

The Influence of Risk Management on Company Value Commercial Bank in Indonesia

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ABSTRACT

The purpose of this study is to examine how credit risk, liquidity risk, solvency risk, bank size, and bank deposits influence the Price-Earnings Ratio (P/E ratio) of commercial banks listed on the Indonesia Stock Exchange during 2019–2023. The research is motivated by the phenomenon of fluctuating bank valuations in Indonesia's capital market, where inconsistent findings from prior studies on risk management and firm value create a research gap. To address this, the study investigates three main independent variables—credit risk, liquidity risk, and solvency risk—and two control variables, bank size and bank deposits. Using a quantitative explanatory approach, panel data regression with fixed and random effects models was employed on 38 banks, yielding 190 observations. The results reveal that solvency risk has a significant positive effect on the P/E ratio, whereas credit risk, liquidity risk, bank size, and bank deposits show no significant impact. These findings highlight the importance of solvency management in sustaining investor confidence and firm valuation. Theoretically, this contributes to risk–value literature, while practically, it suggests that bank managers and investors should prioritize solvency stability when formulating capital structure and risk management policies.

Keywords: Bank Deposits, Bank Size, Credit Risk, Liquidity Risk, Price Earning Ratio (PER), Solvency Risk.



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INTRODUCTION

The banking sector is a driving force in a country's economic development by providing credit to stimulate investment. Commercial banks are the primary players, contributing the most to economic growth. As financial intermediaries, banks play a crucial role in the functioning of the economy (Shiva Raj Poudel et al., 2022). Banks act as payment systems, inflation controllers, and financial authorities to stabilize the Indonesian economy. To this day, the global economy is inseparable from the banking sector. Nearly every aspect of economic activity relies on banks as financial institutions to run or guarantee operations. Funds collected from the public are distributed

to the public in the form of loans. This provides business loans to the public and fosters sustainable business growth. When consumer credit distribution is controlled, public demand for a company's products and services increases (Nguyen & Nguyen, 2022).

Company value reflects past performance and future plans. In this study, company value is measured using the Price Earnings Ratio. The Price Earnings Ratio (PER) is a ratio used to measure the comparison between a company's stock market price and earnings per share (Hossain et al., 2024). The higher the ratio, the more successful the company is in creating value for its shareholders (Onalapo & Odedoyin, 2024). Therefore, the PER in this study is measured using the Market to Book Ratio. Credit risk is one of the most significant threats banks face in providing financial services to customers (Caruso et al., 2021). It refers to the loss of part or all of a loan due to the inability to repay the loan on time. The lender bears the majority of the risk, including the loss of principal and interest. (Moses Dunyoh1 & Kosipa3, 2022)

Liquidity risk is the inability of a bank to provide credit facilities or meet deposit repayment obligations on time. This risk is closely related to various other types of financial risk, making it difficult to measure and control. One crucial aspect of managing liquidity risk is the bank's funding strategy, which aims to avoid a significant mismatch between the maturities of assets and liabilities (Barongo & Mbelwa, 2024). The Loan-to-Deposit Ratio (LDR) is used to measure the extent to which credit is disbursed using funds received through customers' own capital (Ball, 2023). Similar results were also found in a study by (Eltweri et al., 2024) which found that the Loan-to-Deposit Ratio (LDR) had a negative and significant effect on the Price-to-Earnings Ratio (PER).

Solvency risk is the risk faced by a bank when it is unable to repay its long-term debt and financial obligations (Peykani et al., 2025). Banks that are unable to meet their obligations will default, thereby losing their franchise value and becoming insolvent (Samuel Shola et al., 2024).

Bank size is an important characteristic of a bank in understanding the scale of operations that can help manage risk better (Afroj, 2022). Bank size describes the size of a bank which can be shown through total assets, sales volume, average sales level, and average total asset level. Research conducted by (Khan et al., 2020) bank size, which is generally measured using the logarithm of total assets, is a picture that shows the scale of a company. The larger a bank, the more funds it reflects. Large banks also generally receive more protection from the government because if the bank fails, the impact on the economy is wider.

Bank deposits are sums of money deposited by customers with banks for safekeeping and withdrawal according to applicable regulations. These deposits can take the form of savings, time deposits, and checking accounts (Drechsler et al., 2021). According to (Kulkarni, 2022), bank deposits serve as an indicator of financial stability in the economy.

However, despite the crucial role of banks in maintaining financial stability, the valuation of Indonesian banks in the capital market still shows volatility. For instance, several banks with stable profitability records experience declining Price-Earnings Ratios, while others with high credit risks remain attractive to investors. Previous studies also report inconsistent findings regarding the effect of credit risk, liquidity risk, and solvency risk on firm value—some find significant relationships, while others do not. This creates a research gap, especially in the context of Indonesian commercial banks, where macroeconomic fluctuations and regulatory reforms may amplify these effects. Therefore, this study aims to fill the gap by systematically analyzing how risk management variables and bank characteristics affect firm value, specifically the Price-Earnings Ratio.

METHODS

This study employs a quantitative approach with an explanatory method to empirically test the relationship between independent and dependent variables in the context of banking firm performance. The dependent variable focused on analysis is firm value, as measured by the price-earnings ratio (PER).

From 2019 to 2023, the sample was determined using a purposive sampling method, with the criteria being that the banks were commercial banks, consistently listed on the Indonesia Stock Exchange for the five-year study period, not delisted, and had complete financial reports accessible to the public. Based on these criteria, a total of 38 banks met the requirements and were used as the study sample. Therefore, the number of panel data observations used was 190 (38 banks \times 5 years).

Secondary data was derived from the annual financial statements and annual reports of each bank. These included credit risk (CR), liquidity risk (LQR), and solvency risk (SVR). Control variables, such as bank size (BKZ), Bank Deposits (BKD), are also studied. Price Earning Ratio (PER) is used to measure the value of the bank company, which is the dependent variable.

The research process involved several steps. First, the population of this study consisted of all commercial banks listed on the Indonesia Stock Exchange between 2019 and 2023. From this population, purposive sampling was applied with criteria such as continuous listing during the observation period, availability of complete financial statements, and absence of delisting. This process resulted in 38 eligible banks. Second, data collection was conducted through secondary sources, primarily annual financial reports and official IDX publications. Third, the data were processed and analyzed using EViews 9, starting with descriptive statistics, followed by classical assumption tests (Chow, Hausman, and F-test) to determine the appropriate panel regression model. Finally, hypothesis testing was performed to evaluate the influence of the independent and control variables on firm value. This systematic approach ensures the robustness of the findings and provides reliable implications for theory and practice.

RESULTS AND DISCUSSION

a. Descriptive Analysis

Table 1. Descriptive Statistical Analysis Results

Variables	N	Mean	Median	Minimum	Maximum	Std. Dev
PER	190	7.32E-09	8.83E-10	-3.94E-08	2.50E-07	2.41E-08
Credit Risk (CRR)	190	0.040540	0.026510	2.00E-05	0.389790	0.056119
Liquidity Risk (LQR)	190	0.776302	0.789000	0.107240	1.631880	0.253129
Solvency Risk (SVR)	190	0.188944	0.162485	0.055340	0.579740	0.091417
Bank Size (BKZ)	190		31.23515	28.55812	35.31545	1.696922
Bank Deposit (BKD)	190	31.62084	31.00696	28.03036	34.85380	1.720519
			31.29006			

Source: Eviews 9 Regression Data Panel Output

Based on the descriptive statistical analysis in Table 1, the interpretation results can be described as follows:

- 1) PER has a mean value of 7.32E-09 and a standard deviation of 2.41E-08. The minimum PER value is -3.94E-08, while the maximum value is 2.50E-07.
- 2) CRR has a mean value of 0.040540 and a standard deviation of 0.056119. The minimum CRR value is 2.00E-05, while the maximum value is 0.389790.
- 3) LQR has a mean value of 0.776302 and a standard deviation of 0.253129. The minimum LQR value is 0.107240, while the maximum value is 1.631880.
- 4) The SVR has a mean value of 0.188944 and a standard deviation of 0.091417. The minimum SVR value is 0.055340, while the maximum value is 0.579740.
- 5) The BKZ has a mean value of 31.62084 and a standard deviation of 1.696922. The minimum BKZ value is 28.55812, while the maximum value is 35.31545.
- 6) The BKD has a mean value of 31.29006 and a standard deviation of 1.720519. The minimum value of BKD is 28.03036, while the maximum value is 34.85380

b. Classic Assumption Test

1. Chow Test

Table 2. Chow Test Result Redundant Fixed Effect Tests

Variables	Chi-Square	Probability	Result
Price Earning Ratio	100.195960	0.0000	Ho Rejected. Fixed Effects Model selected

Source: Eviews 9.0

Based on Table 2 Chow Test Result, the results show that the cross-section probability value of the chi-square test is $0.0000 < 0.05$. This means that the conclusion obtained is that H_0 is rejected, and the fixed effects model is used. If the fixed effects model is selected, the next test, the Hausman Test, is needed to determine whether to use a fixed effects or random effects model.

2. Hausman Test

Table 3. Hausman Test Result Correlated Random Effects- Hausman Test

Dependent Variable	Chi-Square	Probability	Result
Price Earning Ratio	12.402882	0.0297	Ho Rejected. Fixed Effects Model selected.

Source: Eviews 9.0

Based on Table 3 Hausman Test Result, the results show that the cross-section probability value of the chi-square is $0.0297 < 0.05$. This means that the decision obtained is that H_0 is rejected, so the model used is Fixed Effects.

c. Hypothesis Testing Result

1. Analysis Panel Data Regression

This study uses the panel data regression testing method which aims to test and analyze how the independent variables, namely credit risk, liquidity risk and solvency risk, affect firm value. These results are presented in tabular form for easy understanding by the reader.

Table 4. Panel Data Regression Results

Variables	Coefficient	Probability
Constanta	7.24E-07	0.0005
Credit Risk (CRR)	-5.57E-08	0.4415
Liquidity Risk (LQR)	-1.07E-08	0.4970
Solvency Risk (SVR)	8.39E-08	0.0205
Bank Size (BKZ)	-1.88E-08	0.2983
Bank Deposit (BKD)	-4.10E-09	0.8021

Source: E-views 9.0

Based on the regression results, it is known that the variable. The t test results in table 1 (Price Earning Ratio) show that the Credit Risk (CRR) variable has a significant value of $0.4415 > 0.05$, which means that H_0 is accepted, H_a is rejected with a coefficient of -5.57E-08, so it can be conclude that Credit Risk does not have effect on the financial performance.

The t test results in table 1 (Price Earning Ratio) show that the Liquidity Risk (LQR) variable has a significant value of $0.4970 > 0.05$, which means that H_0 is accepted, H_a is rejected with a coefficient of -1.07E-08, so it can be conclude that Liquidity Risk does not have significant effect on the financial performance.

The t test results in table 1 (Price Earning Ratio) show that the Solvency Risk (SVR) variable has a significant value of $0.0205 < 0.05$, which means that H_0 is rejected, H_a is accepted with a coefficient of 8.39E-08, which means the increase in Solvency Risk will also increase Price Earning Ratio and vice versa. So it can be conclude, that Solvency Risk does have a significant positive effect on the financial performance.

The t test results in table 1 (Price Earning Ratio) show that the Bank Size (BKZ) variable has a significant value of $0.2983 > 0.05$, which means that H_0 is accepted, H_a is rejected with a coefficient of -1.88E-08, so it can be conclude that Bank Size does not have significant effect on the financial performance.

The t test results in table 1 (Price Earning Ratio) show that the Bank Deposit (BKD) variable has a significant value of $0.8021 > 0.05$, which means that H_0 is accepted, H_a is rejected with a coefficient of -4.10E-09, so it can be conclude, that Bank Deposit does not have significant effect on the financial performance.

2. F Test

Table 5. F Test Result

Effect test	Dependent Variable	Probability	Result
Prob. (F-Statistic)	Price Earning Ratio	0.000001	Ho Rejected

Source: Eviews 9.0

Based on Table 5 of the F-test, the results show that the F-statistic probability value is $0.000001 < 0.05$. This means that H_0 is rejected, and the independent and control variables, such as credit risk, liquidity risk, solvency risk, and bank size, affect the dependent variable, the Price Earnings Ratio. Therefore, the regression model in this study is suitable for use.

3. Goodness of Fit Test (Adjusted R^2)

Table 6. Goodness of Fit Test Results

Dependent Variable	R^2	Adjusted R^2
Price Earning Ratio	0.454258	0.298332

Source: Eviews 9.0

Based on Table 6 of the Goodness of Fit Test (Adjusted R^2), the adjusted R^2 value is 0.298332. This means that the independent and control variables, such as credit risk, liquidity risk, solvency risk, bank size, and bank deposits, are able to explain 29.83% of the variation in the dependent variable, the Price Earnings Ratio (PER). The remaining 71.27% is explained by other variables not included in this model. Therefore, there is a weak relationship between credit risk, liquidity risk, solvency risk, bank size, and bank deposits, and PER.

DISCUSSION

Credit Risk has a Significant Effect on the Price-Earning Ratio.

Based on the results of regression testing, the credit risk variable, proxied by the Non-Performing Loan (NPL) ratio, showed an insignificant effect on the Price-Earnings Ratio (PER). This finding indicates that an increase or decrease in a bank's credit risk does not have a significant direct impact on the market's assessment of the bank's future earnings, as reflected in the PER. This result aligns with research conducted by (Agustin Ekadjaja, 2021) on the Nigerian banking sector, which concluded that NPLs do not significantly impact dividend policy and firm value, including PER, in unstable economic conditions. Furthermore, (Noviyanti & Sanjaya, 2024) also emphasized that in the context of South Asian banks, although NPLs impact short-term profitability, their effect on PER-based valuations tends to be unstable and statistically insignificant. Therefore, the market likely places more emphasis on long-term earnings prospects than short-term credit risk ratios in determining bank valuations. The test results show that credit risk, as proxied by the Non-Performing Loan (NPL) ratio, has no significant effect on the Price Earnings Ratio (PER). This indicates that investors do not consider the level of non-performing loans as a primary indicator in assessing bank stock valuations based on future earnings expectations. This finding is consistent with research by (Nurthen & van der Laan, 2022) published in the Future Business Journal. This research indicates that NPLs do not significantly influence market variables such as PER because investors prioritize earnings stability.

For banks, this result suggests that although credit risk does not directly affect valuation in the short term, maintaining strong credit quality is still crucial for sustaining long-term profitability and avoiding systemic risks. Bank managers should implement strict risk management and loan monitoring systems to ensure sustainable growth. For investors, the finding implies that relying solely on NPL ratios may not be sufficient in evaluating bank value; instead, they should consider broader indicators such as earnings stability, profitability trends, and portfolio diversification.

Liquidity Risk has a Significant Effect on the Price-Earning Ratio.

The liquidity risk variable, represented in this study by the Loan-to-Deposit Ratio (LDR), showed no significant effect on the Price-Earnings Ratio. This indicates that a bank's liquidity level, although important for internal financial management, is not a primary factor considered by

investors when determining the PER. This finding is supported by the findings of a study by (Hasanudin et al., 2023) which examined the effect of the Liquidity Coverage Ratio (LCR) on the profitability and valuation of banks in the United States during the COVID-19 crisis. The study concluded that while the LCR is important for short-term resilience, its impact on market valuations such as the PER is very limited. Liquidity risk, measured using the Loan-to-Deposit Ratio (LDR), also showed no significant effect on PER. This indicates that although liquidity is important in maintaining the stability of bank operations, it does not necessarily influence investor expectations of future earnings. According to (Omri et al., 2025), liquidity has a non-linear relationship with profitability, but does not necessarily affect PER, which better reflects long-term market perceptions.

Banks should continue to manage liquidity prudently to ensure operational stability and regulatory compliance, but they should also focus on channeling available liquidity into productive assets that generate sustainable profits. Managers can improve investor confidence by demonstrating efficiency in liquidity utilization rather than merely showing liquidity adequacy. For investors, this finding suggests that liquidity ratios such as LDR should be evaluated in conjunction with profitability indicators to assess a bank's long-term value potential.

Solvency Risk has a Significant Impact on the Price-Earning Ratio.

Solvency risk, as measured by the Debt-to-Equity Ratio (DER), does not significantly impact the PER. This indicates that a bank's funding structure, whether through debt or equity, is not a primary consideration for investors when assessing a bank's long-term profit potential. (Parulian & Bebasari, 2024) state that global banks' valuations are more influenced by the price-to-book ratio and digitalization expectations than by traditional leverage structures. This is consistent with research by (Tomak, 2024), which states that DER has no effect on PER because investors pay more attention to the efficiency of fund use and profit growth. Support also comes from empirical studies showing that capital structure is not a primary indicator in bank stock valuation when net profit growth and ROE are more dominant.

The result implies that banks should not rely solely on capital structure adjustments to improve market valuation. Instead, managers must ensure that leverage is utilized strategically to enhance profitability and operational efficiency. For investors, this suggests that solvency indicators such as DER should be assessed alongside profitability metrics and growth prospects, as market participants place greater emphasis on actual earnings performance rather than the capital mix.

Bank Size Significantly Influences the Price-Earning Ratio.

Bank size (firm size) also did not significantly influence the Price-Earning Ratio in this study. This indicates that larger assets or total assets do not necessarily lead investors to place a higher valuation on the company's financial performance through the PER (Percentage-to-Earning Ratio). Their reports explain that large banks tend to face high operational and regulatory complexity, which makes investors cautious in assigning valuation premiums. In fact, an analysis by (Farooq et al., 2023) found that large banks, despite having stable profits and strong market share, do not always achieve a high PER due to potential systemic risk and inherent growth limitations. Bank size also did not significantly influence the Price-Earnings Ratio (PER) in this study. This means that a bank's total assets do not necessarily increase its market valuation unless accompanied by performance efficiency. Research conducted by (Pandey & Budhthoki, 2020) shows that larger banks do not always achieve a higher PER due to growth constraints and increased operational risk.

For large banks, the result emphasizes the need to demonstrate efficiency, innovation, and effective cost management to translate size into actual market value. Merely expanding asset size without improving productivity or profitability may not enhance investor perceptions. Managers should therefore invest in digital transformation, risk control, and diversification strategies. For investors, this suggests that bank size alone is not a reliable indicator of valuation; instead, they should analyze whether larger banks achieve operational efficiency and sustainable growth

Bank Deposits Significantly Influence the Price-Earning Ratio.

The control variable for bank deposits, measured by total third-party funds (DPK), also had no significant effect on the PER. This indicates that the size of public deposits in banks does not directly boost future profit expectations, as reflected in the PER. Research by (Blatter & Fuster, 2022) states that although increasing deposits strengthens a bank's funding stability, it does not automatically increase market valuation if it is not accompanied by credit growth or increased profit margins. Therefore, investors tend to assess the efficiency of deposit utilization rather than solely the size of deposits when assessing a company's profit prospects.

Banks must focus not only on mobilizing deposits but also on effectively allocating them into profitable and productive lending activities. Deposit growth should be accompanied by strategies that maximize lending efficiency and profitability, otherwise, the increase in deposits will not be reflected in higher firm value. For regulators, this finding highlights the importance of monitoring banks' ability to convert deposits into sustainable credit expansion. For investors, it signals that evaluating banks requires looking beyond total deposits to how effectively those deposits are utilized to generate returns.

CONCLUSION

This study examines the relationship between solvency risk and the price-earnings ratio (P/E) of listed companies on the Indonesia Stock Exchange. A panel data regression study shows that solvency risk impacts the P/E ratio. On the other hand, liquidity risk (LQR), market risk (CRR), bank size (BKZ), and bank deposits (BKD) do not significantly influence the P/E ratio. This suggests that capital market investors tend to consider a bank's long-term stability (reflected in solvency) over short-term risk or other operational indicators in determining a company's relative value. This study has several limitations. First, the five-year study period cannot fully capture the dynamics of longer economic cycles, including phases of economic crisis or recovery that may affect the P/E ratio. Second, the number of independent variables used is still limited, so it does not reflect all external and internal factors that could potentially influence the value of banking companies.

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