

# Analysis of Bank Health Level Using RGEC (Risk Profile, Good Corporate Governance, Earnings, and Capital) Method

## Case Study at PT. Bank Mandiri (Persero), Tbk. 2018-2020

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### ABSTRACT

This study aimed to determine the health level of PT. Bank Mandiri Tbk used RGEC (Risk Profile, Good Corporate Governance, Earnings, Capital) method in the period the 2018-2020 period. The type of research used in this study was descriptive quantitative with a sample of Bank Mandiri which published in an annual hassle by PT. Bank Mandiri (Persero). The type of data source was secondary data. The study used the ratio approach analysis technique concerning the indicators included in assessing the soundness of the bank. The results of the Bank Mandiri health research in the period 2018-2020 showed the results of various Risk Profile indicators of Bank Mandiri in terms of the NPL ratio of 2.96% for the health category. Subsequently, the LDR value of 102.14% is categorized as unhealthy. Good Corporate Governance indicators with health criteria obtained a composite rating of 2. The Earnings indicator with a result of 1.85% was categorized as very healthy. The Capital indicator with a result of 20.58% was categorized as very healthy. Based on all aspects of RGEC assessment, Bank Mandiri soundness level was obtained with the average of the composite assessment showing bank soundness level was ranked 2 with a healthy bank condition.

**Keywords:** Good Corporate Governance, RGEC, Risk Profile, Bank Soundness Level

### 1. INTRODUCTION

Every country in the world needs an economy for the welfare and prosperity of its citizens. Most Indonesians use banking services in their daily life [12]. The financial sector has changed various banking structures in Indonesia which is expected to have an effect on bringing about positive changes today for the national economy because banking financial institutions specifically play a significant role in the wheels of the Indonesian economy. An 80% market share in Indonesia uses banking services for payments and money saving [30].

The global economy is currently experiencing difficulties caused by the Covid-19 pandemic. Including Indonesia, all countries have been affected by the pandemic in all sectors of its economy. The delayed development due to the pandemic causes all sectors in Indonesia to decline, including the banking sector. Almost all banking companies in Indonesia experienced an increase in non-performing loans in the first semester of 2020. During the pandemic, it is analyzed whether

there are changes in various aspects of bank income that can be anticipated for the long term.

To gain trust from the wider community, the role of bank soundness triggers people to save their money both in the form of deposits and in ordinary savings, and also the health of the bank influences the public to choose to use the bank option to borrow in the form of credit.

Bank health takes steps to maintain liquidity so that the bank fulfills its obligations and its performance. Furthermore, the maintenance makes the bank able to gain customer trust. Banks that are able to carry out their functions can be healthy banks. Banks that are trusted by the public can be assumed to have carried out the intermediation function, which helps the operations to run well, especially in

payment finance in which the policies set by the government [3].

Bank health assessment is measured from various ratios contained in Risk Profile, Good Corporate

Governance, Earnings, and Capital methods. The results of analyzing the financial statements concluded whether there are weaknesses/strengths of banking companies. When there is a weakness, the management must fix it in time. PT. Bank Mandiri (Persero) Tbk has a slowing economy due to the COVID-19 pandemic which has an impact on the company's performance.

## 2. OBJECTIVES

The purpose of this study aimed to identify the effect of risk profile, good corporate governance, earnings, and capital ratio indicators on bank soundness. These findings provided an understanding of the use of RGEC method on bank health. Thus, it can be additional reference sources and provide information, especially in the banking sector as a reference for further research. Furthermore, it became indicators that could determine bank soundness, as previous researchers did.

### 2.1 Theoretical Framework

The assessment of bank soundness used was based on Bank Indonesia Regulation concerning the assessment of bank soundness which has been stipulated in Circular Letter Number 13/24/DPNP of 2011. It concluded that the assessment of bank soundness was carried out by analyzing the ratios listed in the influencing indicators through financial data. The financial statements were reviewed using RGEC method. The Risk Profile was reviewed using the NPL and LDR formulas. GCG used self-assessment according to each bank. Earning was reviewed using ROA, Capital were reviewed by analyzing the CAR ratio. The calculation of various indicators gave results, which have been determined by composite ratings to determine the bank entry into very healthy/healthy/moderately healthy/less healthy/unhealthy category.

Banking function for economic development is becoming increasingly advanced rapidly. Banks can be institutions that act as intermediaries between parties who have excess capital and those who need capital so that the money cycle in society continues to circulate [3]. Bank must also play a role in carrying out customer trust which is helpful for bank performance. According to Law Number 7 of 1992 concerning Banking as amended by Law Number 10 of 1998, Bank is a business entity that collects funds from various circles of society in the form of savings and can be distributed to people in need in the form of debt so that it runs smoothly without any obstacles. The intermediation of banking institutions plays a role in influencing the national economic growth [1].

### 2.2. Financial statements

The condition of bank financial statements shows as a whole. It is clear that the actual condition of the bank is

whether there is any weakness/strength. Bank business activities thrive on risks associated with the intermediation function as a financial institution. Financial statements provide information on company financial position that users can use, especially for making economic decisions. Financial statements results can be a reference for assessment in providing final decisions, and solutions in the future [29]. Company financial level can be assessed by analyzing company financial statements. Useful information for investors is used to assess the company comes from financial statements.

### 2.3. Bank Health Level

In simple terms, the soundness of a bank can be seen by how well it carries out its functions. The provisions in the assessment have been stipulated in the rules and are based on the principles of the banking sector. A good role will certainly provide benefits for the company and have a big impact on gaining public trust. In addition to having a role in gaining customer trust, it is also helpful in evaluating problems that occur to find the best solution that can be taken.

Bank soundness assessment is regulated under Bank Indonesia Regulation Number 13/1/PBI/2011 concerning Commercial Bank Soundness Level Assessment, banks are required must conduct a risk-based Bank Soundness Level assessment using RGEC method with complete guidelines referring to Bank Indonesia Circular Letter No.13/24/DPNP dated October 25, 2011. Furthermore, from the results of the analysis, it is categorized into a composite rating that has been determined in the rules. Shows the effect of each factor.

## 3. METHODOLOGY

The use of this research method was descriptive quantitative. Using secondary data gained from the publication of the annual report. This research is helpful to obtain information on the Effect of Bank Soundness Level with RGEC (Risk Profile, Good Corporate Governance, Earnings, and Capital) Method at PT. Bank Mandiri (Persero) Tbk, 2018-2020.

### 3.1. Risk Profile

The factor assessment is credit risk using NPL and liquidity ratio using LDR. The results of the value of the two risks are categorized into ratings that have been determined in Bank Indonesia regulations.

$$NPL = \frac{\text{Impaired loans}}{\text{Total loans}} \times 100\%$$

Table of Risk Profile (NPL) Rating Criteria

Rating	Description	Criteria
1	Very healthy	NPL < 2%
2	Healthy	2% NPL 5%
3	Healthy enough	5% NPL 8%
4	Less Healthy	8% NPL 12%
5	Unhealthy	NPL 12%

Source: Bank Indonesia Circular Letter No.13/24/DPNP 2011

$$LDR = \frac{\text{Total laons}}{\text{Fund of third parties}} \times 100\%$$

Table of Risk Profile (LDR) Rating Criteria

Rating	Description	Criteria
1	Very healthy	LDR < 75%
2	Healthy	75% < LDR 85%
3	Healthy enough	85% < LDR 100%
4	Less Healthy	100% < LDR 120%
5	Unhealthy	LDR > 120%

Source: Bank Indonesia Circular Letter No.13/24/DPNP 2011

**3.2. Good Corporate Governance**

The assessment of applying the principles of GCG as regulated in the PBI was realized in SE BI No.15 / 15 / DPNP 2013 concerning the implementation of GCG in Commercial Banks assessed in variables. This assessment is based on an analysis according to bank policy under study. There are three aspects of the assessment, namely Governance Process, Governance Outcome and Governance Structure. Furthermore, it is included in the composite PK (financial regulations) category according to the applicable regulations in the POJK (The Regulations of Financial Services Authority) Bank Indonesia. Good Corporate Governance found that management chose to use the criteria validated due to future evaluations results [28].

Table of GCG Assessment Rating Criteria (self-assessment)

PK Rank	Category
1	Very healthy
2	Healthy
3	Healthy enough

**4. RESULTS**

Bank soundness is one way of determining normal operational performance and fulfilling the obligations of banking management by analyzing financial statements

4	Less Healthy
5	Unhealthy

Source: Bank Indonesia Circular Letter No.13/24/DPNP 2011

**3.3. Earnings**

Profitability (earnings) can be measured using ROA [8]. The results of the calculated values are then categorized into composite ratings.

$$ROA = \frac{\text{Earnings before tax}}{\text{Average of total assets}} \times 100\%$$

Table of Profitability Assessment Rating Criteria (ROA)

Rating	Description	Criteria
1	Very healthy	ROA > 1.5%
2	Healthy	1.25% < ROA 1.5%
3	Healthy enough	0.5% < ROA 1.25%
4	Less Healthy	0% < ROA 0.5%
5	Unhealthy	ROA 0%

Source: Bank Indonesia Circular Letter No.13/24/DPNP 2011

**3.4. Capital**

Capital can be interpreted as the availability of bank funds that are useful for anticipating the occurrence of risks that will occur in the future. Capital is very important for sustainability in the banking world in running it as the driving force of the economic in everyday life. The ratio to measure the availability of funds owned by a bank is the Capital Adequacy Ratio (CAR).

$$CAR = \frac{\text{Bank capital}}{\text{Risk-based average assets}} \times 100\%$$

Table of Criteria for Rating Rating of Capital (CAR)

Rating	Description	Criteria
1	Very healthy	CAR > 12%
2	Healthy	9% CAR < 12%
3	Healthy enough	8% CAR < 9%
4	Less Healthy	6% CAR < 8%
5	Unhealthy	CAR 6%

Source: Bank Indonesia Circular Letter No.13/24/DPNP 2011

in accordance with applicable regulations. The level of bank soundness can describe the position of the bank's performance in a healthy condition or not. The criteria for a bank assumed healthy or not can be seen from the analysis of the bank financial statements.

The bank has an obligation to measure its soundness to maintain the stability of company management and public trust in banking companies with the applicable regulations that Bank Indonesia has regulated. Bank

health conditions can be used by parties related to banking companies to evaluate bank performance in applying the principles of anticipating risks following prudential banking principles

Indicator	Ratio	Year			Average	Description	PK
		2018	2019	2020			
Risk Profile	NPL	1.70%	4.95%	2.24%	2.96%	Healthy	Healty
	LDR	107.05%	106.74%	92.65%	102.14%	Less Healthy	
GCG	GCG	PK 1	PK 2	PK 2	PK 2	Good	
Earnings	ROA	2.15%	2.18%	1.24%	1.85%	Very healthy	
Capital	CAR	20.81%	20.80%	20.14%	20.58%	Very healthy	
Average		26.54%	27.33%	23.65%			
Composite Value							PK 2

Source: Data processed 2022

Based on the results of the analysis table that has been processed for the period 2018 to 2020, it showed that the average performance of Bank Mandiri was at Composite Rating 2 (PK-two), which means the bank is in a healthy condition. Although several ratios of the four indicators of bank health assessment each year recorded poor performance, these weaknesses did not result in a bad bank health condition. In addition, several ratios of the four indicators of bank soundness recorded poor performance every year, these weaknesses do not worsen the bank health condition.

RGEC Assessment Data Results Table in the period 2018-2020

PK Rank	Description
1	Very healthy
2	Healthy
3	Healthy enough
4	Less Healthy
5	Unhealthy

**5. DISCUSSION**

Bank is required to conduct an assessment of the Bank Soundness Level based on risk using the RGEC method with complete guidelines referring to Bank Indonesia Circular Letter No.13/24/DPNP dated October 25, 2011. Bank soundness assessment is regulated in accordance with Bank Indonesia Regulation Number 13/1/PBI/2011 regarding the assessment of the health of commercial banks. The regulation states that banks are required to maintain asset quality, liquidity, solvency, capital adequacy, profitability, and several other aspects

related to the principles used. The method of assessing bank soundness is similar to assessing the level of bank soundness, which is constantly changing to adjust to conditions in the banking world. Thus, the effectiveness of the assessment is more accurate. As an administrator and supervisor of banking in Indonesia, namely Bank Indonesia, it is regulated in bank regulation no.

Assessment of the soundness of banks used RGEC method, namely indicators of Risk Profile, Good Corporate Governance, Earnings, and Capital, such as Bank Indonesia regulation No. 13/1/PBI/2011. Bank Mandiri health level used RGEC method on a composite rating (PK-2) with health criteria for 2018-2020. Bank Mandiri obtained a composite score from the overall results: 26.54%, 27.33%, and 23.65%, respectively. The average of these composite assessments shows that bank soundness is ranked 2, which means bank being healthy. The final result of the analysis states a healthy condition with a composite rating of 2 as stipulated in the POJK regulations.

**6. CONCLUSION**

The results of the soundness rating of Bank Mandiri are seen from the overall indicators for three consecutive years, Bank Mandiri has obtained PK-2. The COVID-19 pandemic also affected Bank Mandiri during the three periods, it was considered capable of dealing with significant negative effects from changes in business conditions and as viewed from other external factors, various aspects were generally good. If weakness occurs, it is not a significant obstacle to affect it.

## RECOMMENDATIONS

Further research is expected to provide information and benefits, especially for those who are conducting research on bank soundness to expand reference sources and provide information, especially in the banking sector. Furthermore, it is expected that the information provided will be helpful for the economy, especially in the banking sector. Thus, it can help and attract customers' attention to bank soundness. Hopefully it will provide an understanding of the soundness of the bank in terms of various risk indicators according to the regulations that have been set at PT. Bank Mandiri (Persero) Tbk 2018-2020. Furthermore, it can provide a reference for further research.

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## REFERENCES

- [1] Z. Ghozali, R. Hanifa, and M. Hendrich, "Analysis of Bank Soundness Level Using RGEC Method (Case Study at PT Bank Muamalat Tbk) for 2012-2016 Period," *Mbia*, vol. 18, no. 2, pp. 141–157, 2019, doi:10.33557/mbia.v18i2.500.
- [2] I. Ayu, S. Kemala, and MR Candradewi, "Faculty of Economics and Business, Udayana University, Bali, Indonesia Email : dayu\_kemala@yahoo.com Banking functions are increasingly being driven by the rapid economic development. Banks are institutions that have a role as financial intermediaries," *Accounting*, vol. 7, no. 3, pp. 1595–1622, 2018.
- [3] K. Pramana and L. Artini, "Analysis of Bank Soundness Level (RGEC Approach) at PT. Bank Danamon Indonesia Tbk," *E-Jurnal Manaj. Univ. Udayana*, vol. 5, no. 6, p. 255238, 2016.
- [4] FI Wardhani, "Analysis of Bank Soundness Based on RGEC Approach in State-Owned Banks for the Period 2013 - 2017," *J. Ekon. STIEP*, vol. 4, no. 2, pp. 26–33, 2019.
- [5] M. Nurwijayanti and L. Santoso, "Analysis of Bank Soundness Level Using Rgec Method (Risk Profile, Good Corporate Governance, Earnings, Capital) at BNI Syariah Year 2014-2017," *El-Barka J. Islam. econ. Bus.*, vol. 1, no. 2, p. 207, 2018, doi:10.21154/elbarka.v1i2.1451.
- [6] M. Mostak Ahamed, "Asset Quality, Non-Interest income, and Bank Profitability: Evidence from Indian Banks," *Econ. Models*, vol. 63, no. January, pp. 1–14, 2017, doi:10.1016/j.econmod.2017.01.016.
- [7] AM Fuertes and MD Robles, "Bank Credit Risk Events and Peers' Equity Value," *Int. Rev. finance. Anal.*, vol. 75, no. February, p. 101668, 2021, doi:10.1016/j.irfa.2021.101668.
- [8] PA Maramis, "Bank Health," vol. 2, no. 4, pp. 40–69, 2019.
- [9] SA Basher, LM Kessler, and MK Munkin, "Bank Capital and Portfolio Risk Among Islamic Banks," *Rev. finance. Econ.*, vol. 34, pp. 1–9, 2017, doi: 10.1016/j.rfe.2017.03.004.
- [10] FJ Christian, P. Tommy, and J. Tulung, "Analysis of Bank Health Using the RGEC Method at BRI and Mandiri Banks for the 2012-2015 Period," *J. EMBA*, vol. 5, no. 2, pp. 530–540, 2017.
- [11] Mufidah and AP Sari, "Economists: Journal of Economics and Business Vol.2 No.2 September 2018," *J. Econ. Bus.*, vol. 2, no. 2, pp. 218–234, 2018.
- [12] RL Putri and B. Suryono, "Analysis of Bank Soundness Level (RGEC Approach) at Bank Rakyat Indonesia 2013-2015," *J. Sains and Ris. Account.*, vol. 6, no. 8, pp. 1-16 ISSN: 2460-0585 , 2017.
- [13] M. Bitar, K. Pukthuanthong, and T. Walker, "The Effect of Capital Ratios on the Risk, Efficiency and Profitability of Banks: Evidence from OECD Countries," *J. Int. finance. Mark. Institutions Money*, vol. 53, pp. 227–262, 2018, doi:10.1016/j.intfin.2017.12.002.
- [14] M. Dewi, "Analysis of Bank Soundness Using the Rgec Approach (Risk Profile, Good Corporate Governance, Earnings, Capital)," *Ihtiyath J. Manaj. finance. Sharia*, vol. 2, no. 2, 2018, doi:10.32505/ihtiyath.v2i2.710.
- [15] R. DeYoung, I. Distinguin, and A. Tarazi, "The Joint Regulation of Bank Liquidity and Bank Capital," *J. Financ. Intermediation*, vol. 34, pp. 32–46, 2018, doi:10.1016/j.jfi.2018.01.006.
- [16] A. . G. Suarjaya and PAC Putri, "Analysis of Bank Soundness Level Using RGEC Method at PT. Bank Tabungan Negara (Persero) Tbk," *E-Jurnal Manaj. Unud*, vol. 6, no. 7, pp. 3595–3621 , 2017.
- [17] I. Paramartha and N. Darmayanti, "Assessment of Bank Soundness Level Using Rgec Method at Pt. Bank Mandiri (Persero), Tbk.," *E-Jurnal Manaj. Univ. Udayana*, vol. 6, no. 2, p. 249124, 2017.

- [18] SS Aisyah and R. Khoiroh, "Analysis of the Impact of Macroeconomic Variables on the Indonesian Sharia Stock Index (ISSI)," *J. Ekon.*, vol. 2, no. 1, pp. 398–412, 2015.
- [19] MA Purba, "MEASURING THE INTEREST OF PUTERA BATAM UNIVERSITY STUDENTS IN USING FINANCIAL TECHNOLOGY PRODUCTS," *J. Appl. Manag. Accounts.*, vol. 4, no. 1, pp. 132–141, 2020, [Online]. Available: [www.bi.go.id](http://www.bi.go.id).
- [20] OJK, "POJK" Number 04/POJK.03/2016 concerning Assessment of Commercial Bank Soundness Level," 2017.
- [21] E. Amelia and AC Aprilianti, "Assessment of Bank Soundness Level: CAMEL and RGEC Approaches," *J. Akunt. And Finance. Islam*, vol. 6, no. 2, pp. 189–208, 2019, doi:10.35836/jakis.v6i2.5.
- [22] PT Telekomunikasi Indonesia, "Consolidated Financial Statements," vol. 3, no. 2017, pp. 54–67, 2020, [Online]. Available: <http://repositorio.unan.edu.ni/2986/1/5624.pdf>.
- [23] ACCURATE | Scientific Journal of Accounting, FE UNIBBA, D. Setiawan, and D. Afrianti, "The Effect of Third Party Funds on Credit Provision and Bank Net Profit (Case Study At PT Bank Rakyat Indonesia (Persero), Tbk Majalaya Branch Office Dayeuhkolot)," *Accurate*, vol. 9, no. 3, pp. 1–20, 2018.
- [24] MV Ridho Suryana, S. Masyithoh, and F. Diyanti, "Analysis of Financial Soundness Levels Using the RGEC (Risk Profile, Good Corporate Governance, Earning and Capital) Method," *Akutabel*, vol. 15, no. 1, p. 49, 2018, doi:10.29264/jakt.v15i1.2052.
- [25] "PT Bank" Mandiri (Persore) Tbk," vol. 3, 2012.
- [26] H. Rohaeni and WJ Ermawati, "Analysis of Third Party Funds, Non-performing Loans, and Profits (Case Study of PT Bank X Tbk)," *J. Manaj. and Organ.*, vol. 1, no. 2, p. 96, 2016, doi:10.29244/jmo.v1i2.14154.
- [27] BPP Mandiri, "Monthly Financial Position Report (Balance Sheet) of PT Bank Mandiri (Persero) Tbk. April 30, 2019," vol. 2019, no. April, pp. 0–4, 2019.
- [28] S. Padmantyo, "Earnings Management Analysis in Islamic Banking Financial Statements (Studies on Bank Syariah Mandiri and Bank Muamalat Indonesia)," *Anal. manaj. Lap Profit. banking. BENEFITS J. Manaj. and Business*, vol. 14, no. 2, pp. 53–65, 2010.
- [29] Widoyono and M. K. Putri, "Analysis of the Impact of Company Fundamental Factors on Cash Dividends (Case Study in Manufacturing Companies Listed on the Indonesia Stock Exchange)," vol. 15, pp. 169–176, 2011.
- [30] R. S. Qurniawati, "Banking Efficiency in Indonesia and Its Effect on Stock Returns with a Data Envelopment Analysis (DEA) Approach," *BENEFIT J. Manaj. and Business*, vol. 17, no. 1, pp. 27–40, 2013.