CHAPTER 2

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Signaling Theory

Signaling theory was proposed by Spence (1973) who explained job market behavior. Signaling theory explains that two parties who have different access to information, namely the signaler or owner of the information, provide a signal in the form of information that reflects the condition of a company which is beneficial for the receiver or outside parties (Connelly *et al*., 2011). Apart from that, it also explains management's perception of the company's future growth, by providing information that explains management's efforts to realize the owner's wishes. This information can be an important indicator for investors and businesspeople in making investment decisions.

The information provided by the company will be received by investors, it will be interpreted and analyzed first whether the information obtained is in the form of a positive signal that has a good impact or a negative signal that has a negative impact. If the information has a positive impact, it means that investors will respond positively and be able to differentiate between quality companies and those that are not, so that share prices will be higher, and the value of the company or bank will increase. However, if investors give a negative signal, it indicates that the investor's desire to invest is decreasing, which will affect the decline in company value.

Signals given by insiders obtain positive and negative private information, and they must decide whether to communicate this information to outsiders. Signaling theory focuses primarily on the intentional communication of positive information in an effort to convey positive organizational attributes. The signal given can be in the form of debt issuance. The use of debt in the company is adjusted to the company's ability to fulfill its obligations. Apart from that, signaling theory can also be seen from a business risk perspective, where higher business risks are considered negative by potential investors, thereby influencing their desire to invest. High investment opportunities will also be perceived as a positive signal that will influence investors' assessment of the company, indicating that the company can improve its financial performance and company value in the future.

2.2. Bank

2.2.1. Definition of Bank

According to Indonesian Financial Services Authority and Law number 10 of 1998, banks are defined as business entities that collect funds from the public in the form of savings and distribute them to the public in the form of credit and/or other forms in order to improve people's living standards. Indonesian banking is able to carry out its functions based on the principle of prudence. The main function of Indonesian banking is as a collector and distributor of public funds and aims to support the implementation of national development in order to increase the distribution of development and its results, economic growth and national stability, towards improving the standard of living of the people at large.

2.2.2. Type of Bank

Banks in Indonesia have 3 types, namely commercial banks, people's credit banks (BPR), and sharia banks. Commercial banks are banks that carry out business activities conventionally and/or based on sharia principles, which in their activities provide services in payment traffic. Commercial Banks can provide credit to the people, collect funds from the public in the form of savings in the form of current accounts, time deposits, savings, and/or other forms, then are able to carry out activities in foreign currency by fulfilling the provisions set by Bank Indonesia, etc.

Rural Credit Bank (BPR) is a bank that carries out business activities conventionally or based on sharia principles, whose activities do not provide services in payment traffic. Rural bank activities are narrower compared to commercial bank activities because rural banks are prohibited from accepting current account deposits, foreign exchange activities and insurance. Then the last type of bank is a sharia bank which has characteristics based on the principle of profit sharing, providing an alternative banking system that is mutually beneficial for the community and the bank. Currently, the banks that have influence on the Indonesian market are commercial banks. However, if you look at the number of existing banks, there are more people's credit banks than commercial banks. However, people's credit banks are less able to provide facilities as a means of payment traffic by the public, so public banks are better able to have an impact on the circulation of money in the environment.

2.2.3. Commercial Bank

The definition of a commercial bank is in accordance with Law Number 10 of 1998, a commercial bank is a bank that carries out business activities conventionally and/or based on sharia principles and in its activities provides services in payment traffic. The nature of the services provided is general, in the sense that it can provide all existing banking services. Likewise, the operational area can be carried out throughout Indonesia, even to overseas branches. Based on ownership, public banks can be owned by the government or private. for government commercial banks are banks whose entire capital comes from separated state assets and are established under separate laws, examples of these banks are Bank Rakyat Indonesia (BRI), Bank Nasional Indonesia (BNI), Bank Mandiri, Bank Tabungan Negara (BTN), and many others. Private commercial banks are banking whose entire capital comes from private parties or individuals. Banks that are classified as private public banks in Indonesia are Bank Central Asia or BCA, Bank Mega, Bank Niaga, and others.

2.3. Bank Value

2.3.1. Definition of Bank Value

The value of a bank company is the price that must be paid by potential buyers or investors if the company is sold. The price that prospective buyers are willing to pay is defined as the market value or market price of the company itself because the value of the company can provide maximum shareholder prosperity if the company's share price increases. The share price of this bank company can fluctuate, due to demand from the public which varies with each period, causing the share price to be high or very low.

2.3.2. Measurement of Bank Value

The value of this company can be influenced by various policies taken by management. If there is an increase in company value, then there will be an increase in the prosperity of the owners and shareholders which is reflected in the share price. So that the higher the bank share price, the higher the company value, the better the condition of the bank. The value of a bank company can be measured using the price based on the financial statement date or can be called book value, and also can be based on the market value is issued on the publish date. Book value of the company is based on actual value that is calculated by the internal parties, while market price is determined based on supply and demand from the community. It is better to use the market value of the company if want to invest or but the stock, because this price is influenced by the demand of the society.

Based on the Halimah and Komariah, 2017, the formulation to calculate the bank value is using the Price to Book Value (PBV). To calculate Price to Book Value by dividing the Stock Price with Book Value per Share. While Book Value per Share is got from total equity divided by the total number of outstanding shares. The stock price is based on the publication date of financial statements, which are using the market value of each bank. According to Murwani and Taufiq (2022), PBV that has more than 1 is reflect that the bank in a good condition. The result of PBV indicates the level of share price is overvalue or undervalue from the book value. If the PBV is increasing or the result is high it reflects an overvalued because the public or investor tends to buy the stock, and make the demand increase it means the company is having a good condition. Other than that, the low or decreasing PBV means an undervalued share price. In this condition, reflect that the company having bad conditions, and makes the society and investor tend to sell the stock.

2.4. Bank Performance

2.4.1. Definition of Bank Performance

Bank performance represents the economic success achieved by a bank during a particular period of banking activities in order to generate profits effectively and efficiently (Usman & Lestari, 2019). To evaluate a bank's financial performance, the first thing is checking how the bank's performance is and whether it is already good. Valuations determine how much profitability or bank profitable by comparing its profit result for a particular period with profits from previous and after years, or by comparing the bank's performance with the other banks (Katrodia, 2012). One of the indicators used to measure a bank's performance is using profitability ratio. Menicucci and Paolucci (2016) state that profitability is the ability to improve performance within the bank and generate profits from year to year.

2.4.2. Measurement of Bank Performance

A measurement used to calculate the profitability of a bank is using Return on Assets or ROA. ROA here is estimated based on earning before tax over total assets (Ali & Puah, 2018). Bank profitability is defined as the ability to generate profits (Kasmir, 2014) and a bank profitability is determined by its Return on Assets (ROA) and Return on Equity. Return on Assets (ROA) is a type of profitability ratio that can be used to analyze a company's ability to earn profit from its assets (Sudiyanto, 2010). ROA evaluates a company's performance based on past profit income and can be used for the next period. This means that the assets come from own capital or capital obtained from third parties and converted by the company into various assets of the organization in order for the survival of the company.

According to Indonesia Banking Regulation No. 13 / 24 / DPNP dated October 2, 2011, the minimum return on assets for banks is 1.5%. As profit increase, Return on Assets also increases. This indicates that the company is effectively utilizing its assets to generate profits. The performance of a new business can actually be determined by comparing the profits generated and the assets or capital used to generate profits. The return on equity (ROE), is a measure of a company's ability to generate profits from all the capital it employes and is a commonly used measure of profitability. This ratio indicates investment efficiency as measured by the effectiveness of personal capital management. This key figure can be used to evaluate a company's ability to improve or increase profits with its own total capital.

2.5. Bank Risk

Risk is a deviation of actual results from expected results, or the possibility of results that are different from those expected (Purwoko & Sudiyatno, 2013). This risk can come from internal or external parties which can be categorized into four categories, namely market risk, credit risk, operational risk and reputation risk. Market risk is the risk of loss of portfolio value due to interest rate fluctuations, exchange rate fluctuations, commodity price fluctuations, and stock price fluctuations. Then, operational risk is the risk of direct or indirect loss resulting from failure or inadequate operational processes. Meanwhile, credit risk is the risk of loss due to debtor failure that cannot be predicted in advance or because the debtor is unable to fulfill its obligations according to the agreement or a decline in the quality of the customer's credit.

Credit risk is the risk faced by banks regarding the amount of credit distributed to customers. Credit risk can be measured by the non-performing loan (NPL) variable. Non-performing loans are a number of credits that have not been paid or cannot be collected, in other words bad debt. This credit quality is considered substandard, doubtful and poor. Therefore, credit risk is a significant problem for banking in Indonesia. Banks with lower credit risk tend to show better performance than banks with higher credit risk. The lower the bank's credit risk, the higher the share price, and vice versa (Meliza, 2021). According to Bank Indonesia regulation number 15/2/PBI/2013 concerning *Penetapan Status dan Tidak Lanjut Pengawasan Bank Umum Konvensional*, the standard NPL ratio is less than 5%. If the NPL amount exceeds 5%, it is likely that the bank's profitability will also be large, because non-payment of credit will result in a decrease in interest income, which is the bank's main income.

2.6. Bank Size

Bank Size or company size are of fundamental importance to companies. This is because firm size represents the size of a firm and can be expressed in terms of total assets, number of sales, average sales level and average total assets (Ido, 2016). Size is a ratio that represents the bank's ownership of the assets. Higher asset ownership holdings allow banks to provide more financial services at lower costs. The size of the bank is determined by the total assets possessed by the bank. Assets are an important component of a bank. A bank with a larger asset size is more profitable than a bank with a small asset size because a larger bank has a higher level of efficiency. The size of the bank has an impact on the stock price and is significant to the closing price.

2.7. Previous Research

Based on the topic about bank value can be influenced by risk and performance, there have been several studies that have been conducted previously. Based on research conducted by Meliza (2021), about the influence of banking risk on share price and the moderating role of inflation rate. This research has share price as the dependent variable, then liquidity risk and also credit risk as independent variables, inflation as the moderating variable, and capitalization and efficiency as control variables. In this research, the sample consists of four largest government banks in Indonesia and compare it with the six largest private banks. This research has the result that government banks liquidity risk positively influences share price, while credit risk has no significant relationship with the share price. Furthermore, inflation can moderate the relationship between liquidity risk and share price. On the other hand, inflation failed to moderate the relationship between credit risk and share price.

Febrianto (2020), held research about analyzing macroeconomic, risk profiles on company performance, and company value in commercial banks listed on the Indonesian Stock Exchange. This research uses samples from 44 banking companies for 3 years from 2017 - 2020. Based on this research it is known that the factors that influence or encourage the decline amount in banking shares are unfavorable macroeconomic conditions, risk profile conditions, and poor banking financial performance. Therefore, all of these variables can influence company performance, especially banking performance in Indonesia.

Another research related to this topic is risk-based bank ratings on the value of banking companies conducted by Savitri and Ramanta (2019). The sample in this research is 6 companies that were registered on the Indonesian Stock Exchange in 2013-2017. The data analysis technique used is multiple linear regression analysis. The results of this research show that non-performing loans and loan to deposit ratios have a negative effect on the value of banking companies. Return on assets and capital adequacy ratio have a positive effect on the value of banking companies and good corporate governance has no effect on the value of banking companies.

Other than that, there is also research related to the influence of ROA, CAR, NPL, LDR, BOPO on the company value of commercial banks in Indonesia, this research was conducted by Halimah and Komariah in 2017. This research used a sample of 25 commercial banks that had go public from 2011 to 2015. The method used in this research is multiple linear regression analysis. The results of this study show that ROA, CAR, and LDR have a significant effect on firm value. Meanwhile, NPL and BOPO have no significant effect on firm value. Simultaneously these variables have a significant effect on firm value.

Table 2.1 Previous Research Summary

Researcher	Variable	Subject	Research Result
Meliza (2021)	**Dependent Variable:** Y: Share Price **Independent Variable:** X1: Liquidity Risk X2: Credit Risk **Moderating Variable:** Inflation **Control Variable:** Capitalization Efficiency	4 government banks, and 6 private banks listed in IDX from 2015 – 2019	a. Government bank liquidity risk has a positive effect on share price. b. Credit risk has no significant relationship with share price. c. Inflation can moderate the relationship between liquidity risk and share price.

			d. Inflation unsuccessful to moderate the relationship between credit risk and share price
Febrianto (2020)	**Dependent Variable:** Y1: Bank Value **Independent Variable:** X1: Macroeconomics X2: Risk Bank Profile **Control Variable:** Z: Bank Financial Performance	44 Bank Company of Commercial Bank in Indonesia listed in IDX from 2017 – 2020	H1: Macroeconomic affects the bank value H2: Risk profile affects the bank value H3: Financial performance affects the bank value
Savitri and Ramantha (2019)	**Dependent Variable:** Y: Company Value	6 bank that listed in Indonesian Stock	H1: Non-Performing Loan has negative effect on bank value.

	Independent Variable: X1: Non-Performing Loan X2: Loan to Deposit Ratio X3: Good Corporate Governance X4: Return on Asset X5: Capital Adequecy Ratio	Exchange from 2013 to 2017	H2: Loan to Deposit Ratio has negative effect on bank value. H3: Good Corporate Governance does not affect bank value. H4: Return on Asset has a positive effect on bank value. H5: Capital Adequacy Ratio has positive effect on bank value.
Halimah and Komariah (2017)	**Dependent Variable:** Y: Bank Value	25 Commercial banks listed in IDX from 2011 - 2015	Using T Statistic Test: ROA, CAR, and LDR has significant effect on company value.

	Independent Variable: X1: Return on Asset X2: Capital Adequacy Ratio (CAR) X3: Non-Performing Loans (NPL) X4: Loan to Deposit Ratio (LDR) X5: Operational Cost Ratio to Operating Income (BOPO)		While NPL, and BOPO does not have significant effect on company Value Using F Statistic Test: ROA, CAR, NPL, LDR, and BOPO have significant effect on company value

2.8. Hypothesis Development

2.8.1. The Effect of Bank Performance on Bank Value

A bank is an entity that connects several parties, so the internal information provided by the bank will influence market conditions. In this way, ROA as internal information from the bank will create a reaction in the market. Banks that have a large ROA value will also generate more profits. So, this information is good information for investors. Therefore, there will be more and more investors buying these shares, which will then cause an increase in the value of the bank, which can be seen from the bank's share price.

Banking performance assessment is carried out to determine the bank's ability to generate profits over a certain period. To measure banking performance, can use the return on asset ratio. Banking companies that have a high ROA value tend to be more attractive to investors because increasing profits shows that the bank has good and optimal capabilities in managing company assets so that the bank has good prospects in the future. Research conducted by Febrianto (2020) stated that bank financial performance influences bank value, apart from that, research conducted by Savitri and Ramantha (2019) showed that ROA can positively influence bank value, as well as research conducted by Halimah and Komariah (2017) also stated that ROA has a significant effect on company value.

Bank that has higher the ROA value, the better the banking ability to generate profits. According to BI circular no 13/24/DPNP, the standard of ROA value is greater than 1.21% it considers as a bank has a good health. A bank that are in good condition tend to be more attractive to investors, so the value of the bank will increase as well. Thus, the higher the ROA will increase the bank value. Based on theoretical explanations and previous research, the research hypothesis is formulated as follows:

H1: Return on Asset have a positive effect on Bank Value

2.8.2. The Effect of Bank Risk on Bank Value

The main function of a bank is distributing the money to society in terms of credit or loans. In the real situation, there are many debtors that cannot pay back the credit. Therefore, money circulation cannot run smoothly. so that it can hinder the circulation of money in the bank. This risk often occurs in banking, which is usually called credit risk. Non-Performing Loans (NPL) is a ratio used to measure a bank's ability to cover the risk of failure to repay credit by debtors. NPL reflects credit risk, the greater the NPL value indicates the greater the risk borne by the bank for the credit provided. On the other hand, if the NPL is low, the credit risk borne by the bank will be smaller. A change in the NPL value can provide a signal to investors. If the NPL value is lower, investors will tend to invest their funds in that bank, and vice versa. It can be seen from the calculation of the NPL ratio, namely the comparison between total non-performing loans consisting of substandard, doubtful and non-performing loans to total loans.

If seen from previous research conducted by Naufan (2020), it is stated that NPLs have a significant negative effect on bank value. Other research conducted by Savitri and Ramantha (2019) also explains that

NPLs have a significant negative effect on bank value. Both this two previous research have the same result that Non-Performing Loans have a significant negative effect on the bank value.

Based on Bank Indonesia Regulation Number 15/2/PBI/2013, banks that have a Non-Performing Loan ratio of more than 5% of total credit are banks that are considered to have potential difficulties that endanger the continuity of their business. So, in other condition a bank that has a NPL of less than 5% is a bank that in a good condition, because there are not many credit problems occurring in that bank. This regulation cannot be used as a benchmark for investors because this limitation is not an important signal for investors. Investors will tend to pay more attention to whether there is an increase or not in the NPL ratio. The greater the NPL, the more investors hold back investment and because of that the demand for that bank is decreasing so that share prices will decrease, and this will also cause a decrease in the value of the bank. Thus, it can be concluded that the greater the NPL value will cause the bank value to decrease. Based on theoretical explanations and previous research, the research hypothesis is formulated as follows:

H2: Non-Performing Loans have a negative effect on Bank Value

2.9. Conceptual Framework

The conceptual framework of this research is the theoretical relationship between research variables observed and measured by the research conducted. Therefore, in this research there is one dependent variable, namely Bank value (Y), two independent variables, namely Performance (X1), Risk (X2), and one control variable, namely Bank Size (Z). Therefore, the statistical analysis model for this research is as follows:

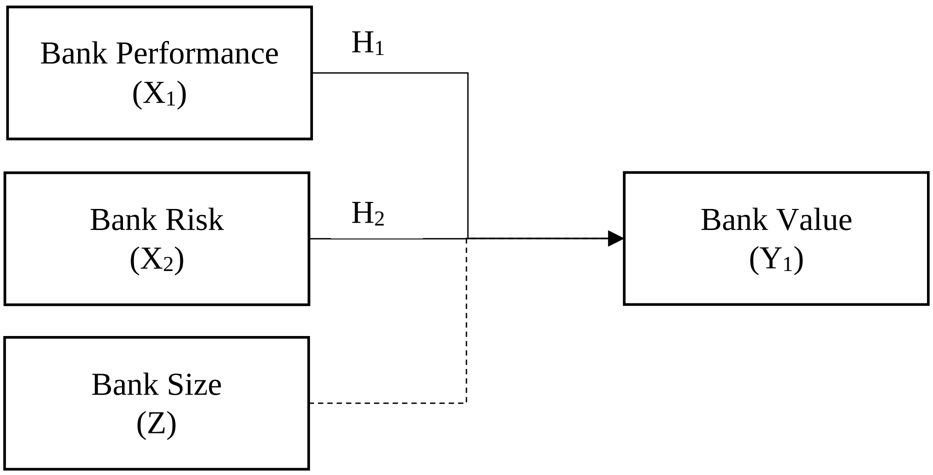

Figure 2.1 Conceptual Framework