CHAPTER II

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Literature Review

2.1.1. Stakeholder Theory

Stakeholder theory deals with how morality should be and when it plays a role in the business world. This theory states that considerations about how a company's operational activities affect stakeholders and that companies should not only concentrate on maximizing profits for the benefit of the owner have become a moral obligation of the company (Rankin et al., 2018). According to this theory, corporate goals can be achieved by balancing conflicting interests and demands among various stakeholder groups.

Rankin et al. (2018) divides stakeholder theory into three branches, namely the normative or ethical branch, the instrumental branch, and the managerial branch. Based on the ethical branch perspective, the company must treat all stakeholders fairly and the company must be managed in the interest of all stakeholders. Based on the instrumental branch perspective, it is said that management of stakeholders is one of the company's strategies. Companies that pay more attention to various stakeholder groups will have a better image. Based on the managerial branch perspective, it is said that stakeholders can influence company actions. The extent to which the company considers stakeholders depends on how much power the stakeholders have over the resources needed by the company. The

greater the stakeholder's control over the resources that play a major role in the company's success, the more likely the manager will address stakeholder concerns.

Rankin et al., (2018) said that providing information about company activities and performance is one-way companies can take to meet the needs and expectations of stakeholders. This information describes how the company, both in terms of vision, mission, goals, as well as financial and environmental performance, is aligned with the expectations and demands of stakeholders. In this study, stakeholder theory is related to ethical banking practices through the use of digital finance which shows the bank's concern for the country's goals in developing digital finance and shows that banks respond to pressure from stakeholders to act following technological developments.

2.2. Financial Performance Enterprises

2.2.1. Definition of Financial Performance Enterprises

In Yeremia & Stanly (2019) Financial Performance is defined as an assessment of a company's achievements, which can be seen from the company's ability to generate profits. Apart from being an indicator of the company's ability to fulfill obligations to its funders, company profits are also an element in the creation of company value that shows the company's prospects in the future. Meanwhile, financial performance is defined as an analysis that is useful for seeing how far a company has implemented financial implementation rules properly and correctly (Fahmi, 2017). Based on these two definitions, it can be concluded that financial performance is an analysis or assessment that is used as the basis for evaluating a

company's financial capability that has been carried out in one period using an analysis of financial statements.

2.2.2. Financial Statement

Financial Statements stated in Kasmir (2013) are reports that show the financial condition and results of operations of a company at this time or in a certain period. The purpose of financial statements is to provide financial information of a company at a certain time or at a certain period (Kasmir, 2013). The purpose of financial reports is to provide information about the company's performance in a certain period to users of financial statements by analyzing financial reports. These financial statements are analyzed using financial ratios to obtain quantitative information through financial reports for use by stakeholders in making decisions (Sukamulja, 2019).

2.2.3. Financial Ratio

Financial ratios in Sukamulja (2019) are explained as comparisons between elements in financial reports that can be classified into five types of financial ratios, namely:

1. Liquidity Ratio

   The ratio reflects the company's ability to convert its assets into cash. Liquidity ratios can be divided into five types, namely Current Ratio, Quick Ratio, Cash Ratio, Net Working Capital to Total Asset Ratio, and Interval Measure.

2. Solvency Ratio

The ratios that can be used to measure the risk of a company in the long term can be divided into six types, namely Debt to Asset Ratio, Debt to Equity Ratio, Equity Multiplier, Long Term Debt Ratio, Time Interest Earned Ratio, and Cash Coverage.

3. Profitability Ratio

The ratio that measures a company's ability to generate profits and measures the rate of return on investments made. Profitability ratios can be divided into four types, namely:

a. Gross Profit Margins

A ratio that measures a company's gross profit relative to a company's sales or net income.

b. Net Profit Margins

The ratio that measures the company's ability to generate net profit from sales.

c. Return on Equity

The ratio that measures a company's ability to generate net income from equity.

d. Return on Assets

The ratio that measures a company's ability to generate net profit from assets owned while at the same time measures the rate of return on the company's investment.

4. Efficiency Ratio

The ratio that measures the efficiency level of the company in managing its assets to generate sales.

5. Market Value Ratio

The ratio used to compare the value of the company from the point of view of investors with the value of the company in the financial statements.

2.3. Digital Finance

2.3.1. Definition of Digital Finance

Digital Finance is defined differently in governments perspective and financial institutions, some define digital finance including the classification of payment data, some of which are still connected with electronic transactions. Academics and practitioners continue to have varying definitions of the term (Ramli, 2020; Risman et al., 2021). Digital finance is the delivery of financial services via mobile devices, desktop computers, the internet, mobile wallets, e-wallets, and credit and debit cards (Durai et al., 2019).

According to Ozili (2018), digital finance encompasses all goods, services, technologies, and infrastructure that allow people and businesses to access payment, savings, and credit facilities online (online) without having to physically visit a bank or interact with financial service providers. Based on the latest technological developments, digital finance also includes financial technology (fintech) which offers various investment products in the form of gold which is then referred to as digital gold, stocks, financial derivative products and commodities. Fintech companies are also a financial marketplace that organizes peer-to-peer

lending and crowdfunding, so that they can directly bring together lender and borrower, although this function as a financial marketplace is still being debated as a digital financial element that helps achieve financial inclusion. Digital financial transactions were first used in developed countries because of the availability of adequate technology and infrastructure.

2.3.2. Dimension of Digital Finance

According to Risman et al. (2021) digital finance is all forms of financial transactions that are used digitally or electronically. One form of Digital Finance is internet-based digital payments. Examples of internet-based digital payments are mobile banking, sms banking, internet banking, QR codes or quick response codes.

2.4. Previous Research

Not many previous studies have tested digital finance on financial performance. China dominates research on digital finance and is very aggressive in conducting research updates. There are previous studies from China that have tested the effects of digital finance and financial constraints on financial performance as a firm-level evidence from China's new energy enterprises. Research by Wu & Huang (2022) uses the company's financial performance as the dependent variable and digital finance as the independent variable. In addition, using financial constraints as moderating variables and firm size, firm age, company age, state control, topshare, boardsize, CEOduality, and findev as control variables. The object of this study uses new energy companies listed on Shenzhen and Shanghai stock exchanges from 2011 to 2018. The results of this study state that the results are consistent with the finance literature, there is a robust negative relationship

between financial constraints and new energy firms' financial performance. The development of digital finance technology can positively influence new energy companies' financial performance. However, in the presence of financial constraints, the effect of digital finance will be weakened. Digital finance and financial constraints may have varying effects on financial performance depending on firms' scales and ownership types. In particular, the promotion effect of digital finance is higher among small firms and non-SOEs, the negative effect of financial constraints is higher among larger firms.

Research by Risman et al. (2021) which examines the effect of digital finance on financial stability uses financial stability as the dependent variable, digital finance as the independent variable. The object of this study uses 120 samples for 10 years from Bank Indonesia data sources from 2009 to 2019. The results of this study state that digital finance has a positive impact on financial stability by increasing the ability of banks to provide financing, so that the availability of bank loans tends to experience growth. However, the positive influence of digital finance on financial stability will decrease with increasing systematic risk, increasing digital payments as the main element of digital finance can no longer automatically support the growth of banking financing, this happens because banks anticipate systematic risks by reducing loans. Increased systematic risk will have an impact on financial system reducing instability, in such conditions the banks will have liquidity difficulties and even lack of liquidity, therefore by credit availability when there is an increase in systematic risk, banks will have sufficient liquidity in the

event of financial system instability and/or there was a financial crisis caused by systematic risk.

Research by Banna & Alam (2021) regarding the impact of digital financial inclusion on ASEAN banking stability as implications for the post-Covid-19 era uses banking stability as the dependent variable and digital financial inclusion as an independent variable. The object of this research uses 253 banks of 4 ASEAN countries over the period 2011–2019 where the 4 countries are Indonesia, Malaysia, Philippines and Thailand. The results of this study state that the greater implementation of DFI is positively associated with ASEAN banking stability which does not only reduce the default risk of the banks but also increases the financial mobility in the region.

Consequently, an integrated inclusion of digital finance in the ASEAN banking industry ensures sustainable economic growth that is likely to help maintain financial sustainability in times of crisis like the Covid-19 pandemic. Some of the countries, based on our findings, show lower DFI scores on various indicators. Therefore, the following policies can be taken into consideration to improve the DFI scores.

Firstly, as our results find that there is a lack of digital financial access in the ASEAN region, the banking sector, therefore, needs to expand its agent networks and other access points as well as improve the design of its existing DFS products by implementing artificial intelligence and machine learning to fascinate people of all economic classes. This will not only reduce the liquidity problem faced by the

banks in times of crises by increasing retail deposits from a vast clientele base but also ease financing constraints of individuals and SMEs. Secondly, as our index suggests that people in this region especially in the Philippines, Indonesia and Thailand have lack of financial and digital literacy, governments and policy makers should, therefore, provide people with appropriate digital financial literacy specially to middle-aged and older people. Finally, the positive relationship between DFI and banking stability suggests that DFI, as a progressive mechanism, can bring a ground-breaking development in the ASEAN banking industry even in times of any economic shock. Hence, the government, policymakers and standard setters should take immediate steps to implement the full-fledged DFS in the ASEAN banking sector by adopting innovative, technology friendly and regulatory-based policies as well so that they can efficiently tackle the aftermath of any adverse situation like the current Covid-19 pandemic.

Research by Ozili (2018) which examines Impact of digital finance on financial inclusion and stability uses financial inclusion and financial stability as the dependent variable, digital finance as the independent variable. The results of this study provide a discussion on digital finance and its implication for financial inclusion and financial stability. Digital finance through Fintech providers has positive effects for financial inclusion in emerging and advanced economies, and the convenience that digital finance provides to individuals with low and variable income is often more valuable to them than the higher cost they will pay to obtain such services from conventional regulated banks. Despite the benefits of digital finance, this article has highlighted some challenges that digital finance poses for

financial inclusion and financial stability. Finally, an interesting direction for future research would be to explore the relationship between digital finance and economic crises to determine whether digital finance helps to propagate financial contagion during a crisis.

Table 2. 1

Previous Research

No.	Researcher	Variable	Object	Research result
1.	(Wu & Huang, 2022)	**Dependent Variable** - Corporate Financial Performance **Independent Variable** - Digital Finance **Moderating Variable** - Financial Constraint **Control Variable** - Firm Size - Firm Age - Company Age	New energy companies listed on Shenzhen and Shanghai stock exchanges from 2011 to 2018	The development of the new energy industry in China is confronted with a significant investment and financing hurdle. Using the panel data of listed new energy companies and the prefecture-level digital finance index from 2011 to 2018, this study employed the SGMM method to explore the effects of digital finance and financial constraints on new energy enterprises' financial performance. The conclusions drawn from the analysis are as follows: (1) Consistent with the finance literature, there is a robust negative relationship between financial constraints and new energy firms' financial performance.

		- State Control - Topshare - Boardsize - CEOduality - Findev		(2) The development of digital finance technology can positively influence new energy companies' financial performance. However, in the presence of financial constraints, the effect of digital finance will be weakened. (3) Digital finance and financial constraints may have varying effects on financial performance depending on firms' scales and ownership types. Specifically, the promotion effect of digital finance is higher among small firms and non-SOEs, the negative effect of financial constraints is higher among larger firms.
2.	(Risman et al., 2021)	**Dependent Variable** - Financial Stability **Independent Variable** - Digital Finance **Moderating Variable** - Market Risk	The data used is 120 samples for 10 years from Bank Indonesia data sources from 2009 to 2019	Digital finance has a positive impact on financial stability by increasing the ability of banks to provide financing, so that the availability of bank loans tends to experience growth. However, the positive influence of digital finance on financial stability will decrease with increasing systematic risk, increasing digital payments as the main element of digital finance can

				no longer automatically support the growth of banking financing, this happens because banks anticipate systematic risks by reducing loans. Increased systematic risk will have an impact on financial system instability, in such conditions the banks will have liquidity difficulties and even lack of liquidity, therefore by reducing credit availability when there is an increase in systematic risk, banks will have sufficient liquidity in the event of financial system instability and / or there was a financial crisis caused by systematic risk.
3.	(Banna & Alam, 2021)	**Dependent Variable** - Bank Stability **Independent Variable** - Digital Financial Inclusion	253 banks of 4 ASEAN countries over the period 2011–2019	The empirical evidence advises that greater implementation of DFI is positively associated with ASEAN banking stability which does not only reduce the default risk of the banks but also increases the financial mobility in the region. Consequently, an integrated inclusion of digital finance in the ASEAN banking industry ensures sustainable economic growth that is likely to

				help maintain financial sustainability in times of crisis like the Covid-19 pandemic. Our results are robust in various robustness checks. Some of the countries, based on our findings, show lower DFI scores in various indices. Therefore, the following policies can be taken into consideration to improve the DFI scores. Firstly, as our results find that there is a lack of digital financial access in the ASEAN region, the banking sector, therefore, needs to expand its agent networks and other access points as well as improve the design of its existing DFS products by implementing artificial intelligence and machine learning to fascinate people of all economic classes. This will not only reduce the liquidity problem faced by the banks in times of crises by increasing retail deposits from a vast clientele base but also ease financing constraints of individuals and SMEs. Secondly, as our index suggests that people in this region especially in the Philippines,

				Indonesia and Thailand have lack of financial and digital literacy, governments and policymakers should, therefore, provide people with appropriate digital financial literacy specially to middle-aged and older people. Finally, the positive relationship between DFI and banking stability suggests that DFI, as a progressive mechanism, can bring a ground-breaking development in the ASEAN banking industry even in times of any economic shock. Hence, the government, policymakers and standard setters should take immediate steps to implement the full-fledged DFS in the ASEAN banking sector by adopting innovative, technology friendly and regulatory-based policies as well so that they can efficiently tackle the aftermath of any adverse situation like the current Covid-19 pandemic.
4.	(Ozili, 2018)	**Dependent Variable**		This article provides a discussion on digital finance and its implication for financial inclusion and financial

		- Financial inclusion - Financial Stability **Independent Variable** - Digital Finance		stability. Digital finance through Fintech providers has positive effects for financial inclusion in emerging and advanced economies, and the convenience that digital finance provides to individuals with low and variable income is often more valuable to them than the higher cost they will pay to obtain such services from conventional regulated banks. Despite the benefits of digital finance, this article has highlighted some challenges that digital finance poses for financial inclusion and financial stability. Finally, an interesting direction for future research would be to explore the relationship between digital finance and economic crises to determine whether digital finance helps to propagate financial contagion during a crisis.

Reference: Previous Research

2.5. Hypothesis Development

Based on Wu & Huang (2022) the role of digital finance can be summarized into four aspects. First, it enriches the financial market, creates new business models, and offers novel financial services to fulfill entrepreneurs' financial needs.

Second, digital finance revolutionizes the transaction methods and simplifies the transaction process. Third, digital finance reduces information asymmetry and improves risk management efficiency. Fourth, digital finance challenges traditional financial institutions regarding their services and products, driving them to upgrade their offerings and provide new services to customers to remain competitive posed by digital banking.

The Indonesian government is also boosting digital finance, as stated by Bank Indonesia Deputy Governor Rosmaya Hadi that Bank Indonesia (BI) has continued to encourage digital finance development, which it considers one of the transformation pillars of the national economic structure (Bank Indonesia Deputy Governor, 2021). According to Bank Indonesia Deputy Governor digital finance is created to build a healthy, competitive, and innovative payment system industry, so as to facilitate efficient, secure, and reliable payment services to the public and the impact will be able to increase national economic efficiency.

The banking sector must be prepared to provide various digital transaction innovations so that they can develop with digital finance readiness. In the future, the number of digital transactions will be multiplied by seeing the support from the Indonesian central bank which is aggressively providing socialization regarding digital finance.

According to BNI Corporate Secretary Okki Rushartomo (2023), there were 9.8% more transactions in February 2023 than there had been for February 2022. The transaction value of mobile banking as of February 2023, which was recorded

at IDR 155.51 trillion, jumped 49% YoY when compared to the acquisition in the same period the previous year, which amounted to IDR 104.48 trillion, was where the highest improvement in BNI Mobile Banking performance was actually found (Pers BNI, 2023). This is a phenomenon that shows that technological advances really support the development of digital finance, namely by providing electronic transactions such as mobile banking as one of the products and services of banking companies.

But unfortunately, in Indonesia there is still no Digital Finance Index that can be used to measure digital finance like research conducted by (Wu & Huang, 2022) in China. Research conducted by Risman et al., (2021) uses proxies to calculate digital finance by comparing total electronic transactions to the total of all transactions. However, the data available in Indonesia is only the total number of transactions from all banks and published by Bank Indonesia. Very few banking companies have reported regarding the number and nominal value of electronic transactions, even though the development of digital finance in Indonesia has been very rapid.

Referring to the increased use of mobile banking or digital finance, it is possible that there will be an impact on the financial performance of banking companies. The implementation of digital finance is when the banking company issues mobile banking as one of the products and services offered. Comparing the differences between the financial performance of banking companies before and after the implementation of digital finance can be done to determine the impact of digital finance on financial performance.

Digital transactions will provide efficiency and transaction integrity which will have an impact on increasing the financial performance of companies, especially banking companies. This is in accordance with research according to Ozili (2018) digital financial services have a long-term positive effect on banking performance. Based on previous analysis and research related to the effect of digital finance on financial performance as measured by ROA and ROE in banking companies in Indonesia, the hypotheses proposed to be tested in this study are as follows:

a) ***H_{a1}: There is a difference in ROA between before and after the implementation of digital finance.***
b) ***H_{a2}: There is a difference in ROE between before and after the implementation of digital finance.***