American Journal of Humanities and Social Sciences Research (AJHSSR)

e-ISSN: 2378-703X

Volume-4, Issue-2-pp-175-182

www.ajhssr.com

Research Paper

Open Access

# Assessment of the Bank's Financial Health Level at Pt. Bank Central Asia, TBK. Based on Risk Approach

Kadek Ayu Yuliawati <sup>1</sup>, I Made Dana <sup>2</sup>

Faculty of Economics and Business, Udayana University (Unud), Bali, Indonesia

ABSTRACT: In an effort to realize public trust in banks, it is necessary to assess their financial health. It has been regulated in Bank Indonesia Regulation Number 13/1 / PBI / 2011 which requires banks to conduct an assessment of financial health based on risk approach. This study aims to assess the financial health level of PT. Bank Central Asia, Tbk. on 2016-2018, based on risk-based bank rating. Data collected through published financial statements. Data analyzed using risk approach including risk profile assessment factors, good corporate governance, earnings, and capital. The results showed that PT. Bank Central Asia, Tbk. is in the composite rank 1 which means that the condition of the bank is very healthy. This reflects that the bank. able to commit to maintaining public trust by providing optimal banking performance.

Keywords -Bank's financial health, Risk Profile, Good Corporate Governance, Earning, Capital

## **I.INTRODUCTION**

Banks are one of the financial institutions that play an important role in providing financial liquidity in the economy. (Marlina, 2016). Banks as agents of trust, have the main basis of activities that are based on trust, both in raising funds and channeling funds. In this function trust must be built that moves in two directions, namely from and to the community. The trust that is built by banks in the eyes of the public will be the strength for these banks to be able to maintain the sustainability of banking activities(Pan, 2016).Lasta *et al.* (2014)states that public trust in banks will be realized if banks are able to optimally improve their performance.

In September 2008, there was a crisis of public confidence in national banking. The crisis began as a result of the economic crisis that hit the United States and spread to other countries throughout the world, including Indonesia. The economic crisis at that time was preceded by an impetus for excessive consumption from the public in the United States which resulted in financial institutions lending to go bankrupt due to loss of liquidity. The United States economic crisis also affected the financial system in Indonesia. It is the task of the central bank, namely Bank Indonesia, to prevent a crisis in the national banking environment. Responding to the threat of the global financial crisis that could endanger the stability of the national economic system, the government issued three regulations whihe are Perppu Number 2, 3, and 4 of 2008. The existence of negative sentiment towards the global financial market resulted in the withdrawal of financial assets by foreign capital owners thereby making financial assets and capital into deficits.

Capital owners are restless as indicated by the migration of funds from small banks to bigger banks. The migration of funds reflects the financial condition that has affected the banking system systemically. Problems are exacerbated when Century Bank experiences problems, when liquidity scarcity occurs. Three major government banks: Bank Rakyat Indonesia (BRI), Bank Mandiri, and Bank Negara Indonesia (BNI) also experienced the same thing so the government was forced to inject funds amounting to IDR 15 Trillion. Public confidence is increasingly shaky along with the deepening of the global crisis, an increase in the inflation rate reached 12, 1 percent and the weakening of the IDR to touch IDR 11,711 per US dollar at that time. Capital owners and the public began to hesitate and the crisis of confidence began to spread due to the rapid deterioration that occurred. The crisis of confidence will result in a country experiencing a large increase in bad loans, and a large decrease in capital in the banking system (Chlichici & Gribincea, 2015).

Haryati & Kristijadi (2014)explained that the growth and stability of the country's finances depends on the financial health of its banking sector. Bank Indonesia as the central bank of the Republic of Indonesia, which plays a role in overseeing, evaluating and fostering banking activities as a financial institution, has established various policies contained in Bank Indonesia Regulations to improve bank performance. One way that can be done to improve bank performance is by evaluating the financial health of the bank. The level of financial health of a bank is one of the most important benchmarks of a bank's financial performance, because from the results of the assessment it can be seen the performance of the owner and the professionalism of the

bank's management (Karthikeyan & Shangari, 2014). Recognizing the importance of bank financial health for the formation of public trust in the banking world as well as for implementing prudential banking principles in the banking world, Bank Indonesia felt the need to apply regulations on bank financial health. With the bank's financial health regulation, banks are expected to always be in a healthy condition, so that it will not harm the public associated with banking (Dewi, 2018).

Based on Bank Indonesia Regulation Number 6/10 / PBI / 2004 dated April, 12<sup>th</sup> 2004, Bank Indonesia has established regulations for assessing the financial health of banks using the CAMELS method. This assessment of the financial health of the bank includes assessments of CAMELS factors consisting of capital, asset quality, management, earnings, and liquidity, and sensitivity to market risk which is done through a qualitative assessment by looking at market risk profiles and market risk management reported by banks. Changes in banking activities that are increasingly complex in line with the increasingly varied economic development, will increase risk exposure to banks that have an impact on the overall condition of the bank and make bank management must always innovate in order to continue to maintain the quality and performance (Zedan & Daas, 2017).

Bank Indonesia improved the bank's financial health assessment method based on the Risk-Based Bank Rating approach in accordance with Bank Indonesia Letter Number 13/24 / DPNP dated October 25, 2011 concerning Rating of Bank's Financial Health of Commercial Banks which is an implementation instruction of Bank Indonesia Regulation Number 13/1 / PBI / 2011 and effective since January 1, 2012 by all commercial banks operating in Indonesia and is still valid today. Rating of Bank's Financial Health using a risk-based bank rating as stipulated in Article 2 paragraph (3) of Bank Indonesia Regulation Number 13/1 / PBI / 2011 requires banks to conduct an assessment of the Financial Health of an individual bank or in consolidation with the aself assessment which includes several factors as follows: risk profile , Good Corporate Governance (GCG), earnings, and capital or better known as the RGEC method to produce a composite rating of Bank's Financial Health(Korri & Baskara, 2019). The composite rating of the bank's financial health level is determined based on a comprehensive and structured analysis of the ranking of each factor by taking into account the materiality and significance of each factor. The assessment of bank financial health using a risk-based bank rating will result from each of the calculated variables and will be adjusted according to the composite rating (Medyawicesar *et al.*, 2018).

## **II.LITERATURE REVIEW**

A healthy bank benefits all parties who are bank owners, bank managers, people who use the services of banks, the general public, central banks, and the government (Iftikhar, 2016). Suhartono & Zahroh (2017) states a healthy Bank is a bank that can carry out its functions properly that can maintain and maintain public trust, can carry out the intermediary function of the government in implementing various policies, especially monetary policy. The rules regarding the rating of bank financial health have been regulated in Bank Indonesia Regulation Number 13/1 / PBI / 2011 concerning Rating of Financial health of Commercial Banks which must be applied by all banks operating in Indonesia. Dewi & Candradewi (2018), an unhealthy bank will not only endanger the performance of the bank, but will adversely affect other interested parties such as all stakeholders, both owners, managers (management), community users of bank services (customers) and Bank Indonesia as the supervisory authority bank.

Based on Bank Indonesia Regulation Number 13/1 / PBI / 2011 Article 7 states that the assessment of risk profile is an assessment of inherent risk and the quality of the implementation of risk management in bank operations carried out on 8 risks namely credit risk, market risk, liquidity risk, operational risk , legal risk, strategic risk, compliance risk and reputation risk. The next rating factor for bank financial health is Good Corporate Governance (GCG). Sandhya & Parashar (2017), Good Corporate Governance practices are increasingly important in banks given the fact that banks attract and mobilize large amounts of public funds. Bank Indonesia Regulation Number 13/1 / PBI / 2011 requires banks operating in Indonesia to incorporate the factor of Good Corporate Governance in the assessment of the financial health of banks, therefore companies must pay more attention to the stability of the banking system so that it can bears the title of good in managing the company.

Rentability (earnings) is a factor that can not be separated from the assessment of the financial health of banks using a risk approach. The assessment of profitability is based on a comprehensive analysis of the components of profitability by taking into account the significance of each component and considering other issues that affect the Bank's rentability. Muhmad & Hashim (2015)states that corporate profitability depends on institutional effectiveness and efficiency of asset and liability management. Increased rentability must inspire trust among savers, capital owners, creditors and the public. The next factor is capital, capital is usually defined as the ability needed to cover bank losses with certain probabilities, which are related to the desired rating. CAR (Capital Adequacy Ratio) is a ratio that shows how much all bank assets that contain risks (credit, investment,

securities, invoices to other banks) are also financed from the bank's own capital, in addition to getting funds from sources outside the bank, such as public funding, debt and more. (Azeharie & Wahjono, 2017)

In previous studies regarding the assessment of bank financial health using an assessment of risk profile factors, Good Corporate Governance (GCG), earnings, and capital or better known as the RGEC method have been widely used, including research by Aspal & Dhawan (2014), Dwinanda & Wiagustini (2015), Anwar (2016), Shinta *et al.* (2016), Azeharie & Wahjono (2017), Nicola *et al.* (2017), Andriyani *et al.* (2018). An assessment of the financial health of banks must continue to be done to avoid a crisis of public confidence in the existence of banks in Indonesia. Increasing competition in the banking sector requires banks to maintain the trust of the public and their customers in order to encourage the progress and smooth operation of banking companies. The existence of an assessment of the financial health of a bank using a risk-based bank rating approach provides a new understanding of a more stringent commercial bank financial health assessment system to improve the performance of a commercial bank. The results of this performance play an important role in the service and increase public confidence in the bank ( Paramartha & Darmayanti, 2017). Wijaya (2018), Paramartha & Mustanda (2017) found that BCA was "very healthy", and therefore in order to maintain the trust of the public the writer wanted to assess the financial health of BCA at different periods and measure each variable using a different ratio.

#### **III.METHODS**

The research design used is descriptive. This research is in the form of quantitative research to assess the financial health of banks at PT. Bank Central Asia, Tbk. The mechanism for evaluating bank financial health refers to Bank Indonesia Regulation No. 13/1 / PBI / 2011 concerning Rating of Financial health of Commercial Banks and Bank Indonesia Circular No. 13/24 / DPNP dated 25 October 2011 Regarding the Rating of Financial health of Commercial Banks. The data obtained in the form of data from PT. Bank Central Asia, Tbk. in 2016-2018 . The objects of this study include risk profile factors, Good Corporate Governance (GCG), earnings, and capital from PT. Bank Central Asia, Tbk. in assessing the financial health of a bank. Data collection methods used in this study are the study of documentation and non-participant observation.

#### IV.RESULTS AND DISCUSSION

This study uses a Non Performing Loan (NPL) ratio to determine the credit risk of PT. Bank Central Asia, Tbk. in 2016-2018. This ratio illustrates how big the ratio of non-performing loans (substandard, doubtful, and loss) with the total loans that have been distributed by banks to non-bank third parties.

Table 1.Credit Risk Composite Component Rating Value (NPL)

Period	NPL (%)	Composite Rating	
2016	1,31	1	Very healthy
2017	1,49	1	Very healthy
2018	1,41	1	Very healthy

Source: Data Processed, 2018

Based on table 1 and referring to Bank Indonesia Circular No. 13/24 / DPNP / 2011, PT. Bank Central Asia, Tbk. in 2016, 2017, and 2018 received a composite rating of 1 with a very healthy predicate because it has a ratio of under 2 percent in the calculation of the credit risk component. This reflects that PT. Bank Central Asia, Tbk. able to maintain the quality of its loan portfolio well, it can be shown by the results of the calculation of NPL ratio of 1.31 percent in 2016; 1.49 percent in 2017; and 1.41 percent in 2018, which is lower than the banking sector average of 2.4 percent. In this study, the Loan to Deposit Ratio (LDR) ratio is used to determine the liquidity ratio of PT. Bank Central Asia, Tbk. 2016-2018 period. This financial ratio is used to show the level of ability of banks in channeling third party funds collected by banks by comparing the total loans granted with total third party funds which include savings, current accounts, and deposits that can be collected by banks.

Based on table 2 and referring to Bank Indonesia Circular No. 13/24 / DPNP / 2011, PT. Bank Central Asia, Tbk. in 2016 and 2017 ranked 1st with a very healthy predicate because it has a percentage of LDR ratio ranging from 70 percent to <85 percent ie respectively 78.52 percent and 80.47 percent while in 2018 decreased to rank 3 with a predicate quite healthy where the LDR ratio in 2018 is 85.41 percent. The magnitude of the LDR ratio of PT. Bank Central Asia, Tbk. 2016-2018 shows that bank management has the ability to channel its funds properly, even though it has not been maximized or has been able to implement the bank intermediation function.

Table 2. Value of Composite Rating Liquidity Risk Component (LDR)

Period	LDR (%)	Composite Rating	
2016	78,52	1	Very healthy
2017	80,47	1	Very healthy
2018	85,41	3	Moderate

Source: Data Processed, 2018

This study uses the ratio of Operational Costs to Operating Income (BOPO) to determine the operational risks faced by PT. Bank Central Asia, Tbk. 2016-2018 period. This financial ratio is used to describe the ability of banks to manage operating expenses / costs to the company's operating income.

Table 3.Operational Risk Component Composite Rating Value

Period	BOPO (%)	Composite Rating					
2016	43,47	1	Very healthy				
2017	44,21	1	Very healthy				
2018	43,87	1	Very healthy				

Source: Data Processed, 2018

Based on table 3. PT. Bank Central Asia, Tbk. in 2016, 2017 and 2018, they were ranked 1 with a very healthy rating because they had a BOPO percentage of 43.47 percent; 44.21 percent; and 43.87 percent. This happens because the results of the assessment of operational risk levels using the BOPO ratio are in the percentage <90 percent referring to Bank Indonesia Circular No. 13/24 / DPNP / 2011. The BOPO ratio gives an indication of the better operations of banks, and the better performance of bank management in using existing resources in the company.

Good corporate governance (GCG) is a must in order to maintain the long-term sustainability of the company's business and maximize the value of the company. In accordance with Bank Indonesia Circular No. 15/15 / DPNP PT. Bank Central Asia, Tbk. conduct its own assessment of the implementation of corporate GCG which includes an assessment of the quality of bank management on the implementation of GCG principles.

**Table4. GCG Component Composite Rating Value** 

Period	Composite Rating	
2016	1	Very good
2017	1	Very good
2018	1	Very good

Source: Data Processed, 2018

In the period of 2016 to 2018, BCA received a composite ranking of 1 in the GCG assessment with an excellent rating. BCA is able to maintain its consistency in implementing GCG principles in conducting banking activities such as transparency, accountability, responsibility, independence, and fairness.

Table 5. Composite Component Value: Rentability (ROA)

Period	ROA (%)	Composite Rating	
2016	4,07	1	Very healthy
2017	4,09	1	Very healthy
2018	4,15	1	Very healthy

Source: Data Processed, 2018

Based on table 5, it can be described that in 2016 to 2018 the ROA ratio obtained around> 2 percent and relatively high in the banking sector. In accordance with Bank Indonesia Circular No. 13/24 / DPNP / 2011, the results of the calculation of the ROA ratio obtained a composite rating of 1 and indicates the condition of the bank is very healthy.

Table6. Composite Component Value: Rentability (ROE)

Period	ROE (%)	Composite Rating	
2016	18,31	2	Healthy
2017	17,75	2	Healthy
2018	17,04	2	Healthy

Source: Data Processed, 2018

In 2016 to 2018 the ROE ratio of PT. Bank Central Asia, Tbk. obtained a composite rank 2 with a healthy predicate with the ROE ratio calculation of 18.31 percent in 2016; increased to 17.75 percent in 2017; and 17.04 percent in 2018, this means that PT. Bank Central Asia, Tbk. able to generate net income well.

Table7. Composite Component Value: Rentability (NIM)

Tubicit component (unit vittemanity (1(11(1)							
Period	NIM (%)	<b>Composite Rating</b>					
2016	7,09	1	Very healthy				
2017	6,56	1	Very healthy				
2018	6,44	1	Very healthy				

Source: Data Processed, 2018

The NIM ratio calculation results amounted to 7.09 percent then in 2017 and 2018 amounted to 6.56 percent and 6.44 percent. In those three years, PT. Bank Central Asia, Tbk. able to maintain its composite ranking of rank 1 with a very healthy predicate.

**Table 8. Capital Component Composite Rating (CAR)** 

Period	CAR (%)	Composite Rating	
2016	21,90	1	Very healthy
2017	23,59	1	Very healthy
2018	23,95	1	Very healthy

Source: Data Processed, 2018

Based on the calculation of the CAR ratio set out in table 8 it can be illustrated that in the period of 2016, 2017 and 2018 PT. Bank Central Asia, Tbk. able to achieve a composite rank 1 with the predicate is very healthy. This means that in running its banking business, PT. Bank Central Asia, Tbk. has a very good capital adequacy to meet its obligations and support assets that contain risks such as credit risk, market risk, and operational risk.

Table 9. Financial health Level Assessment of PT. Bank Central Asia, Tbk. In 2016

No.	Factor	Ratio	Composite Rating				
			1	2	3	4	5
1	Risk Profile	NPL					
		LDR					
		BOPO					
2	Good Corporate Governance	GCG					
3	Earnings	ROA					
		ROE		V			
		NIM					
4	Capital	CAR					
	Composite Value	40	35	4			

Source: Data Processed, 2018

The eight ratios assessed, there are 7 ratios that obtained a composite rating of 1 and only 1 ratio that obtained a composite rating of 2, then the final financial health grade calculation in 2016 is as follows: Total composite value = 40; actual composite value = (7x5) + (1x4) = 39 then the final value of the financial health level in 2016 which is equal to:

$$\frac{39}{40}x100\% = 97,5\%$$

Table 10. Financial health Level Assessment of PT. Bank Central Asia, Tbk. In 2017

No.	Factor	Ratio	Composite Rating				
			1	2	3	4	5
1	Risk Profile	NPL					
		LDR					
		BOPO					
2	Good Corporate Governance	GCG					
3	Earnings	ROA					
		ROE		V			
		NIM					
4	Capital	CAR					
	Composite Value	40	35	4			

Source: Data Processed, 2018

Eight ratios assessed only the ROE ratio obtained a composite rating of 2, and the remainder obtained a composite rating of 1, then the calculation of the final financial health level in 2017 is as follows: Total composite value = 40; actual composite value = (7x5) + (1x4) = 39 then the final value of the financial health level in 2017 is equal to:

$$\frac{39}{40}x100\% = 97,5\%$$

Table 11. Financial health Level Assessment of PT. Bank Central Asia, Tbk. In 2018

No.	Factor	Ratio	Composite Rating				
			1	2	3	4	5
1	Risk Profile	NPL					
		LDR			V		
		BOPO					
2	Good Corporate Governance	GCG					
3	Earnings	ROA	<b>√</b>				
		ROE		V			
		NIM					
4	Capital	CAR	<b>√</b>				
	Composite Value	40	30	4	3		

Source: Data Processed, 2018

Eight ratios assessed, there were 6 ratios that obtained composite rank 1, there was 1 ratio that obtained composite rank 2, and 1 ratio obtained composite rank 3, then the final financial health grade calculation of PT. Bank Central Asia, Tbk. 2018 is as follows: Total composite value = 40; actual composite value = (6x5) + (1x4) + (1x3) = 37 then the final value of the financial health level in 2018 which is equal to:

$$\frac{37}{40} \Box 100\% = 92,5\%$$

Table 12. Financial health Level Assessment of PT. Bank Central Asia, Tbk. In 2016-2018

Period	Nilai (%)	Composite Rating	
2016	97,5	1	Very healthy
2017	97,5	1	Very healthy
2018	92,5	1	Very healthy

Source: Data Processed, 2018

Based on table 12 PT. Bank Central Asia, Tbk. for three years in a row namely in 2016, 2017, 2018 was in the position of composite rank 1 with the predicate of a very healthy bank. Of all the factors assessed, there were several factors that experienced a composite downgrade in each period but this did not affect the composite rating

## V. CONCLUSION

Based on the assessment that has been done, the financial health level of PT. Bank Central Asia, Tbk. in the 2016-2018 period in a row that is ranked composite 1 with a very healthy predicate. This indicates that PT. Bank Central Asia, Tbk. has been able to implement banking activities very well and in accordance with

Bank Indonesia regulations, one of which is to maintain the financial health of banks. The success achieved by PT. Bank Central Asia, Tbk. is an achievement that must be maintained to maintain public confidence.PT. Bank Central Asia, Tbk. able to prioritize public trust, services, and efforts to encourage economic growth in order to support the stability of the banking world and the country's economy. Efforts that can be made by maintain the rating of the financial health of the bank in order to continue to receive the title of very healthy by maintaining the trust of the public, both customers, investors, government, and other stakeholders. One way that can be done is to improve the financial performance of banks to be more professional, reliable, and prioritize the best service for the community.

#### REFERENCES

- [1] Marlina, R. (2016). Analysis of Financial Performance Differences Bank in Indonesia Based on Buku. *Academy of Strategic Management Journal*, *15*(3), 176–187.
- [2] Pan, Z. (2016). An Empirical Analysis of the Impact of Commercial Banks' Corporate Governance to Risk Control. *Management & Engineering Journal*, 22(1), 72–79.
- [3] Lasta, H. A., Arifin, Z., & Nuzula, N. F. (2014). Analisis Tingkat Kesehatan Bank Dengan Menggunakan Pendekatan RGEC (Risk Profile, Good Corporate Governance, Earnings, Capital). *Jurnal Administrasi Bisnis*, *13*(2), 1–10.
- [4] Chlichici, D., & Gribincea, C. (2015). Implication of The Financial Crisis on The Soundness of The Banking System in The Republic of Moldova. *The IEB International Journal of Finance*, 10(1), 88–109.
- [5] Haryati, H., & Kristijadi, E. (2014). The Effect of GCG Implementation and Risk Profile on Financial Performance at Go-Public National Commercial Bank. *Journal of Indonesian Economy and Business*, 29(3), 237–250.
- [6] Karthikeyan, & Shangari, B. (2014). Calibrating Financial Soundness Among Selected Private Sector Banks In India By Using Camel Model. *International Journal of Management Research and Review*, 4(4), 449–454.
- [7] Dewi, M. (2018). Analisis Tingkat Kesehatan Bank dengan Menggunakan Pendekatan RGEC (Risk Profile, Good Corporate Governance, Earnings, Capital). *Niagawan*, 7(3), 125–143.
- [8] Zedan, K. A., & Daas, G. (2017). Palestinian Bank Analysis Using CAMEL Model. *International Journal of Economics and Financial Issues*, 7(1), 351–357.
- [9] Korri, N. T. L., & Baskara, I. G. K. (2019). Pengaruh Capital Adequacy Ratio, Non Performing Loan, BOPO, dan Loan to Deposit Ratio terhadap Profitabilitas. *E- Jurnal Manajemen Universitas Udayana*, 8(11), 6577–6597.
- [10] Medyawicesar, H., Tarmedi, E., & Purnamasari, I. (2018). Analisis Komponen Tingkat Kesehatan Bank Terhadap Harga Saham Bank Umum Swasta Nasional Devisa yang Terdaftar di Bursa Efek Indonesia Periode 2012-2016. *Journal of Business Management Education*, 3(1), 21–31.
- [11] Iftikhar, M. (2016). Impact of Credit Risk Management on Financial Perfomance of Commercial Banks of Pakistan. *University of Haripur Journal of Management*, 1(2), 110–124.
- [12] Suhartono, D. A., & Zahroh, A. D. . (2017). Analisis Tingkat Kesehatan Bank dengan Menggunakan Metode Risk Based Bank Rating. *Jurnal Administrasi Bisnis*, 46(1), 131–139.
- [13] Dewi, I. A. S. K., & Candradewi, M. (2018). Penilaian Tingkat Kesehatan Bank Metode RGEC Pada PT. Bank Tabungan Negara (Persero), Tbk. Periode 2014-2016. *E-Jurnal Manajemen Universitas Udayana*, 7(3), 1595–1623. https://doi.org/https://doi.org/10.24843/EJMUNUD.2018.v7.i03.p011
- [14] Sandhya, S., & Parashar, N. (2017). Literature Review on Corporate Governance Structure and Firm Performance with Special Reference to Banking Sector. *Gian Jyoti E-Journa*, 7(3), 26–38.
- [15] Muhmad, S. N., & Hashim, H. A. (2015). Using The CAMEL Framework in Assessing Bank Performance in Malaysia. *International Journal of Economics, Management and Accounting*, 23(1), 109–127.
- [16] Azeharie, W. M., & Wahjono, S. I. (2017). Analysis of Bank Health at Indonesia State-Owned Bank Using RGEC Method at BRI, BNI, and Bank Mandiri for Periods 2011-2015. *Information Technology and Business*, *I*(1), 1–12.
- [17] Aspal, P. K., & Dhawan, S. (2014). Financial Performance Assessment of Banking Sector in India: A Case Study of Old Private Sector Banks. *The Business & Management Review*, 5(3), 196–211.
- [18] Dwinanda, I. A. W., & Wiagustini, N. L. (2015). Analisis Penilaian Tingkat Kesehatan Bank Pada PT. Bank Pembangunan Daerah Bali Berdasarkan Metode RGEC. *E-Jurnal Manajemen Universitas Udayana*, 4(1), 126–142.
- [19] Anwar, Y. (2016). Comparative analysis of Commercial Banks Government Owned and Private Banks National Using RGEC. *The Accounting Journal*, *1*(1), 27–36.
- [20] Shinta, L., Primiana, I., & Nidar, S. R. (2016). Bank Health Analysis Based on Risk Profile, Earnings, and Capital. *Actual Problems of Economics*, 7(2), 388–395.

- [21] Nicola, D., Manalu, S., & Hutapea, T. M. H. (2017). Effect of Bank Soundness Level RGEC Method on Index of Financial Inclusive in Indonesia. *Journal of Applied Management*, *15*(4), 704–709.
- [22] Andriyani, I., Mayasari, R. P., & Aryani, D. S. (2018). Soundness Rating of Commercial Banks Before and After Implementation of RGEC Method in Indonesia. *Accounting Journal*, 22(1), 162–169.
- [23] Paramartha, D. G. D. A., & Mustanda, I. K. (2017). Analisis Penilaian Tingkat Kesehatan Bank Pada PT. Bank Central Asia, Tbk. Berdasarkan Metode RGEC. E- Jurnal Manajemen Universitas Udayana, 6(1), 32–59.
- [24] Wijaya, B. (2018). Analisis Tingkat Kesehatan Bank dengan Menggunakan Metode Risk-Based Bank Rating (RBBR). *Jurnal Akuntansi Maranatha*, 10(1), 85–97.
- [25] Paramartha, I. M., & Darmayanti, N. P. A. (2017). Penilaiann Tingkat Kesehatan Bank Dengan Metode RGEC Pada PT. Bank Mandiri (Persero), Tbk. *E- Jurnal Manajemen Universitas Udayana*, 6(2), 948–974.