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The Effect of Corporate Risk-taking on Company Performance in View of the Firm Life Cycle

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ABSTRACT

Examining the impact of Corporate Risk-Taking (CRT) on business performance over the firm life cycle is the primary objective of this research. Participating manufacturing enterprises from the 2020–2022 timeframe on the Indonesia Stock Exchange made up the study's population. Similarly, the research sample was selected by a purposive sampling procedure. We used 356 pieces of observational data from 137 different firms in our sample. The multiple linear approach, implemented in SPSS Statistics 24, was used for the study. First, CRT as measured by the standard deviation of ROA has a positive impact on performance. Second, CRT as measured by the standard deviation of stock returns has no effect on performance. Third, CRT as measured by the standard deviation of ROA has a negative impact on performance during the introduction stage but a positive impact during the maturity stage. Fourth, CRT as measured by the standard deviation of stock returns has no effect on performance throughout all lifetime stages of a company.

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INTRODUCTION

In the current era of economic development, it raises increasingly difficult competition in the business world which makes company conditions the spotlight for investors to select companies that will be used as places to invest. The condition of the company can be described through the risks faced and company performance information (Kriswidiyanti et al., 2021). Company performance is one of the significant indicators to see the condition of the company. For company management, performance must always be improved to maintain existence and attract investors to invest their capital (Murnawati et al., 2023).

The manufacturing industry plays an important role in today's national economy because it has a good performance. This reflects the active productive activities and positive growth in the manufacturing industry. Therefore, investment in the manufacturing industry is considered very promising. Investors can see the vast market potential for manufactured products as Indonesia has a large domestic market, supported by a large population and increasing purchasing power. Thus, this industry is interesting to study.

To assess the quality of the company can be seen from financial performance and non-financial performance (Hutabarat, 2021). Financial performance is a certain measure used as a basis for assessing the success of a company in generating profits (Murnawati et al., 2023). In general, the measurement of the company's financial performance uses analytical tools, namely financial ratios (Febrina et al., 2021),

It includes profitability, solvency, and liquidity statistics. The profitability ratio, which indicates the capacity to create profits for the business, is the most crucial of the three ratios when evaluating financial performance. The Return on Assets (ROA) ratio is a financial metric that is used to assess the overall profitability of the organization., on the grounds that ROA can explain the company's profitability because it usually provides insight into management efficiency based on the use of its assets (Khrawish, 2011).

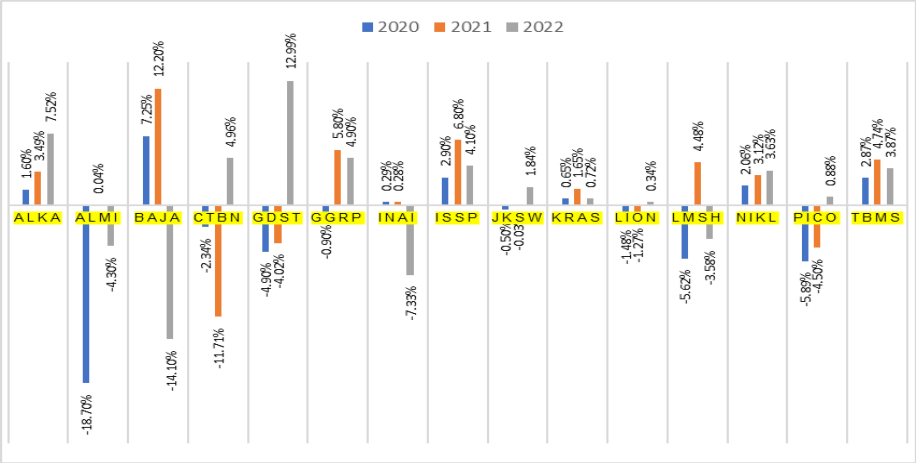

Figure 1. Data on ROA Levels of Several Manufacturing Companies Listed on the Indonesia Stock Exchange

The figure above shows that the ROA of several manufacturing companies fluctuated during 2020-2022. In 2020, 50% of the companies experienced negative ROA, due to the Covid-19 pandemic that depressed the economy and disrupted operations. However, in 2021-2022, ROA showed a recovery as the economy recovered and the pandemic subsided.

Companies can adjust by utilizing information about the history, current condition, and future prospects of the company and its environment. This information varies over time and between companies, depending on the problems and processes faced, which affect the company's life cycle (Pradipta et al., 2020). The company's life cycle can be measured using cash flow statement data (Dickinson, 2011) which reflects operating, investing, and financing activities, so it can be used to classify companies into life cycle stages such as introduction, growth, mature, shake-out, and decline. Therefore, the author is inspired to categorize ROA based on the company's life cycle.

One of the factors that allegedly affect firm performance in this study is corporate risk-taking. An action to make decisions by company management that contains risk is called risk-taking (Kesuma et al., 2018). Corporate risk-taking is related to the uncertainty associated with company risk as well as investments that can provide added value. A company will face problems if it does not allow risk-taking at a healthy level (Setiarini et al., 2023) because the measurement of risk-taking reflects the company's ability to carry out company projects that contain risk (Sanders & Hambrick, 2007). Thus, it is important for firm management to understand how healthy risk-taking is in order to improve firm performance.

Several relevant studies have examined the effect of corporate risk taking on firm performance such as Habib & Hasan (2015); Shahzad et al. (2019); dan Zeng et al. (2014), but in the context of companies in Indonesia there are still relatively few that do so and the results of the research are inconsistent. The author feels driven to investigate the effects of corporate risk taking on the productivity of Indonesian manufacturing enterprises in order to fill this vacuum in the research and address the conflicting results from other studies. This research aims to make the influence on business performance more evident by using age, leverage, and market-to-book ratio as control variables. In light of the above, the writers would want to go more into the topic of how corporate risk-taking impacts business performance during the lifespan of a firm.

LITERATURE REVIEW

Here, agency theory serves as the theoretical framework. Agency theory addresses issues that develop in businesses as a result of the disconnection of interests between principals and agents (Panda & Leepsa, 2017). In the perspective of corporate risk taking, agency theory argues that managers are more likely to avoid risk. This is because the manager's wealth cannot be diversified and invested in the company (Zeng et al., 2014) so that managers are more careful when deciding to take risks for the company. Meanwhile, shareholders tend to be neutral to risk (Shahzad et al., 2019) because shareholders tend to have wealth that can be diversified and have greater ambition than managers.

Next is signaling theory. In the field of management and finance, companies use the concept of signaling to indicate information about the quality of the company (Connelly et al., 2011). While in the context of risk taking, signaling theory is used to show how corporate risk taking can improve performance (García-Granero et al., 2015). External parties who lack information tend to be more cautious about risk. Therefore, firms signal that risky decisions can improve performance through innovation and potentially higher returns (García-Granero et al., 2015). Although innovation comes with risks, innovative firms still engage in technical and marketing innovations to demonstrate their ability to compete in the market (Dao dan Zmud, 2018 dalam Simamora, 2023).

Finally, the life cycle theory of the firm, derived from the product life cycle theory, which divides the life cycle of the firm into several stages consisting of introduction, growth, mature, and decline stages (Miller & Friese, 1984; Fama and French, 2001; De Angelo, 2006; Dickinson, 2011 in Zain, 2022. Each stage has a different period of time so that the company's risk-taking needs to be adjusted to the specific needs of the life cycle that is being lived.

Relationship Between Variables

The Effect of Corporate Risk Taking on Company Performance

To maintain the continuity of company operations, company management is constantly innovating even though innovation is always accompanied by risk. In designing strategies, companies need to take into account the possibility of risks and implement control efforts to minimize the impact of risks (Itan & Devina, 2021). One way is to pay attention to how the company takes risks. Risk is uncertainty that causes losses (Wideman in Mulyawan, 2015). According to Younas & Zafar (2019), defining corporate risk taking as an important policy and key strategy in risk decision making adopted by companies to increase value and expand business reach.

Parties who do not have sufficient information tend to be more cautious about the risks that the company will face. In an effort to overcome this uncertainty, it can be explained by using signal theory. García-Granero et al. (2015) argue that companies will signal that taking risks can result in improved performance, accompanied by innovation and the potential for achieving higher performance. To rephrase, the correlation between the level of risk-taking inside an organization and its success is positive. You can tell how well a business is doing financially by looking at its performance. (Yuliansyah, 2020). According to Nugrahayu & Retnani (2015) company performance refers to the company's ability to achieve certain goals by using resources efficiently and effectively, and describes the extent to which the company achieves its results in comparison with previous performance and the performance of other companies.

The impact of corporate risk taking on company performance was investigated by Zeng et al. (2014). The study used all non-financial businesses registered on the Shanghai and Shenzhen Stock Exchanges from 2006-2011 as its subjects. The results demonstrated that corporate risk taking has a significantly positive effect on EPS, ROE, and Tobin's Q, which are indicators of company performance measurement. This agrees with the findings of Li (2016), who also found that CRT had a beneficial effect on ROA, a measure of business success. Furthermore, studies by Simamora (2023) and Pratono (2018) reach similar conclusions, demonstrating that CRT significantly improves business outcomes.

However, a distinct set of findings is presented by Olaniran et al. (2016), who found that corporate risk taking significantly lowers firm performance. This research uses return on assets (ROA) and return on equity (ROE) as metrics to evaluate business success.

H1a: Corporate risk taking proxied by the standard deviation of ROA has a positive and significant effect on company performance.
H1b: Corporate risk-taking proxied by the standard deviation of stock returns has a positive and significant effect on firm performance.

The Effect of Corporate Risk-Taking on Company Performance Based on Company Life Cycle

According to agency theory, there is a conflict of interest that occurs between managers and investors regarding corporate risk-taking. Based on this theory, managers tend to avoid risk rationally. This is because most of their wealth cannot be diversified and is tied to the organization they manage so that managers are more careful regarding corporate risk-taking (Zeng et al., 2014).

In contrast, investors prefer managers to take more risks because shareholders have greater ambitions than managers. Investors tend to want companies to carry out all projects or investments that are considered financially feasible or have a positive NPV (Habib & Hasan, 2015). Investors or shareholders do not take into account the risks associated with these projects or investments because they can diversify the risks.

Each company has different life cycle stages where each stage has different characteristics (Atmini, 2002 in Kriswidiyanti et al., 2021). Ngo et al. (2023) assert that the theory of the company's life cycle provides an explanation for the different predictable patterns of development that firms go through. Firm life cycle theory states that investment decisions, funding, and operational performance of a company are strongly influenced by its organizational capabilities (Habib & Hasan, 2015). Thus, there is a tendency for corporate risk-taking that should vary with changes in the firm's life cycle.

During the introduction and decline stages, most firms experience limited resources and new plans, but desire to grow rapidly to meet competitive challenges and bring new products to re-enter the market. Due to resource constraints, it can be assumed that firm performance during the introduction and decline stages will decline due to higher risk taking (CRT).

In terms of profitability during the growth stage, it is suggested that growing companies will put the most effort into building their brand identity and market share, as product differentiation results in higher profit margins. Growing companies will also benefit the most from current spending on product differentiation. The returns generated from large investments during the introduction phase start to show up during the growth phase. This has a positive impact on profitability.

Increased investment and efficiency contribute to achieving maximum profit margins. This means that profitability should be highest during the growth and mature periods. The decline in prices is due to the decline in growth during the decline stage. The urge to return to profitability drives additional investment during the decline stage. On the other hand, managers invest in projects with negative NPV. This aims to show outsiders that there is an investment opportunity. However, this is likely to lead to poor performance due to investing in negative NPV.

H2a: Corporate risk-taking proxied by the standard deviation of ROA has a significant effect (negative at the introduction and decline stages; positive at the growth and mature stages) on firm performance.
H2b: Corporate risk-taking proxied by the standard deviation of stock returns has a significant effect (negative at the introduction and decline stages; positive at the growth and mature stages) on firm performance.

METHOD

Data and Sample

Secondary data used in the research was gathered via purposive sampling according to these criteria: (1) industrial firms that will be trading on the Indonesia Stock Exchange in 2020 and 2022, and (2) companies that provide annual and financial reports for these years. Companies without complete financial data were excluded. The final sample includes 137 companies.

Operational Definition and Sample Measurement

In this study, the independent variables used are corporate risk taking proxied by the standard deviation of ROA (Shahzad et al., 2019; Severesia & Juliana, 2022; John et al., 2008) and the standard deviation of stock returns (Shahzad et al., 2019; Habib & Hasan, 2015; Hadinata, 2018), where Return on Assets (ROA) is the metric used to assess business performance in this research. Age, leverage, and market-to-book ratio are all included as control factors in this research.

Data Analysis Technique

In order to determine whether there is a causal or reciprocal link between the dependent and independent variables, the research makes use of multiple linear regression analysis. (Ghozali, 2016). All hypotheses are tested using the t-test. The equation for multiple regression analysis used to prove these hypotheses is as follows:

$ROA = \alpha + B_1 CRT_{SD\ ROA} + B_2 Age + B_3 Leverage + B_4 MTB + e$ (1a)

$ROA = \alpha + B_1 CRT_{SD\ Return} + B_2 Age + B_3 Leverage + B_4 MTB + e$ (1b)

$ROA = \alpha + B_1 CRT_{SD\ ROA}^{FLC} + B_2 Age + B_3 Leverage + B_4 MTB + e$ (2a)

$ROA = \alpha + B_1 CRT_{SD\ Return}^{FLC} + B_2 Age + B_3 Leverage + B_4 MTB + e$ (2b)

RESULT AND DISCUSSION

Deskriptive Statistics

After data collection and processing, the study presents the following descriptive statistics.

Tabel 2. Deskriptive Statistics

Variable	Minimum	Maximum	Mean	Std. Deviation
ROA	-.3457	.2910	.038193	.0590446
SD ROA	.0000	.0338	.003716	.0035536
SD RET	.0002	.4047	.031587	.0399060
AGE	0	49	20.03	12.132
LEV	.0002	2.8267	.166096	.2200635
MTB	-8.0220	44.8570	1.776972	3.5250456

Table 2 reveals that the average Return on Assets (ROA) for manufacturing companies listed on the Indonesia Stock Exchange (IDX) is 0.038193, with the highest ROA of 0.2910 achieved by PT Unilever Indonesia Tbk in 2021, and the lowest ROA of -34.57% recorded by PT Tirta Mahakam Resources Tbk in 2022. The standard deviation of ROA during the 2020-2022 period is 0.0590446, indicating significant variability in the ROA data among the sampled companies.

The average standard deviation of ROA (SD ROA) across all manufacturing companies on the IDX is 0.03716. The highest SD ROA of 0.0338 was recorded by PT Tirta Mahakam Resources Tbk in 2022, while the lowest SD ROA of 0.000 was reported by several companies, including PT Gunung Raja Paksi Tbk in 2022 and PT Astra Otoparts Tbk in 2021. The standard deviation of SD ROA is 0.0035536, suggesting less variability in the CRT variable when proxied by SD ROA.

Lastly, the average standard deviation of returns (SD RET) is 0.031587, with the highest SD RET of 0.4047 observed at PT Ekadharma Internasional Tbk in 2020, and the lowest of 0.0002 at PT Tunas Alfin Tbk in 2021. The standard deviation of SD RET is 0.0399060, indicating considerable variation in the data for the CRT variable when proxied by SD RET.

Multiple Linear Regression Analysis

Table 6. Multiple Regression Test Analysis Model 1a

Variable	Unstandardized Coefficients	Standardized Coefficient	t	Sig

	B	Std. Error	Beta		
(Constant)	0,032	0,006		5,845	0,000
SD ROA	2,062	0,877	0,124	2,350	0,019
AGE	0,000	0,000	0,057	1,251	0,212
LEV	-0,105	0,012	-0,393	-8,467	0,000
MTB	0,006	0,001	0,335	6,753	0,000

$$ROA = 0{,}032 + 2{,}062DROA + 0{,}000AGE - 0{,}105LEV + 0{,}006MTB + e$$

The equation model indicates that the constant coefficient is 0.032, meaning that if all influencing factors (CRT proxied by SD ROA, controlled by AGE, LEV, and MTB ratio) are zero, the ROA value will be 0.032. A 1% increase in SD ROA results in a 0.02062 reduction in ROA, as indicated by the positive SD ROA coefficient of 2.062. The AGE coefficient is 0.000, meaning each 1-year increase in AGE leaves the ROA unchanged. The LEV has a negative coefficient of -0.105, indicating that a 1% increase in LEV decreases ROA by 0.00105. The MTB coefficient is positive at 0.006, suggesting that a 1% increase in MTB raises ROA by 0.00006.

Table 7. Multiple Regression Test Analysis Model 1b

Variable	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
(Constant)	0,033	0,006		5,500	0,000
SD RET	0,023	0,066	0,015	0,342	0,732
AGE	0,000	0,000	0,087	1,946	0,052
LEV	-0,097	0,012	-0,360	-8,076	0,000
MTB	0,006	0,001	0,388	8,679	0,000

$$ROA = 0{,}033 + 0{,}023SDRET + 0{,}000AGE - 0{,}097EV + 0{,}006MTB + e$$

The equation model shows that the constant coefficient is 0.033, meaning that if all factors affecting ROA (CRT proxied by SD RET, controlled by AGE, LEV, and the MTB ratio) are zero, the ROA value will be 0.033. A 1% increase in SD RET will raise the ROA by 0.00023, as indicated by the positive SD RET coefficient of 0.023. The control variable AGE has a coefficient of 0.000, indicating that a 1year increase in AGE will not change the ROA value. Meanwhile, LEV has a negative coefficient of -0.097, meaning that each 1% increase in LEV will reduce the ROA by 0.00097. The MTB coefficient is positive at 0.006, indicating that a 1% increase in MTB will increase the ROA by 0.00006.

Table 8. Multiple Regression Test Results Model 2a (Cycle: Introduction)

Variable	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
(Constant)	0,040	0,010		3,995	0,000
SD ROA	-10,644	1,693	-0,759	-6,289	0,000
AGE	-0,00001179	0,000	-0,055	-0,036	0,971
LEV	0,029	0,035	0,097	0,811	0,424
MTB	-0,00005231	0,004	-0,002	-0,014	0,989

$$ROA = 0{,}040 - 10{,}644SDROA - 0{,}00001179AGE + 0{,}029LEV - 0{,}000005231MTB + e$$

The equation model reveals a constant coefficient of 0.040, meaning that if all factors impacting ROA (with CRT proxied by SD ROA and controlled by AGE, LEV, and the MTB ratio) are zero, the ROA will be 0.040. The SD ROA coefficient is -10.644, indicating that each 1% increase in SD ROA will

reduce the ROA by 0.10644. The AGE control variable has a negative coefficient of -0.00001179, implying that a 1-year increase in AGE will decrease ROA by 0.0000001179. LEV, with a positive coefficient of 0.029, suggests that a 1% increase in LEV will raise the ROA by 0.00029. Lastly, the MTB coefficient of -0.00005231 indicates that a 1% increase in MTB will reduce ROA by 0.0000005231.

Table 9. Multiple Regression Test Results Model 2a (Cycle: Growth)

Variable	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
(Constant)	0,024	0,012		1,948	0,056
SD ROA	-2,419	2,036	-0,149	-1,188	0,240
AGE	-0,00001222	0,000	-0,003	-0,025	0,980
LEV	-0,034	0,036	-0,120	-0,952	0,345
MTB	0,012	0,004	0,391	3,163	0,002

$$ROA = 0{,}024 - 2{,}419SDROA - 0{,}00001222AGE - 0{,}034LEV + 0{,}012MTB + e$$

The equation model shows a constant coefficient of 0.024, indicating that if all factors influencing ROA (with CRT proxied by SD ROA and controlled by AGE, LEV, and the MTB ratio) are zero, the ROA will be 0.024. The SD ROA coefficient of -2.419 suggests that a 1% increase in SD ROA will reduce ROA by 0.02419. The control variable AGE has a negative coefficient of -0.00001222, meaning a 1-year increase in AGE will decrease ROA by 0.0000001222. LEV, with a coefficient of -0.034, also shows a negative impact, where a 1% increase in LEV will lower ROA by 0.00034. On the other hand, the MTB coefficient is 0.012, indicating that a 1% increase in MTB will raise ROA by 0.00012.

Table 10. Multiple Regression Test Results Model 2a (Cycle: Mature)

Variable	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
(Constant)	0,024	0,008		3,240	0,001
SD ROA	7,422	1,180	0,434	6,290	0,000
AGE	0,00006620	0,000	0,013	0,236	0,813
LEV	-0,083	0,020	-0,229	-4,241	0,000
MTB	0,003	0,001	0,222	3,397	0,001

$$ROA = 0{,}024 + 7{,}422SDROA + 0{,}00006620AGE - 0{,}083LEV + 0{,}003MTB + e$$

The equation model indicates a constant coefficient of 0.024, meaning that if all factors influencing ROA (with CRT proxied by SD ROA and controlled by AGE, LEV, and the MTB ratio) are zero, the ROA will be 0.024. The SD ROA coefficient of 7.422 shows a positive impact, where a 1% increase in SD ROA raises the ROA by 0.07422. The control variable AGE has a positive coefficient of 0.00006620, meaning a 1-year increase in AGE boosts ROA by 0.00006620. LEV, with a coefficient of -0.083, shows a negative effect, as a 1% increase in LEV reduces ROA by 0.00083. Lastly, the MTB coefficient is 0.003, indicating that a 1% increase in MTB enhances ROA by 0.00003.

Table 11. Multiple Regression Test Results Model 2a (Cycle: Decline)

Variable	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
(Constant)	0,081	0,056		1,455	0,171
SD ROA	-5,984	5,578	-0,408	-1,073	0,304
AGE	-0,001	0,002	-0,145	0,783	0,449

LEV	-0,060	0,064	-0,384	-0,939	0,366
MTB	0,005	0,014	0,073	0,366	0,721

$$ROA = 0{,}081 - 5{,}981SDROA - 0{,}001AGE - 0{,}060LEV + 0{,}005MTB + e$$

The equation model reveals a constant coefficient of 0.081, indicating that if all factors influencing performance proxied by ROA (specifically CRT via SD ROA and controlled by AGE, LEV, and the MTB ratio) are zero, the ROA will be 0.081. The SD ROA coefficient of -5.981 suggests that a 1% increase in SD ROA decreases ROA by 0.05981. The AGE control variable has a negative coefficient of -0.001, meaning a 1-year increase in AGE reduces ROA by 0.001. LEV, with a coefficient of -0.060, also negatively impacts ROA, decreasing it by 0.00060 for every 1% increase in LEV. On the other hand, the MTB coefficient of 0.005 is positive, indicating that a 1% increase in MTB slightly raises ROA by 0.00005.

Table 12. Multiple Regression Test Results Model 2b (Cycle: Introduction)

Variable	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
(Constant)	0,020	0,016		1,243	0,223
SD RET	0,159	0,138	0,154	0,866	0,393
AGE	0,000	0,000	-0,089	-0,470	0,641
LEV	0,031	0,053	0,105	0,588	0,561
MTB	-0,007	0,006	-0,228	-1,230	0,228

$$ROA = 0{,}020 + 0{,}159SDRET + 0{,}000AGE + 0{,}031LEV - 0{,}007MTB + e$$

The equation model reveals a constant coefficient of 0.020, meaning that with all factors affecting performance proxied by ROA (specifically CRT via SD RET and controlled by AGE, LEV, and the MTB ratio) set to zero, the ROA will be 0.020. The SD RET coefficient of 0.159 indicates that a 1% increase in SD RET raises ROA by 0.00159. AGE has a coefficient of 0.000, meaning changes in AGE do not affect ROA. LEV's coefficient is 0.031, suggesting that a 1% increase in LEV raises ROA by 0.00031. Conversely, the MTB coefficient of -0.007 shows that a 1% increase in MTB decreases ROA by 0.00007.

Table 13. Multiple Regression Test Results Model 2b (Cycle: Growth)

Variable	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
(Constant)	0,018	0,012		1,413	0,163
SD RET	0,056	0,116	0,060	0,458	0,630
AGE	0,000	0,000	-0,047	-0,368	0,715
LEV	-0,026	0,035	-0,091	-0,722	0,473
MTB	0,011	0,004	0,363	2,895	0,005

$$ROA = 0{,}018 + 0{,}056SDRET + 0{,}000AGE - 0{,}026LEV + 0{,}011MTB + e$$

The equation model reveals a constant coefficient of 0.018, implying that with all factors affecting performance proxied by ROA (specifically CRT via SD RET and controlled by AGE, LEV, and MTB) set to zero, ROA will be 0.018. The SD RET coefficient of 0.056 suggests that a 1% increase in SD RET decreases ROA by 0.00056. AGE's coefficient of 0.000 indicates that changes in AGE do not impact ROA. LEV, with a coefficient of -0.026, decreases ROA by 0.00026 for every 1% increase. Conversely, MTB's coefficient of 0.011 means a 1% increase in MTB raises ROA by 0.00011.

Table 14. Multiple Regression Test Results Model 2b (Cycle: Mature)

Variable	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
(Constant)	0,039	0,008		4,641	0,000
SD RET	-0,044	0,091	-0,029	-0,490	0,625
AGE	0,001	0,000	0,126	2,134	0,034
LEV	-0,094	0,021	-0,260	-4,242	0,000
MTB	0,006	0,001	0,455	7,688	0,000

$$ROA = 0{,}039 - 0{,}044SDRET + 0{,}001AGE - 0{,}094LEV + 0{,}006MTB + e$$

The equation model shows a constant coefficient of 0.039, meaning that with all factors affecting performance proxied by ROA (specifically CRT via SD RET and controlled by AGE, LEV, and MTB) at zero, ROA would be 0.039. The SD RET coefficient of -0.044 suggests that a 1% increase in SD RET decreases ROA by 0.00044. AGE's coefficient of 0.001 indicates that each 1-unit increase in AGE raises ROA by 0.001. LEV, with a coefficient of -0.094, decreases ROA by 0.00094 for every 1% increase. Conversely, MTB's coefficient of 0.006 implies that a 1% increase in MTB raises ROA by 0.00006.

Table 15. Multiple Regression Test Results Model 2b (Cycle: Decline)

Variable	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
(Constant)	0,086	0,069		1,243	0,238
SD RET	-0,282	0,645	-0.080	-0,437	0,670
AGE	-0,002	0,002	-0,158	-0,777	0,452
LEV	-0,122	0,028	-0,778	-4,407	0,001
MTB	-0,001	0,014	-0,077	-0,037	0,971

$$ROA = 0{,}086 - 0{,}282SDRET - 0{,}002AGE - 0{,}122LEV - 0{,}001MTB + e$$

The equation model reveals a constant coefficient of 0.086, indicating that with all factors affecting performance proxied by ROA (specifically CRT via SD RET and controlled by AGE, LEV, and MTB) at zero, ROA would be 0.086. The SD RET coefficient of -0.282 suggests that a 1% increase in SD RET decreases ROA by 0.00282. AGE's coefficient of -0.002 implies that each 1-unit increase in AGE lowers ROA by 0.002. LEV, with a coefficient of -0.122, decreases ROA by 0.00122 for every 1% increase. MTB's coefficient of -0.001 indicates that a 1% increase in MTB decreases ROA by 0.00001.

Hypothesis Test (T Test)

Manufacturing businesses listed on the Indonesia Stock Exchange (IDX) are considerably impacted by corporate risk-taking, as measured by SD ROA, according to Hypothesis 1a. A negative coefficient of SD ROA of -2.065, a t-value of 2.350, and a significance value of 0.019 < 0.05 are shown in Table 4.26. This proves that manufacturing enterprises listed on the IDX have a significant uptick in performance when CRT is measured by SD ROA. So, H1a is considered valid.

The performance of manufacturing enterprises listed on the IDX is substantially impacted by corporate risk-taking, as measured by SD stock returns (Hypothesis 1b). In accordance with Table 4.26, the significance level is 0.732 > 0.05, the t-value is 0.342, and the SD Return is positive with a value of 0.023. The results show that manufacturing enterprises listed on the IDX are positively affected by CRT proxied by SD Return, however the impact is not statistically significant. So, we can rule out H1b.

Following this, we have Hypothesis 2a, which asserts that, according to the standard deviation of ROA, manufacturing companies listed on the IDX undergo a negative effect on performance during the introduction and decline stages of Corporate Risk-Taking, and a positive effect during the growth and mature stages. The first stage SD ROA coefficient is negative at -10.644, as shown in Table 4.26, with a t-value of -6.289 and a significance value of 0.000 < 0.05. Return on investment (ROI) standard deviation (SD) at growth stage end is -2.419, t-value is -1.188, and p-value is 0.240 + 0.05. Further, the SD ROA coefficient is 7.422 at the mature stage, with a t-value of 6.290 and a significant value of 0.000, which is lower than the threshold of 0.05. During the decline stage, the SD ROA coefficient is -5.984, which is supported by a t-value of -1.073 and a significance value of 0.304 > 0.05. With CRT, as measured by SD ROA, taken into account, the following effects are felt by IDX-listed manufacturing companies: a negative impact during introduction, a negative but insignificant effect during growth, a significant positive impact during maturity, and a negative but insignificant effect during decline. According to the theory, only the two first and third stages of a life cycle—the introduction and the mature—have significant and congruent effects. However, this is not the case throughout the decline and development phases. So, it's safe to say that H2a is OK, but it doesn't matter much throughout the expansion and contraction phases.

Finally, hypothesis 2b states that the standard deviation of stock returns negatively affects performance during the introduction and decline stages of a manufacturing company's life cycle, and positively affects performance during the growth and mature stages of the company's risk-taking. Table 4.26 shows that the SD RET coefficient at the introduction stage is 0.159, with a t-value of 0.866 and a significance value of 0.393 > 0.05. While in the development stage, the SD RET coefficient is 0.056, t-value is 0.485, and significance is 0.630 > 0.05. When the organism reaches maturity, its SD RET coefficient is -0.044, t-value is -0.490, and 0.625 > 0.05, indicating statistical significance. The decrease stage SD RET coefficient is -0.282, t-value is -0.437, and 0.670 > 0.05, indicating statistical significance. Results show that CRT proxied by SD RET has a positive but insignificant effect during introduction, growth, maturity, and decline stages. At maturity, the effect is negative but insignificant, and at decline, it is negative but insignificant. Consequently, we reject H2b.

Effect of Corporate Risk-taking Proxied by Standard Deviation of ROA on Company Performance

The first hypothesis is that manufacturing businesses listed on the Indonesia Stock Exchange (IDX) are positively and significantly impacted by corporate risk-taking, as measured by the standard deviation of ROA. The results of the study show that CRT, as measured by SD ROA, significantly and positively affects business outcomes. So, it's safe to say that H1a is the established hypothesis.

This result aligns with signaling theory, which explains that high CRT indicates that a company is likely to achieve higher profitability, accompanied by innovation and greater performance potential. This sends a positive signal (good news) to external parties that the company’s performance will improve.

The findings of this study are consistent with the research conducted by Zeng et al. (2014), which states that CRT or corporate risk-taking significantly enhances company performance. Similar research by Simamora (2023) also shows comparable results.

Effect of Corporate Risk-taking Proxied by Standard Deviation of Stock Return on Company Performance

Manufacturing businesses listed on the Indonesia Stock Exchange (IDX) are positively and significantly impacted by corporate risk-taking, as measured by the standard deviation of stock returns, according to Hypothesis 1b. While prior research did find a beneficial impact of CRT proxied by SD

RET on business performance, it was not statistically significant. This leads us to the conclusion that H1b is not valid.

The lack of significant impact of CRT proxied by the standard deviation of stock returns on manufacturing performance in Indonesia suggests that higher risk-taking by companies does not significantly affect their performance. According to agency theory, there is a conflict of interest between the company's owners and manager (Zain, 2022), owners or investors tend to be neutral towards risk, while managers often avoid it (Shahzad et al., 2019).

Additionally, signaling theory posits that risk-taking is a way for companies to signal shareholders about the benefits of risk-taking for company performance (García-Granero et al., 2015). Such signals represent good news, implying higher performance potential. By taking higher risks, companies aim to prepare themselves to avoid losses by enhancing innovation. Therefore, high risk-taking is expected to improve company performance.

Nonetheless, the study's findings indicate that CRT does not significantly impact the performance of IDX-listed industrial businesses. A lesser level of risk-taking does not always result in inferior performance for businesses, and a high CRT does not always lead to better success. These results are in line with those of Li (2016), who also discovered that CRT improves business performance, but not significantly. This suggests that while risk-taking (CRT) might improve performance, the effect is not significant. High risk-taking does not directly enhance company performance or guarantee higher performance, and lower risk-taking does not guarantee lower performance.

Corporate risk-taking proxied by the standard deviation of ROA has a significant effect (negative at the introduction and decline stages; positive at the growth and mature stages) on firm performance

According to the second hypothesis, which is based on the life cycle of a firm, corporate risk-taking has a major influence on manufacturing companies listed on the Indonesia Stock Exchange, as assessed by the standard deviation of ROA. During the beginning and end phases, this effect is detrimental, but it has a beneficial effect on the development and maturity phases. In the introduction stage, CRT has a negative effect on manufacturing company performance as measured by SD ROA. In the growth stage, it has a negative but insignificant effect. In the mature stage, it has a positive impact. Finally, in the decline stage, it has a negative but insignificant effect. Impacts are present and significant throughout the introduction and mature stages of a company's life cycle, but they do not occur throughout the growth and decline phases. Thus, it is reasonable to assume that H2a is OK; nonetheless, it is of little consequence throughout the expansion and contraction stages.

The research found no significant influence of CRT proxied by SD ROA on the performance of IDX-listed manufacturing enterprises across their life cycles. When it comes to taking business risks, different companies exhibit different inclinations at different stages of their life cycles, as stated in the firm life cycle theory. (Atmini, 2020 in Kriswidiyanti et al., 2021 and Habib & Hasan, 2015). This is because every investment decision of a company is adjusted to the company's capabilities (Habib & Hasan, 2015).

Companies that are in the introduction stage tend to have many plans to carry out their innovations but have limited resources. Due to these limited resources, it is assumed that the company's performance at this stage will decline due to high risk taking (CRT) on the investments they make. At the growth stage, companies usually experience rapid growth and tend to take greater risks to expand the market and increase market share. However, high risk taking can cause instability and significant potential losses, which can ultimately have a negative impact on the company's performance during the growth stage. Then, at the mature stage the company will get a return generated from the investment that has been made at the growth stage. In addition, companies that are at the mature stage

tend to have achieved stability and slower growth. Slowing and continuing growth will cause the company to be in the decline stage. At this stage, the decline in company growth will cause a decrease in the price of their products. To restore the situation, managers tend to invest in projects with negative NPV, but this is likely to cause poor performance.

The results of this study at the introduction and mature stages are in accordance with research conducted by Shahzad et al. (2019) which states that at the introduction stage CRT will have a significant negative effect on company performance, and at the mature stage it will have a significant positive effect.

Corporate risk-taking proxied by the standard deviation of stock returns has a significant effect (negative at the introduction and decline stages; positive at the growth and mature stages) on company performance

Second, when it comes to corporate risk-taking as indicated by the standard deviation of stock returns, manufacturing companies listed on the IDX have a negative impact during their introduction and decline stages, and a positive impact during their growth and mature stages. According to previous data processing, CRT has a marginally positive impact during the introduction stage, a marginally negative impact during the growth stage, a marginally positive impact during the mature stage, and a marginally negative impact during the decline stage, as measured by the standard deviation of stock returns. So, we can't accept the H2b theory.

Corporate risk-taking (CRT) cannot impact firm performance, according to the conclusions of this research. This could be due to the fact that the variables examined here are not exhaustive, and other variables may have a more substantial impact on business outcomes. The current theory states that a greater CRT has a detrimental effect on a company's performance during the introduction and decline phases, but a beneficial one during the growth and mature stages. However, the findings of this hypothesis contradict this idea. (Shahzad et al., 2019).

According to the company life cycle theory, companies in the introduction stage tend to take higher risks (Habib & Hasan, 2015) to innovate and introduce new products to the market. This risk-taking is often necessary to achieve initial growth and build market share. Taking the right risks at this stage can improve company performance. Furthermore, at the growth stage, the company will build brand identity and develop market share, because product differentiation will generate higher profit margins. Companies in the growth stage will also benefit the most from current spending on product differentiation. At this stage, the company will also begin to get returns generated from large investments during the previous stage. Because at the growth stage the company begins to benefit from the investments that have been made, at the mature stage the company tends to be more stable and has slower growth. However, if the company takes excessive risks at this stage, it can disrupt the stability that has been achieved and reduce operational efficiency. At the decline stage, the company will experience a decline in growth which will cause product prices to decrease. This will result in a decline in company performance.

The results of this study are in line with research conducted by Oktaviani (2021) where company risk taking (CRT) does not affect company performance as proxied by ROA at the introduction, growth, and mature stages.

CONCLUSSION

This study examines the performance of manufacturing companies listed on the Indonesia Stock Exchange from 2020 to 2022, focusing on the impact of corporate risk-taking on their financial outcomes. One way to measure performance is return on assets (ROA). Another way to assess risk-

taking is to look at the standard deviation of ROA and stock returns. The research reveals a number of significant outcomes. First things first: if you look at the standard deviation of ROA, you'll see that company risk-taking has a positive and substantial effect on ROA. In addition, the standard deviation of stock returns, which measures company risk-taking, has no effect on return on assets (ROA). Looking at the impact on ROA throughout the introduction, mature, and development phases also shows that corporate risk-taking has a negative and large effect, according to the standard deviation of ROA. But it doesn't matter much when you're trying to gauge expansion. Finally, the standard deviation of stock returns over all stages of a company's life cycle measures organizational risk-taking, which has no effect on ROA.

REFERENCES

Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. Journal of Management, 37(1), 39–67. https://doi.org/10.1177/0149206310388419

Dickinson, V. (2011). Cash flow patterns as a proxy for firm life cycle. Accounting Review, 86(6), 1969–1994. https://doi.org/10.2308/accr-10130

Febrina, F., Tamara, D. A. D., & Syarief, M. E. (2021). Kinerja Keuangan dengan pendekatan Economic Value Added (EVA) pada PT. Mayora Indah, Tbk. Indonesian Journal of Economics and Management, 1(3), 584–596. https://doi.org/10.35313/ijem.v1i3.3029

García-Granero, A., Llopis, Ó., Fernández-Mesa, A., & Alegre, J. (2015). Unraveling the link between managerial risk-taking and innovation: The mediating role of a risk-taking climate. Journal of Business Research, 68(5), 1094–1104. https://doi.org/10.1016/j.jbusres.2014.10.012

Ghozali, I. (2016). Aplikasi Analisis Multivariate Dengan Program IBM SPSS 23 (8th ed.). Univ. Diponegoro Press.

Habib, A., & Hasan, M. M. (2015). Firm life cycle, corporate risk-taking and investor sentiment. Accounting and Finance, 57(2), 465–497. https://doi.org/10.1111/acfi.12141

Hadinata, S. (2018). Tingkat Pengembalian (Return), Risiko, dan Koefisien Variasi pada Saham Syariah dan Saham Nonsyariah. AKTSAR: Jurnal Akuntansi Syariah, 1(2), 171. https://doi.org/10.21043/aktsar.v1i2.5089

Hutabarat, F. (2021). Analisis Kinerja Keuangan Perusahaan. Desanta Publisher.

Itan, I., & Devina. (2021). Pengaruh Struktur Kepemilikan Dan Tata Kelola Perusahaan Terhadap Perilaku Pengambilan Risiko. ULTIMA Accounting, 13(2), 294–309.

John, K., Litov, L., & Yeung, B. (2008). Corporate Governance and Risk-Taking. In THE JOURNAL OF FINANCE •: Vol. LXIII (Issue 4).

Kesuma, N., Gozali, E., & Syathiri, A. (2018). Pengaruh Corporate Governance Index Terhadap Risk-Taking dan Dinamika Bisnis Perbankan di Indonesia. JURNAL MANAJEMEN DAN BISNIS SRIWIJAYA, 15(2), 106–118. https://doi.org/10.29259/jmbs.v15i2.5698

Khrawish, H. A. (2011). Determinants of commercial banks performance: evidence from Jordan. International Research Journal of Finance and Economics, 5(5), 19–45.

Kriswidiyanti, P. I. D., Kristanto, A. B., & Rita, M. R. (2021). Relevansi Nilai Ukuran Kinerja Dan Risiko: Tinjauan Berdasarkan Siklus Hidup Usaha. Jurnal Akuntansi Aktual, 8(1), 13–24. https://doi.org/http://dx.doi.org/10.17977/um004v8i12021p13

Li, J. (2016). Board Advising, Risk-Taking, and Firm Performance. Journal of Financial Risk Management, 05(03), 149–160. https://doi.org/10.4236/jfrm.2016.53015

Mulyawan, S. (2015). Manajemen Resiko. CV Pustaka Setia.

Murnawati, Erti, L., & Tasril. (2023). Analisis Pengukuran Kinerja Keuangan Berdasarkan Rasio Profitabilitas. Jurnal Daya Saing, 9, 488–492.

Ngo, N.-Q.-N., Nguyen, C.-N., Ngo, N.-N.-N., & Nguyen, T.-K. (2023). The Influence of Firm Life Cycle On Firm Risk-taking Evidence of Vietnam. Research Square, 1–44. https://doi.org/10.21203/rs.3.rs-3576601/v1

Nugrahayu, E. R., & Retnani, E. D. (2015). Penerapan Metode Balanced Scorecard Sebagai Tolok Ukur Pengukuran Kinerja Perusahaan. Jurnal Ilmu & Riset Akuntansi, 4(10), 1–16.

Oktaviani, C. (2021). Siklus hidup perusahaan, pengambilan risiko, dan kinerja perusahaan indonesia. Universitas Pelita Harapan.

Olaniran, M. O., Namusonge, G. S., & Muturi, W. (2016). The Role of Risk-taking on Performance of Firms on Nigerian Stock Exchange. International Journal of Research in Business Studies and Management, 3(3), 36–44. www.ijbsnet.com http://hdl.handle.net/123456789/2748

Panda, B., & Leepsa, N. M. (2017). Agency theory: Review of theory and evidence on problems and perspectives. Indian Journal of Corporate Governance, 10(1), 74–95. https://doi.org/10.1177/0974686217701467

Pradipta, L. N., Sitinjak, E. L. M., & Sasmito, Y. W. D. (2020). Pengaruh Kinerja Keuangan Perusahaan Terhadap Pengambilan Keputusan Investor Dalam Siklus Hidup Perusahaan yang Berbeda. JOURNAL OF APPLIED BUSINESS ADMINISTRATION, 4(1), 31–37. https://doi.org/10.30871/jaba.v4i1.1957

Pratono, A. H. (2018). Does firm performance increase with risk-taking behavior under information technological turbulence?: Empirical evidence from Indonesian SMEs. Journal of Risk Finance, 19(4), 361–378. https://doi.org/10.1108/JRF-10-2017-0170

Sanders, WM. G., & Hambrick, D. C. (2007). Swinging for the Fences: The Effects of Ceo Stock Options on Company Risk Taking and Performance. Academy of Management Journal, 50(5), 1055–1078. https://doi.org/10.5465/amj.2007.27156438

Setiarini, A., Gani, L., Diyanty, V., & Adhariani, D. (2023). Strategic orientation, risk-taking, corporate life cycle and environmental, social and governance (ESG) practices: Evidence from ASEAN countries. Business Strategy and Development, 6(3), 491–502. https://doi.org/10.1002/bsd2.257

Severesia, C., & Juliana, R. (2022). Pengaruh Ketidakpastian Kebijakan Ekonomi Terhadap Pengambilan Risiko Perusahaan di Indonesia. Jurnal Riset Akuntansi Dan Keuangan, 10(3), 491–502. https://doi.org/10.17509/jrak.v10i3.43857

Shahzad, F., Lu, J., & Fareed, Z. (2019). Does firm life cycle impact corporate risk taking and performance? Journal of Multinational Financial Management, 51, 23–44. https://doi.org/10.1016/j.mulfin.2019.05.001

Simamora, A. J. (2023). Firms performance, risk taking and managerial ability. International Journal of Productivity and Performance Management, 72(3), 789–808. https://doi.org/10.1108/IJPPM-03-2021-0172

Younas, Z. I., & Zafar, A. (2019). Corporate risk taking and sustainability: a case of listed firms from USA and Germany. Journal of Global Responsibility, 10(1), 2–15. https://doi.org/10.1108/JGR-07-2018-0027

Yuliansyah, Y. (2020). Analysis of Factors Affecting Company Performance. Jurnal Riset Akuntansi Dan Auditing, 7(3), 26–41.

Zain, I. Y. (2022). Effect of Corporate Social Responsibility and Firm Life Cycle on Banking Performace in Indonesia. Financial Management Studies, 2(3).

Zeng, J. hong, Tan, L. ping, & Chen, X. hong. (2014). Managerial equity incentive, corporate risk-taking, and corporate performance. International Journal of Simulation and Process Modelling, 9(4), 246–254. https://doi.org/10.1504/IJSPM.2014.066370