A study of information asymmetry in financial research

Juli Riyanto Tri Wijaya*, Eliada Herwiyanti

Universitas Jenderal Soedirman, Purwokerto, Central Java, Indonesia

ARTICLE INFO

Article history
Received 1 March 2022
Revised 31 January 2023
Accepted 31 January 2023

JEL Classification:
M41

Key words:
Information Asymmetry, Earnings Management, Accounting Fraud, Budgetary Slack.

DOI:
10.14414/tiar.v13i1.2935

ABSTRACT

This study aims to determine the effect of information asymmetry on earnings management, accounting fraud, budgetary slack, and the cost of equity. This study is conducted using literature study techniques by finding facts and making interpretations. Data sources are obtained from the results of previous studies, from 2017 to 2020, which have been published in various national journals. This study concludes that information asymmetry has a positive effect on earnings management; information asymmetry has a positive effect on accounting fraud; information asymmetry has a positive effect on budgetary slack; and information asymmetry has a negative effect on the cost of equity.

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh asimetri informasi terhadap manajemen laba, kecurangan akuntansi, senjangan anggaran, dan biaya ekuitas. Penelitian ini dilakukan menggunakan teknik studi kepustakaan dengan mencari fakta dan melakukan interpretasi. Sumber data diperoleh dari hasil penelitian sebelumnya, dari tahun 2017 sampai dengan tahun 2020, yang telah dipublikasikan di berbagai jurnal nasional. Penelitian ini menyimpulkan bahwa asimetri informasi berpengaruh positif terhadap manajemen laba; asimetri informasi berpengaruh positif terhadap kecurangan akuntansi; asimetri informasi berpengaruh positif terhadap senjangan anggaran; dan asimetri informasi berpengaruh negatif terhadap biaya ekuitas.

1. INTRODUCTION

Financial statement has a very important role for stakeholders because it contains valuable information regarding the condition of a company. Financial statement should be prepared as transparently as possible. In addition, the information contained in the financial statement must be accountable and accurate, because it influences the decision making of its users. However, irresponsible parties sometimes provide biased information to stakeholders (Fernando & Sitorus, 2020), which ultimately leads to information asymmetry.

Information asymmetry has an impact on information inequality received by stakeholders. The information obtained by one party is more complete and in-depth, while the information obtained by the other party is only limited to basic matters. Kusniawati & Lahaya (2018) state that information asymmetry occurs due to differences in information received, where subordinates have more complete and better information than their superiors. This is what causes biased information in budget reporting which can make budget targets look easy to achieve, thus triggering budgetary slack.

Information asymmetry can be a cause of accounting fraud. One of the frauds committed within the scope of business is the manipulation of the applicable provisions. Manipulation often appears in many fields, one of which is in the financial sector. Manipulation in the financial sector includes falsification in the preparation of financial statement and other important reports (Irwansyah & Syufriadi, 2019).

* Corresponding author, email address: juli.wijaya@mhs.unsoed.ac.id

The financial statement presented by a company must be of high quality and easily understood by its users. A low level of information asymmetry in financial statements indicates that the information is properly and evenly distributed to all those who need it. The smaller the difference in information received by stakeholders, the better the monitoring carried out by shareholders on the performance of management when operating the company (Purba & Suaryana, 2018).

The emergence of information asymmetry indicates that there is ambiguity in the control of data related to the flow of individual or social transactions. This problem needs to be addressed immediately because it can harm and endanger the continuity of the company. Problems related to information asymmetry also occur in government, such as in policy, legal and judicial processes, including in the management of human resources, costs, natural resources, and so on (Cahyani et al., 2019).

Financial statements present data related to the company's financial condition that can be used as a basis for making appropriate decisions. The financial statements that are already published and accessible to the public will have a huge impact. A company is considered ready and able to overcome problems that arise, if the company can present good financial statements. Financial statements that have high value can be used as a reference in making maximum business decisions. Given the importance of financial statements, company management must present quality financial statements because management is the party authorized by the shareholders (principals) to manage the company (Purba & Suaryana, 2018).

2. THEORITICAL FRAMEWORK AND HYPOTHESIS

Agency Theory

Agency theory shows that there is a relationship between the owner of the company (principal) and management (agent), regulated in an agreement that has been agreed upon. The agreement agreed upon by the company owner (principal) and management (agent) includes the duties and obligations of both parties in terms of managing and supervising the company in accordance with the duties and obligations of each party (Jensen & Meckling, 1976).

Although both parties are bound by an agreement that has been agreed upon, there is always one party trying to optimize individual interests, thus triggering agency problems. Agent usually has the opportunity to hide information about the actual condition of the company without the knowledge of the principal. The agent also has easy access to misappropriate financial reports and deliberately hide key data from the principal (Smulowitz et al., 2019).

Information Asymmetry

According to Rohayati (2020), information asymmetry is a condition where managers have greater access to complete and detailed information about the company's future prospects than external parties. Information asymmetry is often used by subordinates to fulfill their personal needs by providing biased information to superiors (Wardhana & Gayatri, 2018).

Information asymmetry is one of the factors causing earnings management. Information asymmetry influences managers to present incorrect information, especially when the information has a very close relationship with the manager's performance measurement. In addition, the quality of financial reports can also describe the level of earnings management (Rohayati, 2020).

The imbalance of information held by principals and agents will trigger information asymmetry. The principal does not have complete information about the agent's performance. Meanwhile, the agent has more complete information about his own capacity, work environment, and the company as a whole. Therefore, financial statement is necessary for external parties, because they are the most uncertain parties in understanding the actual condition of the company (Korompis et al., 2018). Information asymmetry and uncertainty have a large influence on stock prices. These factors are also related to company performance and industry indices. Meanwhile, macroeconomics has a negative influence on stock prices (Mehrabadi et al., 2021).

According to Scott (2015:22), there are two types of information asymmetry: adverse selection and moral hazard. Adverse selection is a condition where managers (agents), who operate company activities directly, understand the conditions and prospects of the company more than the shareholders (principals), who do not directly participate in operating company activities. The lack of information conveyed by agents to principals will affect investors in making decisions. Moral hazard is an activity performed by managers in carrying out company operations, that is not fully known by investors, both shareholders and creditors. Managers often take actions and make decisions without the knowledge of investors. This indicates that the managers have violated the agreement agreed upon by both parties. They have violated norms or ethics that should be avoided, because it is inappropriate to do so.

Earnings Management

Earnings management is an activity carried out by managers in implementing policies related to the financial performance of an entity or company that misleads stakeholders. Methods for measuring earnings management include the accrual model and the non-accrual model. There are two categories of earnings management: accrual earnings management and real earnings management. Earnings management can be done through selling assets, modifying delivery schedules, slowing down maintenance, cutting advertising costs, and cutting equipment maintenance costs (Muslim & Widyastuti, 2019).

Earnings management is management intervention in the process of external financial reporting with the aim of being able to benefit oneself. Management intervention in the external financial reporting process can be carried out by using the accrual accounting method, changing accounting methods, and applying certain policies. The accrual accounting method is carried out by shifting the cost or income period to the next accounting period, that is by accelerating or delaying research and development expenditures until the next accounting period. Changes in the accounting method are made by changing the accounting method used to record a transaction, that is by changing the method of depreciation of fixed assets from the straight-line method to the declining balance method. The application of a policy can be done through an assessment of accounting estimates, including estimates of bad debts, estimates of insurance costs, and others (Yando & Lubis, 2018).

Accounting Fraud

There are various types of accounting fraud. The most common fraud is committing fraud on behalf of the organization. One example of fraud related to financial reports is that companies make financial reports that appear to be better than actual conditions. In this case, the party that benefits is the executive of the company because the stock price has increased, while the party that is harmed or who becomes a victim of the fraudulent act is the investor. Sometimes executives misinterpret earnings to ensure a larger year-end bonus. Financial statement fraud is often found in companies that experience losses or companies whose profits are lower than expected (Fernando & Sitorus, 2020). Accounting fraud is an act that is carried out intentionally by unfairly and inappropriately utilizing internal resources in presenting facts with the aim of obtaining personal gain (Muna & Haris, 2018).

Budgetary Slack

Budgetary slack is the most common obstacle in the budgeting process that can eliminate the best estimated value from the budget so that it can affect organizational performance (Kusniawati & Lahaya, 2018). Information asymmetry is one of the triggering factors for budgetary slack. This happens when subordinates provide biased information by presenting a budget that looks easier to achieve, giving rise to budgetary slack. There are several factors that influence the difference that is considered as a result of budgetary slack. Factors that trigger budgetary slack are the many parties participating in the budgeting process and biased information conveyed by subordinates. In fact, the budget is used to assess the performance of subordinates. Budgeting is an opportunity for subordinates to participate in the budgeting process in an organization.

Cost of Equity

The cost of equity is the cost incurred by the company for the capital invested by investors. Investors will require the rate of return they want when they invest their capital in a particular company. The emergence of large information asymmetries can affect the high cost of company equity. The lower the information asymmetry caused by the high disclosure of company information to outsiders, the smaller the cost of equity paid by the company (Sukarti & Suwarti, 2018).

This study aims to determine the effect of information asymmetry on earnings management, accounting fraud, budgetary slack, and the cost of equity. This study is based on a literature review of several research articles, related to the research theme from 2017 to 2020, which have been published in national journals.

3. RESEARCH METHOD

The method used in this study is a qualitative method through literature study techniques by finding facts and interpreting them appropriately. The references used in this literature review are articles related to the research theme obtained from Google Scholar and have been published in national journals. These articles are previously conducted studies from 2017-2020 consisting of 21 articles.

This literature review is chosen because this method can describe in more detail and depth based on relevant sources. The results of this literature review can be used for further research in determining variables related to the effect of information asymmetry on other variables. In addition, this literature review provides evidence about the results of previous studies, related to the effect of the independent variable of information asymmetry on other dependent variables. With this literature review, further research is suggested to use other relevant variables that might be influenced by information asymmetry.

4. DATA ANALYSIS AND DISCUSSION

There are differences in the results of previous studies regarding the effect of information asymmetry on earnings management, accounting fraud, budgetary slack, and the cost of equity. The results of the literature review are presented in Appendix 1.

The difference in the results of previous research related to the effect of information asymmetry on earnings management, accounting fraud, budgetary slack, and the cost of equity is an opportunity to conduct further research with the aim of providing deeper insight and explaining the actual results so that it becomes a novelty of knowledge regarding the impact of information asymmetry.

This research has relevance to the importance of financial information disclosure for various parties who need it, such as investors, creditors, the government, and other stakeholders. Moreover, during the current Covid-19 pandemic, many companies had difficulties in carrying out their business activities, and some of them even went bankrupt. Under such conditions fraud is very prone to occur in the preparation of financial statements by providing biased information regarding the condition of the company, resulting in inaccurate decision making by stakeholders.

Technology influences information asymmetry. Increasingly sophisticated technology increases transparency in financial reporting due to easy access to obtain information related to company financial reports. Thus, technology reduces information asymmetry. Regarding the company's obligation to report its financial condition, both mandatory and voluntary reporting, information asymmetry often occurs in the two types of reporting, especially in voluntary reporting which does not require every company to disclose. This allows information to be made in such a way by certain parties to gain profit.

Information asymmetry also influences the government's decision in determining the tax to be charged to companies. Inappropriate financial statements affect the determination of the tax rate to be imposed. This will have an impact on state tax revenues and will directly affect the amount of the state budget.

The use of the bid-ask spread as the proxy in measuring information asymmetry in the articles reviewed has the possibility of biasing the results of this literature review because almost all articles use this proxy. In fact, earnings forecast error is also a proxy that can be used to measure information asymmetry. Research conducted by Sumani et al (2020) analyzed the effect of information asymmetry on dividend policy using two different proxies. The results show that, by using the earnings forecast error proxy, information asymmetry affects dividend policy. Meanwhile, by using the bid-ask spread proxy, information asymmetry has no effect on dividend policy. This explains that the same variable measured using different proxies will have different results.

There are differences in the results of previous studies related to the effect of information asymmetry on earnings management. Of the eight studies, five studies show that information asymmetry has an effect on earnings management, while three other studies show that information asymmetry has no effect on earnings management. These different research results encourage the need to conduct further research on related variables in order to obtain relevant results that can be used as conclusions. The differences in the results of these studies tend to be caused by the use of different indicators. In addition, research methods also influence research results. Research using primary data has different results from research using secondary data.

The results of research conducted by Mulumbot & Sumanti (2020) concerning the effect of information asymmetry (proxied by the bid-ask spread) on earnings management (proxied by modified Jones) show that information asymmetry has a negative and significant effect on earnings management. Meanwhile, the seven studies show varying results, even though all of the studies use the same proxies for both variables. Therefore, the use of proxies in measurement affects the results obtained. The research object also influences the research results. The articles used as references in this study use different research objects, such as manufacturing companies listed on the IDX, automotive sector companies, etc.

This literature review also examines previous studies to find out whether information asymmetry has an effect on accounting fraud. Of the four studies that have been reviewed, all have the same results, information asymmetry has a positive effect on accounting fraud. Research conducted by Irwansyah & Syufriadi (2019) uses the bid-ask spread to measure information asymmetry variable and three statement items obtained from the Association of Certified Fraud Examiners (ACFE) to measure accounting fraud. The results of this study indicate that information asymmetry has a positive effect on accounting fraud. The same results are also found in the research conducted by Korompis et al (2018). In this research, information asymmetry is measured using five indicators: information held by the execu-tive, the relationship between input and output, potential performance, being able to assess potential impact, and achievement in the field of activity. Meanwhile, accounting fraud is measured using five indicators: manipulation, omission of events, application of incorrect accounting principles, misrepresentation of financial statements due to theft, and improper presentation of financial statements. The research shows the same results because it uses almost the same research data.

Another variable examined in this literature review is budgetary slack. This literature review involves six previous studies. Of the six studies, five studies conclude that information asymmetry has a positive effect on budgetary slack, while one study concludes that information asymmetry has no positive effect on budgetary slack. Research conducted by Wardhana & Gayatri (2018) measures the information asymmetry variable using five statements adopted from Eisenhardt (2009). Meanwhile, the budgetary slack variable is measured using five statements adopted from Carreras (2014). All articles reviewed in this literature study use primary data, where the data are obtained by distributing questionnaires to the sample to be researched.

The last variable used in this literature review is the cost of equity. This literature review involves three previous studies. Research conducted Sukarti & Suwarti (2018) uses the bid-ask spread as the proxy for information asymmetry and the dividend growth model approach as the proxy for the variable of the cost of equity. The results of this study indicate that information asymmetry has a negative

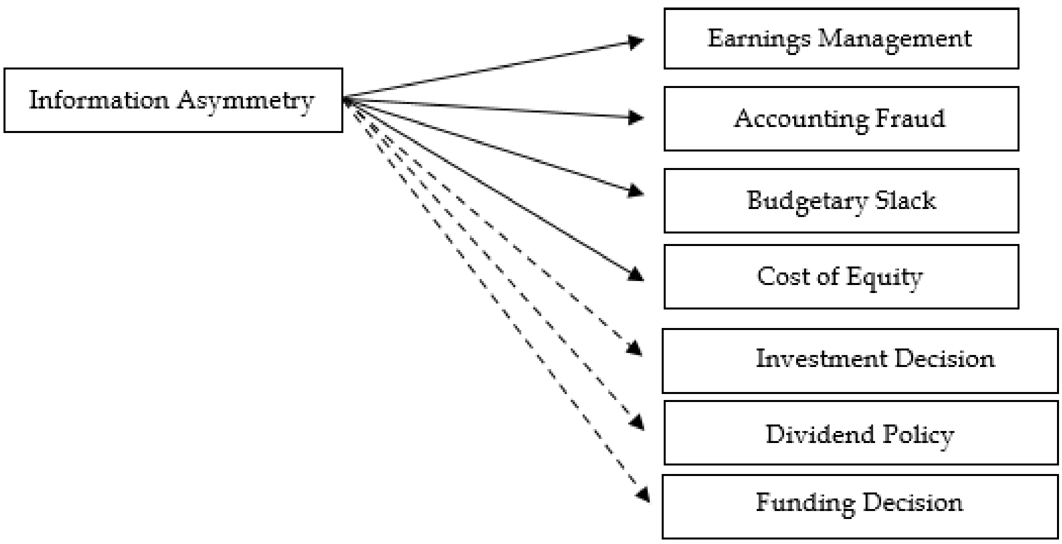

Figure 1
Further Research Ideas

Source: Data Processed

effect on the cost of equity. The results of research conducted by Widyowati (2020) show that information asymmetry has no significant effect on the cost of equity capital. Meanwhile, the results of research conducted by Putra, 2018) show that information asymmetry has a positive and significant effect on the cost of equity.

5. CONCLUSION, IMPLICATION, SUGGESTION AND LIMITATION

Based on the results of a literature review of previous studies from 2017 to 2020, it can be concluded that information asymmetry has a positive effect on earnings management. Of the eight previous studies, five studies conclude that information asymmetry has a positive effect on earnings management, while three other studies conclude that information asymmetry has a negative effect on earnings management.

Information asymmetry has a positive effect on accounting fraud. Of the four previous studies, all of them conclude that information asymmetry has a positive effect on accounting fraud.

Information asymmetry has a positive effect on budgetary slack. Of the six previous studies, five studies conclude that information asymmetry has a positive effect on budgetary slack, while one study concludes that information asymmetry has a negative effect on budgetary slack. So it can be generalized that information asymmetry has a positive effect on budgetary slack.

Information asymmetry has a negative effect on the cost of equity. The results of research conducted by Sukarti & Suwarti (2018) show that information asymmetry has a negative effect on the cost of equity.

The four dependent variables used in this literature study have different results. Earnings management variable is most widely used as the dependent variable. However, the results obtained are not the same due to differences in measurement tools and companies as research objects.

Research on the relationship between information asymmetry and the cost of equity is still rare. Therefore, this is an opportunity for future researchers to use this variable in relation to information asymmetry.

The research implication is that information asymmetry is a variable that is still very feasible to study. This variable is able to influence other variables with different results. Through this research, it can be seen that there are various kinds of dependent variables that can be used in future research.

This research is limited to using the source of the articles reviewed, only from 2017 to 2020. Subsequent research can extend the observation period and add the dependent variables so as to be able to provide better and more in-depth explanations and conclusions. Information asymmetry has an influence on various variables because information is very crucial in all aspects. Inequality of information obtained by someone will cause mistakes in making decisions or policies. Apart from the four dependent variables used in this study, there are several other variables that can be used in further research, such as dividend policy, investment decisions, and funding decisions.

Subsequent research can increase the number of studies that will be used as a literature study with the same variables. This is intended to obtain stronger conclusions and as a comparison material when there are different conclusions.

REFERENCES

Ayuni, N. M. K., & Erawati, N. M. A. (2018). Pengaruh Asimetri Informasi pada Senjangan Anggaran dengan Kejelasan Sasaran Anggaran dan Komitmen Organisasi sebagai Pemoderasi. *E-Jurnal Akuntansi*, *22*, 492. https://doi.org/10.24843/eja.2018.v22.i01.p19.

Cahyani, N. R., Paminto, A., & Nadir, M. (2019). Pengaruh gender, board size, firm size dan volatility terhadap asimetri informasi pada sektor industri dan kimia yang terdaftar di bursa efek indonesia. *Jurnal Manajemen*, *11*(1), 49–55.

Dewi, A. A. I. S., & Budiasih, I. G. A. N. (2019). Pengaruh Asimetri Informasi, Ukuran Perusahaan, dan Employee Stock Ownership Program pada Praktik Manajemen Laba. *E-Jurnal Akuntansi*, *27*, 594. https://doi.org/10.24843/eja.2019.v27.i01.p22.

Diansari, R. E., & Saraswati, M. (2020). Pengaruh Partisipasi Ang-garan, Asimetri Informasi, Penekanan Ang-garan, dan Ambi-guitas Peran Ter-hadap Budgetary Slack (Organisasi Perangkat Daerah Kota Yogtakarta). *Jurnal Akuntansi & Manajemen Akmenika, 17*(2).

Fernando, D., & Sitorus, T. (2020). Internal Audit, Kualitas Pengendalian, Asimetri Informasi, Perilaku Disfungsional Staff Accounting, dan Pengaruhnya Terhadap Kecurangan Akuntansi. *Journal of Business & Applied Management, 13*(2), 147-205.

Fitriana, A. I. (2018). Pengaruh Asimetri Informasi Dan Ukuran Perusahaan Terhadap Manajemen Laba. *Balance Vocation Accounting Journal*, *1*(2), 1. https://doi.org/10.31000/bvaj.v1i2.472.

Fitriana, A. I., & Febrianto, hendra galuh. (2017). Pengaruh Asimetri Informasi Dan Ukuran Perusahaan Terhadap Manajemen Laba (Studi Empiris Perusahaan Consumers Goods Industry Periode 2011 – 2015). *Universitas Muhammadiyah Tangerang*, *1*(2), 1–15.

Irwansyah, I., & Syufriadi, B. (2019). Pengaruh Efektivitas Pengendalian Internal, Kesesuain Kompensasi, Moralitas Manajemen, Ketaatan Aturan Akuntansi, Dan Asimetri Informasi Terhadap Kecenderungan Kecurangan Akuntansi. *Jurnal Akuntansi*, *8*(2), 89–100. https://doi.org/10.33369/j.akuntansi.8.2.89-100.

Jensen, M. C., & Meckling, W. H. (1976). Theory Of The Firm: Managerial Behavior, Agency Costs and Ownership. In *Journal of Financial Economics* 3.

Korompis, S. N., Saerang, D. P. E., & Morasa, J. (2018). Pengaruh Moralitas Individu, Asimetri Informasi, dan Keefektifan Pengendalian Internal Terhadap Kecenderungan Kecurangan (Fraud) Berdasarkan Persepsi Pada Badan Pengelola Keuangan dan Barang Milik Daerah Provinsi Sulawesi Utara. *Jurnal Riset Akuntansi Dan Auditing "Goodwill," 9*(1), 29–36. https://doi.org/10.35800/jjs.v9i1.18950.

Kusniawati, H., & Lahaya, I. A. (2018). Pengaruh Partisipasi Anggaran, Penekanan Anggaran, Asimetri Informasi terhadap Budgetary Slack pada SKPD Kota Samarinda. *Akuntabel*, *14*(2), 144. https://doi.org/10.29264/jakt.v14i2.1904.

Mehrabadi, M. M., Najafizadeh, A., & Ashtiyani, P. G. (2021). Factors Affecting Stock Prices regarding Uncertainty and Asymmetric Information in Tehran Stock Exchange. *Advances in Mathematical Finance & Applications*, *6*(3), 535–554.https://doi.org/10.22034/AMFA.2019.1866542.1214.

Mulumbot, F. J., & Sumanti, E. (2020). the Effect of Information Asimetry and Corporate Governance Mechanism on Earnings Management. *Klabat Accounting Review*, *1*(1), 27–40.

Muna, B. N., & Haris, L. (2018). Pengaruh Pengendalian Internal Dan Asimetri Informasi Terhadap Kecenderungan Kecurangan Akuntansi. *Jurnal Akuntansi, Ekonomi, dan Manajemen Bisnis*, *6*(1), 35–44. https://doi.org/10.30871/jaemb.v6i1.809.

Muslim, A. I., & Widyastuti, T. (2019). Asimetri Informasi Pada Emiten Syariah Dan Dampaknya Terhadap Manajemen Laba. *Jurnal ASET (Akuntansi Riset)*, *11*(2), 279–287. https://doi.org/10.17509/jaset.v11i2.19526.

Palupi, D. G. & Sari, M. M. R. (2020). Pengaruh Partisipasi Anggaran, Komitmen Organisasi, Gaya Kepemimpinan Transformasional, Asimetri Informasi pada Budgetary Slack Hotel Ber-bintang. *E-Jurnal Akuntansi*, 30(9), 2323-2337.

Purba, I. A. C., & Suaryana, I. G. N. A. (2018). Quality of Financial Statements, Asymmetry Information. *Jurnal Ilmiah Akuntansi dan Bisnis*, *13*(1), 42–53.

Putra, Y. P. (2018). Pengaruh Asimetri Informasi Dan Manajemen Labaterhadap Biaya Modal Ekuitas Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia (BEI) Tahun 2013-2015. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*, *6*(1), 13–21. https://doi.org/10.37676/ekombis.v6i1.431.

Naraswari, R. P. A., & Sukartha, I. M. (2019). Pengaruh Asimetri Informasi, Penekanan Anggaran, Komitmen Organisasi dan Ketidakpastian Lingkungan pada Senjangan Anggaran. *E-Jurnal Akuntansi*, *26*, 1660. https://doi.org/10.24843/eja.2019.v26.i02.p30.

Rohayati, E. (2020). Pengaruh Asimetri Informasi dan Ukuran Perusahaan terhadap Manajemen Laba pada Sub Sektor Industri Rokok yang Terdaftar di Bursa Efek Indonesia Periode 2013-2017. *Eksis: Jurnal Ilmiah Ekonomi Dan Bisnis*, *10*(2), 116. https://doi.org/10.33087/eksis.v10i2.173.

Scott, W, R. (2015). *Financial Accounting Theory*". Kanada: Pearson Canada Inc.

Smulowitz, S., Becerra, M., & Mayo, M. (2019). Racial diversity and its asymmetry within and across hierarchical levels: The effects on financial performance. *Human Relations*, *72*(10), 1671–1696. https://doi.org/10.1177/0018726718812602.

Sukarti, & Suwarti, T. (2018). Pengaruh Pengungkapan CSR, Asimetri Informasi, Ukuran Perusaan, Dan Kepemiikan Institusional Terhadap Cost of Equity. *Prosiding SENDI_U*, Hal 692-698.

Sumani, S., Puspitasari, N., & Sari, C. F. (2020). Asymmetric Information dan Dividend Decision pada Perusahaan Asuransi di Indonesia. *BISMA: Jurnal Bisnis dan Manajemen*, *14*(2), 118. https://doi.org/10.19184/bisma.v14i2.12439.

Widyowati, D. D. (2020). Pengaruh Manajemen Laba, Asimetri Informasi, dan Pengungkapan Sukarela terhadap Biaya Modal Ekuitas. *Paradigma*, *17*(2), 69–88. https://doi.org/10.33558/paradigma.v17i2.2316.

Wardhana, W. A. A. G., & Gayatri, G. (2018). Pengaruh Partisipasi Anggaran, Asimetri Informasi, Ketidakpastian Lingkungan, Budaya Organisasi, dan Komitmen Organisasi pada Senjangan Anggaran. *E-Jurnal Akuntansi*, *25*, 2098. https://doi.org/10.24843/eja.2018.v25.i03.p18.

Yando, & Lubis, S. H. (2018). Pengaruh Asimetri Informasi terhadap Praktik Manajemen Laba. *Jurnal Bisnis dan Ekonomi*, *5*(1), 31–47.

Yanti, T. R., & Ery Setiawan, P. (2019). Pengaruh Asimetri Informasi, Ukuran Perusahaan, Leverage dan Profitabilitas pada Manajemen Laba. *E-Jurnal Akuntansi*, *27*, 708. https://doi.org/10.24843/eja.2019.v27.i01.p26.

Appendix 1. Previous Research Results

No	Researcher	Object of Research	Result	Indicator
1.	Rohayati (2020)	The effect of information asymmetry on earnings management	Information asymmetry has a positive and significant effect on earnings management.	Information asymmetry is proxied using the relative bid-ask spread. The earnings management variable is proxied using Modified Jones.
2.	Fernando & Sitorus (2020)	The effect of information asymmetry on accounting fraud	Information asymmetry has a significant effect on accounting fraud.	The variable of information asymmetry variable is measured by providing access to information, information alignment, and information reliability (Hanafi, 2014). The variable of accounting fraud is measured by erroneous statements, concealment of data, and non-material facts (Ali-son, 2006).
3.	Diansari & Saraswati (2020)	The effect of budgetary participation, information asymmetry, suppressed budgets, and role ambiguity on budgetary slack (Regional Apparatus Organization of Yogyakarta City)	Information asymmetry has no effect on budgetary slack.	The variable of information asymmetry is measured by indicators of information owned by agents compared to principals, there is a relationship between input and output, potential performance, technical work, being able to assess potential impacts, and achievement of activities. The variable of budgetary slack is measured by indicators of increased productivity, achieved budgets, monitoring of cut-off costs, budget improvements, efficient budgets, and the causes of not achieving budgets and realization.
4.	Mulumbot & Sumanti (2020)	The effect of information asymmetry on earnings management	Information asymmetry has a negative and significant effect on earnings management.	Information asymmetry is proxied using the relative bid-ask spread (Rahmawati et all, 2006). Meanwhile, earnings management variable is proxied using Modified Jones (Dechow et all, 1995).
5.	Palupi & Sari (2020)	Effect of information asymmetry on budgetary slack in star hotels	Information asymmetry has a positive effect on budgetary slack.	Information asymmetry is measured using indicators: more information held by agents than principals, the relationship between input and output on internal operations, potential performance, technical work, being able to assess potential impact, and success in the field of activity. Meanwhile, budgetary slack is measured using indicators: budget standards, budget implementation, inspection of expenditure budgets, pressure on the budget, budget efficiency, and budget targets.

No	Researcher	Object of Research	Result	Indicator
6.	Widyowati (2020)	The effect of earnings management, information asymmetry, and voluntary disclosure on the cost of equity capital	Information asymmetry has no significant effect on the cost of equity .capital	Information asymmetry uses the relative bid-ask spread as a proxy, while the cost of capital is calculated using a discount rate that is often used by investors in assessing future cash flows.
7.	Irwansyah & Syufriadi (2019)	The effect of information asymmetry on the tendency of accounting fraud	Information asymmetry has a positive effect on the tendency of accounting fraud.	The information asymmetry variable uses the bid-ask spread as a proxy. The variable of accounting fraud tendency is measured using the three statement items obtained from the Association of Certified Fraud Examiners (ACFE).
8.	Muslim & Widyastuti (2019)	The effect of information asymmetry on earnings management	Information asymmetry has no effect on earnings management.	Information asymmetry is calculated using the bid-ask spread model (Venkatesh & Chiang, 1986), while earnings management is proxied by the modified Jones model (Dechow et al., 1995).
9.	Dewi & Budiasih (2019)	The effect of information asymmetry on earnings management	Information asymmetry has no effect on earnings management practices.	Information asymmetry is calculated using the bid-ask spread, while earnings management is calculated using the discretionary accrual (DA) model (Jones 1991).
10.	Naraswari & Sukartha (2019)	Effect of information asymmetry on budgetary slack	Information asymmetry has a positive effect on budgetary slack	The information asymmetry variable is projected using five indicators: information owned by the executive, input-output relationships, potential performance, potential impact, and activity achievement. Meanwhile, budgetary slack is measured using six statements adopted from Mahadewi (2014).
11.	Yanti & Setiawan (2019)	The effect of information asymmetry on earnings management	Information asymmetry has no effect on earnings management.	Information asymmetry is measured by the difference between the ask price and the bid price of shares for one year (Healy, 1999), while earnings management is measured by the Modified Jones Model (1991).
12.	Muna & Haris (2018)	The effect of information asymmetry on the tendency of accounting fraud	Information asymmetry has a positive effect on the tendency of accounting fraud.	Information asymmetry is measured using six statement items based on Scott (2014), while accounting fraud tendencies are measured using three statement items obtained from the Association of Certified Fraud Examiners (ACFE).
13.	Kusniawati & Lahaya (2018)	The effect of information asymmetry on budgetary slack	Information asymmetry has a positive and insignificant effect on budgetary slack	Information asymmetry is proxied by the indicators developed by Asak (2014:114), while budgetary slack is proxied by the indicators developed by Afebriano (2013:13).

No	Researcher	Object of Research	Result	Indicator
14.	Ayuni & Erawati (2018)	Effect of information asymmetry on budgetary slack	Information asymmetry has a positive effect on budgetary slack,	Information asymmetry is calculated using indicators developed by Dunk (1993), while budgetary slack is calculated using six statements adopted from Mahadewi (2014).
15.	Korompis et al (2018)	The effect of information asymmetry on the tendency of fraud	Information asymmetry variable has a positive and significant effect on the tendency of fraud.	Information asymmetry is measured using five indicators: information held by the executive, the relationship between input and output, potential performance, being able to assess potential impact, and achievement in the field of activity. Meanwhile, the tendency to fraud is measured using five indicators: manipulation, omission of events, application of incorrect accounting principles, misrepresentation of financial statements due to theft, and improper presentation of financial statements.
16.	Yando & Lubis (2018)	The effect of information asymmetry on earnings management practices	Information asymmetry has a positive effect on earnings management practices.	Information asymmetry is calculated using the bid-ask spread, while earnings management is calculated using discretionary accruals (DAC) and the Modified Jones Model.
17.	Fitriana (2018)	The effect of information asymmetry on earnings management	Information asymmetry has a positive effect on earnings management.	Information asymmetry is calculated using the bid-ask spread, while earnings management is calculated using the Friedlan model (Friedlan, 1994) through discretionary accruals (DAC).
18.	Sukarti & Suwarti (2018)	The effect of information asymmetry on the cost of equity	Information asymmetry has a negative effect on the cost of equity.	Information asymmetry is proxied by the bid-ask spread, while the cost of equity is proxied by the dividend growth model approach.
19.	Wardhana & Gayatri (2018)	Effect of information asymmetry on budgetary slack	Information asymmetry has a positive effect on budgetary slack.	Information asymmetry is proxied by five questions adopted from Eisenhardt (2009), while budgetary slack is proxied by five questions adopted from Carreras (2014).
20.	Putra (2018)	The effect of information asymmetry and earnings management on the cost of equity capital in manufacturing companies	Information asymmetry has a positive and significant effect on the cost of equity.	Information asymmetry is measured using the bid-ask spread theory model, while the cost of equity is calculated using the residual income model, which is better known as the Edward Bell Ohlson Valuation.
21.	Fitriana & Febrianto (2017)	The effect of information asymmetry on earnings management	Information asymmetry has a positive and significant effect on earnings management.	Information asymmetry is proxied by the bid-ask spread, while earnings management is calculated using Eckel's (1981) model. In this case, Eckel uses the absolute value of the Coefficient Variation (CV).

Source: Data Processed