

# Comparative Analysis Of The Financial Performance Of Islamic Banking With Conventional Banking Listing On The Indonesia Stock Exchange For The 2018-2020 Period

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## Abstract

Banks present their financial statements and then re-analyze them with financial ratios as a benchmark for their performance to distinguish the performance of Islamic banking from conventional banks. The goal is to test the Comparative Analysis. Financial Performance of Islamic Banking with Conventional Banking Listing on the IDX for the 2018-2020 period. A quantitative approach with two different average tests (Independent Sample Test). With a population of 46 banks listed on the Indonesia Stock Exchange for the 2018-2020 period. The samples were 3 Islamic & conventional banks with 9 data. The results showed that the CAR of Conventional Banks did not have a significant difference and the CAR of Islamic Banks did not have a significant difference. The NPL of Conventional Banks and NPLs of Islamic Banks have significant differences. BOPO Conventional Banks and BOPO Islamic Banks do not have a significant difference. ROA of Conventional Banks and ROA of Islamic Banks does not have a significant difference. Conventional Bank LDR and Islamic Bank LDR have significant differences.

**Keywords:** Banking Financial Performance, Comparative Analysis and BOPO.

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## I. INTRODUCTION

The world of the banking business is increasingly competitive, resulting in banks trying hard to attract investors' attention [1]. One of the activities is to raise funds from the community [2]. This country-Indonesia, the majority of which are Muslim, encourages banks to use a system based on Islam [3]. Steps used by the Government to develop Islamic Banking by allowing conventional banks to open branches of Sharia Business Units by converting conventional banks to sharia. Law no. 10 of 1998 concerning Banking as well as in Government Regulation no. 72 of 1992 discusses Banks Based on Profit Sharing Principles, it contains the legal basis for the Dual Banking System, namely that there are two banking systems (conventional and sharia) side by side. The bank's operational activities are presented in its financial report which analyzes the use of financial ratios as a measure of the bank's financial performance [4]. So there is a difference between the performance of Islamic banks and conventional banks. The difference between these two types of financial institutions is in the returns and profit sharing provided to their clients [5]. The principles adopted by Islamic banks are profit sharing, do not use interest, and have a sharia supervisory board, while conventional banks do not exist [6]. The existence of different results encourages researchers to deepen the differences in the performance of Islamic banks with conventional banks. Financial ratios are the basis for measuring the financial performance of these two financial institutions against CAR, NPL, ROA, BOPO, and LDR [7].

Bank BRI, including conventional banks in Indonesia, has various advantages over other conventional banks. Conventional BRI had a positive performance in the first quarter of 2019 with a profit of Rp 8.2 trillion with a profit growth of 10.42% and BRI assets reached Rp 1,279.86 trillion. BRI's third-party funds increased or grew by 13.18%. Meanwhile, increased lending adds to the long list of BRI achievements with 12% growth and 2.41% gross NPL (www.mediabumn.com, 12 July 2019). BRI Syariah experienced a sharp decline in profit in 2019 by 62.6% due to an increase in other operating expenses by 15%. Receivable financing increased by 191.2% with profit-sharing financing growing by 101.2%. BRI's gross NPF is at 4.45% and net NPF is 3.97%. Disbursement income increased by 8.2% and profit sharing for investment fund owners decreased by 0.2%. Revenue driver achievement after the distribution of profit sharing increased by 13.8% in line with the improvement in the net reward ratio (NI) from 5.28% in 2018 to

5.58% in 2019 (www.m.bisnis.com, 04 Nov 2019). For more details, the phenomena data can be presented as follows:

**Table 1. Research Phenomenon**

No	Kode Emiten	Tahun	Modal	Kredit Macet	Biaya Operasional	Laba Sebelum Pajak	Dana Ketiga	Pihak
1	BTPN	2018	17.106.367.000	155.184.000.000	4.526.243.000	3.049.248.000	64.851.852.000	
		2019	34.803.067.000	238.303.000.000	7.513.059.000	4.018.922.000	79.388.815.000	
		2020	32.451.223.000	291.142.000.000	5.281.544.000	2.633.076.000	92.865.540.000	
2	BRI	2018	173.618.421.000	17.680.729.000	33.917.032.000	41.753.694.000	944.268.737.000	
		2019	195.986.650.000	6.622.313.000	40.048.971.000	43.364.053.000	996.377.825.000	
		2020	183.337.537.000	8.603.756.000	37.722.595.000	26.724.846.000	1.087.555.173.000	
		2018	41.488.579.000	4.256.401.000	8.247.532.000	4.572.779.000	137.694.263.000	
3	NBN	2018	40.244.184.000	4.314.134.000	8.755.818.000	4.595.617.000	131.402.909.000	
		2019	48.410.745.000	3.633.043.000	7.378.410.000	4.071.792.000	143.029.190.000	
		2020	48.410.745.000	3.633.043.000	7.378.410.000	4.071.792.000	143.029.190.000	
		2018	41.488.579.000	4.256.401.000	8.247.532.000	4.572.779.000	137.694.263.000	

Source : [www.idx.co.id](http://www.idx.co.id)

Based on the table above, BTPN's capital from 2018 to 2019 has increased, as well as BBRI's capital, but the capital in 2020 has decreased for BTPN, and BBRI. PNB capital from 2018 to 2019 decreased and in 2020 PNB capital increased. Bad loans that occurred in BTPN, BBRI, and PNB from 2018 to 2020 fluctuated (fluctuated). The operational costs of BTPN, BBRI, and PNB from 2018 to 2019 increased and the operational costs of these three banks decreased in 2020. Profit before tax occurred at BTPN, BBRI, and PNB from 2018 to 2020 experienced fluctuations (fluctuating). at BBRI and BMRI. Third-Party Funds in BTPN, BBRI from 2018 to 2020 increased while Third Party Funds in PNB in 2018-2019 decreased and in 2020 increased.

## II. LITERATURE REVIEW

### Comparison of Capital Adequacy Ratio

The capital adequacy ratio is the minimum capital adequacy ratio with a minimum of 8% [8]. Capital is a measuring tool for the capital adequacy ratio (CAR) by comparing capital with the total weighted asset ratio (RWA) [9]. CAR calculation with the formula:

$$\text{Capital Adequacy Ratio} = \frac{\text{Total Capital}}{\text{ATMR}} \times 100\%$$

### Comparison of Non-Performing Loans with Non-Performing Loan Ratio

NPL compares bad loans to total loans. Bad credit, including uncollectible credit by the bank [10]. Non-performing loans can be minimized and prevent bad credit [11]. Gross non-performing loans (gross NPL) consist of comparing non-performing loans with total loans [8].

$$\text{Non-Performing Loan (NPL)} = \frac{\text{Troubled Credit}}{\text{Total Credit}}$$

### Comparison of Operating Costs Operating Income

BOPO is to compare overall operating costs with total operating income [8]. BOPO compares operational costs with operating income for the last 12 months, BI gives a maximum value of 100 with BOPO reaching 80% [12]. BOPO calculation with the formula [13]:

$$\text{Operating Expenses Operating Income} = \frac{\text{Operating Costs}}{\text{Operating Income}} \times 100\%$$

**Comparison of Return on Assets**

Return on assets is a measure of the bank's ability to use the funds invested in assets to earn a profit [14]. ROA is a picture of the productivity of a bank that uses its funds to make a profit. ROA is a measure of how much investment is invested to generate profits [15]. ROA is comparing profit before tax for the last 12 months with total assets [12]. The ROA formula is:

$$ROA = \frac{\text{Profit before tax}}{\text{Total Capital}} \times 100\%$$

**Comparison of Loan to Deposit Ratio with Financing to Deposit Ratio**

The loan or deposit ratio consists of comparing the overall loan disbursed with the funds received [14]. The loan-to-deposit ratio consists of comparing loans granted and financed by third-party funds [9]. BI expects a maximum LDR of 85%. Loan to deposit ratio formula:

$$\text{Loan to deposit ratio} = \frac{\text{Credit granted}}{\text{Funds received}} \times 100\%$$

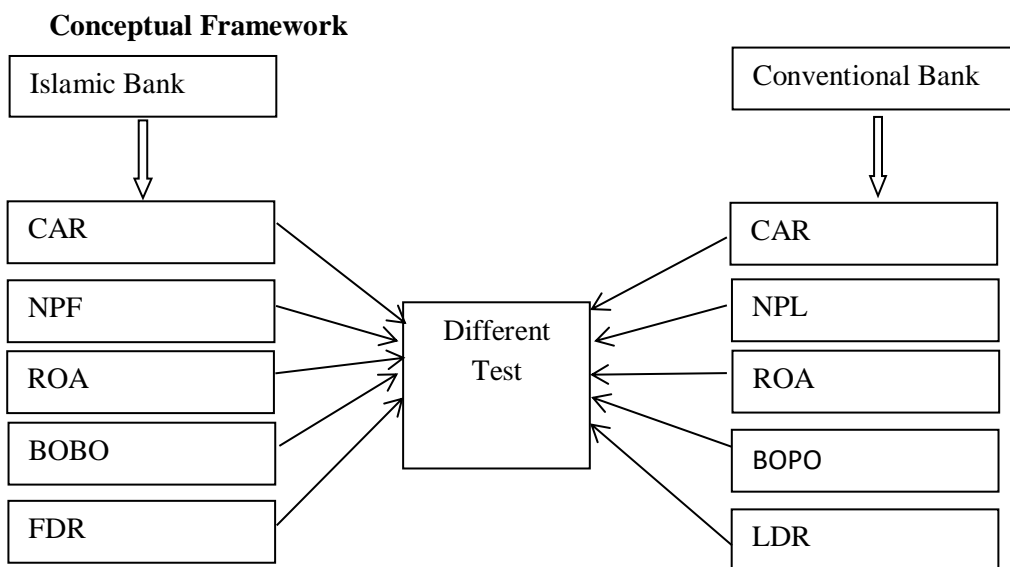


Fig 1. Conceptual framework

**III. METHODS**

Descriptive research approach. The use of ratio data compares the balance sheets of conventional banks and Islamic banks for the 2018-2020 period that has been verified and published. Furthermore, the population in this study is 46 banks listed on the IDX for the period 2018 to 2020. The research sample was taken by intentional sampling. Examples of criteria in the table below are as follows:

**Table 2.** Research Sample

No.	Criteria	Total Sample
1.	Banking Companies Listed on the Indonesia Stock Exchange for the 2018-2020 Period	46
2.	Banking companies that do not have Islamic banks during the 2018-2020 period.	(40)
	Total	6
	Total sample (3 x 6 perusahaan)	18

Source : [www.IDX.co.id](http://www.IDX.co.id)

The data were collected using documentation and a literature study. Documentation with the acquisition of financial statement data of conventional banks and Islamic banks, as well as literature study for the use of theories that support this research. Furthermore, the type of quantitative research data. The secondary data source to obtain this research data is through documents, namely the financial statements of each bank under study and related journals. The data analysis techniques are (1) Data Normality Test, the normality test is used to determine whether the data to be studied is normally distributed or not. The value of

sig > 0.05 means the data distribution is normal, but if sig < 0.05 then the data distribution is not normal. (2) Hypothesis testing includes:

**Independent Sample T-Test**

Independent Sample T-Test is used to determine whether or not there is a difference in the average of the two independent groups on a ratio scale. This test is to determine the difference between the financial performance of conventional banks and Islamic banks with normal data. Test conclusion:

- a. Significant or Mr. (2-tailed) < 0.05 then Ho is rejected and Ha is accepted, the conclusion is there is a difference between conventional banks and Islamic banks
- b. Significant or Mr. (2-tailed) > 0.05 then Ho is accepted and Ha is rejected. The conclusion is there is no difference between conventional banks and Islamic banks.

**Mann Whitney**

The Mann-Whitney test is a non-parametric test used to find out the difference between 2 full-scale ratios. This test is on the financial performance of conventional banks and Islamic banks if the data is not normally distributed. The steps for the conclusion of this test are:

- a. Significant or Asymp.Sig. (2-tailed) < 0.05 then Ho is rejected and Ha is accepted, then the conclusion is there is a difference between conventional banks and Islamic banks
- b. Significant or Asymp.Sig. (2-tailed) > 0.05 then Ho is accepted and Ha is rejected so that the conclusion is there is no difference between conventional banks and Islamic banks

The writer's analysis technique is t-test and regression. The t-test search is a search comparing the two research objects. While Regression is a study that shows how much influence these variables have on the financial performance of Islamic Banking with conventional financial performance.

**IV. RESULT AND DISCUSSION**

**Test Independent Sample T-Test**

**Table 3.** Independent Sample t-test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
CAR	Equal variances assumed	12.215	.003	-1.692	16	.110	-6.88333	4.06801	-15.50713	1.74047
	Equal variances not assumed			-1.692	8.788	.126	-6.88333	4.06801	-16.11983	2.35317
NPL	Equal variances assumed	10.558	.005	-2.659	16	.017	-5.54111	2.08358	-9.95811	-1.12411
	Equal variances not assumed			-2.659	8.703	.027	-5.54111	2.08358	-10.27918	-.80304
BOP O	Equal variances assumed	8.668	.010	-.138	16	.892	-1.36667	9.86964	-22.28936	19.55603
	Equal variances not assumed			-.138	9.437	.893	-1.36667	9.86964	-23.53668	20.80335
ROA	Equal variances assumed	27.597	.000	-.709	16	.488	-1.19556	1.68540	-4.76845	2.37734
	Equal variances not assumed			-.709	8.249	.498	-1.19556	1.68540	-5.06181	2.67070
LDR	Equal variances assumed	15.241	.001	-2.688	16	.016	-513.66556	191.09268	-918.76394	-108.56717
	Equal variances not assumed			-2.688	8.040	.027	-513.66556	191.09268	-953.94777	-73.38334

**CAR**

In the Levene's-Test-for-Equality-of-Variiances column the sig value (0.003 < 0.05 H0 is rejected and H1 is accepted where both groups have the same variance. In the t-test for-Equality-of-Mean column, the sig value is 0.110 > 0.05 then H0 is accepted and H1 is rejected or there is no significant difference in CAR Conventional Banks and column-t-test for-Equality-of-Mean, sig value 0.126 > 0.05 then H0 is accepted and H1 is rejected not = there is = sig difference Sharia Bank CAR.

**NPL**

In Levene's Test for Equality of Variances column the value of sig (0.005) < 0.05 H0 is rejected and H1 is accepted where both groups have the same variance. In the t-test column for Equality of Mean,

the value of sig (0.017 and 0.027) < 0.05, then H0 is rejected and H1 is accepted or there is a big difference between the NPL of Conventional Banks and NPF of Islamic Banks.

### BOPO

In the Levene's Test for Equality of Variances column, the value of sig (0.010) < 0.05, H0 is rejected and H1 is accepted, then both groups have the same variance. In the t-test for the Equality of Mean column, the significance value (0.892 and 0.893) > 0.05, which means H0 is accepted and H1 is rejected or there is no significant difference between BOPO of Conventional Banks and CAR of Islamic Banks.

### ROA

In Levene's Test for Equality of Variances column, the value of sig (0.000) < 0.05, H0 is rejected and H1 is accepted, meaning that both groups have the same variance. In the t-test for the Equality of Mean column, the significance value of 0.488 > 0.05 and 0.498 > 0.05 means that H0 is accepted and H1 is rejected or there is no significant difference between ROA of Conventional Banks and ROA of Islamic Banks.

### LDR

In Levene's Test for Equality of Variances column, the value of sig (0.001) < 0.05, H0 is rejected and H1 is accepted, meaning that both groups have the same variance. In the t-test for the Equality of Mean column, the significance value (0.016 and 0.027) < 0.05 means that H0 is rejected and H1 is accepted or there is a significant difference between the LDR of Conventional Banks and FDR of Islamic Banks.

### Mann Whitney

**Table 4.** Mann Whitney Test Results.

	Jenis Bank	N	Mean Rank	Sum of Ranks
CAR	Bank Konvensional	9	7.83	70.50
	Bank Syariah	9	11.17	100.50
	Total	18		
NPL	Bank Konvensional	9	6.33	57.00
	Bank Syariah	9	12.67	114.00
	Total	18		
BOPO	Bank Konvensional	9	9.67	87.00
	Bank Syariah	9	9.33	84.00
	Total	18		
ROA	Bank Konvensional	9	11.00	99.00
	Bank Syariah	9	8.00	72.00
	Total	18		
LDR	Bank Konvensional	9	6.00	54.00
	Bank Syariah	9	13.00	117.00
	Total	18		

- Capital Adequacy Ratio on 9 Conventional Bank data with mean rank 7.83 and sum of ranks 70.650. Capital Adequacy Ratio on 9 Islamic bank data with a mean rank of 11.17 and a sum of ranks of 100.50.
- Non-Performing Loans on 9 Conventional Bank data with a mean rank of 6.33 and a sum of ranks 12.67. NPF on 9 Islamic bank data with a mean rank of 57.00 and a sum of ranks 114.00.
- BOPO 9 Conventional Bank data with a mean rank of 9.67 and a sum of ranks of 9.33. BOPO on 9 Islamic bank data with a mean rank of 87.00 and a sum of ranks 84.00.
- ROA on 9 Conventional Bank data with a mean rank of 11.00 and a sum of ranks of 8.00. ROA on 9 Islamic bank data with a mean rank of 99.00 and a sum of ranks 72.00.
- LDR on 9 Conventional Bank data with a mean rank of 6.00 and sum of ranks 13.00. FDR on 9 Islamic bank data with a mean rank of 54.00 and a sum of ranks 117.00.

**Table 5.** Mann Whitney Test Results

	CAR	NPL	BOPO	ROA	LDR
Mann-Whitney U	25.500	12.000	39.000	27.000	9.000
Wilcoxon W	70.500	57.000	84.000	72.000	54.000
Z	-1.325	-2.517	-.132	-1.193	-2.782
Asymp. Sig. (2-tailed)	.185	.012	.895	.233	.005
Exact Sig. [2*(1-tailed Sig.)]	.190 <sup>b</sup>	.011 <sup>b</sup>	.931 <sup>b</sup>	.258 <sup>b</sup>	.004 <sup>b</sup>

a. Grouping Variable: Jenis Bank

b. Not corrected for ties.

**CAR**

From table 3.4, it can be seen that the Z CAR value is -1.325 with Asymp. Sig of 0.185 > 0.05, then H0 is accepted, H1 is rejected. The rejection of H1 shows the CAR of Bank Conventional and Bank Sharia there is no difference significant.

**NPL**

From table 3.4, it can be seen that the Z NPL value is -2.517 with Asymp. Sig of 0.012 < 0.05, then H0 is rejected, H1 is accepted. The rejection of H0 shows that there is a significant difference in the NPL of Bank Conventional and Bank Sharia.

**BOPO**

From table 3.4, it can be seen that the Z BOPO value is -0.132 with Asymp. Sig of 0.895, because of the value of Asymp. Sig 0.895 > 0.05, then according to the basis of decision making in this test, it is concluded that H0 is accepted, and H1 is rejected. The acceptance of H0 shows that there is no significant difference between the BOPO of Conventional Banks and Islamic Banks.

**ROA**

From the table, it can be seen that the Z ROA value is -1.193 with Asymp. Sig of 0.233 > 0.05, then H0 is accepted, H1 is rejected. Acceptance of H0 shows that there is no significant difference in ROA between Conventional Banks and Islamic Banks.

**LDR**

From table 3.4, it can be seen that the Z LDR value is -2.782 with Asymp. Sig of 0.005 < 0.05, then H0 is rejected, H1 is accepted. The rejection of H0 shows that there is a significant difference between the LDR of Conventional Banks and Islamic Banks.

*CAR Financial Performance Comparison*

The result of the research is that the CAR of Conventional Banks does not have a significant difference and the CAR of Islamic Banks does not have a significant difference. This is a sign that the CAR of Conventional Banks is higher than the CAR of Islamic Banks.

*Comparison of NPL's Financial Performance*

The result of the research is that the NPL of Conventional Banks and NPLs of Islamic Banks have significant differences. This is a sign that the NPL of Islamic Banks is higher than that of Conventional Banks. The difference is caused by the fact that the nonperforming loans of Conventional Banks are greater than that of Islamic Banks. This can be seen from the higher average NPL of conventional banks.

*BOPO Financial Performance Comparison*

The result of the research is that the BOPO of Conventional Banks and the BOPO of Islamic Banks do not have a significant difference. This is because the BOPO of Islamic banks is higher than conventional banks. The difference is caused by operating costs that are almost the same between conventional and sharia

*ROA Financial Performance Comparison*

ROA of Conventional Banks does not have a significant difference and ROA of Islamic Banks does not have a significant difference. This is because the ROA ratio of Conventional Banks is higher than that of Islamic Banks.

*LDR Financial Performance Comparison*

The results of the study are LDR Conventional Banks and LDR Islamic Banks have significant differences. This is because the LDR of Conventional Banks is higher than Banks Sharia. The difference is caused by the total credit of conventional banks being greater than Islamic banks. This can be seen from the higher average NPL of conventional banks.

**V. CONCLUSION**

Based on the results of the study, the conclusions are as follows: 1) Conventional Bank CAR does not show significant differences and Islamic Commercial Bank CAR does not show significant differences. 2) NPLs of conventional banks and NPLs of Islamic banks differ significantly. 3) BOPO of Conventional Banks and BOPO of Islamic Commercial Banks are not significantly different. 4) ROA of Conventional Banks and ROA of Islamic Banks does not have a significant difference. 5) The LDR of conventional banks

and LDR of Islamic banks show a significant difference. Based on the conclusions above, several suggestions are given: 1) Conventional and Islamic banks are recommended to maintain and increase CAR, NPL, ROA, and LDR. 2) The results of research on the use of financial management science development, especially comparing financial performance. In this study, the research is limited to financial performance, other factors can be discussed in further research.

## REFERENCES

- [1] R. A. I. L. Nasib, *Keuangan & Perbankan*. Bandung: CV. Sadari, 2019.
- [2] I. L. Nasib, *Manajemen & Bisnis Modern*. 2021.
- [3] S. A. H. Romdhoni, "Pengaruh Financing To Deposit Ratio (Fdr), Dana Pihak Ketiga (Dpk) Dan Return on Asset (Roa) Terhadap Pembiayaan Musyarakah," *J. Ilm. Edunomika*, vol. 2, no. 02, pp. 598–608, 2020.
- [4] A. M. C. Mawardi, "Analisis Pengaruh Giro Wadiah, Tabungan Mudharabah Dan Deposito Mudharabah Terhadap Profitabilitas Bank Syariah Yang Terdaftar Di Bei," *E-JRA*, vol. 08, no. 02, pp. 23–31, 2019.
- [5] E. Sihabudin and Wirman, "Pengaruh Pembiayaan Mudharabah Dan Pembiayaan ( Studi Kasus Pada Bank Umum Syariah Yang Terdaftar Pada the Effect of Mudharabah Financing and Musyarakah Financing on the," *J. Ekon. syariah dan bisnis*, vol. 4, no. 1, pp. 8–18, 2021.
- [6] R. E. C. A. Khairunnisa, "Analisis Pengaruh Pembiayaan Mudharabah, Musyarakah, Murabahah Dan Npf Terhadap ROA (Studi Kasus Bprs Di Indonesia)," *Nisbah J. Perbank. Syariah*, vol. 6, no. 2, pp. 63–74, 2020.
- [7] C. W. M. dwi Kartikasari, "Analisa Rasio Keuangan terhadap Profitabilitas pada Perbankan yang Terdaftar di BEI," *Permana J. Perpajakan, Manajemen, dan Akunt.*, vol. 13, no. 1, pp. 124–138, 2021.
- [8] I. B. Indonesia, *Bisnis Kredit Perbankan*. Jakarta: Gramedia Pustaka Utama, 2015.
- [9] V. W. Sujarweni, *Metodologi Penelitian Bisnis & Ekonomi*. Yogyakarta: Pustaka baru, 2015.
- [10] D. Wira, *Analisis Fundamental Saham. Edisi Kedua*. Jakarta: Exceed, 2015.
- [11] A. Subagyo, *Teknik Penyelesaian Kredit Bermasalah*. Jakarta: Mitra Wacana Media, 2015.
- [12] Malayu Hasibuhan, *Dasar-dasar Perbankan*. Jakarta: Bumi Aksara, 2015.
- [13] Harmono, *Manajemen Keuangan*. Jakarta: Bumi Aksara, 2018.
- [14] Muhamad, *Manajemen Dana Bank Syariah*. Jakarta: Raja Grafindo Persada, 2014.
- [15] irham Fahmi, *Pengantar Manajemen Sumber Daya Manusia Konsep & Kinerja*, Pertama. Jakarta: Mitra Wacana Media, 2016.