



# DEBT AND RISK DISCLOSURE ROLE ON FIRM VALUE IN INDONESIA

Nyoman Triaryati<sup>1</sup> Ayu Desi Indrawati<sup>2</sup> Luh Gede Sri Artini<sup>3</sup>

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#### Koresponding:

Faculty of Economics and Business Universitas Udayana, Bali, Indonesia Email: triaryati@unud.ac.id

This study examines and explains how risk disclosure supports debt's role in growth opportunities, profitability, and real assets' effect on firm value. The limited role of risk disclosure in previous studies and changes in market participants' interest in small mid-cap firms in IDX motivated it. The conditional process model analysis method used moderated mediation analysis based on the research framework. The test was conducted on small mid-cap firms on the IDX. The results show that debt and risk disclosure only have a role as a signal in growth opportunities and real assets' effects, not profitability. This signal determines the perceptions and expectations of market participants towards the firm. Complementary mediation and omitted variables emerge in the analysis results, showing that other variables are suspected as intermediary variables other than debt. More voluntary risk disclosure is an effective way to ensure the positive perception of the market participant. As the firm can balance the benefits of debt and risk, it could be a signal to anticipate the risks that market participants expect, and the desired firm value will be achieved.

#### Abstrak

Studi ini mengkaji bagaimana pengungkapan risiko mendukung peran utang dalam pengaruh peluang pertumbuhan, profitabilitas, dan aset riil terhadap nilai perusahaan. Peran pengungkapan risiko yang terbatas dalam studi sebelumnya dan perubahan minat pelaku pasar terhadap perusahaan berkapitalisasi menengah kecil di BEI melatarbelakangi studi ini. Metode analisis model proses bersyarat menggunakan analisis mediasi moderasi berdasarkan kerangka penelitian. Hasil penelitian menunjukkan bahwa pengungkapan utang dan risiko hanya berperan sebagai sinyal dalam peluang pertumbuhan dan efek aset riil, bukan profitabilitas. Sinyal ini menentukan persepsi dan ekspektasi pelaku pasar terhadap perusahaan. Mediasi komplementer dan variabel yang dihilangkan muncul dalam hasil analisis, menunjukkan bahwa variabel lain diduga sebagai variabel perantara selain utang. Pengungkapan risiko sukarela adalah cara yang efektif untuk memastikan persepsi positif dari pelaku pasar. keseimbangan manfaat utang dan risiko bisa menjadi sinyal untuk mengantisipasi risiko yang diharapkan pelaku pasar, dan nilai perusahaan yang diinginkan akan tercapai.

Faculty of Economics and Business Universitas Udayana, Bali, Indonesia<sup>2</sup> Email: desi\_indrawati@unud.ac.id Faculty of Economics and Business Universitas Udayana, Bali, Indonesia<sup>3</sup> Email: lg\_artini@unud.ac.id

## **INTRODUCTION**

One of the Indonesian capital market index classifications is small mid-cap firms, which are classified based on their capitalization. Small mid-cap firms play a critical role in market sustainability by creating a balanced market and fostering competition by emerging innovations in each industry. However, this type of firm is generally less attractive to market participants because it experiences classic information asymmetry problems. Fama, (1998) and more significant risk than large firms M. Huang et al., (2015). Information asymmetry is the information gap between managers as internal parties and market participants as outside parties. Managers have actual information about assets and growth opportunities reflecting their value. Myers, S.C. and Majluf, (1984).

Shareholders' expectations and perceptions of the firm value are based on the information held about the firm. In a professionally managed firm, there will be a separation between the owner and manager of the firm. It causes an information gap, where the firm's managers as internal parties have better information than firm owners or other market participants as external parties. Information asymmetry occurs between those with certain information and those who can make better decisions if they have the same information. Stiglitz, (2002). Under the signal theory, It can overcome sending signals to reduce information asymmetry between two parties. Spence, (2002) Signals are information sent internally and interpreted externally, shaping perceptions about the firm. In this situation, managers send signals to outsiders containing information about firm prospects, performance, and financial decisions. By interpreting it, they perceive the firm's value. Bacon, (2020).

From a shareholder perspective, attribution theory can be used to explain how shareholders interpret information about a firm's performance and how this interpretation affects their perception of the firm's value. Bacon, (2020). Attribution theory, from the perspective of investors and firm value, is concerned with how investors interpret the causes of a firm's performance and prospects and how it affects a firm's value. Attribution theory can be applied in an investment context, as investors often have to make decisions based on limited and uncertain information about the firms they invest in. From a shareholder perspective, signal theory and attribution theory are interrelated in communicating and interpreting information about the firm-signal theory concerning how management is communicated to owners. Bacon, (2020). More comprehensive disclosure of information will give a positive signal to parties interested in the firm and the Firm's shareholders. It generates their confidence in the firm. In 2018, the small-cap index performance was rising as investor interest increased in it Caesario (2019); Bisnis.com; (Rahmawati, (2021); Pravitno, (2018). This situation raises a new paradigm where market participants decide to invest in small mid-cap firms, compared to large-cap firms. The rational explanation is that small mid-cap firms are considered to have higher growth prospects, as well as cheaper prices. Increased value expectation is a critical factor in market participants' purchasing decisions. The expectation of increased future value in investment decisions is an interesting new paradigm. It makes small mid-cap firms attractive to be studied. This research will examine more deeply what is behind this increase in interest concerning shareholder expectations and perceptions reflected in firm value.

Increasing the firm's value is essential for investors when deciding to invest. Serven finds that shareholders pay the most attention to the price of their shares. Talebnya et al., (2009). Current valuecreation activities are classified in terms of past performance and future development. Bowman & Ambrosini, (2007). Firms are judged based on their sustainability. Myers, (2016) The firm's value is reflected in its share price; the higher the share price, the higher the firm's value, which also indicates high shareholder prosperity. (1). Firm value is the benefits or profits obtained from shares by shareholders. Rashid, (2008) These two concepts underlie investors' decision-making to invest in certain firms, as evidenced by the increasing interest in small mid-cap firms.

The firm value determinant has been observed for decades, suggesting many determinants. Frank and Goyal's study shows three fundamental determinants of firm value: growth opportunities,

profitability, and asset guarantee Frank & Goyal, (2007). Growth opportunities give positive signals because they promise an increase in value in the future and show how much capital investment at a particular time affects changes in the value of the firm's operating income. Fosu et al., (2016) ; Y. Cheng et al., (2010); Mishra et al., (2001); Kodongo et al., (2014); M. Huang et al., (2015); and Amarudin et al., (2019). However, firms with high growth rates will experience higher asymmetry due to the uncertainty of the project, which can send negative signals to market participants about the firm's future value Core, (2001); Allayannis & Weston, (2001). The more profitable the firm is, the more it positively signals market participants and shapes their perceptions Barclay & Smith, Jr., (2001); Capon et al., (1990); Carter et al., (2003); M.-C. Cheng & Tzeng, (2011); Hermuningsih, 2013; Kodongo et al., (2014); Singhal et al., (2022); Varaiya et al., (1987) An increase in the number of firm real assets is a positive signal that shapes investor perception because it indicates an increase in the firm's operational capacity to achieve its goals. Capon et al., (1990); Carter et al., (2003); Habib & Ljungqvist, (2005); Kodongo et al., (2014); Singhal et al., (2022). However, several studies suggest that large real assets are approaching maturity in their life stage, which will give negative signals about the firm future Maury & Pajuste, 2005; Mishra et al., (2001) and hurt firm value.

Achieving value through value management is increasing value, which requires understanding the relationship between costs, risks, and benefits. Barclay & Smith, Jr., (2001). Decision-making is an effort to increase firm value and has consequences in additional risks to the expected benefits. Funding is a management firm's source of funds, and decision-making relates to the risks that the firm must bear. Managers must manage and use it well to prevent the possibility of additional income variability and insolvency risk due to the use of debt. (Horne, n.d.). Debt is a strong signal that shows the actual value of a firm in an information asymmetry situation. Ross, (1997). Adding debt indicates a high probability of bankruptcy, and managers will suffer severe consequences if it happens. Myers and Maljuf state that the problem of information asymmetry is behind the firm's capital structure decision Myers, S.C. and Majluf, (1984). The manager's every action or decision is a signal directed at external parties. This *pecking order* theory proposes a hierarchy of utilizing funding sources based on the lowest cost and most minor sensitivity to information. Respectively, retained earnings are the last choice, followed by debt and equity. Firms are reluctant to choose equity first because they have the highest sensitivity to information. The market will assume the possibility of future losses and want to share it with new shareholders because the stock price is *overvalued*.

Debt poses a risk and can signal to shareholders, referring to the risk and return trade-off theory; increased risk results from higher returns and can give investors both positive and negative signals. Increased use of debt increases the expected rate of return. However, more debt will be riskier for shareholders. Brigham, (2019). Risk disclosure is more beneficial for investors if small firms provide it. Miihkinen, (2013). Firms that expect an increase in value must be able to manage their accounting figures and reduce their variability to decrease the risk of financial difficulties. Smith & Stulz, (1985). It must be followed by risk management efforts to reduce the firm's total risk to benefit its value. Fairchild, (2002).

The firm's capital structure affects the risk and *return* of shareholders, so the market value of its shares is influenced by its capital structure. Khandelwal et al., (2020). The use of debt is also a positive signal for shareholders and investors because the firm is assumed to be undervalued. Strebulaev, (2007).

However, Ruan stated a different point: if the debt is too high, the firm's risk will become higher if it is not appropriately managed. Ruan et al., (2011); Fitria, (2016). On the other hand, debt and firm value are influenced and determined by profitability, asset guarantees, and growth opportunities, so they cannot be linked casually. Frank & Goyal, (2007) Debt mediates the effect of growth opportunities on firm value, but it does not mediate the effect of profitability on firm value. Hermuningsih, (2013). In contrast, Amarudin *et al.* only found the role of debt mediation on the effect

of profitability on firm value. Amarudin et al., (2019). Setia Darma and Machali suggest that debt does not mediate the influence of real firm assets on firm value. Gitleman, (2014). These results show that the use of debt as an effective driver of the three determinants influences on firm value has not been concluded. Research suggests that debt has an intermediary role in the three determinants' effect on the firm value and also shows the importance of debt in determining firm value. It shapes expectations and perceptions about the firm's performance and prospects in the future. However, the additional risk due to debt can lower expectations and shape market participants' negative perceptions of the expected increase in firm value.

In this regard, small mid-cap firms with greater inherent risk must manage and inform them through risk management disclosures. Firms must also report their risk management per Law No. 8 of 1995 concerning the capital market, further regulated in BAPEPAM regulations. It is explained in detail in the Decree of the Chairman of Bapepam Number: KEP-347 / BL / 2012, concerning procedures for presenting the firm's financial statements, which requires reporting on 3 (three) types of risks, namely credit risk, liquidity risk, and market risk (mandatory risk disclosure). Risk management or risk management carried out by the firm is mandatory and must be disclosed. Fama and French, (2008) specifically revealed that investors need more risk information because of the higher risk of small firms than large firms. Likewise, Miihkinen, (2013) states that risk disclosure is more beneficial for investors if provided by small firms, and firms that present good disclosure of risk information about the firm's risk management can provide an overview of the risks faced and how the firm manages them. This information transparency can restore expectations of an increase in firm value from concerns due to the use of debt.

Research on corporate risk management disclosure mainly examined the direct effect of risk disclosure on firm value and also placed more emphasis on the tone of risk disclosure or looking at the impact of firm performance on risk disclosure. Abdullah Al-Dubai & M Abdelhalim, (2021); Abdullah et al., (2015); Anantha & Simatupang, (2022); Kamaruzaman et al., (2019); Meilani & Wiyadi, (2017); Miihkinen, (2013); Restika & Lastiati, (2021); Tan et al., (2017). These studies have not explicitly explored debt's role in funding decisions as a signal and an attribute that shapes market participants' perceptions of firms. Previous research on determinants of firm value and risk disclosure on the IDX also mainly observed large-cap firms in general or specific to certain industries. In contrast, this study will look more specifically at small mid-cap firms.

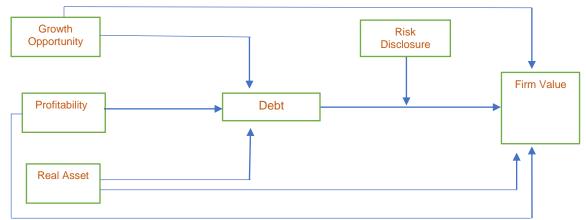
This research was conducted to understand how determinants of firm value become a signal and attribute that shapes market participants' expectations and perceptions of firm value. It also could determine the market participants' consideration of growth opportunities, profitability, real assets, debt, and risk disclosure in their investment decisions. Risk disclosure in this study is a **novelty** based on the role of debt as an intermediary of determinants of firm value.

The test in this study wanted to know whether the effectiveness of debt in mediating the effect of growth opportunities, profitability, and real assets on firm value is supported by risk disclosure. Risk disclosure can strengthen the effectiveness of achieving firm value through signals in the form of information that shapes the perception of market participants or vice versa. The test will also show how growth opportunities, profitability, and real assets perceive a firm's value before debt mediation and risk disclosure so that it can contribute to signal theory and attribution through its empirical results and practically to small mid-cap firms and market participants.

Starting with the increasing interest in the small mid-cap on the IDX, this type of firm incurs higher information asymmetry than large firms. C. Huang et al., (2014). Increasing the firm's value is an important thing that underlies investment decisions because it is related to improving its welfare. Fama & French, (2008). Based on signal and attribution theory, firm value is formed from the perceptions and expectations of market participants based on signals. Stiglitz, (2002), Moreover, firm

attributes Bacon, (2020) In the form of growth opportunities, profitability, and real assets sent by the firm to parties outside the firm. This signal will be more effective if debt is used as a funding decision because debt is the lowest-cost source of external funding and the least sensitive to information. Debt can also be captured as an attribute that can positively shape market participants' perceptions and expectations of a firm's value. However, debt will pose additional risks that can reduce market participants' expectations of increased firm value. Brigham, (2019). Risk management due to increasing risk due to debt is inadequate. However, it must be presented as information that market participants can capture as a signal. Risk disclosure is information about the risks challenged by the firm and its mitigation. It should prevent possible decreases in expectations and negative perceptions of market participants on firm value. Disclosure of adequate information about the firm's risk management can provide an overview of the risks faced and how the firm manages them. This information transparency should be able to restore perceptions and expectations of firm value from concerns due to the use of debt. This raises the suspicion that the effectiveness of debt in mediating the influence of determinants of firm value is supported by the firm's risk management disclosure.

Thus, the study tries to determine how the determinant of firm value directly and indirectly affects firm value. How does debt mediate it, and is risk disclosure effectively supporting debt as a mediator? Therefore, this study develops a new conceptual model consisting of 6 (six) variables: growth opportunities, profitability, real assets, debt, risk disclosure, and firm value. The framework of research concepts can briefly be described in Figure 1.



Source: Author compilation, 2024

Figure 1. Research Concept Framework

This study will use a quantitative approach to examine the relationship between variables in the IDX Small-Mid Cap (SMC) Composite Index from 2018 to 2022. The criteria used as the basis for sampling are firms with a market capitalisation of 1 to 50 trillion Rupiah, and the sample criteria are firms that entered consecutively from 2018 to 2022, all sectors except the financial sector with complete data. So, 179 firms can be used as samples in this study.

This study uses six variables: growth opportunity, profitability, real assets and as an independent variable, debt as a mediation variable, risk disclosure as a moderation variable, and firm value as a dependent variable. Data sources are published in financial statements and other sources. The relationship pattern between variables will be tested using conditional process analysis. PROCESS is an analytical tool based on path analysis and ordinary least squares (OLS) by Hayes in 2012. The model used is model number 14, one of the conditional process model PROCESS analyses. This model is a second-stage moderated mediation model analysis.

The analysis path consists of 3 paths that use the same equation with different independent variables, as follows.

For the first group of equations:  $M = iM_{med} + a_{medX} + eM$   $Y = iY_{med} + c'_{med}X + b_{med}M + e_Y$ The second group of equations:  $M = iM_{modmed} + a_{modmed}X + e_M$  $Y = iY_{modmed} + c'_{modmed}X + b_{modmed}M + b_{modmed}MW + e_Y$ 

Derives from: *Y* is Tobins Q<sub>t</sub>; *X* is Growth opportunities  $_{t-1}$  or Profitability  $_{t-1}$  or Real Asset  $_{t-1}$ ; *M* is Debt To Equity Ratio<sub>t-1</sub>; *W* is Risk Disclosure  $_{t-1}$ ; *i* is the intercept;  $a_{med}$ ,  $b_{med}$ ,  $c_{med}$  are regression coefficients of the mediating variables;  $a_{modmed}$ ,  $b_{modmed}$ ,  $c_{modmed}$  are regression coefficients of the mediation variables; *e* is the error term.

Growth opportunities are opportunities to invest in profitable assets in 2022: *I* is the Operation Income Growth Rate, Q is Capital investment, and  $\beta$  is the growth opportunity coefficient. Profitability is the degree to which shareholders' expectations conform to the firm's ability to generate profits from invested capital. Varaiya, et al., (1987): Profitability<sub>t-1</sub> = ROE<sub>t-1</sub> – Ke<sub>t-1</sub>, where ROE is capital invested effectiveness by investors in generating profits, obtained from; Ke is the cost of capital equal to the required rate of shareholder return. Real assets are a firm's wealth that shows the capacity and resources to achieve goals. It is the comparison of fixed assets with the firm's total assets. Kodongo et al., (2014); Maury & Pajuste, (2005); Nguyen et al., (2022). Debt is the primary external source of funds to accommodate a firm's efforts to survive and grow. The proxy used is the Debt to Equity Ratio. Allayannis & Weston, (2001). Risk disclosure is the information about the risks faced by the firm and how to mitigate them. It compares voluntary risk disclosure. Wahh et al., (2021) And financial risk disclosure. Firm value is the market's perception of a firm's prospects and wealth. The proxies used in this case are *Tobin Q*. Allayannis & Weston, (2001) and Jiao, (2010).

## **RESULT AND DICUSSION**

The table below shows the average value of each variable throughout the observation year, from 2018 to 2022.

Descriptive Statistic							
	Year	Ν	Min.	Max.	Mean	Std. Deviation	
2017	Firm Value	179	.06	16.49	1.1423	1.95582	
	Growth	179	99	1.00	.1444	.71950	
	Opportunity						
	Profitability	179	-13.41	2.14	.0042	1.04046	
	Real Asset	179	.00	1.25	.5656	.23949	
	Debt	179	.00	27.10	.7556	2.14134	
	Risk Disclosure	179	.25	13.00	1.5591	1.28947	
	Valid N	179					
	(listwise)						
2018	Firm Value	179	.00	15.93	1.0889	1.99912	
	Growth	179	-1.00	1.00	.2208	.68894	
	Opportunity						
	Profitability	179	-1.17	2.56	.0921	.31901	
	Real Asset	179	.00	1.97	.5732	.25959	
	Debt	179	.00	11.37	.6411	1.06483	
	Risk Disclosure	179	.08	4.00	1.1660	1.06668	
	Valid N	179					

Table 1.Descriptive Statistic

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2019	Firm Value	179	.00	12.59	1.0944	1.61728
·	Growth	179	-1.00	1.00	.2451	.71585
	Opportunity					
	Profitability	179	-1.25	1.06	.0302	.21748
	Real Asset	179	.08	7.88	.7105	.90611
	Debt	179	.00	9.09	.6634	1.06731
	Risk Disclosure	179	.25	12.00	1.6746	1.33610
	Valid N	179				
2020	Firm Value	179	.00	10.78	1.2209	1.72188
	Growth	179	-1.00	1.00	.0877	.71387
	Opportunity					
·	Profitability	179	-4.22	1.47	0334	.41188
·	Real Asset	179	.09	7.14	.6443	.53536
	Debt	179	.00	5.41	.6913	.88499
	Risk Disclosure	179	.08	4.00	1.1153	1.03841
	Valid N	179				
2021	Firm Value	179	.00	13.99	1.2547	1.83087
	Growth	179	-1.00	1.00	.1656	.73720
	Opportunity					
	Profitability	179	-1.16	1.07	.0687	.22507
	Real Asset	179	.00	4.57	.6013	.37126
	Debt	179	.00	11.07	.7236	1.15821
	Risk Disclosure	179	.25	12.00	1.6639	1.30978
	Valid N	179				

Source: Hayes data result, 2024.

The firm's value shows the optimism of market participants about the future of small mid-cap firms. It also has positive investment opportunities throughout the 5 (five) years of observation. It consistently generates positive returns during the observation period, although its fluctuations can exceed shareholder expectations in generating profits on invested capital. Most firms also have adequate capacity and resources, and the average value of debt shows a reasonably good comparison because it shows that this small mid-cap firm can expand and generate profits without endangering shareholder wealth. Mid-cap firms make more risk disclosures than required, whereas voluntary risk disclosure is higher than needed.

Statistical Results of Path Analysis

Direct Effect on Firm Value							
Variable	coefficient	(SE)	Т	Р	LLCI	ULCI	
Growth Opportunity	0.216	0.017	1.040	0.029**	0.157	0.510	
Profitability	0.537	0.410	1.191	0.024**	0.316	1.292	
Real Asset	0.026	0.021	1.242	0.214	-0.015	0.067	
Debt	-0.011	0.085	-1.306	0.192	-0.056	0.278	
Direct Effect on Debt							
Variable	coefficient	(SE)	Т	Р	LLCI	ULCI	
Growth Opportunity	-0.306	0.071	-4.229	0.000*	-0.441	-0.161	
Profitability	-1.479	1.583	-0.173	0.202	-0.531	0.445	
Real Asset	-0.144	0.090	-1.608	0.044**	-0.051	-0.318	
G XX 1	1. 2024						

Table 2.The Direct Effect Results

Source: Hayes data result, 2024;

whereas: (\*sig, (\*\*sig (no zero between LLCI and ULCI)

The direct effect of growth opportunities on firm value shows significant results with regression coefficients of 0.216 and a P value of 0.029. Furthermore, there are no zero values in the range of LLCI (*Lower-Level Confidence Interval*) and ULCI (*Upper-Level Confidence Interval*). Similarly, profitability significantly affects a firm's value. With a coefficient of 0.537 and a P value of 0.024. However. real assets and debt do not significantly affect firm value. Furthermore, the direct effect of growth opportunity on debt is negatively significantly. Nevertheless. real assets significantly affect debt with a coefficient of -0.306 and a P value of 0.000. Profitability does not affect debt significantly. Nevertheless. real assets significantly affect debt with a coefficient of -0.144 and a P value of 0.044.

Table 3.				
The Indirect Effect Results				

Debt as mediator							
Variable	index	Boot SE	Boot LLCI	Boot ULCI			
Growth Opportunity	0.003	0.015	0.013	0.074***			
Profitability	0.134	0.103	-0.109	0.300			
Real Asset	-0.002	0.003	-0.011	-0.001***			
Debt as mediator and Risk Disclosure as moderator							
Variable	index	Boot SE	Boot LLCI	Boot ULCI			
Growth Opportunity	0.051	0.030	0.004	0.122***			
Profitability	0.290	0.282	-0.060	0.946			
Real Asset	0.384	0.025	0.135	0.001***			
~ ~ ~							

Source: Hayes data result, 2023

whereas: (\*\*\*sig (no zero between LLCI and ULCI)

The indirect effect of growth opportunities on firm value with debt as a mediator and risk disclosure as a moderator is statistically significant with a mediating index of 0.003 and moderator index of 0.051, with no zero values in the range of LLCI and ULCI. The real assets also show the same result on indirect effects with a mediation index of -0.002 and a moderator index of 0.384. However, profitability does not show any significant indirect effect on firm value.

Risk Disclosure classification	Risk Disc (W)	closure <i>Moderated Consequences of</i> Growth Opportunity to Firm Value (ab1+ab2 W)	Moderated Consequences of Real Asset (ab1+ab2 W)
Percentile 10 <sup>th</sup> (Low)	0.44	0.016	0. 012
Percentile50 <sup>th</sup> (medium)	1	0.044	0. 026
Percentile 84 <sup>th</sup> (High)	2.33	0. 119	0. 065

Table 5.The Moderate Consequences

Source: Hayes data result, 2024.

Based on Hayes, Hayes & Rockwood, (2020), In the 10th percentile with a low-risk disclosure level group, in two cases of the same risk disclosure of 0.44, firms with one unit greater growth opportunity and the real asset will have a more excellent firm value, respectively, by 0.016 and 0.012. Furthermore. In the 50th percentile with a moderate risk disclosure level group, in two cases of the same risk disclosure of one, firms with one unit greater growth opportunity and the real asset will have a more excellent firm value, respectively and the real asset will have a more excellent firm value respectively by 0.044 and 0.026. Lastly, in the 84th percentile with a high-risk disclosure level group. In two cases of the same risk disclosure of 2.33, firms with one unit greater growth opportunity and the real asset will have a more excellent firm value, respectively by 0.019 and 0.065.

Signals and attributes can explain the increasing market participants' interest in small mid-cap firms as information sent to them in the form of increased growth opportunities, profitability, and real assets with debt as intermediaries and risk disclosure as a strengthening factor. This shows the importance of the role of debt and risk disclosure as intermediaries in efforts to increase firm value.

Increasing the firm's opportunity to invest in profitable assets in small mid-cap firms can shape positive perceptions and expectations from market participants, which is then reflected in rising stock prices. These growth opportunities require the role of debt as an intermediary to meet capital investment needs, although not absolute (complementary *mediation*), and it also needs to be strengthened by risk disclosure to increase firm value. More voluntary risk is present, supporting the role of debt and preventing the possibility of lowering expectations due to increased risks from using debt. The information can narrow the information gap between management and external parties and become specific signals. Moreover, it can shape positive perceptions and expectations of market participants on firm value.

Profitability increases in small mid-cap firms, which is a positive signal and attribute that can directly increase the firm's value. This is due to the additional value that can be immediately sensed because the shareholder market value is greater than its book value. It also causes the absence of debt and risk disclosure, which affects profitability and firm value. Profitability is preferably by investors and is a specific signal and attribute that can boost stock prices.

Real asset increase cannot affect firm value directly, but it can increase firm value through the role of debt and risk disclosure. Increasing capacity and resources requires debt intermediaries as a source of external funding. Debt has a lower sensitivity to information than external debt because shareholders only need to share a portion of their profits with creditors. The role of debt, in this case, can provide positive signals and shape positive perceptions and expectations of market participants. Likewise, risk disclosure can strengthen the role of debt in giving positive signals and shaping the perceptions and expectations of market participants. The presentation of risk information and its mitigation can provide a sense of security to shareholders and prevent the possibility of lowering expectations due to risks arising from using debt. It can minimize the information gap between management and external parties and become a specific signal.

Complementary mediation shows that debt is not the only intermediary between growth opportunity and firm value. There are omitted variables associated with the profit generated from invested capital, which consistently exceeds the required profit level. It can be suspected that this omitted variable is retained earnings derived from internal firm funding sources. This also explains why the debt level of small mid-cap firms decreased during the observation. It is also because funding needs are fulfilled partly from internal funding sources.

Risk disclosure strengthens the effectiveness of debt as an intermediary in the influence of growth opportunities and real assets. It is the presentation of information about the firm's risks and mitigation. This small mid-cap firm provides more information about risks than mandated. This shows that presenting more risk than it should creates a sense of security for shareholders, strengthens signals, and supports the effectiveness of debt as an intermediary in the effect of growth opportunities and real assets on firm value.

Increasing growth opportunities and real assets can increase firm value with the role of debt and risk disclosure support in small mid-cap firms, indicating a priority in selecting funding sources based on risk and sensitivity to information. To reduce the information gap between management and market participants due to information asymmetry. Risk management and mitigation are the main things firms must do in decision-making and management. However, the more important thing is to convey it so that it can be captured as a positive signal and attribute perceived positively by market participants and affects the firm value. Debt does not always have a role to play in any indirect influence of a firm's value determinants. Debt has a vital role in reducing information asymmetry. It becomes a positive

signal that is perceived positively by market participants when there is an increase in growth opportunities and real assets of the firm. However, not when there is an increase in profitability. Likewise, the role of risk disclosure is to present information about the risks faced by the firm and their mitigation and support the effectiveness of debt when there is an increase in growth opportunities and real assets of the firm. However, this does not occur when increasing firm profitability. This shows that the rise in economic profitability related to the free cash flow desired by shareholders alone is enough to send specific signals in the form of information interpreted by market participants and increase stock prices.

## CONCLUSION AND RECOMMENDATION

Due to the separation between firm ownership and managers, there is an information imbalance between managers and owners, called information asymmetry between management and the firm's external parties. Management's effort to bridge this information gap is to give specific signals. Spence, (2002). These signals then shape the perceptions and expectations of market participants regarding the firm's value, which is then reflected in the firm's stock price. Three fundamental determinants determining the firm's value are growth opportunities, profitability, real assets, and debts. Frank & Goyal, (2007). Previous studies used debt as an intermediate variable to strengthen the signals of these three determinants to firm value. On the other hand, it has not considered debt risks. This can reduce market participants' expectations of the firm's value. Increased risk due to debt use has not been specifically discussed and considered in previous studies relating to risk disclosure. The risk disclosure is expected to prevent a decrease in market participants' expectations.

This study concludes that the three determinants have different influencing capacities. Increased growth opportunities give direct signals to market participants. However, the existence of debt as an intermediary and risk disclosure strengthen positive signals to the market participants. Increased profitability sends direct signals to market participants without the need for intermediaries. Market participants prefer profitability, so intermediaries and reinforcements are not needed to shape the perceptions and expectations of market participants. Profitability is a direct signal that most effectively shapes the perceptions and expectations of market participants and is reflected in the firm's share price. This finding can be the reason for the low level of debt used by small mid-cap firms. These results justify the complementary mediation results on the growth opportunity path. Increasing real assets requires debt intermediaries and strengthening risk disclosure to send positive signals to market participants. Risk disclosure carried out is in the form of voluntary risk disclosure greater than the required risk. This shows that the implementation of risk management in the firm must be accompanied by an adequate presentation of voluntary risk to the public to become an effective source of information for market participants. The limitation of this research is that the behaviour of the relationship between variables in the framework of this research concept does not include firms that are out of the index due to the periodic performance evaluation. The behaviour of the relationship between variables in the framework of this research concept only includes firms that present mandatory and voluntary risk disclosure. The existence of omitted variables in the research suggests that other related variables are not included in the research framework. The retained earnings variable is likely to have an intermediary role and can be considered for future research bases.

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