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Analysis of Bank Rating with RGEC Method

Case Study at PT Bank Mandiri (Persero) Tbk for the Period 2013-2017

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***Abstract*—Health of a bank has a great influence on the economy of a country, because if a bank into a group that is not healthy then the economy in a country will be disturbed, especially in the financial system. Therefore, banks are required to maintain and improve the level of health. This study aims to determine: Bank Health Level in terms of Risk Profile, Bank Health Level in terms of Good Corporate Governance, Bank Health Level in terms of Earnings, Bank Health Level from the side of Capital at PT. Bank Mandiri (Persero) Tbk period 2013 - 2017. Data collection method in this research is using documentary method. Data analysis method used in this research is quantitative analysis method that is by analyzing the numbers in financial statements then adjusted to the ratios and non-ratio as follows: (1) Risk Profile using financial ratio of NPL and LDR, (2) GCG based on self-assessment result of PT. Bank Mandiri (Persero), (3) Earning using financial ratio ROA, and ROE, and (4) Capital using CAR. Results of research at PT. Bank Mandiri (Persero) Tbk period 2013 showed that the soundness of the bank was very healthy, this was reflected in the final composite value of 86,66%, results of research at PT. Bank Mandiri (Persero) Tbk period 2014 showed that the soundness of the bank was very healthy, this was reflected in the final composite value of 86,66%, in period 2015 shows that the Bank soundness healthy, it is reflected from the final composite value obtained value of 83.33% For the period of 2016 shows that the Bank soundness healthy, it is reflected from the final composite value obtained value of 73.33%. For the period of 2017 shows that the Bank soundness healthy, it is reflected from the final composite value obtained value of 83.33%. Based on the results of the analysis, the ratio that affects the rise and fall of the bank's health composite value is the ratio of NPL and ROE, because in the period 2016 PT. Bank Mandiri (Pesero) Tbk experienced a decline in composite value along with a decrease in the ratio of NPL and ROE. Thus the health results can be used as an evaluation by PT. Bank Mandiri (Persero) Tbk to be more selective in lending to prospective customers to better health of banks and will affect the profits generated.**

Keywords: bank health level, RGEC method

I. INTRODUCTION

The health of a bank has a great influence on a country's economy, because if a bank falls into an unhealthy class, the economy of a country will be disrupted, especially in its financial system. The level of bank soundness can be interpreted as the ability of a bank to carry out banking operations normally and be able to fulfill all its obligations properly in ways that are in accordance with applicable banking regulations [1]. One of the government's efforts in preventing and handling crises in the financial sector was on November 21, 2008, the KSSK (Financial System Stability Committee) established Century Bank (currently a Pearl Bank) as a bank failing to have a systemic impact on reducing the rescue costs of Rp 6.7 trillion, reap a lot of pros and cons both from the government itself and from the economy and students.

According to international institutions, such as the Bank of International Settlements and the European Central Bank emphasizing the systematic impact refers to the term chaos that is comprehensive, sudden, produces a greater domino effect of financial chaos that can endanger other commercial banks' economies and also the country's economy. All this is caused by a poor performance system and a management system that is not running well, causing Bank Century to experience a systematic failure that is able to affect all banks in Indonesia. As a result, public confidence in banks has declined and affected all banks whose activities have been disrupted.

In measuring the performance of a bank, Bank Indonesia issued a circular concerning the rating of the soundness of commercial banks. In connection with the enactment of Bank Indonesia Regulation Number 13/1/PBI/2011 concerning Rating of Commercial Bank Soundness, among others, it is stipulated that Banks are required to conduct self-assessments of bank soundness using a Risk based Bank Rating 7 RBBR approach both individually or on a consolidated basis, with the scope of the assessment including factors such as, Risk Profile, Good Corporate Governance (GCG), Profitability (Earning), and Capital (Capital) to produce a coposil rating of the bank's soundness [2].

Banks can be said to be healthy if they are measured using the RGEC method, namely Risk Profile (R), Good Corporate Governance (GCG), Earning (E), and Capital (C). The risk profile consists of eight elements, namely credit risk, market risk, liquidity risk, operational risk, legal risk, strategic risk, compliance risk, and reputation risk. If a bank receives a risk value that tends to be small or getting smaller each year, the bank can be said to be very good or very healthy in dealing with risk in the activities of the bank and vice versa if the bank receives a large risk value or increases every year, it will adversely affect the health of the bank. Good Corporate Governance (GCG) is reviewed directly by the Board of Commissioners and the Board of Directors based on the principles that have become the provisions of Bank Indonesia. The smaller the value or rank obtained from the years in assessing the Good Corporate Governance of a bank, it will determine that the bank is very healthy. Earning is a method used by banks in seeing their ability to seek profits, the greater the value of a bank's earnings will prove the greater the profits or profits obtained by the bank. Capital is a method used to be able to see the ability of banks to save their reserves in order to anticipate if the bank faces some risks that arise as a result of the presence of banking activities, the greater the capital owned by the bank the better or healthier the bank [3].

Considering the importance of bank soundness that is able to make banking performance better in the future and can be used as a precaution to avoid the failure of the financial system that is able to affect the economy of a country and even the world, then I as the writer feel interested in conducting a research by analyze the assessment of the bank's soundness by making PT Bank Mandiri (Persero) Tbk as the object of research based on Risk Profile, Good Corporation Governance, Profitability and Capital owned by PT Bank Mandiri (Persero) Tbk. The reason the author chose PT. Bank Mandiri (Persero) Tbk as a bank that will be used as an object of research is due to the high profits owned by the bank can or does not guarantee that the bank is included in the group of banks that are very healthy, healthy, healthy enough, less healthy and unhealthy.

This study aims to determine: Bank Health Level in terms of Risk Profile, Bank Health Level in terms of Good Corporate Governance, Bank Health Level in terms of Earnings, Bank Health Level from the side of Capital at PT. Bank Mandiri (Persero) Tbk period 2013 – 2017.

II. Literature Review

A. Bank

According to RI Law Number 10 Year 10 November 1998 concerning Banking, what is meant by Banks is a business entity that collects funds from the public in the form of deposits and distributes them to the public in the form of credit and or other forms in order to improve the lives of many people [1].

B. Financial Statements

According to Kasmir "Financial Statements are reports that show the company's financial condition at this time or in a certain period" [4].

C. Bank Health

Understanding Bank Health According to Kasmir in the book Bank and Other Financial Institutions states that: The soundness of a bank can be interpreted as the ability of a bank to carry out banking operations normally and be able to fulfill all its obligations properly in ways that are in accordance with applicable banking regulations [1].

D. Rating Factors for Bank Soundness

Factors assessing the soundness of a bank based on the RGEC method in circular No. 13/24/DPNP dated October 25, 2011 and PBI No. 13 / PBI / 2011 as the Indicators are [2]:

1) Risk profile: Risk Profile factor assessment is the result of an assessment of inherent risk and quality in the application of Risk Management in the Bank's operational activities.

Credit Risk is the risk due to the failure of the debtor and / or other parties in meeting obligations to the Bank. Credit risk can be calculated using the Non Performing Loan ratio (Bad Credit/Credit Total). Market Risk is the risk in balance sheet and administrative account positions including derivative transactions, due to changes in market conditions, including the risk of changes in option prices. Market risk can be calculated using the Interest Rate Risk ratio: (Rate Sensitive Assets/Rate Sensitive Liabilities x 100%). Liquidity Risk is the risk due to the inability of the Bank to fulfill obligations due from cash flow funding sources, and / or from high quality liquid assets that can be pledged, without disrupting the activities and financial condition of the Bank. Liquidity risk can be calculated using the Loan to Deposit Ratio: (Credit Total/third-party funds x 100%).

Operational Risk is the risk due to inadequate and / or malfunctioning of internal processes, human error, system failure, and / or external events that affect bank operations. Legal Risk is the risk arising from lawsuits and / or weaknesses in the juridical aspects. Strategic Risk is the risk due to inaccurate banks in making decisions and / or implementing a strategic decision and failure to anticipate changes in the business environment. Compliance Risk is the risk arising from the bank not complying with and / or not implementing the applicable laws and regulations. Reputation Risk is the risk due to a decrease in the level of stakeholder confidence that comes from negative perceptions of the bank.

2) Good Corporate Governance (GCG): GCG is an assessment of the quality of the Bank's management of the implementation of GCG principles. The principles of GCG and the focus of the assessment of the implementation of GCG principles are guided by Bank Indonesia regulations regarding the Implementation of GCG for Commercial Banks, taking into account the characteristics and complexity of the Bank's business.

3) Earning: Assessment of earnings includes evaluating earnings performance, sources of sustainable profitability with profitability and earnings management. Earnings can be calculated using the Return On Assets ratios: (Profit Before Tax) / (Average Total Assets) x 100% and Return On Equity (ROE) ratios : (Profit After Tax) / (Average Core Capital) x 100% [5].

4) Capital: An assessment of Capital or Capital factors includes evaluating the adequacy of the Capital and the adequacy of Capital management. In calculating Capital, Banks must refer to Bank Indonesia regulations governing the Minimum Capital Requirement for Commercial Banks.

Capital can be calculated using the CAR ratio: Capital / ATMR x100%.

The Bank's Soundness Composite Rating determined in this method is based on a comprehensive and structured analysis of each Risk Profile, Good Corporate Governance, Earning and Capital ranking by showing the materiality and significance of each factor. Composite Ratings are categorized as follows:

- Composite Rating 1 (PK-1), reflects the condition of the Bank which is generally very healthy so that it is considered to be able to face significant negative effects from changes in business conditions and other external factors.
- Composite Rating 2 (PK-2), reflecting the generally healthy condition of the Bank so that it is considered capable of facing significant negative effects from changes in business conditions and other external factors.
- Composite Rating 3 (PK-3), reflecting the condition of the Bank which is generally quite healthy so that it is considered sufficient to be able to face a significant negative effect from changes in business conditions and other external factors.
- Composite Rating 4 (PK-4), reflecting the condition of the Bank which is generally less healthy so that it is considered less able to face significant negative effects from changes in business conditions and other external factors.
- Composite Rating 5 (PK-5), reflecting the Bank's generally unhealthy condition so that it is considered unable to face significant negative effects from changes in business conditions and other external factors.

III. Methods

This study is a descriptive research with a quantitative approach, which explains the object under study by providing a description or description of the problem that has been identified and carried out intensively and in detail to a company that is by analyzing the numbers on the financial statements then adjusted to the relevant ratios and assessing the soundness of the bank where the results will be used as a reference for preparing future bank plans and as an improvement in the performance of the bank based on the data obtained and the provisions set by Bank Indonesia.

The type of data used in this study is documentary data. Documentary data is research data which among others consists of factors, journals, letters, results of minutes, meetings, memos, or in the form of program reports. Based on data sources, this study uses secondary data sources were obtained from financial reports and non-financial reports or annual reports at PT. Bank Mandiri (Persero) Tbk for the period 2013-2017.

The population in a study is a collection of individuals or objects that are common traits, the authors determine the population and this study is a public bank that is publicly listed on the Indonesia Stock Exchange (IDX). In this study the sample technique used in this study is Random Sampling or random samples i.e. each member of the population has the same opportunity and opportunity to be chosen as a sample and there are no specific interventions from researchers. Based on the following sample types, the authors designate PT Bank Mandiri (Persero) Tbk as the sample to be examined.

The data analysis technique used is the analysis of financial statements and also annual reports owned by PT. Bank Mandiri (Persero) Tbk in 2013-2017 using the RGEC method. The steps used to assess the soundness of a bank for each factor with its components are as follows:

- Collecting data from financial reports and non-financial reports or annual reports of PT. Bank Mandiri (Persero) Tbk relating to research variables.
- Rating each NPL, LDR GCG, ROA, ROE, and CAR analysis.
- Establishing a composite rating for the rating of the bank's soundness from 2013 to 2017. The composite value for the financial ratios of each component that ranks composite will have the following values:
  Rank 1 = each time a checklist multiplied by 5
  Rank 2 = each time the checklist multiplied by 4
  Rank 3 = each time the checklist multiplied by 3
  Rank 4 = each time the checklist multiplied by 2
  Rank 5 = each time the checklist is multiplied by 1
- The composite value obtained from multiplying each checklist is then determined by weighting it. Composite Rating = (Total Composite Value) / (Total Composite Overall value) x 100%.
- Draw conclusions about the soundness of a bank in accordance with the bank's health calculation standard determined by Bank Indonesia based on the calculation of the ratio analysis.

IV. Results and Discussion

A. Bank Health Analysis in terms of Risk Profile

1) Credit risk: In this study, the ratio used to measure credit risk is using the ratio of NPL (Non Performing Loans). In this ratio explains that NPL can be obtained from the results of problem loans from a bank in a certain period classified as substandard, doubtful and loss loans divided by credit financing provided by a bank to non-bank third parties in a certain period (See Table 1) [5]. By using NPL data obtained by bank Mandiri health. In 2013 the condition of the bank was very healthy, in 2016 it was quite healthy and in other years was in a healthy condition.

TABLE I. NPL (NON PERFORMING LOAN) COMPONENT CALCULATION AND CRITERIA

Year	Bad Debt	Debt Total	NPL
2013	8.930.010	467.170.449	1,91%
2014	11.297.833	523.101.817	2,16%
2015	15.377.323	586.675.437	2,62%
2016	26.184.421	649.322.953	4,03%
2017	25.040.784	712.037.865	3,52%

Source: Financial statements that have been processed by researchers, (2015-2017).

2) Liquidity risk: In this study the ratio used to measure liquidity risk is using the LDR (Loan to Deposit Ratio) ratio. In this ratio explains that the LDR can be obtained from the total credit given by a bank to non-bank third parties in a certain period and then divided by third party funds, namely current accounts, savings and time deposits [6]. By using LDR, it is obtained the health data of banks Mandiri which show quite healthy from 2013 to 2017 (See Table 2).

TABLE II. CALCULATION AND CRITERIA FOR LDR (LOAN TO DEPOSIT RATIO) COMPONENTS

Year	Debt Total	Third Party Loan	LDR
2013	467.170.449	583.448.911	91,78%
2014	523.101.817	508.996.256	89,65%
2015	586.675.437	622.332.331	94,27%
2016	649.322.953	702.060.230	92,48%
2017	712.037.865	749.583.982	95,00%

Source: Financial statements that have been processed by researchers, (2013-2017)

B. Bank Health Analysis in Terms of Good Corporate Governance (GCG) 2013-2017

TABLE III. RESULTS OF INDIVIDUAL GCG AND OJK SELF ASSESSMENTS IN 2013

Year	Rating	Appraiser	Remarks
2013	Bank Mandiri	1	Very Good
	OJK	2	Good
	Composite Value	**1.5**	**HEALTHY**
2014	Bank Mandiri	2	Good
	OJK	1	Very Good
	Composite Value	**1.5**	**HEALTHY**
2015	Bank Mandiri	1	Very Good
	OJK	2	Good
	Composite Value	**1.5**	**HEALTHY**
2016	Bank Mandiri	1	Very Good
	OJK	2	Good
	Composite Value	**1.5**	**HEALTHY**
2017	Bank Mandiri	1	Very Good
	OJK	2	Good
	Composite Value	**1.5**	**HEALTHY**

Source: Secondary Data Annual Report processed by researchers

In terms of Good Corporate Governance, Bank Mandiri was in healthy condition throughout 2013 to 2017.

C. Bank Health Analysis in Terms of Earning

1) Return On Assets (ROA): In this study the ratio used to measure a bank's earning is using the Return On Assets (ROA) ratio. In this ratio explains that ROA can be obtained from the profit before tax owned by the bank in a certain period divided by the average total assets (total assets of the previous year and total assets of the year to be analyzed) [7]. Based on ROA, Bank Mandiri was in very healthy condition in 2013, 2014, 2015 and 2017 (See Table 4).

TABLE IV. ROA (RETURN ON ASSETS) COMPONENT CALCULATION AND CRITERIA

Year	Eearning Before Tax	Average of Total Asset	ROA	Rank	Remarks
2013	24.061.837	684.359.235	3,51%	1	Very Healthy
2014	26.008.015	794.069.717,5	3,27%	1	Very Healthy
2015	26.369.430	882.551.541	2,98%	1	Very Healthy
2016	18.572.965	974.384.709	1,90%	2	Healthy
2017	27.156.863	1.081.703.428	2,51%	1	Very Healthy

Source: Financial statements that have been processed by researchers (2013-2017)

2) Return On Equity (ROE): In this study the next ratio used to measure a bank's earning is using the Return On Equity (ROE) ratio. In this ratio explains that ROE can be obtained from the profit after tax owned by the bank in a certain period divided by the average total equity (total equity of the previous year and total equity of the year to be analyzed) [7]. Based on ROE, Bank Mandiri was in very healthy condition in 2013 and 2014, healthy condition in 2015 and 2017 and quite healthy in 2016 (See Table 5).

TABLE V. ROE (RETURN ON EQUITY) COMPONENT CALCULATION AND CRITERIA

Year	Eearning After Tax	Average of Total Asset	ROE	Rank	Remarks
2013	18.829.934	82.273.092,5	21,33%	1	Very Healthy
2014	20.654.783	96.817.579	22,88%	1	Very Healthy
2015	21.152.398	112.168.201,5	18,85%	2	Healthy
2016	14.650.163	136.430.782	10,73%	3	Fairly Healthy
2017	21.443.042	161.687.927,5	13,26%	2	Healthy

Source: Financial statements that have been processed by researchers (2013-2017)

D. Bank Health Analysis in Terms of Capital

CAR ratio which includes capital owned by banks in a certain period of time divided by Risk Weighted Assets (ATMR). The greater the CAR ratio, the better the quality of bank capital, following the application of the CAR ratio in 2015-2017 at PT. Mandiri Bank [8]:

TABLE VI. CALCULATION AND CRITERIA FOR CAR COMPONENTS (CAPITAL)

Year	CAPITAL	ATMR	CAR %	Rank	Remarks
2013	73.345.421	491.276.170	14,92	2	Healthy
2014	85.479.697	514.904.536	16,60	1	Very Healthy
2015	107.388.146	577.345.989	18,60	1	Very Healthy
2016	137.432.214	643.379.490	21,36	1	Very Healthy
2017	153.178.315	707.791.497	21,64	1	Very Healthy

Source: Financial statements that have been processed by researchers (2013-2017)

Based on CAR Ratio, Bank Mandiri was declared very healthy in 2014 to 2017. Even though in 2013 it was only in a healthy condition (See Table 6).

E. Results of Analysis of Bank Health Analysis by RGEC Method of PT. Bank Mandiri (Persero) Tbk in 2013

From the results of the description above, it can be concluded that in 2013 PT. Bank Mandiri (Persero) Tbk ranks 1 (one) of several variables that have been studied, namely Risk Profile which is measured using the ratio of NPL and LDR, Good Corporate Governance obtained directly from the annual report of Bank Mandiri's governance, Earning is measured using a ratio ROA and ROE ratio, and Capital are measured using the CAR ratio. This was reflected in the final composite value which obtained a value of 86.66%. Banks can be said to be very healthy if obtaining the final composite value obtains a composite value between 86% -100% of the composite weight. This reflects that financial conditions are generally very healthy so that they are considered to be able to face significant negative effects from changes in business conditions and other external factors.

F. Results of Analysis of Bank Health Analysis by RGEC Method of PT. Bank Mandiri (Persero) Tbk in 2014

From the description above, it can be concluded that in 2014 PT. Bank Mandiri (Persero) Tbk was ranked 1 (one) or very healthy in terms of several variables that have been studied, namely Risk Profile which is measured using the ratio of NPL and LDR, Good Corporate Governance obtained directly from Bank Mandiri's annual governance report, Earnings are measured using the ROA ratio and ROE ratio, and Capital is measured using the CAR ratio. This was reflected in the final composite value which obtained a value of 86.66%. Banks can be said to be very healthy if obtaining the final composite value obtains a composite value between 86% - 100% of the composite weight. This reflects that financial conditions are generally very healthy so that they are considered to be able to face significant negative effects from changes in business conditions and other external factors.

G. Results of Analysis of Health Analysis by RGEC Method of PT. Bank Mandiri (Persero) Tbk in 2015

From the description above, it can be concluded that in 2015 PT. Bank Mandiri (Persero) Tbk ranks 2 (two) of several variables that have been studied, namely Risk Profile which is measured by the ratio of NPL and LDR, Good Corporate Governance obtained directly from Bank Mandiri's annual governance report, Earning is measured by the ROA ratio and ROE and Capital measured using CAR ratios get a category of rating 2 or HEALTH, this is reflected in the final composite value obtaining a value of 83.33%. Banks can be said to be healthy if they obtain a composite value between 71% -85% of the composite weight. This reflects the Bank's generally healthy condition so that it is considered capable of facing significant negative influences from changes in business conditions and other external factors.

H. Results of Bank Health Analysis by RGEC Method of PT. Bank Mandiri (Persero) Tbk in 2016

From the description above, it can be concluded that in 2016 PT. Bank Mandiri ranks 2 (two) from several variables that have been studied, namely Risk Profile measured by the ratio of NPL and LDR, Good Corporate Governance obtained directly from the annual report of Bank Mandiri governance, Earning is measured by the ratio of ROA and ROE and measured Capital By using the CAR ratio, it gets a rank 2 or HEALTH category, reflected in the composite value obtained in 2016 that was 73.33% and the minimum threshold value for healthy composites was 71% -85%. Where the value obtained has decreased compared to the previous year. This is reflected in the composite value obtained from variable data processing which produces a value of 73.33% where the value decreases by 10% compared to last year which reached 83.33%. With the acquisition of composite value 2 or healthy, it can reflect the Bank's generally healthy condition so that it is considered capable of facing significant negative effects from changes in business conditions and other external factors.

I. Results of Analysis of Bank Health Analysis by RGEC Method of PT. Bank Mandiri (Persero) Tbk in 2017

From the description above, it can be concluded that in 2017 PT. Bank Mandiri (Persero) Tbk ranks 2 (two) of several variables that have been studied, namely Risk Profile which is measured by the ratio of NPL and LDR, Good Corporate Governance obtained directly from Bank Mandiri's annual governance report, Earning is measured by the ROA ratio and ROE and Capital measured using CAR ratios ranks category 2 or HEALTH, where it has increased compared to 2016. This is reflected in the final composite value of 83.33%. Banks can be said to be healthy if they obtain a composite value between 71% -85% of the composite weight. By getting second place or healthy, reflect the Bank's generally healthy condition so that it is considered capable of facing significant negative effects from changes in business conditions and other external factors.

V. CONCLUSION

The assessment of the Risk Profile variable measured using the Non-Performing Loan (NPL) ratio and the Loan to Deposit Ratio (LDR) ratio was declared healthy in 2013, 2015, 2015, although in 2016 it experienced a predicate decline to be quite healthy but in 2017 the Risk Profile get a good title again. This reflects that PT. Bank Mandiri is considered capable of managing the risks faced by banking activities carried out and is determined to improve banking performance when Risk Profile is downgraded.

Assessment of Good Corporate Governance variables measured using the self-assessment method that has been carried out by PT. Bank Mandiri (Persero) Tbk and also the Financial Services Authority (FSA) in 2013 to 2017 received a healthy title. This reflects that PT. Bank Mandiri is considered to have implemented the implementation of Good Corporate Governance (GCG) in accordance with a circular issued by the Financial Services Authority and Bank Indonesia properly.

Evaluation of earning variables measured using the Return On Assets (ROA) ratio and the Return On Equity (ROE) ratio at PT. Bank Mandiri (Persero) Tbk in 2013 and 2014 received a very healthy predicate, but in 2015 up to 2017 received a healthy predicate. This reflects that PT. Bank Mandiri (Persero)

Tbk has adequate earnings or profitability and profits that are able to support the growth of bank capital.

Valuation of Capital variables measured using the Capital Adequacy Ratio (CAR) at PT. Bank Mandiri (Persero) Tbk in 2013 received the title of healthy but solid from 2014 to 2017 received the title of very healthy. This is reflected in the increase in capital or capital every year which reflects that PT. Bank Mandiri (Persero) Tbk is considered to be able to meet the capital adequacy adequately against the risks that will arise and can manage capital very well.

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