

Risk Relevance of Comprehensive Income in Indonesia: The Role of Corporate Social Responsibility, Good Corporate Governance, Tax Avoidance

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Abstract

This study aims to investigate the effect of comprehensive income volatility on idiosyncratic risk and the moderating role of corporate social responsibility disclosure, good corporate governance disclosure, and tax avoidance on this effect. The analysis includes 99 manufacturing companies listed on the Indonesia Stock Exchange from 2016 to 2020. Through purposive sampling, this study obtained 495 observations. To test each hypothesis, this study employs multiple linear regression. Our findings suggest that comprehensive income volatility positively affects idiosyncratic risk. Furthermore, neither corporate social responsibility, corporate governance, nor tax avoidance can moderate the effect of comprehensive income volatility on idiosyncratic risk. This study provides evidence that investors price comprehensive income volatility as an accounting measure of risk into the stock price. This study also demonstrates that the current practice of corporate social responsibility disclosure and good corporate governance fail to dispel investors' concern over volatile comprehensive income. Meanwhile, tax avoidance does not affect investors' perception of risk arising from volatile comprehensive income.

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INTRODUCTION

The volatility of stock returns is related to increasing idiosyncratic volatility (Campbell et al., 2001). Morck et al. (2000) previously revealed that idiosyncratic risk increases against systematic risk over time. Schneller (1975) suggested that long-term investors should not ignore idiosyncratic risk. According to the capital assets pricing model, idiosyncratic risk or unsystematic risk is a risk that is influenced by unique or specific factors endogenous to a particular asset. These specific factors can be corporate policies, operations, and financial performance. Unsystematic risk describes the movement of an investment value component independent from the market (Hotvedt & Tedder, 1978). Therefore, idiosyncratic risk can be minimized through a well-diversified portfolio, where the stock price movement reflects changes in risk composition.

Investors employ accounting measures of risk as a strategy to select stocks and build a more risk-neutral portfolio. Accounting data give the notion of certain occurrences that determine the variability of risk among securities and that such occurrences are reflected in the market prices of securities as well (Beaver et al., 1970). The semi-strong efficient market suggests that the stock price continuously adjusts to all publicly available information (Fama, 1970). Changes in a company's stock price are influenced by specific information on the company (Roll, 1998). This depicts the power of accounting information currently available to investors to partially alter stock price formation. Since investors purchase future earnings based on present performance, they are also likely to be sensitive toward accounting performance. Accounting performance signals the company's future outlook.

One of the parameters of accounting performance is comprehensive income. It depicts the company's ability to generate earnings attributable to shareholders. The movement of earnings is directly proportional to the movement of stock returns (Dechow, 1994). In identifying and analyzing investment opportunities, investors use earnings indicators (Bushman and Smith, 2003). Comprehensive income is the sum of net income in the income statement and unrealized gains and losses in other comprehensive income (Zulch and Pronobis, 2010). The concept of comprehensive income differs from the most traditional concept of net income (Hirst & Hopkins, 1998).

Furthermore, according to Kanagaretnam et al. (2009), comprehensive income in aggregate has a greater influence on stock prices and return on investment than net income. Khan and Bradbury (2014; 2016) revealed that the volatility of comprehensive income drives the perception of increased corporate risk. Improper policies related to the company's internal and external activities may expose the company to greater risk (Firmansyah et al., 2020a).

This study investigates the effect of comprehensive income volatility on idiosyncratic risk. This study has several differences from previous studies. An earlier study by Firmansyah et al. (2020a) employed data of non-financial companies with derivative instruments, while this study uses manufacturing companies. This study also follows one of the future researches suggested by Firmansyah et al. (2020a), namely the use of corporate governance (GCG) as a moderating variable in the relationship between comprehensive income volatility and idiosyncratic risk. Additionally, this study incorporates corporate social responsibility disclosure (CSR disclosure) and tax avoidance in the context of risk relevance that previous studies have never undertaken. Furthermore, in some earlier studies, information regarding the volatility of comprehensive income components was analyzed in an annual time series data, while this study employs panel data regression.

The stakeholder theory views CSR disclosure as a means to address stakeholders' concerns. According to stakeholder theory, a company is not an entity that operates only for individual interests but must also benefit all stakeholder groups (Ghazali and Chariri, 2007). Disclosures should be tailored to meet the information needs of stakeholders. These disclosures aim to assist management in enhancing value creation. Management's disclosure of corporate social responsibility demonstrates the company's commitment to better meet stakeholders' expectations regarding corporate ethics in social and environmental issues. Proper execution of Corporate Social Responsibility can help reduce company risk (Richardson et al., 1999). According to Jo and Na (2012), corporate social responsibility can reduce

information asymmetry between stakeholders. Hockerts (2015) found that companies that can increase their corporate social responsibility activities will reduce idiosyncratic risk. Tzouvanas et al. (2020) also suggested that environmental disclosure could reduce idiosyncratic risk.

Good corporate governance (GCG) acts as a control toward exercising management power and authority in providing accountability to stakeholders. Corporate governance is the relationship between the company and stakeholder groups that determine and control the strategic direction and performance of the company (Luo, 2005). Disclosure of good corporate governance can help meet stakeholders' demand for transparency. According to Immanuel (2013), good corporate governance reduces idiosyncratic risk. The decrease in idiosyncratic risk is also seen in companies that have elements of good corporate governance, such as the proportion of managerial ownership (Himmelberg et al., 1999), the proportion of independent directors and committees (Lin et al., 2010), and CEO-managerial power (Tan and Liu, 2016).

Tax avoidance activity is unethical and perceived negatively by groups of stakeholders. Tax evasion goes against the state's interests and can risk the company. Negative responses can also come from high public pressure, for example, against companies that are revealed to have several subsidiaries established in tax haven countries for the sole purpose of avoiding taxes and not having meaningful business operations (Dyreng, Hoopes, and Wilde, 2016). Martinez and Martins (2019) revealed that higher tax aggressiveness led to higher idiosyncratic risk, which reflects the dispersion of probable returns due to tax deferral practices and risks related to taxes. Additionally, Chaudhry (2019) found that decreased effective tax rates increased idiosyncratic risk.

This study employs company size, profitability, and financial leverage as control variables to ensure unbiased results. These control variables have been proven to affect idiosyncratic risk in previous studies significantly. Company size is significantly related to market-based risk (Beaver et al., 1970; Papadamou & Tzivinikos, 2012; Salkeld, 2011). Larger companies have more capabilities and resources to manage corporate risk. Meanwhile, companies with higher profitability are considered to have safer future cash flows (Cohen, 2012; Chang et al., 2015; Chen et al., 2018; Tzouvanas et al., 2020). On the other hand, financial leverage is closely related to companies experiencing financial distress, where higher leverage positively affects idiosyncratic risk (Rajgopal and Venkatachalam, 2011). Companies with large amounts of debt are considered to pose a potentially higher risk of default than those with less debt.

This study finds that comprehensive income volatility positively affects idiosyncratic risk. Furthermore, neither corporate social responsibility, corporate governance, nor tax avoidance can moderate the effect of comprehensive income volatility on idiosyncratic risk. This study provides evidence that investors price comprehensive income volatility as an accounting measure of risk into the stock price. This study also demonstrates that the current practice of corporate social responsibility disclosure and good corporate governance cannot dispel investors' concern over volatile comprehensive income. Meanwhile, tax avoidance does not affect investors' perception of risk arising from volatile comprehensive income.

LITERATURE REVIEW

The Efficient Market Hypothesis

Fama (1970) revealed that the main role of the capital market is the allocation of economic capital ownership. In general, the ideal market is a market where prices provide accurate signals for resource allocation, i.e., a market in which companies can make investment-production decisions and investors can choose securities that represent the company's activities, assuming that security prices fully reflect all available information. A market that reflects all available information is called an efficient market. Efficient markets assume that there are no transaction costs in trading securities, all information is freely available to all parties involved, and there is agreement on the implications of all current information for the current price and distribution of the future prices of each security. This assumption implies that stock prices reflected all the information available when the shares were issued in an efficient market. In practice, an efficient market is difficult to achieve. This condition occurs because investors find it difficult

to obtain all available information, and not all information is available without incurring certain costs. Investors have less information than management, such as business strategies and company operations, that are not fully disclosed in the financial statements. Additionally, investors bear an incurred transaction cost in stock trading. Thus the stock prices are biased and fail to reflect the impact of all available information timely. As a result, a miscalculation occurs in determining the expected return rate, leading to distorted investment decisions.

Kothari (2001) states that the capital market can be considered efficient if all information reaches stakeholders, including investors, managers, standard setters, and other users of financial reports. According to Merton (1987), investors cannot optimally follow and obtain information from all securities in the capital market. As one of the information provided by the company to the public, accounting information can reflect the company's condition in the market in the form of stock prices, stock returns, and company risk. Investors will use accounting information in assessing the company in general. Investors can respond to accounting information accordingly to affect changes in the company's stock price.

The Agency Theory

Jensen and Meckling developed agency theory in 1976. Jensen and Meckling (1976) revealed that the agency relationship arises when there is a contract in which one party called the principal (principal) binds himself with another party called the agent (agent) to perform some services on behalf of the principal. The principal is a shareholder or creditor who delegates authority and responsibility in making company business decisions to the company's management as an agent under an agreed-upon contract. Both shareholders and management are utility maximizers, so the belief that management as an agent will always act in the best interests of principals is subject to doubt (Godfrey et al., 2010). According to Meisser et al. (2006), the agency relationship causes two problems. First, there is information asymmetry, where company management generally has more information about the entity's financial and operating position than shareholders. Second, an agency problem is caused by a conflict of interests between the principal and the agent.

Jensen and Meckling (1976) explain several agency costs, i.e., monitoring, guarantee, and residual losses. The monitoring expenditure by the principal is the cost of supervision incurred to monitor managers by measuring, observing, and controlling the behavior of managers. Guarantee costs (the bonding costs) are incurred to align managers' decisions with the interests of shareholders. Finally, the residual loss is a loss that arises even though counter-measures have been carried out. Information asymmetry and conflicts of interest may lead to porous corporate policies that threaten the company's profitability and going concerned. Therefore, managers' opportunism can be detrimental to the company. Management can also determine which information to release and withhold, which further decreases financial reports' quality. This situation can occur for several reasons, such as the manager's desire to influence public perceptions in the capital market or the desire to increase management compensation.

The Stakeholder Theory

Dewi and Pitriyari (2019) stated that the stakeholder theory extends organizational responsibility to all stakeholders, not limited to shareholders and economic perspectives. According to Ghazali and Chariri (2007), the stakeholder theory suggests that companies benefit all stakeholders. The stakeholder theory aims to assist company management in increasing value creation while minimizing losses for stakeholders. The company's stakeholders consist of shareholders, creditors, consumers, suppliers, government, society, analysts, and other parties. Companies must maintain relationships with stakeholders by accommodating their existing demands, especially influential stakeholders who have power over the resources necessary for their operations. Therefore, the continuity of an organization depends on the ability to maintain stakeholders' support. The fulfillment of stakeholder expectations will impact the company's operations and disclosure policies (Deegan, 2007). Company management must consider stakeholders' need for information in preparing company reports.

In its development, stakeholders expect that the company implement policies that are more ethical, transparent, and in line with stakeholders' demands. To address these demands, a communication line can be established by disclosing corporate social responsibility and good corporate governance undertaken by the company. CSR disclosure emphasizes corporate ethics, as well as social and environmental issues. Meanwhile, the disclosure of GCG reflects transparency and accountability. More sound business practices should further help to lower stakeholders' concerns over detrimental business practices such as engaging in tax avoidance. Tax avoidance is considered a hostile act against the state's interest, thus potentially exposing the company to greater risk.

Hypothesis Development

The comprehensive income volatility depicts the rise and fall of profits generated by the company (Bathala et al., 1994) and is a proxy for business risk. Comprehensive income is the sum of net income in the income statement and unrealized annual gains and losses recognized in other comprehensive income/OCI (Zulch and Pronobis, 2010). Other comprehensive income is the aggregate costs, profits, income, and losses excluded from net income. Components required or allowed in other comprehensive income include unrealized investment gains and losses on certain securities, namely available-for-sale securities, unrealized gains and losses from derivative instruments used for hedging cash flows, profits and losses related to post-employment benefits (pension), foreign currency translation adjustments in foreign subsidiaries, and PPE (property, plant, and equipment) revaluation.

In adopting International Accounting Standard (IAS) No. 1, the Institute of Indonesia Chartered Accountants (IAI) stated that the components of a complete financial statement include income statement and other comprehensive income for a certain period. The concept of comprehensive income has previously received strong criticism from various parties, especially financial statement makers. The criticism of comprehensive income is related to the risk of higher volatility, especially during the crisis period (Glaserova, 2012). This concept contradicts the traditional net income (Hirst & Hopkins, 1998). The higher volatility arising from the transitory component can create a perception of increased corporate risk and impact the stock prices. Shareholders or investors may assume that higher comprehensive income volatility indicates a higher company risk.

On the other hand, comprehensive income is closely related to fluctuations in exchange rates and stock prices compared to traditional net income. Therefore, comprehensive income is considered closer to market realities. (Arimany Serrat et al., 2011; Kanagaretnam et al., 2009). Maines and McDaniel (2000) mention that comprehensive income is a significant consideration for non-professional investors. Based on the description above, the volatility of comprehensive income can be defined as fluctuations in the company's income which can indicate income instability from the company's normal operating activities and outside the company's normal activities that can occur due to management decisions or changes in company policies including accounting policies so that it is considered a proxy for business risk. Income volatility is an important factor because it can affect risk perception. Ryan (1997) states that earnings variability is an accounting variable with a strong relationship with equity risk.

Investors will consider the company's internal risks in making investment decisions. Volatile comprehensive income signals an uncertain future outlook for the company. It depicts the company's shortcomings in profitability. Hodder et al. (2006), Khan and Bradbury (2014), and Lucchese et al. (2020) argued that the volatility of comprehensive income has a positive correlation with firm risk. Investors may presume that higher volatility of comprehensive income indicates a higher internal risk. Thus, our hypothesis is as follow:

H₁: Comprehensive income volatility positively affects idiosyncratic risk.

According to Carroll (1979), social responsibility includes economic, legal, ethical, and policy expectations from society towards the organization at a certain period. The World Business Council for Sustainable Development stated that Corporate Social Responsibility is a continuous commitment to behave ethically and contribute to economic development, employees' quality of life, and society. CSR disclosure can be used as an evaluation tool for company performance and can be considered as an

accountability practice (Gunawan & Hermawan, 2012). Deegan (2014) argued that CSR disclosure is a tool that organizations and companies can use to implement accountability broadly, which refers to delivering accountability for the corporation's benefit. Therefore, CSR disclosure can be viewed as a means to address several concerns of stakeholders over the company's business practices and depicts companies' continuous commitment to behave ethically, responsibly, transparent, and accountable. CSR disclosure is expected to reduce information asymmetry between company management and stakeholders by increasing the quality and amount of information available to the public.

More effective communication due to lower information asymmetry further restricts the potential for managerial opportunism and builds stakeholder trust (Pérez, 2015). It can also help prevent companies from engaging in damaging and costly practices that contribute to earnings declines, contingent liability, and additional expenditures. Koh et al. (2014) found that companies engaging in CSR disclosure are less likely to face lawsuits. It can also help to improve governance quality within the company. Schuler and Cording (2006) claimed that CSR engagement helps companies appeal more to customers, increasing sales. Guenster et al. (2011) confirmed that good CSR performance attracts investments. Not only does the fulfillment of CSR exert positive effects on operating and financial performance, but it further lowers operational costs, creates new business models, increases management efficiency, and increases research and development (R&D) budgets as well as opportunities for growth in the future (Porter and Kramer, 2006; Chen et al., 2013). CSR disclosure helps to improve companies' future outlook and lowers investors' perception of risk. Thus, our hypothesis is as follow:

H₂: Corporate social responsibility disclosure weakens the positive effect of comprehensive income volatility on idiosyncratic risk

Good corporate governance is the principle that directs and controls the company to achieve a balance between the strength and authority of the company in providing accountability to all stakeholders, especially to shareholders (Cadbury, 1992). Corporate governance is the relationship between the company and the stakeholders that determine and control the strategic direction and performance of the company (Luo, 2005). According to the OECD (2004), the principles of corporate governance cover six areas, namely the legal basis needed to ensure effective implementation of corporate governance, shareholder rights and the main functions of corporate ownership, fair treatment of shareholders, the role of stakeholders in corporate governance, transparent disclosure of company information and the responsibility of the board of directors.

According to Ethical Investment Research Services (EIRIS), corporate governance establishes a set of relationships between companies' management, board of directors, shareholders, and other stakeholders. Corporate governance is the entire process of directors and auditors managing their responsibilities to shareholders and company stakeholders. Good corporate governance can increase shareholders' confidence in the expected return on investment. The stakeholder theory suggests that wider scrutiny from various stakeholders can be involved through GCG disclosures. More intense scrutiny further restricts managers' transgression and opportunism and allows for timely corrective actions toward the company's shortcomings. Thus, good corporate governance may also help dispel investors' concerns over uncertainties arising from information risk.

GCG disclosure allows companies to trust key stakeholders, especially investors, due to less information asymmetry and more sound business practices. Companies' effort to reduce information asymmetry is also highly valued by investors, whereas companies with sound corporate governance in emerging markets tend to display higher market valuation and profitability (Khanna and Palepu, 2000; Patel et al., 2002). Especially in emerging markets, investors would be willing to pay more for companies that use effective corporate governance structures and provide valid accounting disclosures (Chen et al., 2009). Companies with better corporate governance experience lower idiosyncratic risk (Lin et al., 2016). Thus, our hypothesis is as follow:

H₃: Good corporate governance weakens the positive effect of comprehensive income volatility on idiosyncratic risk

According to Kirchler, Maciejovsky, and Schneider (2003), tax evasion is carried out by taxpayers to reduce tax payments by taking advantage of loopholes found in tax regulations. Desai and Dharmapala (2009) reveal that tax avoidance can traditionally be described as a transfer of value from the state to shareholders. Taxpayer tailors their accounting methods and policies to reduce reported profits or taxable income so that the company's tax liability shrink. Rego (2013) states that taxpayers apply tax avoidance to reduce tax payments in legal tax planning. However, tax avoidance may also increase uncertainties of future expenditures (Blouin, 2014), which potentially lowers the return expected from the company's future cash flow. Tax avoidance increases the opportunity for tax audits that behest legal consequences on the underpayment of taxes (Carolina et al., 2019). As a result, companies might be exposed to fines, litigation costs, and contingent liabilities. Guenther et al. (2017), Carolina et al. (2019), and Hutchens et al. (2020) found that tax avoidance escalates the company's total risk. Chaudhry (2019) added that decreasing effective tax rates increases idiosyncratic risk. Therefore, instead of benefitting from tax savings, tax avoidance potentially exposes investors to risk arising from the uncertainties of future expenditures. Higher intensity of tax avoidance may generate an additional risk that risk-averse investors try to minimize. Thus, our hypothesis is as follow:

H4: Tax Avoidance strengthens the positive effect of comprehensive income volatility on idiosyncratic risk.

METHODS

The samples in this study were obtained from the data of manufacturing companies listed in the Indonesia Stock Exchange (IDX) covering the period of 2016-2020. The initial point of observation is 2016, following the enactment of the newest regulation of annual reports (see., Regulation of the Financial Services Authority of Indonesia No. 29/POJK.04/2016 on Annual Report of Issuer or Public Company) 2020 was the last reporting period available. This study employs financial reports and annual reports obtained from the IDX website (www.idx.co.id) and IDN Financials website (www.idnfinancials.com) to estimate comprehensive income volatility and tax avoidance to measure the level of CSR and GCG disclosure. To estimate idiosyncratic risk, this study uses historical stock price data retrieved from www.finance.yahoo.com. This study obtained 450 observations through purposive sampling, as shown in Table 1.

Table 1. Research Sample

Criteria	Amount
All manufacturing companies listed on IDX as of July 31 st , 2021	195
Manufacturing companies listed after January 1 st , 2012	(70)
Companies with incomplete data	(17)
Companies with dormant stocks for at least one whole year during the 2016-2020 period.	(9)
The total number of qualified companies	99
Observation period (years)	5
Number of observations	495

Source: Processed

The dependent variable in this study is the idiosyncratic risk (IdioVol) as measured using the Fama-French's (1993) Three-Factor Model (IdioVolFF) in the main regression test and the market model (IdioVolMM) in the sensitivity test to compare the robustness of both models based on the significance of their statistical results. Referring to Liu et al. (2014) and Kumari et al. (2017). Fama and French (1993) introduced a three-factor model that places risk as a stock's sensitivity to three factors, namely market risk premium/beta CAPM ($R_{mt} - R_{ft}$), asset size factor that is measured from portfolio returns that reflect the relative return of small versus big firm portfolio (SMB), and the risk factor of book-to-market-equity ratio

as measured by portfolio returns that reflect the relative return of high versus low book value to market value equity ratio (HML). The SMB portfolio is divided into 2 groups based on the previous year's market capitalization. The HML portfolio is divided into 3 groups using the previous year's book to market equity ratio, i.e., high, medium, and low. This model has been employed previously by Chang et al., 2015; Datta et al., 2017; Hsieh et al., 2018; Firmansyah et al., 2020b; Wang et al., 2020)

$$R_t - R_{ft} = \beta_0 + \beta_1(R_{mt} - R_{ft}) + \beta_2SMB_t + \beta_3HML_t + \varepsilon_{it}$$

The market model is the regression of stock returns against market returns. This model has been employed previously by Mitra, 2016; Cerqueira and Pereira, 2018; Nguyen et al., 2019; Firmansyah et al., 2020a. Following Firmansyah et al. (2020a), the annualized idiosyncratic risk is estimated as the standard deviation of the monthly residual from the regression equation below. According to Kaplan (2013), the standard deviation of daily, weekly, monthly, or quarterly stock return data can be annualized by multiplying it with the square root of the number of days, weeks, months, and quarters period so that it can transform into an estimate of annual volatility (Finance Train, n.d.). Therefore, to obtain annual idiosyncratic risk, this research multiplies the standard deviation of the monthly residuals generated from the following equation with $\sqrt{12}$.

$$R_{it} = \beta_0 + \beta_1 R_{mt} + \varepsilon_{it}$$

Where $R_{i,t}$ is the company's monthly stock return, R_{mt} is the monthly stock return from the Composite Stock Price Index (CSPI), and $\varepsilon_{i,t}$ is the residual of the equation.

The independent variable in this study is comprehensive income volatility. According to Anggraita et al. (2020), comprehensive income volatility is measured using the quarterly report component for a year divided by the market value of equity at the beginning of the current period. The volatility of components in one year is calculated from the standard deviation of comprehensive income generated every three months divided by the market value of equity at the beginning of the current period and multiplied by $\sqrt{4}$. This proxy has been employed previously by Anggraita et al. (2020), Black (2014), Khan and Bradbury (2014; 2016), and Lucchese et al. (2020).

$$CIVOL_t = \sqrt{\frac{\sum_{t=1}^4 \left(\frac{CI_t}{MVE_{t-1}} - \frac{\sum_{t=1}^4 CI_t / MVE_{t-1}}{4} \right)^2}{3}} \times \sqrt{4}$$

where, $CIVOL_{it}$ is the comprehensive income volatility of firm i in period t , CI_{it} is comprehensive income of firm i in period t , and MVE_{it-1} is market value of equity of firm i in period t .

The first moderating variable in this study is CSR disclosure, which is scored against the GRI Standards 2016 as the parameter of disclosure, consistent with the initial point of observation. The GRI Standards 2016 consists of 77 specific disclosures categorized into economics, environment, and social topics. Firstly, this research identifies and analyzes every item of disclosure found in the annual and sustainability report. Then, to measure the quality of CSR disclosure, following Lee (2015) and Firmansyah and Estutik (2020), this research employs a predetermined scale in Table 2 to score each disclosure.

Table 2. Predetermined Scoring Scale of CSR Disclosure

Scale	Description
0	No disclosure: absence of discussion on the issue
1	Narrow coverage: few details or briefly stated
2	Descriptive: Proven impact of the company or its policies
3	Quantitative: the impact of the company or its policies was well elaborated in monetary terms or actual physical quantities, and the performance measuring technique is presented.
4	Truly extraordinary: Consistent disclosure of positive and negative CSR activities through the website and printed report, with comparison against best practice.

This study then accumulates the score from each disclosure for every sample company. To arrive at a disclosure index, the following model is employed:

$$CSRDI_{i,t} = \frac{\sum n_{i,t}}{k_{i,t}}$$

Where $CSRDI_{i,t}$ is CSR disclosure index, $\sum n_{i,t}$ is aggregate score of disclosure, and $k_{i,t}$ is total item of disclosure under GRI standards 2016.

The second moderating variable in this study is corporate governance disclosure referring to the research of Putri et al. (2020), using the index published by the Financial Services Authority Circular Letter No. 32/SEOJK.04/2015 of 2015. This regulation provides guidelines for the governance of public companies listed on the IDX. These guidelines extend to all corporate sectors, including all manufacturing companies listed on the IDX.

$$GCGit = \frac{\sum Xit}{\sum nit}$$

Where GCGit is good corporate governance index of firm i in period t, $\sum Xit$ is the number of GCG indicator items disclosed of firm i in period t, and $\sum nit$ is number of GCG indicator items that should be disclosed.

The last moderating variable in this study is tax avoidance as measured by cash effective tax rate (CETR). CETR reflects the ratio of taxes paid per rupiah of income received (Cheng et al., 2012). The measurement of CETR in this study follows the research conducted by Guenther et al. (2017), which is calculated cumulatively for 5 years, namely from the current year (t) to the previous 4 years (t-4).

$$CETR_{it} = \frac{\sum_{t=1}^n \text{Cash Tax Paid}_{it}}{\sum_{t=1}^n \text{Pretax Income}_{it}}$$

where, $CETR_{it}$ is the cash ETR of the company i in year t is measured over 5 years, $\text{Cash Tax Paid}_{it}$ is cash payments for corporate tax i in year t measured over 5 years, and $\text{Pretax Income}_{it}$ is income before tax of company i in year t measured for 5 years.

To test each hypothesis, the following regression model was employed in the main model:

Model 1 (to test hypothesis 1)

$$IdioVolFF_{it} = \beta_0 + \beta_1 CIVol_{it} + \beta_2 SIZE_{it} + \beta_3 ROA_{it} + \beta_4 LEV_{it} + \varepsilon_{it}$$

Model 2 (to test hypothesis 2, 3, and 4)

$$IdioVolFF_{it} = \beta_0 + \beta_1 CIVol_{it} + \beta_2 CSRDI_{it} + \beta_3 CIVol_{it} * CSRDI_{it} + \beta_4 GCG_{it} + \beta_5 CIVol_{it} * GCG_{it} + \beta_6 CETR_{it} + \beta_7 CIVol_{it} * CETR_{it} + \beta_8 SIZE_{it} + \beta_9 ROA_{it} + \beta_{10} LEV_{it} + \varepsilon_{it}$$

To test the robustness of the research model, a sensitivity test was conducted by substituting Fama and French's (1993) three-factor model with the market model in estimating the idiosyncratic risk as follow:

Model 3 (to test the robustness of hypothesis 1)

$$IdioVolMM_{it} = \beta_0 + \beta_1 CIVol_{it} + \beta_2 SIZE_{it} + \beta_3 ROA_{it} + \beta_4 LEV_{it} + \varepsilon_{it}$$

Model 4 (to test the robustness of hypothesis 2, 3, 4)

$$IdioVolMM_{it} = \beta_0 + \beta_1 CIVol_{it} + \beta_2 CSRDI_{it} + \beta_3 CIVol_{it} * CSRDI_{it} + \beta_4 GCG_{it} + \beta_5 CIVol_{it} * GCG_{it} + \beta_6 CETR_{it} + \beta_7 CIVol_{it} * CETR_{it} + \beta_8 SIZE_{it} + \beta_9 ROA_{it} + \beta_{10} LEV_{it} + \varepsilon_{it}$$

DATA ANALYSIS AND RESULTS

Table 3. Descriptive Statistics

Var	Obs	Mean	Std. Dev	Min.	Max
IDIOVOLFF	495	0.3668	0.3148	0.0382	2.6578
IDIOVOLMM	495	0.4183	0.3707	0.0427	2.9557
CIVOL	495	0.1774	0.8577	0.0000	16.8014
CSRDI	495	0.4796	0.3912	0.0779	2.6233

GCG	495	0.5943	0.1873	0.3200	1.0000
CETR	495	0.2873	0.2786	0.0000	1.0000
LEV	495	0.5137	0.5090	0.0264	5.1677
SIZE	495	28.8442	1.6465	25.6404	33.4945
ROA	495	0.0448	0.1139	-1.0498	0.9209

Source: Processed

Table 4. Hypothesis Test Results of the Main Model

Main Model (IDIOVOLFF)							
Var	Exp. Sign	Model 1			Model 2		
		Coef	t-Stat	Prob	Coef	t-Stat	Prob
CIVOL	+	0.082	6.138	0.000*	-0.195	-0.821	0.206
SIZE		0.083	2.304	0,001	-0.004	-0.301	0.354
ROA		0.063	0.625	0,217	0.055	0.396	0.417
LEV		0.089	1.457	0,099	0.018	0.470	0.312
CSRDI	-				0.083	1.520	0.065
CIVOL*CSRDI					0.074	0.404	0.343
GCG					-0.465	-4.230	0.000
CIVOL*GCG					0.504	1.107	0,134
CETR	-				-0.105	-1.855	0,032
CIVOL*CETR					-0.061	-0.344	0,365
R-Squared		0.6145				0.0877	
Adj.R-Squared		0.5143				0.0689	
F-Statistic		6.1285				4.6558	
Prob. (F-Statistic)		0.0000				0.0000	

Source: Processed

Table 5. Sensitivity Test Result

Sensitivity Test (IDIOVOLMM)							
Var	Exp. Sign	Model 3			Model 4		
		Coef	t-Stat	Prob	Coef	t-Stat	Prob
CIVOL	+	0.097	5.493	0.000*	-0.447	-1.600	0.055
SIZE		0.108	2.638	0.000	-0.028	-0.374	0.354
ROA		0.050	0.433	0.287	0.003	0.211	0.417
LEV		0.126	1.612	0.052	0.020	0.490	0.312
CSRDI	-				0.116	1.835	0,035
CIVOL*CSRDI					0.114	0.533	0.297
GCG					-0.567	-4.426	0.000
CIVOL*GCG					1.004	1.875	0,031
CETR	-				-0.121	-1.815	0,035
CIVOL*CETR					-0.037	-0.174	0.431
R-Squared		0.6244				0.0900	
Adj.R-Squared		0.5267				0.0712	
F-Statistic		6.3915				4.7901	
Prob.(F-Statistic)		0.0000				0.0000	

Source: Processed

As shown in Table 3, the average degree of IdioVol in the sample companies over the observed period is around 36.68% (IdioVolFF) and 41.83% (IdioVolMM), with the market model generating slightly higher estimates than the Fama-French's (1993) three-factor model. The minimum value is

recorded at 0.038 (IdioVolFF) and 0.043 (IdioVolMM), confirming that none of the sample companies is free of idiosyncratic risk. The mean of CIVol is -0.18, which shows that, on average, the sample companies experience moderate-to-low fluctuation of comprehensive income. The mean of CSRDI is 0.48 (out of a maximum value of 4), which shows that the average sample companies can only fulfill 12% of all disclosures required by GRI Standards 2016. The mean of GCG is 0.59, which indicates that, on average, the sample companies has undertaken 59% of all parameter of good corporate governance. The mean of CETR is 29% or slightly above the current corporate income tax rate of 25%. This suggests that, on average, the sample companies have sound tax compliance.

DISCUSSION OF FINDINGS

Discussion on the effect of comprehensive income volatility on idiosyncratic risk

Based on the test result depicted in Table 4 (Model 1), the volatility of comprehensive income positively affects idiosyncratic risk. This result is robust after a sensitivity test depicted in Table 5 (Model 3). This result is consistent with Khan and Bradbury (2014, 2016), who found that comprehensive income volatility is a relevant accounting measure of risk and influences how investors perceive company-specific risk. This risk relevance makes comprehensive income volatility a piece of important information for investors in assessing company-specific risk in countries that adhere to IFRS. This study also confirmed the findings of Lucchese et al. (2020), who found that the rise and fall of comprehensive income provide risk-relevant information about company-specific conditions that are useful for investors and affect their perception of its internal risk. However, this finding contradicts Anggraita et al. (2020) and Firmansyah et al. (2020a).

Financial statements are important accounting products that aim to provide the information needed to evaluate performance and predict future cash flows. Meanwhile, comprehensive income is substantial information in financial statements needed for decision making, especially regarding information risk in the capital market (Hodder et al., 2006). Investors tend to invest in companies that can reassure steadily growing profitability. Therefore, the volatility of comprehensive income is among the paramount factors that investors consider in decision-making (Kordlouie et al., 2018). The findings in this study are also in line with Black (2014), who predicted that shorter period financial data such as quarterly comprehensive income information might attract investors' attention in assessing the company's unsystematic risk.

The volatility of comprehensive income shows corporate managers' shortcoming in devising strategies and policies to maintain steady performance. According to Schober et al. (2014), the idiosyncratic risk becomes costly due to several market imperfections, especially when volatile results could be misinterpreted as arising from a lack of effort or incompetence. Savvy investors may also view the accrual component of comprehensive income to be prone to manipulation. The accrual components in financial statements do not affect the actual cash flow. Hence, it is easier to manipulate.

The increasing volatility of comprehensive income can be a perfect trigger for managers to engage in earnings management, which aims to meet investors' expectations of steadily growing profitability to flatten the upheaval stock price movement. It signals investors that earnings quality will likely deteriorate for years to come. Hence information risk increases. Ortega and Grant (2003) and Burgstahler and Eames (2006) believed that managers would manipulate earnings by an accounting method of their choice so that earnings levels meet investors' or financial analysts' expectations and affect the stock price. Meanwhile, deteriorating earning quality has been proven to escalate company-specific risk (Rajgopal and Venkatachalam, 2011; Cerqueira and Pereira, 2018). The recent economic shutdown triggered by the COVID-19 pandemic has fostered major disruptions in relative demands and organizational capital that increase the likelihood of managements transgression over the next few years (Karpoff, 2020) due to the urge to present a good performance and conceal company-specific risk.

Discussion on the moderating effect of CSR disclosure on the association between comprehensive income volatility on idiosyncratic risk

Based on the test result in Table 4 (Model 2), CSR disclosure fails to weaken the positive effect of comprehensive income volatility on idiosyncratic risk. This result is robust after a sensitivity test depicted in Table 5 (Model 4). This finding suggests that the existing CSR disclosure has not necessarily improved the company-stakeholder relationship or dispels several concerns of investors arising from the comprehensive income volatility. Although CSR disclosure provides additional information to investors, this information is not a priority use of investors (Gunawan and Mayangsari, 2015). CSR disclosure is required for public companies in Indonesia based on the Financial Services Authority regulation no. 29/POJK.04/2016 and the criteria of disclosures are regulated in the Financial Services Authority regulation 431/BL/2012. However, the disclosure remains a unilateral claim from the company and is voluntary, meaning that no authority is established to vouch for its actual practice.

Additionally, the existing regulation that defines corporate social responsibility is more inclined to corporate environmental responsibility. The criteria of disclosure under the existing regulation mainly focus on environmental aspects. Hence it does not meet the overall sustainability aspect (Sejati and Prastiwi, 2015).

Another condition that strongly supports our claim is the low quality of CSR disclosure carried out by Indonesian companies. The quality of CSR disclosure in Indonesia is poor (Anggraeni and Djakman, 2018). Indonesia's CSR disclosure is still more symbolic than actually containing substantive information (Nasution and Adhariani, 2016). This causes CSR disclosure to fail to lower the information asymmetry between investors and managers, causing comprehensive income volatility to hold. Not only endogenous to Indonesia, Bhatia and Makkar (2019) found that developing countries (Brazil, Russia, India, China, and South Africa) tend to have lower CSR disclosure compared to developed countries (U.S.A and U.K). The quality of CSR disclosure in Indonesia probably has not allowed a moderating effect on the positive association between comprehensive income volatility and idiosyncratic risk.

Discussion on the moderating effect of GCG disclosure on the association between comprehensive income volatility on idiosyncratic risk

Based on the test result in Table 4 (Model 2), GCG disclosure fails to weaken the positive effect of comprehensive income volatility on idiosyncratic risk. This result is robust after a sensitivity test depicted in Table 5 (Model 4). This finding suggests that the existing GCG disclosure has not been enough to sway investors' perception of company risk arising from comprehensive income volatility. The emerging countries are still characterized by low compliance with regulations. The enactment of GCG guidelines from the Financial Services Authority in Indonesia is not enough to flip the table. The emerging-market displays lower compliance to regulations than developed markets, where company-level compliance and application can be far below the country-level corporate governance and investor protection regulations (Iatridis, 2012). Once again, GCG disclosure remains a unilateral claim from the company where the disparity between the prevailing control system and the distribution of power and authority, in reality, can be far from what is being claimed. The information disclosed by the company is not considered to be fundamental and substantive to truly describe the actual performance and quality of corporate governance (Sakessia & Firmansyah, 2020). GCG practices do not necessarily improve investors' confidence toward the company's future outlook.

The GCG disclosure in Indonesia is considered more symbolic, administrative, and less substantial. This voluntary disclosure comes with low enforcement. Therefore, the additional information provided by GCG disclosure is less reliable for any decision-making. Voluntary disclosure of good corporate governance is not a priority information used by the market (Fatchan and Trisnawati, 2016).

Discussion on the moderating effect of tax avoidance on the association between comprehensive income volatility on idiosyncratic risk

Based on the test result depicted in Table 4 (Model 2), the moderating effect of tax avoidance is absent on the positive association between comprehensive income volatility and idiosyncratic risk. This result is robust after a sensitivity test depicted in Table 5 (Model 4). This finding suggests that tax avoidance does not affect investors' perception of risk arising from volatile comprehensive income. According to Yonah (2008), tax avoidance allows companies to reduce tax obligations while complying with tax regulations. Tang and Firth (2012) define tax avoidance as an attempt to exploit the uncertainty of tax regulation for the company's benefit.

Meanwhile, Carolina et al. (2019) contended that tax avoidance increases the opportunity for tax audits that behest legal consequences on the underpayment of taxes. However, using CETR, this study suggests that the level of tax avoidance in Indonesia is considered to be moderately low to raise any concern or procure any benefit for investors. Therefore, the role of tax avoidance is insignificant in influencing investors' perception of risk arising from volatile comprehensive income. In this context, managers' decision to engage in tax avoidance is not considered detrimental or excessive but rather a mere financial management routine. Tax avoidance among the sample companies is not meant to escalate or dampen the volatility found in comprehensive income significantly.

The in-depth analysis also reveals that these findings might be influenced by Indonesia's repeated tax repentance program, such as the sunset policy in 2015 and tax amnesty in 2016 that caused the gap of tax underpayment to narrow post-2015. It is also worth noticing that the perceived risk from tax avoidance in Indonesia may be different from that in developed countries with more money at stake and more resources to cultivate sophisticated methods, causing tax avoidance to be considered as a very dangerous act and can significantly escalate the uncertainty of the company's future net cash flows.

CONCLUSION

This study analyzes the effect of comprehensive income volatility on idiosyncratic risk and the moderating role of corporate social responsibility disclosure, good corporate governance disclosure, and tax avoidance on this effect. Overall, the results show that higher volatility of comprehensive income escalates idiosyncratic risk. The volatility of comprehensive income reflects instability, both in the component of net income and other comprehensive income. It also depicts corporate managers' shortcomings in devising strategies and policies to maintain steadily growing profitability. Meanwhile, CSR disclosure, GCG disclosure, and tax avoidance are proven to pose insignificant influences on investors' perception of risk arising from comprehensive income volatility. Under the existing regulation, both CSR disclosure and GCG disclosure contain less important information that can be useful to dispel investors' concern over comprehensive income volatility. Both disclosures also fail to instill investors' confidence toward the company's future outlook and going concerned. Furthermore, this study suggests that the level of tax avoidance in Indonesia is still considered to be moderately low to raise any concern or procure any benefit for investors.

This study provides evidence that investors price comprehensive income volatility as an accounting measure of risk into the stock price. This study also demonstrates that the current practice of CSR disclosure and GCG disclosure fails to dispel investors' concern over volatile comprehensive income. Meanwhile, tax avoidance does not affect investors' perception of risk arising from volatile comprehensive income. The scope of this research is limited to the emerging market, especially Indonesia. Due to the lack of data from official rating institutions, this research conducts an independent scoring of CSR disclosure and GCG disclosure that might be prone to subjectivity. Future research should investigate the effect of other accounting measures of risk on idiosyncratic risk pre- and post-pandemic and whether the moderating effect of CSR disclosure, GCG disclosure, and tax avoidance prevails during both of those periods.

REFERENCES

- Anggraeni, D. Y., & Djakman, C. D. (2018). Pengujian terhadap kualitas pengungkapan CSR di Indonesia. *Journal of Economics and Finance*, 2(1). <https://doi.org/10.24034/j25485024.y2018.v2.i1.2457>
- Anggraita, V., Rossietta, H., Wardhani, R., & Wibowo, B. (2020). IFRS adoption on value-relevance and risk-relevance of accounting information among Indonesian banks. *Pertanika Journal of Social Sciences and Humanities*, 28(1), 515–532.
- Beaver, W., Kettler, P., & Scholes M. (1970). The association between market determined and accounting determined risk measures. *The Accounting Review*.
- Bhatia, A., & Makkar, B. (2019). CSR disclosure in developing and developed countries: a comparative study. *Journal of Global Responsibility*, 11(1), 1-26. <https://doi.org/10.1108/JGR-04-2019-0043>
- Black, D. E. (2016). Other comprehensive income: A review and directions for future research. *Accounting and Finance*, 56(1), 9-45. <https://doi.org/10.1111/acfi.12186>
- Blouin, J. (2014). Defining and measuring tax planning aggressiveness. *National Tax Journal*, 67(4), 875–900.
- Burgstahler, D., & Eames, M. (2006). Management of earnings and analysts' forecasts to achieve zero and small positive earnings surprises. *Journal of Business Finance & Accounting*, 33(5–6), 633–652.
- Campbell, J., Lettau, M., Malkiel, B., & Xu, Y. (2001). Have individual stocks become more volatile? An empirical exploration of idiosyncratic risk. *Journal of Finance*, 56(1), 1-44. <https://doi.org/10.1111/0022-1082.00318>
- Carolina, V., Oktavianti, O., & Handayani, R. (2019). Tax avoidance & corporate risk: An empirical study in manufacturing company. *Jurnal Ilmiah Akuntansi*, 4(2), 291-300.
- Cerqueira, A., & Pereira, C. (2018). Does idiosyncratic return volatility capture information or noise?. *Int. J. Trade and Global Markets*, 11(4), 270–292.
- Chang, S. -H., Wang, T. -S., Chiu, A. A., & Huang, S. Y. (2015). Earnings management and idiosyncratic risk: Evidence from the post Sarbanes-Oxley Act period. *Investment Management and Financial Innovations*, 12(2-1), 117-126.
- Chen, K., Chen, Z., & Wei, J. (2009). Legal protection of investors, corporate governance, and the cost of equity capital. *Journal of Corporate Finance*, 15(3), 273–289.
- Chen, R. C. Y., Hung, S. W., & Lee, C. -H. (2018). Corporate social responsibility and company idiosyncratic risk in different market states. *Corporate Social Responsibility and Environmental Management*. <https://doi.org/10.1002/csr.1483>
- Chen, R. C. Y., Tang, H. W., & Hung, S. W. (2013). Corporate social responsibility and company performance. *Journal of American Business Review Cambridge*, 2, 181–188.
- Cohen, D. A. (2012). Does information risk really matter? An analysis of the determinants and economic consequences of financial reporting quality. *Asia-Pacific Journal of Accounting and Economics*, 15(2), 69-90. <https://doi.org/10.1080/16081625.2008.9720812>
- Datta, S., Datta, M. I., & Singh, V. (2017). The impact of idiosyncratic risk on accrual management. *International Journal of Managerial Finance*, 13(1). <https://doi.org/10.1108/IJMF-01-2016-0013>
- Deegan, C. M. (2014). *Financial accounting theory*. Sydney, Australia: McGraw-Hill Education (Australia) Pty Ltd. Retrieved from https://www.academia.edu/37036806/Financial_Accounting_Theory.
- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The Journal of Finance*, 25(2), 383-417.
- Fama, E. F., & French, K. R. (1993). Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics*, 33, 3–56.
- Finance Train. (n.d.). *How to calculate annualized standard deviation*. Retrieved from <https://financetrain.com/calculate-annualized-standard-deviation/>
- Firmansyah, A., & Estutik, R. S. (2020). Environmental responsibility performance, corporate social responsibility disclosure, tax aggressiveness: Does corporate governance have a role?. *Journal of Governance and Regulation*, 9(4), 8-24. <https://doi.org/10.22495/jgrv9i4art1>
- Firmansyah, A., Sihombing, P., & Kusumastuti, S. Y. (2020b). The determinants of idiosyncratic volatility in indonesia banking industries. *Jurnal Keuangan dan Perbankan*, 24(2), 175–188.
- Firmansyah, A., Utami, W., Umar, H., & Mulyani, S. D. (2020a). The role of derivative instruments on risk relevance from emerging market non-financial companies. *Journal of Governance & Regulation*, 9(2), 45-63. <https://doi.org/10.22495/jgrv9i2art3>

- Godfrey, J., Hodgson, A., Tarca, A., Hamilton, J., & Holmes, S. (2010). *Accounting theory 7th ed.* Retrieved from <https://www.sekoyen.com/Accounting%20Theory%207th%20edition%20Isi1118592712538.pdf>
- Guenster, N., Bauer, R., Derwall, J., & Koedijk, K. (2011). The economic value of corporate eco-efficiency. *European Financial Management*, 17, 679–704.
- Guenther, D. A., Matsunaga, S. R., & Williams, B. M. (2017). Is tax avoidance related to firm risk?. *The Accounting Review*, 92(1), 115–136.
- Himmelberg, C., Hubbard, R., & Palia, D. (1999). Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of Financial Economics*, 53, 353–384.
- Hirst, D. H., & Hopkins, P. E. (1998). Comprehensive income reporting and analysts' valuation judgments. *Journal of Accounting Research*, 36, 47–75. <https://doi.org/10.2307/2491306>
- Hockerts, K. (2015). A cognitive perspective on the business case for corporate sustainability. *Business Strategy and the Environment*, 24, 102–122. <https://doi.org/10.1002/bse.1813>
- Hodder, L. D., Hopkins, P. E., & Wahlen, J. M. (2006). Risk-relevance of fair-value income measures for commercial banks. *The Accounting Review*, 81(2), 337–375. <https://doi.org/10.2308/accr.2006.81.2.337>
- Hotvedt, J. E., & Tedder, P. L. (1978). Systematic and unsystematic risk of rates of return associated with selected forest products companies. *Journal of Agricultural and Applied Economics*, 10(1), 135–138. <https://doi.org/10.1017/s0081305200014242>
- Hsieh, T. -Y., Lee, H. -I., & Tsai, Y. R. (2018). Idiosyncratic risk, stock returns and investor sentiment. *Asian Economic and Financial Review*, 8(7), 914–924. <https://doi.org/10.18488/journal.aefr.2018.87.914.924>
- Hutchens, M., Rego, S. O., & Williams, B. (2020). Tax avoidance, uncertainty, and firm risk. *SSRN Electronic Journal*. <https://ssrn.com/abstract=3348559>
- Iatridis, G. E. (2012). Audit quality in common-law and code-law emerging markets: Evidence on earnings conservatism, agency costs and cost of equity. *Emerging Markets Review*, 13, 101–117. <https://doi.org/10.1016/j.ememar.2012.01.001>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the company: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 13(4), 305–360.
- Jo, H., & Na, H. (2012). Does CSR reduce company risk? Evidence from controversial industry sectors. *J Bus Ethics*. <https://doi.org/10.1007/s10551-012-1492-2>
- Kaplan, P. D. (2013). What's wrong with multiplying by the square root of twelve. *Journal of Performance Measurement*, 17(2), 9. <https://doi.org/10.2469/dig.v43.n4.9>
- Karpoff, J. M. (2020). The future of financial fraud. *Journal of Corporate Finance*. <https://doi.org/10.1016/j.jcorpfin.2020.101694>
- Khan, S., & Bradbury, M. E. (2014). Volatility and risk relevance of comprehensive income. *Journal of Contemporary Accounting and Economics*, 10(1), 76–85. <https://doi.org/10.1016/j.jcae.2014.01.001>
- Khan, S., & Bradbury, M. E. (2016). The volatility of comprehensive income and its association with market risk. *Accounting and Finance*, 56(3), 727–748. <https://doi.org/10.1111/acfi.12108>
- Khanna, T., & Palepu, K. (2000). Emerging market business groups, foreign investors, and corporate governance. In: Morck, R. (Ed.), *Concentrated Corporate Ownership. National Bureau of Economic Research Conference Report*, 265–294.
- Koh, P.-S., Qian, C., & Wang, H. (2014). Company litigation risk and the insurance value of corporate social performance. *Strategic Management Journal*, 35(10), 1464–1482.
- Kothari, S. P. (2001). Capital markets research in accounting. Paper presented at the *JAE Rochester Conference April 2000*. <https://doi.org/10.2139/ssrn.235798>
- Kumari, J., Mahakud, J., & Hiremath, G. S. (2017). Determinants of idiosyncratic volatility: Evidence from the Indian stock market. *Research in International Business and Finance*, 41, 172–184.
- Lee, K.-H. (2015). Does size matter? Evaluating corporate environmental disclosure in the Australian mining and metal industry: A combined approach of quantity and quality measurement. *Business Strategy and the Environment*, 26(2), 209–223. <https://doi.org/10.1002/bse.1910>
- Liu, B., Di Iorio, A., & De Silva, A. (2014). Do stock fundamentals explain idiosyncratic volatility? Evidence for Australian stock market. *23rd Annual Meeting of the European Financial Management Association*. European Financial Management Association.
- Lucchese, M., Di Carlo, F., & Incollingo, A. (2020). Risk relevance and volatility of other comprehensive income in the banking sector: Evidence from European countries. *Corporate Ownership and Control*, 17(3), 187–197. <https://doi.org/10.22495/cocv17i3art15>

- Maines, L., & McDaniel, L. (2000). Effects of Comprehensive-Income Characteristics on Nonprofessional Investors' Judgments: The role Of Financial Statement Presentation Format. *The Accounting Review*, 75(2), 179–207.
- Mitra, R. K. (2016). The association between earnings quality and company-specific return volatility: Evidence from Japan. *Review of Accounting and Finance*, 15(3). <https://doi.org/10.1108/RAF-08-2015-0100>
- Morck, R., Yeung, B., & Yu, W. (2000). The information content of stock markets: why do emerging markets have synchronous stock price movements?. *Journal of Financial Economics*, 58, 215–260.
- Nasution, R. M., & Adhariani, D. (2016). Symbolic or substantive? analysis of CSR reporting practices and disclosure quality. *Indo. J. of Acc. & Fin.*, 13(1), 23–51.
- Nguyen, P., Ben Zaied, Y., & Pham, T.P. (2019). Does idiosyncratic risk matter? Evidence from mergers and acquisitions. *Journal of Risk Finance*, 20(4), 313-329. <https://doi.org/10.1108/JRF-03-2018-0040>
- OECD. (2004). *OECD Principles of Corporate Governance*. Retrieved October 23, 2019, from <http://www.oecd.org/corporate/ca/corporategovernanceprinciples/31557724.pdf>
- Ortega, W. R., & Grant, G. H. (2003). Maynard manufacturing: An analysis of GAAP-based and operational earning management techniques. *Strategic Finance*, 85(1), 50–56.
- Patel, S., Balic, A., & Bwakira, L. (2002). Measuring transparency and disclosure at firm-level in emerging markets. *Emerging Markets Review*, 3(4), 325–337.
- Pérez, A. (2015). Corporate reputation and CSR reporting to stakeholders: Gaps in the literature and future lines of research. *Corporate Communications: An International Journal*, 20(1), 11–29.
- Porter, M., & Kramer, M. (2006). The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84, 78–92.
- Rajgopal, S., & Venkatachalam, M. (2011). Financial reporting quality and idiosyncratic return volatility. *Journal of Accounting and Economics*, 51(1–2), 1–20. <https://doi.org/10.1016/j.jacceco.2010.06.001>
- Schober, D., Schaeffler, S., & Weber, C. (2014). Idiosyncratic risk and the cost of capital: the case of electricity networks. *Journal of Regulatory Economics*, 46(2). <https://doi.org/10.1007/s11149-013-9242-7>
- Surat Edaran Otoritas Jasa Keuangan Nomor 32/SEOJK.04/2015 Tentang Pedoman Tata Kelola Perusahaan Terbuka
- Tan, M., & Liu, B. (2016). CEO's managerial power, board committee memberships and idiosyncratic volatility. *International Review of Financial Analysis*, 48(1), 21-30. <https://doi.org/10.1016/j.irfa.2016.09.003>
- Tzouvanas, P., Kizys, R., Chatziantoniou, I., & Sagitova, R. (2020). Environmental disclosure and idiosyncratic risk in the European manufacturing sector. *Energy Economics*, 87.
- Wang, Y. -S., Chen, -T., & Liu, Z. -J. (2020). The relationship between accounting information quality and idiosyncratic risk: An empirical study on Chinese A-share listed companies. *Eurasian Journal of Business and Management*, 8(2), 150-166. <https://doi.org/10.15604/ejbm.2020.08.02.008>