 ISSN: 1829-9865 (print)
2579-485X (online

Independent Sample T Test Analysis
(Case Study of Bank Mandiri with BNI 46)

Heri Sasono
STIE Dharma Bumiputera, Jakarta Indonesia
heribtc@yahoo.co.id

Abstract
Currently there are four government-owned banks, namely; Bank Mandiri, Bank Rakyat Indonesia (BRI), Bank Tabungan Negara (BTN) and Bank Nasional Indonesia (BNI) 46. Of these four banks it can be said to have quite good performancej, proven to have provided dividends to the State treasury over the last few years. This research wants to see the difference in the average performance of the two government-owned banks, namely between Bank Mandiri and Bank Negara Indonesia over the last 10 years from 2014 to 2023. Research analysis of normality test, homogeneity test and independent sample t test using SPSS software version 26, to analyze the variables ROA, NPL, LDR, BOPO, CAR, NIM and ROE. The research shows that only the financial ratios Return on Equity (ROE) and Loan Deposit Ratio (LDR) have significant differences, while the ratios of Return on Assets (ROA), Net Interest Margin (NIM), Operational Costs to Operating Income (BOPO) and Net Performing Loans (NPL) and Capital Aduqucy Ratio (CAR), did not have a significant difference between Bank Mandiri and Bank Nasional Indonesia (BNI) 46, for 10 years, starting from 2014 until 2014. 2023.

Keywords
CAR, BOPO, ROA, NPL, LDR, NIM, ROE, Independent Samples t Test

Introduction

Currently the banking industry in Indonesia is very competitive, due to strict government regulations. Banking has a very important role, as one of the driving forces of a country's economy. Banks are intermediary institutions for parties who have excess funds and parties who lack funds. Where the party who has a surplus of funds will save money in the bank, while the party who lacks funds will borrow money from the bank.

In Indonesia there are several types of banks, namely; state-owned banks, national private banks, and foreign banks. State-owned commercial banks have a dual role, namely as state development agents, so state-owned banks are required to be able to manage state assets well and effectively. Of these four government-owned banks, net profits have always increased, such as; PT Bank Mandiri Tbk, PT Bank Negara Indonesia Tbk (BNI), PT Bank Rakyat Indonesia Tbk (BRI) have performed quite well, because they provide dividends to the State Treasury.

Bank health is an obligation that must be fulfilled, if banking conditions are unhealthy it can cause the bank's function as an intermediary institution to not function optimally. The government is obliged to supervise and analyze banking performance and also needs to compare the conditions of state-owned banks in carrying out their operational activities.

The following is a graph of the performance of two government-owned banks, namely Bank Mandiri and Bank Negara Indonegara (BNI) 46 over the last 10 years, seen from the Capital Adequacy Ratio (CAR). Where the government has required that banking businesses must meet a minimum CAR of 12%, at all times.

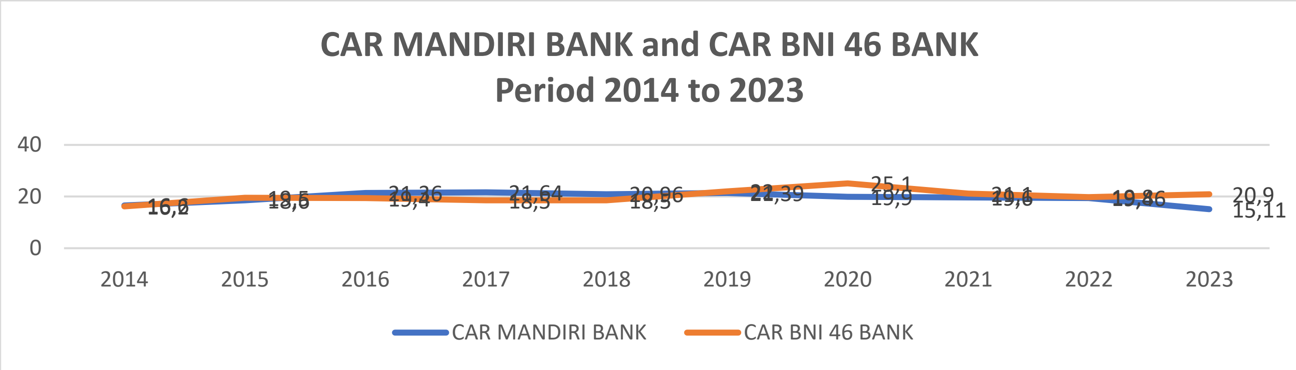

Figure 1. CAR Mandiri Bank and CAR BNI 46 Bank Period 2014 to 2023
Sources: Annual Report Mandiri Bank and BNI 46 Bank

Capital Adjudication Ratio (CAR) data from Bank Mandiri and CAR BNI 46, for the last 10 years from 2014 to 2023, looks no different and almost the same, as do other financial ratios, such as ROA, ROE, NPL, NIM, LDR and BOPO. The following are some research results using the Independent Sample t Test method from several banks in Indonesia using several core financial ratios or key ratios of banking companies.

Research by Damara Andri Nugraha (2014), resulted in research that there were differences in the ROA, ROE and CAR indicators and there were no differences in the LDR indicators between the financial performance of Bank Syariah Mandiri and Bank Central Asia. I Gusti Ayu Purnamawati (2014), research results show that there are significant differences in the ROA, ROE and LDR indicators between the financial performance of Indonesian, Thai and Malaysian banks. There is no difference in the CAR indicator between the financial performance of Indonesian, Thai and Malaysian banks.

Research by Untari (2014) and Faliha (2015) resulted in research that there was no difference in the financial performance of Government Banks and National Private Banks, seen from the LDR ratio. Research by Christian (2009) and Theis (2016) states that when viewed from the LDR ratio, there are differences in the financial performance of Government Banks and National Private Banks.

Research by Steven Meliangan, et al (2014), resulted that there were differences in the financial performance of Bank BCA and Bank CIMB Niaga. Franklin Jethro Pangemanan, et al (20115), research results show that there are differences in performance but they are not significant between Bank Mandiri, BCA and CIMB Niaga. Suggestions for the management of Bank BCA and CIMB Niaga.

Research by Linda M. Tawurisi, Parengkuan Tommy, (2015), resulted in research that there were differences in the financial performance of Bank Rakyat Indonesia and Bank CIMB Niaga in Asset Quality, Management, Earnings, Liquidity and there were no differences in financial performance in capital. Auddy Teddy Pangalila, et al (2015), research results show that the hypothesis is rejected because there are differences but are not significant between the financial performance of Bank Mandiri, Bank Central Asia, and Bank Cimb Niaga.

Debora's research (2015), resulted in research that there were significant differences in the financial performance of Bank Jateng and Bank DKI in asset quality and management, and there were no significant differences in financial performance in capital, liquidity and profitability. Budi Wahono (2017) found that there were significant differences in financial performance in the CAR, NPL, LDR, BOPO and ROA variables between the Financial Performance of Sharia Commercial Banks and Conventional Commercial Banks in Indonesia.

Research by Theis (2016) and Wulandari (2018), resulted in research that, judging from the ROE ratio, there is a significant difference between the financial performance of Government Banks and National Private Banks. Yudiana Febrita, et al (2015), research results show that there are four ratios that experience significant

 ISSN: 1829-9865 (print)
2579-485X (online

differences between the financial performance of Conventional Banks and Sharia Banks. These ratios are LDR, ROA, CAR, BOPO.

Research by Nindri Wensen, et al (2017), resulted in research that there were differences in the financial performance of Bank Mandiri and Bank Central Asia in ROA, BOPO and NPL ratios and there were no differences in financial performance in CAR, NPM and LDR. Christian (2009), Marsuki (2012), and Maharani (2014) came to different conclusions, namely that if we look at the ROA ratio, there is no difference in financial performance between Government Banks and National Private Commercial Banks.

The analysis carried out is in the form of an assessment of the bank's health level, with several financial ratios to assess the bank's health level, such as; ROA, ROE, LDR, BOPO and CAR, NIM and NPL are key indicators in assessing the level of banking health in Indonesia.

Based on several research results whose results were not the same, research regarding differences in the level of banking financial health using the Independent Sample t Test felt necessary to be carried out on government-owned banks between Bank Mandiri and BNI 46, by looking at several ratios such as; ROA, NPL, LDR, NIM, ROE and CAR during the period 2014 to 2023.

Theoritical Review

Definition of Bank, according to Law no. 10 of 1998 concerning amendments to Law No. 7 of 1992 concerning banking explains that the definition of a bank is a business entity that collects funds from the public in the form of savings and distributes them to the public in the form of credit and/or other forms in order to improve the standard of living of many people.

According to the Dictionary of Banking and Financial Services by Jerry Rosenberg in Taswan (2010: 6) what is meant by a bank is an institution that accepts demand deposits, deposits and pays on the basis of documents drawn on certain people or institutions, discounts securities, provides loans and invest their funds in securities.

Based on Law no. 10 of 1998 concerning Banking, there are two types of banks, namely: a) Commercial Banks, are banks that carry out business activities conventionally and/or based on sharia principles whose activities are to provide services in payment traffic. b) Rural Credit Bank, is a bank that carries out business activities conventionally or based on sharia principles whose activities do not provide services in payment traffic.

According to Kasmir (2015), in terms of ownership, there are four types of banks, namely: (a). Government-owned banks are banks whose deeds of establishment and capital are owned by the government. (b). A national private bank is a bank whose capital and deed of establishment are wholly or partially owned by the national private sector. (c). Foreign-owned banks are branches of banks located abroad, whether owned by foreign private companies or foreign governments of a country. (d). Mixed-owned banks are banks whose shares are owned by foreign parties and national private parties.

According to Kasmir (2008) there are three types of bank financial ratios, including bank liquidity ratios, bank solvency ratios and bank profitability ratios. Liquidity ratios are used to measure a bank's ability to meet its short-term obligations when they are billed. The purpose of conducting financial ratio analysis is to help companies identify the company's financial strengths and weaknesses and to assess the performance of the company's financial reports in utilizing all the resources owned by the company (Sujarweni, 2017).

Financial performance

Zarkasyi (2008:48) explains that financial performance is something produced by an organization in a certain period with reference to established standards. Mulyadi (2001) said that the benefits of a performance measurement system are as follows: (a). Manage organizational operations effectively and efficiently through maximum employee motivation. (b). Assist in making decisions related to employees such as promotions, dismissals and transfers. (c). Identify employee training and development needs and to provide selection and evaluation criteria for employee training programs and (d). Provide feedback to employees regarding how their superiors rate performance.

Capital Adequacy Ratio (CAR)

The capital ratio commonly used to measure bank capital adequacy is the Capital Adequacy Ratio (CAR)" Barus, Andreani Caroline. (2011). The amount of CAR is measured from the ratio between own capital and Risk Weighted Assets (RWA). Systematically Capital Adequacy Ratio (CAR) can be formulated as follows (according to Bank Indonesia Circular Letter No. 3/30/DPNP dated 14 December 2001)

CAR = (Bank Capital / Risk Weighted Assets) X 100%

Non Performing Loans (NPL)

The NPL ratio shows the quality of credit assets whose collectability is substandard, doubtful and non-performing from the total credit as a whole, so the bank is facing problem loans. According to Bank Indonesia Regulation Number 6/10/PBI/2004 dated 12 April 2004 concerning the Health Level Assessment System for Commercial Banks, "the higher the NPL value (above 5%), the unhealthy the bank is." Systematically, Non Performing Loans (NPL) can be formulated as follows (according to Bank Indonesia Circular Letter No. 3/30/DPNP dated 14 December 2001.

NPL = (Non-Performing Credit / Total Credit) X 100 %.

Return On Assets (ROA)

ROA is a ratio that shows the comparison between profit (before tax) and total bank assets. This ratio shows the level of efficiency in asset management carried out by the bank in question. ROA is an indicator of a bank's ability to earn a profit on a number of assets owned by the bank". Systematically Return On Assets (ROA) can be formulated as follows (according to Bank Indonesia Circular Letter No. 3/30/DPNP dated 14 December 2001).

ROA =(Profit before tax/Average total assets X 100 %.

Loan to Deposit Ratio (LDR)

LDR is also called the ratio of credit to total third party funds which is used to measure third party funds distributed in the form of credit. Credit distribution is the main activity of banks. "Therefore, the bank's main source of income comes from this activity" Wardiah, Mia Lasmi. (2013). Systematically the Loan to Deposit Ratio (LDR) can be formulated as follows (according to Bank Indonesia Circular Letter No. 3/30/DPNP dated 14 December 2001).

LDR = (Total Credit / Third Party Funds) X 100 %

Net Interest Margin (NIM)

Net Interest Margin (NIM) is a ratio used to analyze the comparison between net interest income and a company's productive assets. If the NIM ratio increases, it shows that the bank generates a greater amount of income than the productive assets it owns (according to Bank Indonesia Circular Letter No. 3/30/DPNP dated 14 December 2001).

NIM = [(Interest Income - Interest Expense) / (Average Earning Assets)] X 100 %.

Return on Equity (ROE)

Return on Equity is the company's ability to generate profits with its own capital, so some people call this ROE the profitability of its own capital.

ROE = (Net profit after tax/Equity) x 100

Efficiency Ratio or Operating Cost Ratio Operating Income (BOPO)

BOPO is a comparison between operational costs and operating income. This ratio is used to measure the level of efficiency and ability of the bank in carrying out its operational activities.

BOPO = (Operating Costs/Operating Income) X 100%.

ISSN: 1829-9865 (print)
2579-485X (online

Research Methods

Types of research This type of research uses descriptive research, namely research that explains the state of the research object, especially the banking and financial industry organizations.

Population and Sample Population is a generalization area consisting of: objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiyono 2012: 115).

The population of this research is Bank Mandiri and Bank Negara Indonesia (BNI) 46. The sample is part of the total number of characteristics possessed by the population (Sugiyono 2012: 116).

In this research, the samples used were seven financial ratios, namely; ROA, ROE, NIM, NPL, BOPO, LDR and CAR from 2014 to 2023 from PT. Bank Mandiri, Tbk and PT. Bank Negara Indonesia (BNI 46).

Research Analysis Methods

This research uses a comparative quantitative descriptive method using two analytical tools, namely financial ratio analysis and the Independent Samples T-Test difference test which is used to test whether the mean differences between two groups that are independent of each other are significant or not. According to Sugiyono (2012: 429) states "Analysis begins when formulating and explaining the problem, before entering the field, and continues until the writing of the research results.

Operational Definition

Based on attachment 14 of Bank Indonesia Circular Letter Number 3/30/DPNP dated 14 December 2001, the following are the operational definitions of NPL, CAR, BOPO, LDR, CAR, ROA and ROE.

NPL (Non-performing loans to total credit)

NPL = Problematic Credit/Total Credit ·. Credit is credit provided to third parties (excluding credit to other banks). · Problematic credit is credit with substandard, doubtful and bad quality. Non-performing loans are calculated on a gross basis (not deducted by PPAP). · Figures are calculated per position (not annualized).

CAR (Capital to RWA)

CAR = Capital/Risk Weighted Assets. Calculations of Capital and Risk Weighted Assets are carried out based on the applicable Minimum Capital Requirement provisions.

LDR (Credit against third party funds)

LDR= Credit/Third party funds. Credit is credit provided to third parties (excluding credit to other banks). · Third party funds include current accounts, savings, time deposits (excluding current accounts and interbank deposits).

ROA (Return On Assets)

ROA = Profit before tax/Average total assets. Calculation of profit before tax is annualized. Example: For June positions: (accumulated profit per position June/6) x 12 · Average total assets Example: For June positions: (sum of total assets January - June)/6

ROE (Return On Equity)

ROE = Profit after tax/Average Equity. Average equity: average core capital (tier 1) Example: For June position: (sum of core capital January-June)/6. Core capital calculations are carried out based on the applicable Minimum Capital Requirement provisions.

NIM (Net Interest Margin)

NIM = Net interest income/Average productive assets. Net interest income: Interest Income - Interest expense. Net interest income is annualized. Example: For June positions: (accumulated net interest income per position June/6) x12, where the productive assets taken into account are productive assets that produce interest (interest bearing assets).

BOPO (Operational Costs to Operating Income)

The ratio of operational costs to operating income (BOPO) is around 80%. The following is the formula for calculating Operational Costs compared to Operating Income (BOPO).

Analysis and Discussion

Normalitas Test

Based on the Shapiro-Wilk Normality Test, Normality data analysis produces the following values:
1) The Sig ROA value is 0.238 > 0.050. then ROA is having normal data
2) The Sig value of ROE is 0.130 > 0.050, so ROE has normal data
3) The NIM Sig value is 0.201 > 0.050, then the NIM has normal data
4) The BOPO Sig value is 0.270 > 0.050, then the NIM has normal data
5) The LDR Sig value is 0.456 > 0.050, so the LDR has normal data
6) The Sig CAR value is 0.344 > 0.050, so the CAR has normal data
7) The NPL Sig value is 0.928 > 0.050, so the NPL has normal data.

Based on the results of the Shapiro-Wilk Normality Test, it can be concluded that all research variables ROA, ROE, financial ratio data from ROA, ROE, NIM, BOPO, LDR, CAR , and NPL can be continued to the next test, namely t

Table 1. Tests of Normality

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ROA	.183	20	.078	.940	20	.238
ROE	.152	20	.200*	.926	20	.130
NIM	.123	20	.200*	.936	20	.201
BOPO	.148	20	.200*	.943	20	.270
LDR	.139	20	.200*	.955	20	.456
CAR	.119	20	.200*	.948	20	.344
NPL	.116	20	.200*	.980	20	.928

a. Lilliefors Significance Correction

Table 2. Independent Samples Test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
ROA	Equal variances assumed	.002	.965	1.550	18	.138	.54000	.34831	-.19177	1.27177
ROE	Equal variances assumed	6.920	.017	1.740	18	.099	3.82100	2.19556	-.79170	8.43370
NIM	Equal variances assumed	1.588	.224	.435	18	.668	.12600	.28937	-.48194	.73394
BOPO	Equal variances assumed	.141	.712	-1.801	18	.089	-6.68900	3.71464	-14.49318	1.11518
LDR	Equal variances assumed	9.369	.007	-1.854	18	.080	-6.12900	3.30551	-13.07362	.81562
CAR	Equal variances assumed	.703	.413	-.001	18	.999	-.00100	.91279	-1.91870	1.91670
NPL	Equal variances assumed	.283	.601	-.417	18	.682	-.15600	.37439	-.94256	.63056

Independent Samples T Test

Based on the results of the Independent Samples t Test of the seven financial ratios, namely; ROA, ROE, NIM, BOPO, LDR, CAR, and NPL show the following results:

1. Independent Sample Test results show that the ROA to Sig (2-tailed) ratio is 0.138 > 0.050, so it can be concluded that the average ROA financial performance has no significant difference between Bank Mandiri and Bank Negara Indonesia (BNI) 46 during 2014 to 2023
2. The results of the Independent Sample Test show that the ROE to Sig (2-tailed) ratio is 0.099 > 0.050, so it can be concluded that the average ROE financial performance has no significant difference between Bank Mandiri and Bank Negara Indonesia (BNI) 46 during 2014 to 2023
3. Independent Sample Test results show that the NIM to Sig (2-tailed) ratio is 0.668 > 0.050, so it can be concluded that the average financial performance of NIM is no significant difference between Bank Mandiri and Bank Negara Indonesia (BNI) 46 during 2014 to 2023.
4. Independent Sample Test results show that the BOPO to Sig (2-tailed) ratio is 0.089 > 0.050, so it can be concluded that the average BOPO financial performance has no significant difference between Bank Mandiri and Bank Negara Indonesia (BNI) 46 during 2014 to 2023
5. Independent Sample Test results show that the LDR ratio with Sig (2-tailed) is 0.080 > 0.050, so it can be concluded that the average LDR financial performance has no significant difference between Bank Mandiri and Bank Negara Indonesia (BNI) 46 during 2014 to 2023.
6. The results of the Independent Sample Test show that the CAR to Sig (2-tailed) ratio is 0.099 > 0.050, so it can be concluded that the average CAR financial performance has no significant difference between Bank Mandiri and Bank Negara Indonesia (BNI) 46 during 2014 to 2023 .
7. Independent Sample Test results show that the NPL ratio with Sig (2-tailed) is 0.682 > 0.050, so it can be concluded that the average NPL financial performance has no significant difference between Bank Mandiri and Bank Negara Indonesia (BNI) 46 during 2014 to 2023 .

From the results of the Independent Sample t Test, it can be concluded that of the seven financial ratios ROA, ROE, NIM, BOPO, LDR, CAR and NPL, it turns out that there is no difference in the average level of health between Bank Mandiri and Bank Negara Indonesia (BNI). 46 significantly over 10 years from 2014 to 2023

Conclusion

The Government-owned Bank (BUMN) is PT. Bank Rakyat Indonesia (BRI), Persero, PT. State Savings Bank (BTN), PT. Bank Mandiri, Persero, Persero and PT. Bank Negara Indonesia (BNI 46), Persero. The four state-owned banks have performed quite well, effectively and efficiently, as proven by providing dividend payments to the Indonesian Government every year and the companies can make quite large net profits.

This research examines the difference in the average level of health of Bank Mandiri and Bank Negara Indonesia (BNI) 46 in terms of financial ratios such as; ROA, ROE, NIM, BOPO, LDR, CAR, and NPL using Independent Sample t Test analysis.

The results of the Independent Sample t Test analysis, between Bank Mandiri and Bank Negara Indonesia (BNI) 46 using 7 (seven) basic financial ratios of banking companies, resulted in research on the ratio of Return on Assets (ROA), Net Interest Margin (NIM), Operational Costs to Operating Income (BOPO), Net Performing Loan (NPL), Return on Equity (ROE), Capital Aduqucy Ratio (CAR) and Loan Deposit Ratio (LDR). The results of the research turned out that only the Return on Equity (ROE) ratio and Loan Deposit Ratio (LDR) on average did not have a significant difference, over the last 10 years, from 2014 to 2023.

Suggestion

The government also needs to continually make comparisons between the four megabanks, both in terms of management and company financial performance, so that the government can make improvements and increase company performance faster, better and closer to performance that is not much different.

BUMN Bank management needs to create a business strategy and other strategies, so that management can achieve the company's vision and mission which have been agreed together with Management (BOC and

BOD) at the beginning of the year in determining the Year's Budget Work Plan at the General Meeting of Shareholders.

By conducting a comparative analysis between Government-owned Banks, as well as with other Private Banks that have quite good performance, you can evaluate and make improvements, if there is performance or performance that has decreased or does not meet the provisions of the Banking Law (BI and OJK) which have been stipulated by Government.

Referencess

Auddy Teddy Pangalila, Dkk, (2015). Analisa Perbandingan Kinerja Keuangan Bank Mandiri (Persero) Tbk, Bank Central Asia (Persero) Tbk, Dan Bank Cimb Niaga (Persero) Tbk. Jurnal EMBA 488 Vol.3 No.4 Desember 2015, Hal. 488-497.

Bank Indonesia, 1992. Undang-Undang Nomor 7 Tahun 1992 tentang Perbankan. (Sebagaimana telah diubah dengan Undang-Undang Nomor 10 Tahun 1998).

Bank Indonesia. 2001. Surat Edaran Bank Indonesia Nomor 3/30/DPNP tanggal 14 Desember 2001.

Bank Indonesia. 2004. Peaturan Bank Indonesia No.6/10/PBI/2004 Tanggal 12 April 2004. Perihal Sistem Penilaian Kesehatan Bank. Jakarta.

Bank Mandiri, (2023). Laporan TRahunan PT. Bank Mandiri, Persero. Tahun 2014 sampai 2023.

Bank Negara Indonesia (BNI) 46, (2023). Laporan Tahunan PT. Bank Negara Indonesia, Persero. Tahun 2014 sampai 2023.

Barus, Andreani Caroline. (2011). Pengaruh Profitabilitas dan Likuiditas terhadap Capital Adequacy Ratio (CAR) pada Institusi Perbankan Terbuka di Bursa Efek Indonesia. Jurnal Wira Ekonomi Mikroskil. Universitas Mikro Skil, Sumatra Utara. ISSN 2622-2421 (Online), ISSN 2088-9707 (Print).

Christian, Yuli. (2009). Analisis Perbedaan Kinerja Keuangan Bank Umum Pemerintah dan Bank Umum Swasta Nasional dengan menggunakan Rasio Keuangan Periode 2003-2007. Skripsi. Universitas Sebelas Maret

Damara Andri Nugraha. 2014. Analisis Perbandingan Kinerja Keuangan Bank Syariah Dengan Bank Konvensional (Studi Kasus pada PT. Bank Syariah Mandiri dan PT. Bank Central Asia). Publikasi Karya Ilmiah.Universitas. Muhammadiyah Surakarta.

Faliha, Eti Akhidal. (2015). Perbandingan Kinerja Keuangan antara Bank Pemerintah dan Bank Umum Swasta Nasional Devisa. Artikel Ilmiah. Sekolah Tinggi Ekonomi Perbanas

Franklin Jethro Pangemanan, Peggy A. Mekel, Hendra N. Tawas (2015). Perbandingan Kinerja Keuangan Pada Pt. Bank Mandiri Tbk., Pt. Bank Central Asia Tbk. Dan Pt. Bank Cimb Niaga Tbk. Menggunakan Rasio Keuangan, Jurnal EMBA Vol.3 No.1 Maret 2015, Hal.631-641.

Kasmir, (2008). Bank dan Lembaga Keuangan Lainnya. Rajawali Pers, Jakarta.

Kasmir, 2008. Analisis Laporan Keuangan.Raja Grafindo Persada. Jakarta.

Kasmir. (2015). Manajemen Perbankan (Edisi Revisi). Jakarta: Rajawali Pers.

Linda M. Tawurisi, Parengkuan Tommy, (2015). Analisis Perbandingan Kinerja Keuangan Pt. Bank Bri Tbk Dan Pt. Bank Cimb Niaga Tbk Periode Tahun 2009-2014, Jurnal EMBA 1185 Vol.3 No.3 Sept. 2015, Hal.1185-1195

Maharani, Vivi Putri.,& Chairil Afandy. (2014). Analisis Perbandingan Keuangan Bank Pemerintah dan Bank Swasta di Bursa Efek Indonesia (BEI) Periode 2008-2012. Management Insight, 9(1). 16-29.

Marsuki, Marwanto., Cepi Pahlevi, dan Maat Pono. (2012). Perbandingan Kinerja Keuangan Bank Pemerintah dan Bank Swasta Nasional. Jurnal Analisis, 1(1). 66-72

Meliangan, S. (2014). Analisis Perbandingan Kinerja Keuangan Antara PT. Bank BCA (Persero) Tbk Dan PT. Bank Cimb Niaga (Persero) Tbk. Fakultas Ekonomi dan Bisnis, Jurusan Manajemen Universitas Sam Ratulangi, Manado. Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi. Hal. 116-125.

Meliangan, Steven. (2014). Analisis Perbandingan Kinerja keuangan Antara Bank BCA (Persero) Tbk dan Bank CIMB Niaga (Persero). Universitas Sam Ratulangi Manado. Jurnal EMBA. Vol.2No.3.(2014).

Nindri Wensen, Sri Murni, Victoria Untu, (2017). Analisis Perbandingan Kinerja Keuangan Bank Mandiri (Persero) Tbk Dan Bank Central Asia (Persero) Tbk Periode Tahun 2011-2015. urnal EMBA Vol.5 No.2 Juni 2017, Hal. 734 – 744.

Republik Indonesia. 1998. Undang-undang RI No.10 tahun 1998. tentang perbankan. Jakarta.

Sugiyono. (2012). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.

Taswan. (2010). Manajemen Perbankan: Konsep, Teknik & Aplikasi (Edisi II). Yogyakarta: UPP STIM YKPN Yogyakarta.

Theis, Richard. (2016). Perbandingan Kinerja Keuangan Bank Umum Pemerintah dan Bank Swasta Nasional (Devisa) yang Go Public di BEI (Periode 2010-2014). Jurnal Berkala Ilmiah Efisiensi, 16(1), 914-924.

Undang-undang Republik Indonesia No.10 Tahun 1998 tentang Perubahan Undang- undang No 7 tahun 1992, Cetakan Pertama, (Jakarta: Penerbit Sinar Grafika),

Untari, Indah Ayu. (2014). Perbandingan Kinerja Keuangan Bank Pemerintah (BUMN) dengan Bank Umum Swasta Nasional (BUSN) Devisa. Artikel Ilmiah. Sekolah Tinggi Ekonomi Perbanas.

V. Wiratna Sujarweni. (2017). Analisis Laporan Keuangan. Teori. Aplikasi dan Hasil Penelitian. Yogyakarta: Pustaka Baru Press.

Vivin, Yeni Annor dan Budi Wahono. 2017. “Analisis Perbandingan Kinerja Keuangan Bank Umum Syariah dengan Bank Umum Konvensional di Indonesia”. e-Jurnal Riset Manajemen Prodi Manajemen. Volume 6 (08), 2017.

Wulandari, Remo., Jeni Susyanti, & M Agus Salim. (2018). Analisis Perbedaan Kinerja Keuangan Bank Pemerintah dan Bank Swasta Nasional yang Tercatat di Bursa Efek Indonesia. Jurnal Ilmiah RisetManajemen, 7(1), 162-172.

Yudiana Febrita, Putri1isti Fadah, Tatok Endhiarto (2015). Analisis Perbandingan Kinerja Keuangan Bank Konvensional Dan Bank Syariah. Jurnal. Program Studi Manajemen Fakultas Ekonomi Universitas Jember 2015.

Zarkasyi, Moh, Wahyudin, 2008. Good Corporate Governance, Pada Badan Usaha Manufaktur, Perbankan, dan Jasa Keuangan Lainnya, cetakan ke satu. Penerbit Alfabeta, Bandung.