FINANCIAL PERFORMANCE MEASUREMENT, ANALYSIS & EVALUATION OF FINANCIAL HEALTHINESS OF REGIONAL DEVELOPMENT BANKS INDUSTRY BEFORE AND DURING COVID-19 PANDEMIC (2016-2023): EVIDENCE OF BANK BJB AND BANK JATIM

MASTERS OF BUSINESS ADMINISTRATION
MASTERS THESIS PROPOSAL

IPMI International School

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Overview

Abstract

Banks, as financial institutions that manage money and related services, have a major role in accepting deposits, providing loans, and making profits from the difference in fees. The focus of this thesis is the evaluation of the health level of Regional Development Banks (BPD's) listed on the Indonesia Stock Exchange (IDX) using the RBBR (Risk-Based Bank Rating) assessment and the Altman Z-Score model. Specifically, this study provides a comprehensive analysis of the financial health level of BUMD Banks, namely Bank bjb and Bank Jatim. In assessing the financial health, various financial indicators are utilized by combining the RBBR method and the Altman Z-Score model, providing an overall picture of the stability and financial health of these Banks amidst the dynamics of the Indonesian economy. In addition, this study also includes the use of a t-test to evaluate significant differences in the financial health of regional development Banks before and during the COVID-19 period. Including the t-test allows us to assess the impact of the pandemic on the financial condition of the Banks, providing additional valuable insights for stakeholders, regulators, and the public in dealing with the challenges facing the Banking industry.

Introduction

Navigating Hurdles and Resilience Amidst External Factors

1 **Regional Banking Structure**

Indonesia's banking sector comprises commercial banks, rural banks, state-owned enterprises, and local government-owned banks, such as Regional Development Banks (BPDs). Their primary focus revolves around deposit collection and credit provision to uplift living standards.

2 **BPD Challenges**

Despite being commercial banks, BPDs encounter impediments stemming from their regional affiliations. Challenges like diminished competitiveness, governance deficiencies, and inadequate support impede their advancement.

3 **External Impact: COVID-19**

External factors such as COVID-19 have exerted a significant impact on the Indonesian economy, manifesting in disrupted supply chains, diminished investments, and decelerated growth. These effects have precipitated stock market fluctuations and a decline in investor confidence.

4 **BPD Resilience During COVID-19**

Despite the challenges presented by the COVID-19 pandemic, businesses with public debts (BPDs) have demonstrated resilience by exhibiting positive asset growth. It is essential to closely monitor financial indicators, particularly liquidity and solvency, to safeguard their stability.

Number of weekly COVID-19 cases reported to WHO
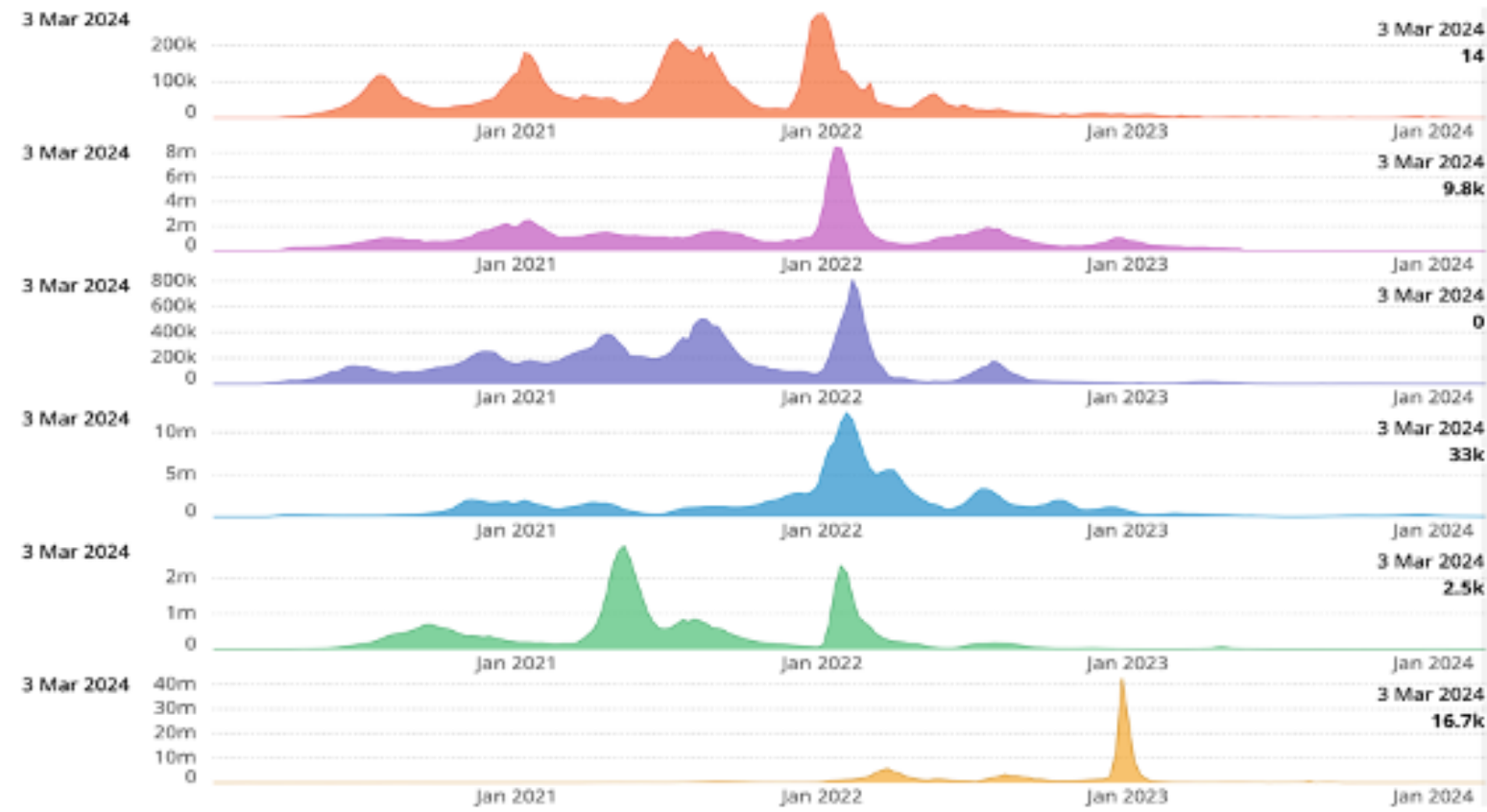5 January 2020 – 3 March 2024

☐ Align axis scales

Region	Date	Value
Africa	3 Mar 2024	
14		3 Mar 2024 / 14
Americas	3 Mar 2024	
9,838		3 Mar 2024 / 9.8k
Eastern Mediterranean	3 Mar 2024	
0		3 Mar 2024 / 0
Europe	3 Mar 2024	
32,955		3 Mar 2024 / 33k
South-East Asia	3 Mar 2024	
2,468		3 Mar 2024 / 2.5k
Western Pacific	3 Mar 2024	
16,674		3 Mar 2024 / 16.7k

Kinerja BPD
(SPI OJK Desember 2023 & Annual Report BPD 3Q-2023)

Total Assets
Rp910.9 Tr
+5.3% YoY

FY-22: 865 FY-23: 911

No	Bank	Nama Bank	Rp Triliun
1	mandiri	Bank Mandiri	2,006.9
2	BRI	BRI	1,852.0
3	BCA	BCA	1,381.5
4	BNI	BNI	1,009.3
5	bpd	**BPD SI**	**910.9**
6	Bank BTN	BTN* (Juni 2023)	400.5
7	CIMB NIAGA	CIMB Niaga	329.1

Total Deposit
Rp730.3 Tr
+0.9% YoY
FY-22: 724 FY-23: 730
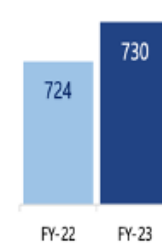
Total Loan
Rp606 Tr
+7.8% YoY
FY-22: 563 FY-23: 607
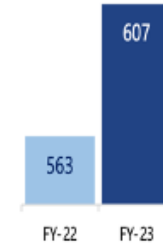
Total Profits
Rp14.5 Tr
-5.2% YoY
FY-22: 15,3 FY-23: 14,5
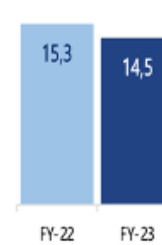
CAR
25.91%
+232 bps YoY

LDR
83.03%
+516 bps YoY

NPL
2.18%
5 bps YoY

BOPO
78.38%
+200 bps YoY

NIM
5.52%
-24 bps YoY

ROA
1.98%
-14 bps YoY

Sebaran Aset (% dari Total Aset BPD)

bank bjb 17,8%	Bank Jatim 11,3%	Bank Jateng 8,6%	Bank DKI 8,3%	Bank Kaltim 4,9%	

5 BPD 51% | **22 BPD 49%**

Bank asset values (in order): bank bjb 168,7 · Bank Jatim 107,0 · Bank Jateng 81,6 · Bank DKI 78,2 · Bank Kaltim 46,5 · Bank Sumut 40,9 · Bank Papua 36,0 · Bank Sumsel Babel 35,9 · BPD Bali 34,4 · Bank Nagari 31,5 · Bank Sulselbar 29,3 · Bank Riau Kepri 28,2 · Bank Aceh 28,2 · Bank Kalsel 23,5 · Bank Kalbar 20,7 · Bank Sulut 19,7 · Bank DIY 17,8 · Bank NTT 17,4 · Bank Kalteng 14,7 · Bank NTB Syariah 14,1 · Bank Sultra 12,6 · Bank Jambi 12,4 · Bank Sulteng 10,9 · Bank Lampung 10,2 · Bank Maluku Malut 9,5 · Bank Bengkulu 8,8 · bank banten 6,9

Company Background

bank **bjb**

- Publik 25%
- Pemda Provinsi Jawa Barat 38%
- Pemda Kota dan Kabupaten Se Banten 8%
- Pemda Kota dan Kabupaten Se-Jawa Barat 24%
- Pemda Provinsi banten 5%

Establish	:	May 20, 1961
Listed on IDX	:	July 8, 2010
Total Asset	:	168,7 T
Employee	:	7,413

bankjatim

- Masyarakat 21%
- Pemda Tingkat I Provinsi Jawa Timur 51%
- 38 Pemda Kabupaten/Kota 28%
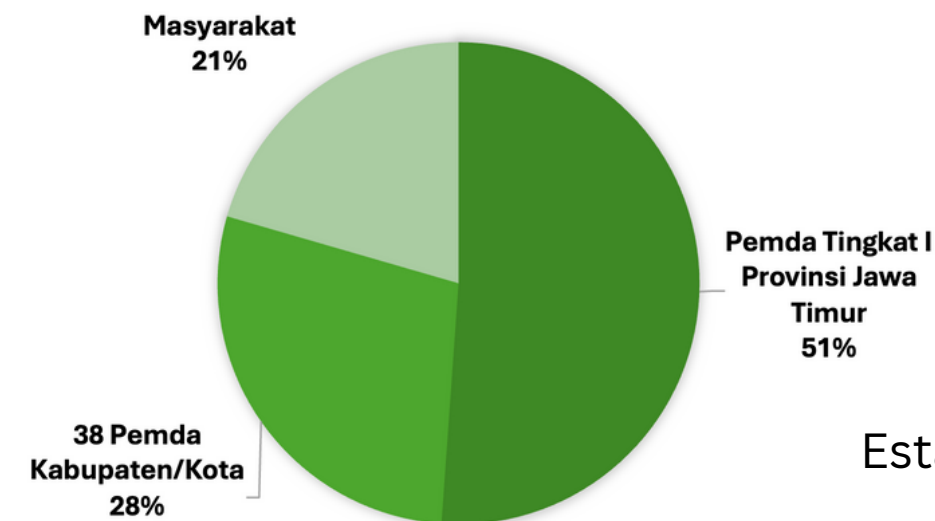
Establish	:	August 17, 1961
Listed on IDX	:	July 12, 2012
Total Asset	:	107,0 T
Employee	:	4,544

Problem & Question

Research Problem

The COVID-19 pandemic has disrupted the Banking sector, highlighting the importance of assessing financial performance for sustainability. Shareholders and stakeholders need reliable data to navigate challenges and make informed decisions. Research is needed to analyze past performance and strategically assess the current situation for effective decision-making.

Research Question

1. How does the financial performance of Banking companies before and during the COVID-19 pandemic in terms of Risk Based Rating Ratio?
2. How do differences in the financial performance of banking companies vary between before and during the COVID-19 pandemic?
3. How was the financial health of banking companies before and during the COVID-19 pandemic?

The First Objective

To evaluate the financial performance of banking companies before and during the COVID-19 pandemic in terms of Risk-Based Rating Ratios.

The First Objective

To assess the differences in the financial performance of banking companies between before and during the COVID-19 pandemic.

The First Objective

To analyze the financial health of banking companies before and during the COVID-19 pandemic.

Research Objectives

This study offers vital insights for banking firms, aiding informed decisions on sustainability and investment. It evaluates financial performance, overall health, and forecasts sustainability, benefiting shareholders, stakeholders, and investors.

Significance of the study →

Theoretical benefits:

This study focuses on evaluating the financial performance and health of Regional Development Banks listed on the Indonesia Stock Exchange (IDX), particularly Bank bjb and Bank Jatim. Utilizing Risk-Based Bank Rating and Altman Z-Score models, it aims to offer a thorough analysis of these banks and contribute to understanding risk assessment models within the regional banking context. The research provides valuable insights for stakeholders and enhances knowledge regarding the application and effectiveness of these models

Practical benefits

This research is useful for stakeholders, such as investors, regulators, and policy makers in assessing the stability and viability of the Bank, by considering risk factors and overall financial health from the research results using the RBBR and Altman Z-Score models. The results of this study may have implications for regulatory policies related to Regional Development Banks, assisting Supervisors in formulating effective measures to ensure the stability of the Bank's business sustainability.

Chapter II Literary Review

About The Literature

- **Risk Based Bank Rating**
  1. Risk Profile
  2. Good Corporate Governance
  3. Earning
  4. Capital

About The Literature

- **Altman's Z-Score Prediction Model**

  The financial analysis tool that aims to predict the potential bankruptcy of a company.

About The Literature

- **t-Test Statistic**

  Daryanto, William (2022) said the partial test (partial testing) was conducted to partially determine each independent variable's effect on the dependent variable.

About The Literature

- **Hypotesis Testing**

  Hypothesis testing is a statistical hypothesis test is used to decide if data support specific hypothesis.

Financial Performances of Banking Companies

Non Performing Loan

A non-performing loan is one where the borrower has failed to make payments over a certain period, indicating a higher risk of default. According to Daryanto (2022), **the lower the NPL, the better.**

$$Non\ Performing\ Loan\ Ratio\ = \frac{Total\ Non\ Performing\ Loan}{Total\ Loan}$$

Loan Deposit Ratio

The Loan Deposit Ratio is used to measure Risk Liquidity. The better **the balance of the LDR score, the better the LDR.**

$$Loan\ to\ Deposit\ Ratio\ = \frac{Total\ Loans}{Third\ Party\ Funds}$$

Financial Performances of Banking Companies

Return on Asset (ROA)

ROA assesses a company's ability based on past profits so that it can be used in the future or the next period. **The higher the ROA, the better.**

$$ROA = \frac{Earnings\ Before\ Taxes}{Total\ Asset}\ x\ 100\%$$

Net Interest Margin

Net Interest Margin is the ability of Banks to generate net interest income by placing productive assets owned by companies (Sari and Dahar, 2016). **The higher the NIM, the better.**

$$NIM = \frac{Net\ Interest\ Income}{Productive\ Asset}\ x\ 100\%$$

Capital Adequacy Ratio

Capital Adequacy Ratio is an important financial metric that assesses a bank's ability to cover potential losses. **The higher the CAR, the better.**

Financial Healthiness of Banking Companies

X1   **Working Capital to Total Asset**
This ratio shows the company's ability to generate net working capital from its total assets.

X2   **Retained Earnings to Total Assets**
This ratio shows the company's ability to generate retained earnings from the company's total assets.

X3   **Earnings Before Interest and Tax Total Assets**
This ratio shows the company's ability to generate profit from its assets before interest and tax payments.

X4   **Book Value of Equity to Book Value of Debt**
This ratio shows the company's ability to meet its obligations from the market value of its own capital (common stock).
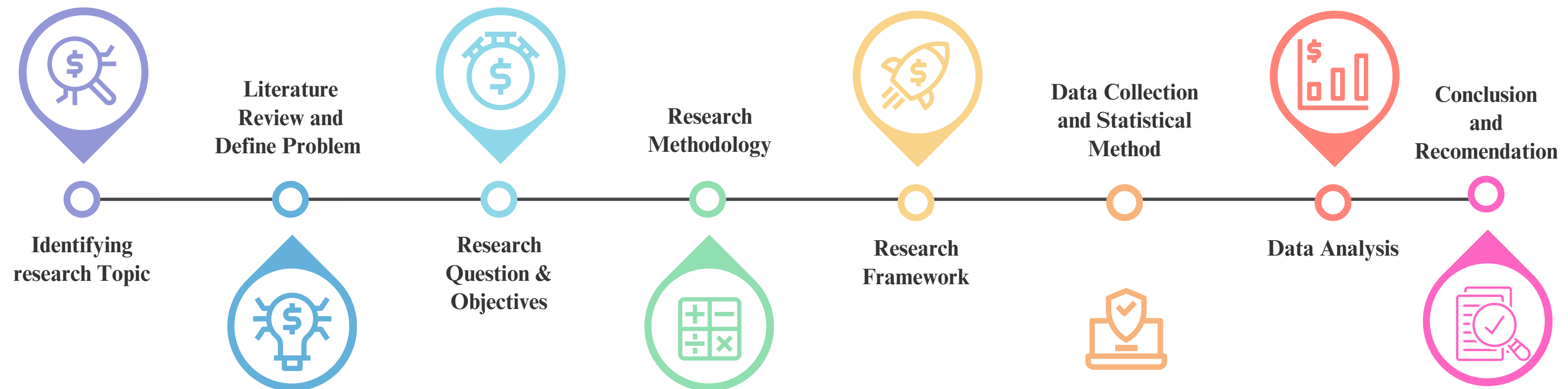
Financial Performance

Financial Healthiness

Hyphotesis

- H1: The Non-Performing Loan ratio of the bank was lower before the pandemic compared to during the COVID-19 pandemic.
- H2: The Loan-to-Deposit ratio of the bank was balanced before the pandemic compared to during the COVID-19 pandemic.
- H3: The Return on Assets ratio of the bank was higher before and during the COVID-19 pandemic.
- H4: The Net Interest Margin ratio of the bank was higher before and during the COVID-19 pandemic.
- H5: The Capital Adequacy Ratio of the bank was higher before and during the COVID-19 pandemic.

Chapter III: METHODOLOGY

- **Research Procedure**

Identifying research Topic

Literature Review and Define Problem

Research Question & Objectives

Research Methodology

Research Framework

Data Collection and Statistical Method

Data Analysis

Conclusion and Recomendation

• Scope and Limitation of the study

The study is limited to the **Regional Development Banks** listed on the Indonesia Stock Exchange, with **BJBR** and **BJTM** as the featured companies.

This study will utilize **quantitative** research methods, specifically concentrating on the ratio aspect while excluding considerations associated with **good corporate governance.**

• Sample Selection and Data Collection

Data Sample: Financial Statements for the Q1-Q4 Period from 2016 to 2023.

The sample collected using an objective method follows specific criteria:

1. The company is focusing on the banking industry.
2. Listed on IDX to obtain reliable data, easy to access, the company is committed to fulfilling good company governance standards.
3. The company was registered on IDX before COVID-19 appeared.
4. The audited financial report for 2016-2023 was accessible.

Emiten code	BJBR
Kap. Market	12.55 T
P/E Ratio	7.13
Yield div	8,68%

Emiten code	BJTM
Kap. Market	8,92 T
P/E Ratio	6.13
Yield div	9.07%
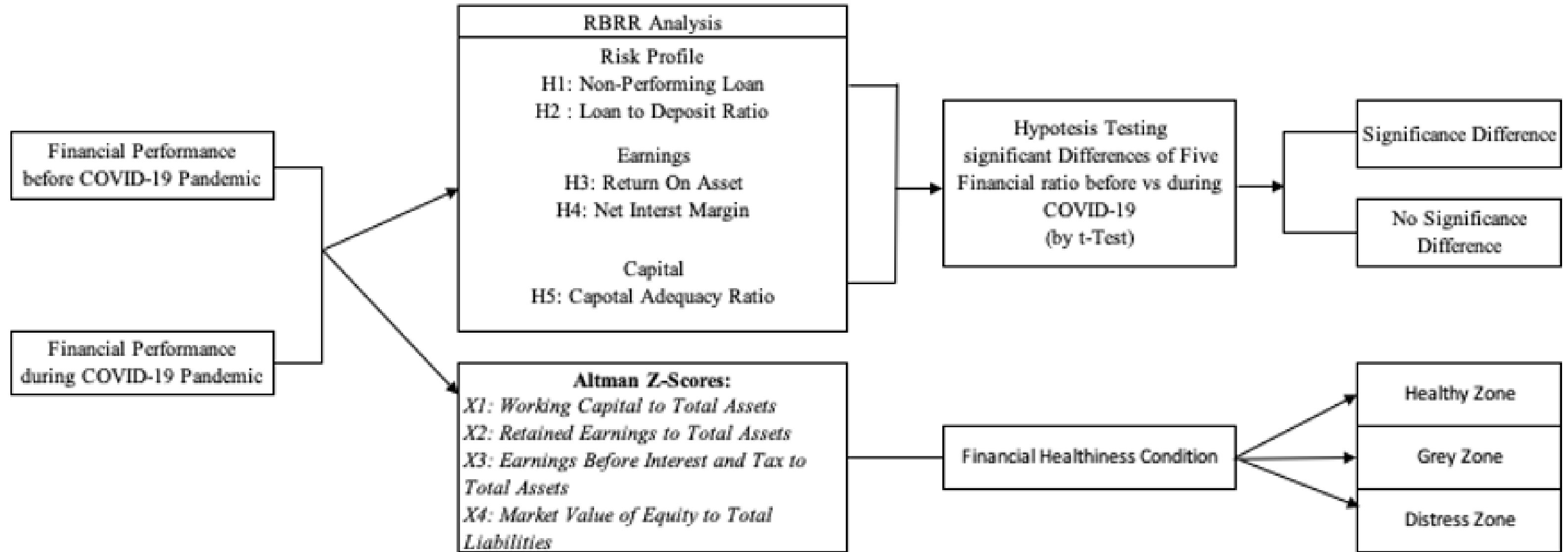
Research Framewok

Distribution Normality Test

- A normality test is a statistical test used to determine whether sample data comes from a normally distributed population (or close to normal distribution).
- Shapiro-Wilk test was test using SPSS;
  Referred to the hypothesis below ($\alpha = 0.05$):
  H0 = data are normally distributed.
  HA = data are not normally distributed

Hypotesis Test

Criteria that will be used to measure the hypothesis of this study:
If $p < 0.05$, H0 is rejected,
If $p > 0.05$, H0 is accepted,

- Paired t-Test used to analyze five hypotheses regarding the impact of COVID-19 on financial ratios: Non-Performing Loan, Loan Deposit Ratio, Return on Assets, Net Interest Margin, and Capital Adequacy Ratio.

- The Wilcoxon Signed Rank Test is a non-parametric test used as an alternative to the dependent t-test when data normality assumptions are violated. It compares two sets of scores from the same individuals.

Risk-Based Bank Rating (RBBR)

$$\text{mean} = \frac{\text{the sum of all values}}{\text{the amount of data}} \times 100\%$$

- Risk Profile $= \dfrac{NPL}{LDR} \times 100\%$

- Earning $= \dfrac{\text{Return on Asset}}{\text{Net Interest Margin}} \times 100\%$

- Capital/CAR $= \dfrac{\text{Tier 1 capital+ Tier 2 capital}}{\text{Risk weight exposure}} \times 100\%$

RBBR Parameter

Composite Rating	Description
1	Very Healthy
2	Healthy
3	Quite healthy
4	Less healthy
5	Unhealthy

Altman Z-Score

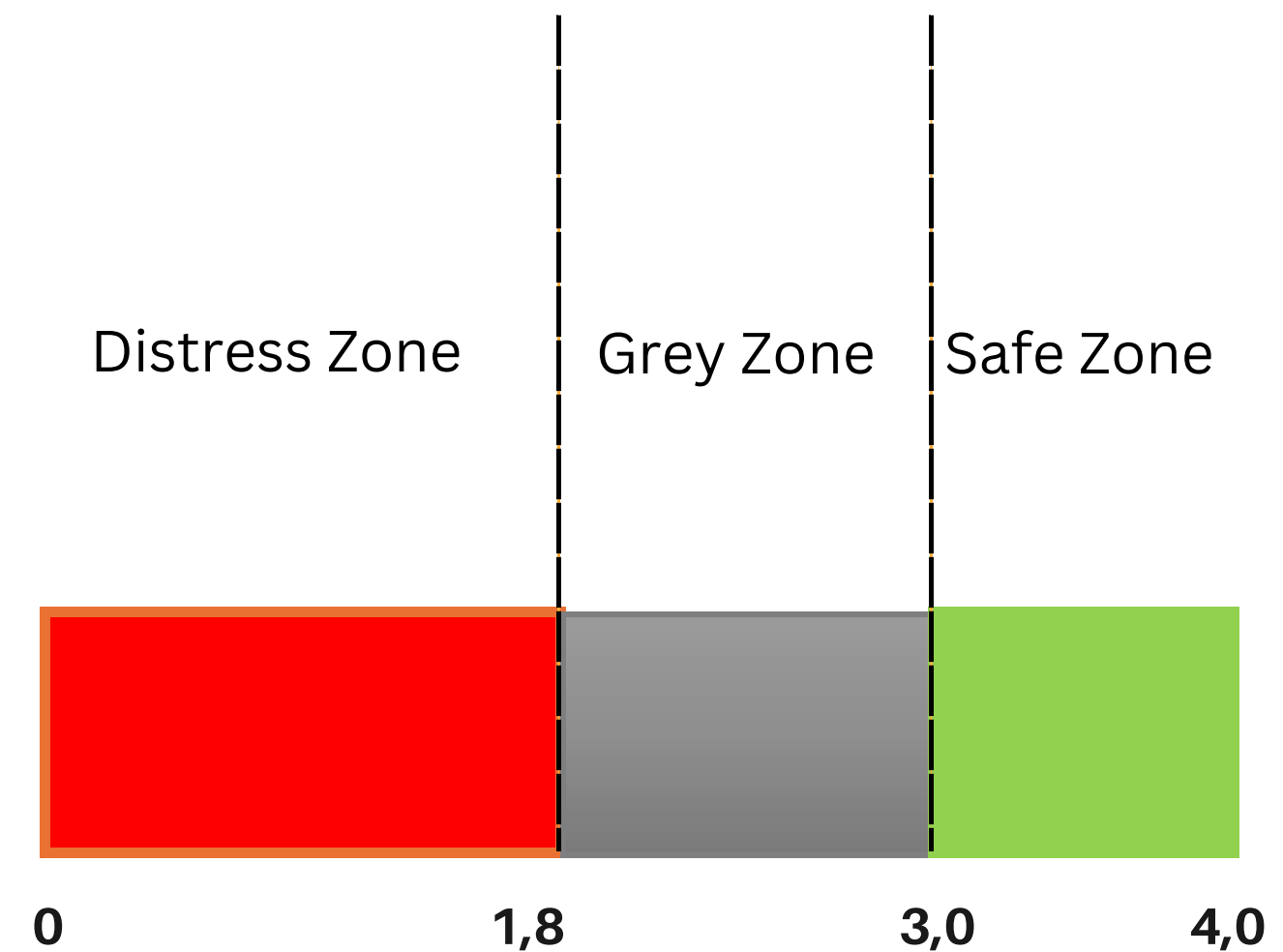Analyze banking healthiness financial position

Althman Z-Score Formula :

Z = 6.56X1+3.26X2+6.72X3+1.05X4

X1 : Working Capital/ Total Asset

X2 : Retained Earning/ Total Asset

X3 : Earning Before Tax/ Total Asset

X4 : Book Value of Equity/ Book Value of Debt

Distress Zone   Grey Zone   Safe Zone

| 0 | 1,8 | 3,0 | 4,0 |

Thank You