing strict sanctions against companies that have irregularities in the delivery of financial statements, and for issuers of affirmations and sanctions for ethical violations in earnings management. This study examines the signalling motives in increasing earnings that play a role in conveying information by managers to users. Signals in information serve as a means of expressing expectations of managers on the future cash flows [35]. Testing the existence of discretionary accruals with signalling motives is interesting to review because many previous findings support the existence of this motive in the submission of financial statements.

The remainder of the paper is organised as follows; section 2 focuses on a review of the literature and hypotheses development, section 3 presents data and methodology, section 4 discusses the results while section 5 concludes the paper.

2. Literature Review and Hypothesis Development

Currently, the focus of the SCM studies has evolved from economic and environment issues to incorporate social issues. SCM studies are more concerned now with exploring the interaction between social issues and SCM practices. Research on the use of discretionary accruals has been widely carried out to test the existence of earnings management, and research on market efficiency is widely carried out by capital market researchers [36]-[38]. Studies indicate that managers are interested in performing discretionary accruals to maximise their bonuses [39-40]. Discretionary accrual are also carried out to avoid failure of debt payments, and interest payments [36,41] to get around industry and regulations [42] to meet revenue estimates and targets issued by financial analysts or management [43] and in connection with the IPO process [44].

Studies have shown a preference for a positive relationship between signalling motives and their relationship to the existence of discretionary accrual in reporting financial statements [45]. The hypothesis of signalling mentions the efforts of managers to use discretionary accruals in conveying the financial information of the company to the capital market and the prospects of the company. When this information is received by the market, investors will react positively to the delivery of contemporary corporate earnings information [46].

Asymmetrical information between managers and investors can be reduced by conveying signals in dividend policy [47]-[48], obtaining loans (debt) [49],[31], and conveying quality company information [50]. The CEO will convey a good signal from his company to potential investors through the observable quality of their financial statements [51] to shareholders [52] and product marketing problems [53],[32].

Investors will see that the income statement can provide a signal of prosperity and is a profit that is relatively growing and stable (sustainable). When earnings decline, the accounting will report engineered profits. Penman [54] states that sustainable earnings are earnings that have high quality and are indicators of future earnings. Accrual accounting provides information related to stock returns and the determination of stock market prices. Accrual accounting provides a space for managers to exercise discretion in reporting earnings. In signalling theory, the focus is on the actions of managers who intentionally inform information that cannot be directly observed by outsiders. Useful signals for outsiders must meet two factors consisting of observability and cost signal [52]. The accrual concept is used to convey company personal information in terms of profitability, such as companies that use dividend change policies [55].

Diverse investor perceptions of the value of accrual in the financial statements as a benchmark may not necessarily be able to detect discretionary accrual in the financial statements. They believe that the firm value in the future is strongly influenced by the accrual policy applied to the company [56]. An analysis of the profitability of the company is carried out by investors to see which stocks can describe the level of good returns expected by investors. The return on asset (ROA) valuation is

used to see the ability of a company to manage each asset value to generate net profit after tax [90]. The higher the ROA value of a company, the better the ability of a company to manage its assets. However, having a high ROA does not necessarily produce a good return. ROA can measure the ability of a company to generate profits in the past and then project earning in the future. The value of ROA will affect investor confidence in companies in deciding their business decisions. Heterogeneity of investor confidence in the value of accruals in the financial statements as a benchmark may not necessarily be able to detect discretionary accruals in the financial statements. Hence, this paper hypothesises:
H1. Return on Assets (ROA) has a positive effect on discretionary accrual.

Another profitability analysis often used by investors in assessing firm value is the price-to-book value (PBV) [57]-[58]. Managers will always try to provide fair firm values to maintain their performance which happens a lot in developing countries, especially when the management and the board of commissioners are from the same group [59]. This analysis is a fundamental indicator of stocks and is used by investors and analysts to determine the fair value of shares [18]. This indicator is obtained by dividing the price of shares in the stock market by the book value of the shares. Stocks with large PBV ratios can be said to have high valuations (overvalued), while stocks with PBV below 1 have low valuations (undervalued). It is reasonable to assume that the market value motive is one of the bases for managers in conducting accrual discretion. Thus, the second hypothesis is:
H2. Price-to-Book Value (PBV) has a positive effect on discretionary accruals.

There are many analyses concerning Earnings Per Share (EPS) which provides indications that the company can increase the prosperity of investors, and encourage them to increase the amount of capital invested. EPS becomes one of the bases used by management and the board of commissioners in dividing dividends. For investors, EPS information is considered the most basic and useful information because it can describe the prospects of earnings in the future, although almost 20% of financial managers believe that the value of EPS is not representative [60]. This can happen in earnings management because there is a tendency for management to repurchase outstanding shares to increase the value of EPS [29]. There are many cases in emerging market countries of managing accruals in dividend policy so that the company reputation is maintained, especially to access external funds [61]. Based on these references, the analysis of EPS needs to be examined as one of the motives for profitability in formulating the accruals of financial statement policies. Thus, the third hypothesis is:
H3. Earnings Per Share has a positive effect on discretionary accruals.

When managers use accruals to inform the financial future, they will increase the value of accruals to give a positive signal to the market. The signal aims to overcome the problem of inappropriate information between managers and shareholders [62]. Investors also observe the amount of debt of the company, and will assume that the high level of debt will have an impact on the benefits to be obtained. Debt can also be a tool or mechanism and can reduce asymmetric information and agency conflicts between managers and owners [63]. Debt can strengthen or weaken the motives of signalling managers in conducting discretionary accruals in financial statements. Bergstresser & Philippon [64] found evidence of a positive and significant relationship between debt and discretionary accruals, which showed that when accruals were high for years, managers made various options, including conducting discretionary accrual and selling shares to employees. Lai [65] states that when a company has a high level of debt, the level of discretionary accrual conducted by the company tends to be at the low level as well. The debt position informs that the financial signals of the company are going well, especially in meeting interest commitments and avoiding violations of debt contracts [9]. From here, we hypothesise:
H4. Leverage has a positive effect on discretionary accruals.

In making decisions on investments, investors will analyse financial statements where the information presented in the financial statements must reflect the condition of the company that reflects the truth. When the financial position shows good results, then they will be interested in buying shares and will affect the stock prices [66]. The stock price is the price that will be bought by investors as proof of share ownership. Investors will always observe the movement of stock prices because the value of their prosperity is determined by the stock price, and it affects the firm value that will be an important indicator for the company.

3. Data and Methodology

This study aims to determine the effect of signalling motives toward discretionary accruals on public companies in the manufacturing sector, and uses unbalance panel data obtained from 117 companies from 2006 to 2016. The samples are taken from companies that have issued financial statements in a row for eleven years accessed on the official website of the IDX (www.idx.co.id). The analysis of this study adopts dynamic models, namely the Generalised Method of Moments (GMM). The use of this model is more consistent and unbiased compared to static models, such as fixed effects because the GMM model can eliminate the endogeneity factor found in fixed effects [67]. One of the ways to eliminate this endogeneity is by using instruments of variables so that it corrects errors in the model [68]. Baum states that researchers must confront various choices in determining instrument variables. The primary empirical problem is heteroscedasticity. Endogeneity testing and over-identifying restrictions are invalid if there is heteroscedasticity. GMM is a more efficient estimation model compared to simple instrumental variable estimators. The expected OLS estimation results are inconsistent with the initial hypotheses that have been built and is theoretically irrelevant. For example, the PBV estimation results have a positive influence in theory, but OLS estimates show a negative effect and render the coefficient results biased. This approach suspects that there is endogeneity. This reference follows the concept carried out by [69]. Endogeneity checking is carried out in the first step by estimating PBV models with the same independent variables and taking the residuals. Then, the estimation is conducted on discretionary accruals. PBV residual results have significant results. The second proof is by checking the heteroscedasticity test (LR test) and the residual correlation test (CSD test), where both reveal significant results. The implementation of the GMM model is expected to have more accurate and consistent results, especially micro panel data where N> T [70]. This research model uses GMM difference where all instrument variables are transformed into the difference.

3.1. Estimation of discretionary accruals

By using the modified Jones model, Dechow [40] used the model in the calculation of accrual earnings management with the following formula:

$$DA_{it} = TA_{it} - \left(\alpha_0^* + \alpha_1^*\left(\frac{1}{A_{t-1}}\right) + \alpha_2^*(\Delta REV_t - \Delta REC_t) + \alpha_3^*(PPE_t)\right) \quad (1)$$

DA : Discretionary accrual is the difference between total accruals and the fitted non-discretionary accruals
TA : Total accruals, defined as the earnings before extraordinary items (NI) – operating cash flows (CFO).
A : Total assets.
ΔREV : Change in revenues.
ΔREC : Change of accounts receivable
PPE : The gross value of fixed assets

The dynamic model for examining signalling motives is as follows:

$$DA_{it} = \beta_0 + \beta_1 DA(-1) + \beta_2 ROA_{i,t} + \beta_3 PBV_{i,t} + \beta_4 EPS_{i,t} + \beta_5 DER_{i,t} + \epsilon_{it} \quad (2)$$

Where: The instruments used are all independent variables on the basic model consisting of ROA, PBV, EPS, and DER. The appropriate instrument variables in the model depend on Hanses J-statistics. If the Prob J-statistic is higher than 5%, the instrument model is valid. Conversely, if the Prob J-statistic is lower than 5%, the instrument is invalid. Furthermore, the GMM requirements that must be met are free from serial correlation.

4. Results and Discussions

4.1. Descriptive analysis

Before discussing statistical data, we pay attention to descriptive data by describing the variables in the following table. The analytical tool used is the mean, standard deviation, minimum, and maximum as presented in the following table.

Based on Table 1, the discretionary accrual variable of the total N sample is 1879 manufacturing companies. Statistical results show that the average value of the discretionary accrual variable is -0.09996 with a standard deviation of 6.462458. SD value is very high compared to the average value, which means a large deviation from the number of observations studied. Herawaty [40] finds that the average earnings management is -0.013005 and the standard deviation is 0.2404, which means that the average company in the study sample tends to use a decreasing income strategy. The average discretionary accrual is by -0.008 and the standard deviation is 0.095 [71], while the average discretionary accrual is -0.0028 with a standard deviation of 0.1049 [72]. Research conducted on companies in Malaysia finds an average discretionary accrual in earnings management of 0.033 [73], which is greater than the average practice in Indonesia.

Manufacturing companies in Indonesia have a maximum DA value of 54,487, and the minimum value is -0.0999. This shows that the average value of discretionary accruals per year of observation is different from the value of 0. This proves that most manufacturing companies in Indonesia are still low in manipulating reports through income decreasing actions to increase profits and fiscal strategies [74].

Astari & Suryanawa [75] found that the average discretionary accrual in manufacturing companies is 1.9472, with a standard deviation of 0.4531. The aggregate calculation of discretionary accruals carried out by Trisnawati [76] finds that the average discretionary accrual at Lq 45 companies is 0.1695 for seven years of observation. In another case, Agustia finds [77] that the average discretionary accrual is -0.011597, with a standard deviation of 0.243031. Pujiati & Arfan [78] find an average discretionary accrual of 0.1423, with a standard deviation of 0.2090. The company uses this to show good company performance in the hope of attracting investors in short and long term investments [79].

Table 1. Descriptive statistics for major variables

	N	Mean	Max	Min	Std. Dev.
DA	1879	-0.09996	54.48708	-274.246	6.462458
ROA	1879	6.271059	1210.11	-101.44	30.91461
PBV	1879	2.308789	74.9	-163.93	6.984161
EPS	1879	177.3767	49712.43	-46687.8	2167.388
DER	1879	115.0784	27437.07	-5917.06	903.4572

Note: DA=discretionary accrual, differences between actual total accruals and the fitted values of the modified Jones model, ROA (return on asset), PBV (price to book value), EPS (earning per share), DER (debt-equity ratio).

The average return on asset (ROA) value is 6.271059, the average price-to-book value (PBV) is 2.308789, and the earnings per share (EPS) value is 177.3767. The movement of ROA in manufacturing companies is mostly influenced by the level of earnings management. This is caused by ROA because it is related to the level of profitability and firm size [80]. A study conducted on 139 manufacturing companies from 2006 to 2009 found that the average EPS value was 58.9265, while research conducted on 70 mining sector manufacturing companies in 2006-2010 found an average EPS of 3.73616 [81]. Other studies obtained an average EPS of 0.755 [82]. The average value of the debt-equity ratio (DER) is 115.07, with a standard deviation of 903.45 compared to other studies that show that the average debt to the manufacturing companies studied from 104 companies in 2006-2008 was 1.2084 [83]. A study in America found that the average debt value of companies from 1996 to 2007 of manufacturing companies was 0.25 [84]. The average value of debt incurred in Malaysia was 0.165 [73]. This debt ratio value shows that the average return on asset (ROA) value is 6.271059, the average price-to-book value (PBV) is 2.308789, and the earnings per share (EPS) value is 177.3767. The movement of ROA in manufacturing companies is mostly influenced by the level of earnings management. This is caused by ROA because it is related to the level of profitability and firm size [80]. Another study conducted on 139 manufacturing companies from 2006 to 2009 found that the average EPS value was 58.9265, while research conducted on 70 mining sector manufacturing companies in 2006-2010 found an average EPS of 3.73616 [81]. Other studies obtained an average EPS of 0.755 [82]. The average value of the debt-equity ratio (DER) is 115.07, with a standard deviation of 903.45 compared to other studies that show that the average debt to the manufacturing companies studied from 104 companies in 2006-2008 was 1.2084 [83]. A study in America found that the average debt value of companies from 1996 to 2007 of manufacturing companies was 0.25 [84]. The average value of debt incurred in Malaysia was 0.165 [73]. This debt ratio value shows the proportion of the debt of the company to the total assets. Investors can use this debt ratio to find out the debt of a company compared to its assets. Creditors can also measure the risk given to a company. A high average debt value motivates managers to make accrual discretion so that their companies avoid contracting debt contracts [36].

4.2. Determinants of Discretionary Accruals

As explained earlier, this study explores the effect of profitability signals on the discretionary accrual of the manufacturing sector companies using the GMM model. The GMM estimation results are explained in Table 2:

$$Y = 0{,}0013\, ROA_{X_1} + 0{,}0372\, PBV_{X_2} + 0{,}0007\, EPS_{X_3} - 5{,}02E05 DER_{X_4} + \epsilon_{it}$$

Table 2. Dynamic Panel GMM estimation results

Variables	Coefficient	Std. error	t-stat	Prob
ROA	0.0013	0.0056	4.29	0.000**
PBV	0.0372	0.00003	14.43	0.000**
EPS	0.0007	0.0025	6.23	0.000**
DER	-5.02E-05	0.0001	-4.53	0.000**
DA(-1)	-0.0145	0.0056	-2.56	0.011*

Note: *significance 5%, ** significance 1%. Hansen test = 0,319 (instrument rank = 48).
AR(2) = 0.22

Based on Table 2, return on assets (ROA) has a positive and significant effect on discretionary accruals, with a coefficient of 0.0013 and a probability of 0,000. It reveals that ROA can influence discretionary accruals in the case of manufacturing companies. ROA can be one indicator that reflects the company's financial performance, the higher the value of ROA, the better the company's financial performance [85]. ROA is also used to measure accounting performance. This is the main analytical tool used by investors to measure the profitability of the company. The health of a company is assessed from ROA, where companies with a higher ROA value tend to perform income smoothing compared with lower companies. Because management has internal information, they know the ability of the company to make profits in the future and can more easily delay or accelerate earnings [86].

Corporate managers tend to use accrual accounting policies when their company conditions are unhealthy [27], and when they prioritise their interests [46]. In contrast, they tend to survive and use real accruals in good company accrual conditions. The results of this study prove that the profitability value of companies proxied by ROA has a positive and significant effect on discretionary accruals carried out by managers at manufacturing companies in Indonesia. This condition is proven when they experience poor performance, where the ROA value is still high and influences discretionary accruals in a stable capital market condition. Usually, investor's measure accounting performance based on ROA levels. However, in companies with strong ownership concentrations such as Indonesia, information obtained from accounting and market performance may not contain the same information [87]. This finding provides evidence of the Efficiency Market Hypothesis theory in emerging markets, which states that stock prices have not fully reflected the information in the market. In this case, it assumes that past data cannot always be used as a reference for information in the future [88].

PBV determination analysis of accrual discretion can be seen as one of the fundamental indicators of a stock. Studies used PBV as one of the aspects of profitability that measures firm value. Stocks with large PBV ratios can be categorised as having high valuations (overvalued), while stocks that have PBV below 1 have low valuations or (undervalued) and have good fundamentals. Investors will use the PBV value as a positive signal and a good prospect. For this company, the demand for its shares will increase so that the price of the book value will rise. The faster the growth rate of a company, the more funds needed to finance expansion. This study shows that the price-book value (PBV) has a positive and significant effect on discretionary accruals. This finding proves that managers engage in discretionary accruals to increase the value of the company. PBV value is currently used by the Indonesian capital market in determining IDX Value 30 and IDX Growth 30 to issuers that have good PBV. The motives of managers increase the value of accrual accounting so that investor confidence in companies increases [89]. PBV information is an important signal needed by investors to invest. When the information is announced, the market will respond and judge whether it is a good or a bad signal.

Earnings per share (EPS) is 0.0007 and has a positive and significant effect on discretionary accruals, which means the H0 hypothesis is accepted. EPS value is used as a measure in the rate of returns of the company [91]. This study supports the signalling hypothesis whereby managers will maintain that changes in stock prices/stock returns will follow changes in company policy including company dividend policies [92]. Managers will be motivated to do corporate disclosure to give a positive signal to all parties to increase the stock price and the credibility of their companies. This can set various expectations from investors and other related institutions [93-94]. Managers tend to be conservative in reporting EPS because they are be required to provide good short-term performance information by following the interests of the owners. EPS will always be managed by managers [60] because this revenue manipulation is very difficult to detect from the outside as it involves the availability of information that can be accessed directly by stakeholders.

Testing of debt as a signal in financial reporting is proven to be able to act as a mechanism of control over the existence of accrual discretion in Indonesian manufacturing companies. The debt (DER) is found to be negatively and significantly related to discretionary accruals, accepting the H1 hypothesis, where debt can weaken managers in conducting accrual discretion in the financial statements. This study is in line with that raised by [63], which states the role of debt as one of the mechanisms of control of managers as agents for preparing financial statements. Managers tend to change accruals when they are stuck in debt [41]. Conflicts between shareholders and creditors occur when they have different interests. Creditors have a major claim on interest income and principal loan instalments, while shareholders can access through managers at the company and hold control over the operational decisions of the company that can affect the cash flow of the company and related risks. The control mechanism through debt occurs in Indonesian manufacturing companies. Although the relationship is weak, it can provide evidence that the role and function of monitoring by external parties can put pressure on managers in managing accruals. These findings are in agreement and support the agency theory.

5. Conclusions

The use of accruals and supply chain management in earnings management has become an important issue related to the issue of capital market credibility. Supply chain strategy by managers is the topic of most interest and is discussed by researchers. This study supports the signalling theory, agency theory, and the efficiency market hypothesis (EMH), where managers will use accruals to increase the relevance of reported earnings to help investors better assess the operating performance of the company, although sometimes the value will change in the following year.

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