

# Health Analysis of Bank Using the RGEC Method (Risk Profile, Good Governance, Earnings, Capital) At PT Bank Mandiri (Persero) Tbk, 2014-2017 Period

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## Abstract

Bank Indonesia made changes to regulations regarding the assessment of bank soundness. The soundness of the bank was initially regulated in Bank Indonesia regulation number 6/10 / PBI / 2004 concerning the bank soundness rating system using the CAMELS method (Capital, Assets, Management, Earning, Liquidity, Sensitivity), then changed to Bank Indonesia regulation number 13/1 / PBI / 2011 concerning the bank soundness rating system using the RGEC method (Risk Profile, Good Corporate Governance, Earnings, and Capital), the regulation contains that banks are required to assess the soundness of banks using a Risk-based Bank Rating approach both individually or on a consolidated basis. This research is a type of evaluative research. Evaluative research is research whose activities collect data or information to be compared with criteria and then draw conclusions. The documents used in this study are the Financial Statements and Annual Reports of PT. Bank Mandiri (persero) Tbk 2014-2017 Period. Independent bank health assessment is based on a rating system for commercial banks, in accordance with Bank Indonesia Regulation No. 13/1 / PBI / 2011, and SE No. 13/24 DPNP on October 25, 2011, based on the bank's health assessment conducted by the RGEC method, it was concluded that the health level of PT. Bank Mandiri (Persero) Tbk from 2014-2017 is Very Healthy (SS)

**Keywords:** Health Bank, RGEC, General Bank.

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## BACKGROUND

Banks are business entities that in their business activities rely on the trust of the community to store and manage their funds. Banks based on ownership are divided into two, namely state-owned banks (state-owned banks) and national private-owned banks [1].

Trisnawati [2] explains that banking business activities are constantly faced with credit risks related to the function of banks, namely intermediary institutions. These risks include credit risk, market risk, operational risk, liquidity risk, legal risk, strategic risk, compliance risk and reputation risk. The many risks faced by banks ultimately demanded Bank Indonesia conduct a method of assessing the soundness of the bank.

Bank Indonesia made changes to regulations regarding the assessment of bank soundness. The soundness of the bank was initially regulated in Bank Indonesia regulation number 6/10 / PBI / 2004 concerning the bank soundness rating system using the

CAMELS method (Capital, Assets, Management, Earning, Liquidity, Sensitivity), then changed to Bank Indonesia regulation number 13/1 / PBI / 2011 concerning the bank soundness rating system using the RGEC method (Risk Profile, Good Corporate Governance, Earnings, and Capital), the regulation contains that banks are required to assess the soundness of banks using a Risk-based Bank Rating approach both individually or on a consolidated basis.

The problem of changes in the rating system for commercial banks from the CAMELS method into the RGEC method due to the global financial crisis that occurred in the last few years provides valuable lessons that innovation in banking products, services and activities that are not balanced with adequate risk management can lead to fundamental problems for the bank or for the financial system as a whole, Bank Indonesia made improvements to the method for assessing the soundness of commercial banks [3]. The ratios used in the bank's health assessment method are collected and assessed based on various weighting or scoring schemes, and even subjective assessment

management of efficiency performance in the banking industry [4].

Bank Mandiri was established on October 2, 1998, as part of a banking restructuring program implemented by the Indonesian government. In July 1999, four state banks namely Bank Bumi Daya, Bank Dagang Negara, Indonesian Export Import Bank and Indonesia Development Bank were merged into Bank Mandiri, where each of these banks had an integral role in the development of the Indonesian economy.

Since its establishment, Bank Mandiri has worked hard to create a strong and professional management team that works based on the principles of good corporate governance that have been internationally recognized. Bank Mandiri is supervised by a Board of Commissioners appointed by the Minister of State-Owned Enterprises which is chosen based on members of a respected financial community. The highest executive management is the Board of Directors led by the President Director. Our Board of Directors consists of bankers from legacy banks and also from outside who are independent and very competent. Bank Mandiri also has offices of compliance, audit and corporate secretary functions, and is also the object of routine audits from external auditors conducted by Bank Indonesia, BPKP and BPK and international auditors.

With assets that continue to grow up to above Rp. 319 trillion, and more than 21 thousand employees spread across 1000 domestic offices and 6 offices and overseas representatives. Bank Mandiri's distribution network includes 3,186 ATMs, 7,051 ATMs which are included in the LINK Network network and 12,663 ATM Bersama Networks, and Electronic Data Capture (EDC) of approximately 25,254 throughout Indonesia. Bank Mandiri currently has 8.3 million ATM card holders and 3.2 million SMS Banking users, 783,356 internet banking users and 822,937 Mandiri Call users and more than 1 million Visa credit card holders.

The formulation of the problem in this study is based on the background described above, then the formulation of the problem to be tested further in this study is: How Bank Soundness at PT. MANDIRI

a. Net Performing Loan (NPL)	
Scale	Criteria
0% < NPL < 2%	Very Healthy (SS)
2% ≤ NPL < 5%	Healthy (S)
5% ≤ NPL < 8%	Healthy Enough (CS)
8% ≤ NPL < 11%	Unwell (KS)
NPL > 11%	Not Healthy (TS)

b. Loan Financing Ratio (LFR)	
Scale	Criteria
50% < LDR ≤ 75%	Very Healthy (SS)
75% < LDR ≤ 85%	Healthy (S)
85% < LDR ≤ 100%	Healthy Enough (CS)

BANK uses the 2014-2017 RGEC method. The research was carried out with the aim of knowing the health level of PT. Bank Mandiri in the 2014-2016 period using the RGEC method.

With a Measurement Scale:

1. Risk Profile

a. Net Performing Loan (NPL)

$$NPL = \frac{\text{Probek Credit}}{\text{Total Credit}} \times 100\%$$

b. Loan Financing Ratio (LFR)

$$LFR = \frac{\text{Total Credit}}{\text{Third-Party Funds}} \times 100\%$$

2. Good Corporate Governance

Self Assessment with GCG assessment factors in a comprehensive and structured manner, including: governance structure, governance process and governance outcome. Based on SE BI No. 15/15 / DPNP 2013, Banks must carry out self-assessments on the implementation of GCG.

3. Earning

a. Return on Asset (ROA)

$$ROA = \frac{\text{Earning Before Tax}}{\text{Total Asset}} \times 100\%$$

b. Net Interest Margin (NIM)

$$NIM = \frac{\text{Interest Income Netto}}{\text{Productif Asset Average}} \times 100\%$$

4. Capital

$$CAR = \frac{\text{Capital}}{\text{ATMR}} \times 100\%$$

Health Assessment Criteria in accordance with Bank Indonesia regulations number 13/1 / PBI / 2011 for ratios, namely:

1. Risk Profile

100% < LDR ≤ 120%	Unwell (KS)
LDR > 120%	Not Healthy (TS)

2. GCG

Scale	Criteria
NK < 1,5	Very Healthy (SS)
1,5 < NK ≤ 2,5	Healthy (S)
2,5 < NK ≤ 3,5	Healthy Enough (CS)
3,5 < NK ≤ 4,5	Unwell (KS)
4,5 < NK ≤ 5	Not Healthy (TS)

## 3. Earning

a. Return on Asset (ROA)	
Scale	Criteria
$ROA > 15\%$	Very Healthy (SS)
$1,25\% < ROA \leq 1,5\%$	Healthy (S)
$0,5\% < ROA \leq 1,25\%$	Healthy Enough (CS)
$0\% < ROA \leq 0,5\%$	Unwell (KS)
$ROA \leq 0\%$	Not Healthy (TS)

b. Net Interest Margin (NIM)	
Scale	Criteria
$NIM < 3\%$	Very Healthy (SS)
$2\% < NIM \leq 3\%$	Healthy (S)
$1,5\% < NIM \leq 2\%$	Healthy Enough (CS)
$1\% < NIM \leq 1,5\%$	Unwell (KS)
$NIM < 1\%$	Not Healthy (TS)

## 4. Capital

Current Adequacy Ratio (CAR)	
Scale	Criteria
$CAR > 11\%$	Very Healthy (SS)
$9,5\% < CAR \leq 11\%$	Healthy (S)
$8\% < CAR \leq 9,5\%$	Healthy Enough (CS)
$6,5\% < CAR \leq 8\%$	Unwell (KS)
$CAR < 6,5\%$	Not Healthy (TS)

Research conducted by Putu Ania Cahyani Putri & A.A. Gede Suarjaya (2017) about ANALYSIS OF BANK HEALTH LEVELS WITH RGEC METHOD IN STATE SAVINGS BANK (PERSERO) TBK where this research is quantitative research with descriptive method. The report used is financial statements. The variables in this study include the Risk Profile using the ratio of Non Performing Loans (NPL) and Loan to Deposit Ratio (LDR), Good Corporate Governance using Composite GCG Ranking, Earnings using the ratio of Return on Assets (ROA) & Net Interest Margin (NIM) and Finally, Capital uses the Capital Adequacy Ratio (CAR) ratio. The results of the study indicate that Bank BTN obtained a fairly healthy predicate in which banks are still quite capable of carrying out risk-based banking management properly, so that it is still worthy to be trusted by the public. However, in the calculation of the NPL ratio the proportion of non-performing loans was classified as high which caused the NPL ratio to obtain an unhealthy predicate as well as the LDR ratio which was still below the standard with an unhealthy predicate.

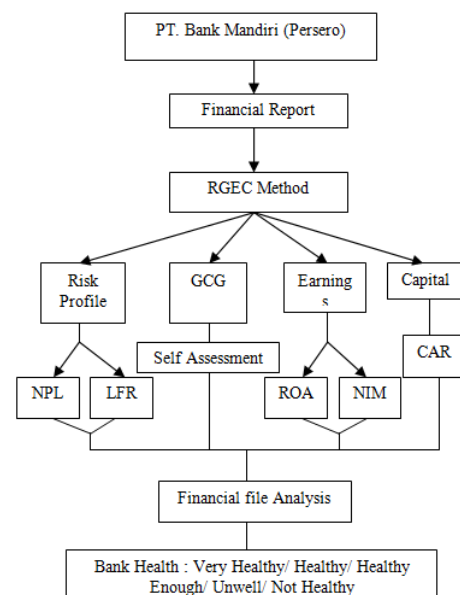
Komang Mahendra Pramana & Luh Gede Sri Artini [5] conducted a study on BANK HEALTH LEVEL ANALYSIS (RGEC APPROACH) IN PT. BANK DANAMON INDONESIA TBK and the results are the results of the study show that during the period of 2011 to 2014 Bank Danamon always ranked 1 or very healthy. Calculation of NPL and LDR ratios illustrates that the bank has managed the risk well. GCG assessment shows that corporate governance has been done well. Calculation of ROA and NIM shows the ability of banks to achieve high profits. Calculation

of CAR is always above the minimum limit of Bank Indonesia deemed capable of managing its capital.

Putri Dwi Wahyuni and Wiwik Utami in the study entitled THE EFFECT OF GOOD CORPORATE GOVERNANCE AND INTELLECTUAL CAPITAL DISCLOSURE ON COST OF EQUITY CAPITAL, This research was conducted on banking sector issues on the Indonesia Stock Exchange during the period 2012-2014 [6]. The sample of this research was 90 data from the sector banking on the Indonesia Stock Exchange with a purposive sampling method. The results of the study explain that institutional ownership, managerial ownership, the proportion of independent boards and the proportion of independent audit committees do not affect the cost of equity capital. (GCG does not affect the cost of equity capital).

## METHOD

This research is a type of evaluative research. Evaluative research is research whose activities collect data or information to be compared with criteria and then draw conclusions. Evaluative research is applied to objects to determine the quality of the object. Evaluative research has requirements that must be met, namely the existence of criteria, benchmarks or standards used as a comparison of the data that has been obtained. The difference between real conditions and those criteria can then describe whether the object under study is appropriate, not suitable or not in accordance with the criteria [7].



Picture-1: Framework

The subject of this research is at PT. Bank Mandiri (Persero) Tbk and the object of this research is the assessment of the health level of PT. Bank Mandiri (Persero) Tbk. With the scope of the assessment includes factors, namely: Risk Profile (Risk Profile), Good Corporate Governance (GCG), Profitability (Earnings), and Capital (Capital). The object of this

research can be obtained from published financial reports, consisting of financial position reports, profit / loss reports, financial statement notes for the period 2014-2017. In detail the explanation of the variables in the object are:

- Net Performing Loan (NPL) is financing provided to third parties (excluding credit to other banks). The NPL ratio is calculated by comparing total financing with problem financing. The smaller the NPL ratio, the better the quality of assets [8].
- Financing To Deposit Ratio is financing provided to third parties in rupiahs and foreign currencies, excluding loans to other banks, but to third party funds which include demand deposits, savings and time deposits. This LFR (Loan Financing Ratio) ratio is calculated by comparing the amount of loans provided with the amount of third party funds [8].
- Return On Equity (ROE) is the comparison of net income after tax with its own initial and end-of-year capital [9]. Return on Equity (ROE) is the ratio of net income after tax to own capital which is used to measure the company's profitability available to the company's shareholders. This ratio is a measure of profitability from the perspective of the shareholders. But in this ratio there is one weakness, namely not taking into account dividends or capital gains for shareholders.
- Return on Assets (ROA) is a measurement of the amount of profit from each asset owned by the company. ROA shows the efficiency of a company in the use of total assets for the company's operations. ROA ratio represents profitability ratios, which measure profits by using assets owned by the company.

- Operational Costs of Operational Income (BOPO) is used to measure the efficiency and ability of banks to carry out their operational activities. The smaller the BOPO ratio, the more efficient the operational costs incurred by the bank [8].
- Capital Adequacy Ratio (CAR) is the Capital Adequacy Ratio to deal with bank losses. According to Dietrich *et al.*, [10], banks with high capital are considered relatively safer than low capital banks, this is because banks with high capital usually have lower needs than external funding.

In this study the data collection techniques used are documentation. According to Suharsimi Arikunto [7] the documentation method is an object that is observed (gazed) in obtaining information in the form of three kinds of sources, namely paper (place), people (people). In carrying out the documentation method, researchers investigate written objects such as books, magazines, documents, regulations, minutes of meetings, diaries, and so on. Documents needed in this study are the Financial Statements and Annual Reports of PT. Bank Mandiri (Persero) Tbk 2014-2017 period, which can be accessed at [www.bankmandiri.co.id](http://www.bankmandiri.co.id). and bank Indonesia data through [www.bi.go.id](http://www.bi.go.id).

## RESULTS AND DISCUSSION

The object of research used in this study is data based on the financial statements of PT. Bank Mandiri (Persero), Tbk which has been published in Bank Mandiri's annual report for the period 2014-2017. Data relating to the calculation of bank health assessment using the RGEC method after using the formulas of each of the variables, namely:

Based on the calculation of financial ratios based on financial statements from PT. Bank Mandiri (persero) Tbk is then calculated into RGEC variables, namely Risk profile, GCG, Earning and Capital, then entered into the rating system of commercial banks, in accordance with Bank Indonesia Regulation No. 13/1 / PBI / 2011, and SE No. 13/24 DPNP on October 25, 2011. Composite rating determination table of PT. Bank Mandiri based on the 2014-2017 RGEC method are as follows:

**Table-1: Financial Ration PT. Bank Mandiri (Persero) Tbk 2014-2017 Period**

RATIO	2014	2015	2016	2017
ROA	3,57	3,15	1,95	2,72
ROE	25,81	23,03	11,12	14,53
NIM	5,94	5,9	6,29	5,63
LFR	82,02	87,05	85,86	87,16
BOPO	64,98	69,67	80,94	71,78
CAR	16,6	18,6	21,36	21,64
NPL	0,44	0,60	1,38	1,06

**Table-2: Determination of Composite Ranking of PT. Bank Mandiri using the RGEC method for the 2014-2017 period**

Years	Factor	Rasio	Score	Scoring Criteria					Desc	PK
				1	2	3	4	5		
2014	Risk Profile	NPL	0.44	√					Very Healthy	
		LFR	82.02		√					
	GCG		2		√				Healthy	
	Earning	ROA	3.57	√					Very Healthy	
		NIM	5.94	√						
	Capital	CAR	16.6	√					Very Healthy	
	Composite Score		30	20	8					
Total			(28/30)x100% = 93,3%							SS

2015	Risk Profile	NPL	0.6	√						Healthy	
		LFR	87.05			√					
	GCG		2		√					Healthy	
	Earning	ROA	3.12	√						Very Healthy	
		NIM	5.9	√							
	Capital	CAR	18.6	√						Very Healthy	
	Composite Score		30	20	4	3					
Total		(27/30)x100% = 90%									SS
2016	Risk Profile	NPL	1.38	√						Healthy	
		LFR	85.86			√					
	GCG		2		√					Healthy	
	Earning	ROA	1.95	√						Very Healthy	
		NIM	6.29	√							
	Capital	CAR	21.36	√						Very Healthy	
	Composite Score		30	20	4	3					
Total		(27/30)x100% = 90%									SS
2017	Risk Profile	NPL	1.06	√						Healthy	
		LFR	87.16			√					
	GCG		2		√					Healthy	
	Earning	ROA	2.72	√						Very Healthy	
		NIM	5.63	√							
	Capital	CAR	21.64	√						Very Healthy	
	Composite Score		30	20	4	3					
Total		(27/30)x100% = 90%									SS

In the composite ranking determination table above, it can be seen that, in the Risk Profile factors, namely NPL and LFR in 2014, the NPL rating is in the Very Healthy (SS) and LFR criteria in the Healthy (S) criteria, then later in 2015-2017, ranking NPLs remain in the Very Healthy (SS) criterion, while the LFR decreases to be Fairly Healthy (CS). For the GCG rating of PT. Bank Mandiri Tbk from 2014-2017 which is worth 2 is in the criteria of Healthy (S). In Earning, which is represented by factors Return on Assets (ROA) and Net Income Margin (NIM), the composite assessment for both from 2014-2017 is in the criteria of Very Healthy (SS). And the valuation of the Capital factor is calculated based on the Current Adequacy Ratio (CAR) in the Very Healthy (SS) assessment criteria.

Furthermore, based on the assessment criteria of each factor from the bank's health assessment, calculated the number of criteria assessment based on composite rank 1-5 then divided by the total composite value obtained from the number of variables x number of composite ranks, the total composite value is 6 x 5 = 30. Based on these calculations, the composite health value of the bank PT. Bank Mandiri (Persero) Tbk for 2014-2017 are as follows:

1. 2014

$$\text{Total} = \frac{\text{Composite Rating}}{\text{Composite Score}} \times 100\%$$

$$(28: 30) 100\% = 93,3\%$$

2. 2015

$$\text{Total} = \frac{\text{Composite Rating}}{\text{Composite Score}} \times 100\%$$

$$(27 : 30) 100\% = 90\%$$

3. 2016

$$\text{Total} = \frac{\text{Composite Rating}}{\text{Composite Score}} \times 100\%$$

$$(27: 30) 100\% = 90\%$$

4. 2017

$$\text{Total} = \frac{\text{Composite Rating}}{\text{Composite Score}} \times 100\%$$

$$(27: 30) 100\% = 90\%$$

Then based on the rating of the appraisal, the independent bank health assessment is based on the rating system for commercial banks, in accordance with Bank Indonesia Regulation No. 13/1 / PBI / 2011, and SE No. 13/24 DPNP on October 25, 2011 are as follows:



**Table-3: Health Assessment PT. Bank Mandiri (Persero) Tbk with the RGEC Method for the 2014-2017 period**

Years	Composite Score	Composite Rating	Results
2014	93,3%	PK 1	Very Healthy
2015	90%	PK 1	Very Healthy
2016	90%	PK 1	Very Healthy
2017	90%	PK 1	Very Healthy

So based on the bank's health assessment conducted by the RGEC method, it was concluded that the health level of PT. Bank Mandiri (Persero) Tbk from 2014-2017 is Very Healthy (SS).

## CONCLUSIONS AND RECOMMENDATIONS

Based on research conducted to assess the soundness of the bank at PT. Bank Mandiri (Persero) Tbk for the period 2014-2017, with the RGEC method the conclusions are:

- With a composite value of 93.3% in 2014 and 90% from 2015-2017, the composite rating of PT. Bank Mandiri is PK 1, and is in the criteria of Very Healthy (SS).
- The decline in the composite value from 2015-2017 from 93.3% to 90%, caused by a decrease in the rating of the Loan Funding Ratio from Healthy to Fairly Healthy.
- With the criteria of Very Healthy (SS), Bank Mandiri is still a Commercial Bank that can be recommended as a bank, which can be the choice of the community in conducting financial transactions.

## SUGESSTIONS

Suggestions that can be given after this research are:

1. Suggestion For Bank
  - a. As a public bank owned by the government which is a reference for the Indonesian people in looking at the condition of the Indonesian bank, PT. Bank Mandiri (Persero) Tbk can increase banking health value from existing ones, or at least maintain a Very Healthy value.
  - b. The decline in the value of the Loan Funding Ratio (LFR) in 2015-2017, should be a concern for Bank Mandiri to be more selective in implementing policies and improving operational techniques in lending.
2. Further Reseach
 

For the next researcher, hopefully it can be a good input to be studied, and may be able to conduct more in-depth and extensive research in the future to assess the health of other banks, so that they are useful for many people.

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