

---

## Contribution of Intellectual Capital and Loan to Deposit Ratio on Financial Performance of Private Public Bank Foreign Exchange

Rika Aprilyani<sup>1</sup>, Leny Suzan<sup>2</sup>

<sup>1</sup>Accounting Faculty of Economic and Bussines, Telkom University, Indonesia

---

### Abstract

The population and data source in this study focuses on the financial sector which is one of the sectors contained in the service industry, namely the banking sub-sector company of the private public Bank of foreign exchange. This research is based on an increase in total assets each year during the year 2014-2018 but the profit generated is volatile. The population of the company's financial report BUMS Devisa listed on the Indonesia Stock Exchange in 2014-2018 with 20 companies. The research methods used are descriptive statistics and analysis of the data regression panel of common effect models. This research aims to analyze how the influence of Value Added Capital Employee (VACA), Value Added Human Capital (VAHU), Structural Capital Value Added (STVA) and Loan to Deposit Ratio (LDR) against Return on Assets (ROA) both simultaneously or partially. The results of the study showed that the variables of VACA, VAHU, STVA, and LDR simultaneously significantly affect ROA with a probability value of 0.00000. Partial of VACA, VAHU and LDR variables have no effect on ROA. STVA has a positive effect on ROA.

---

### Keywords

Value Added Capital Employee (VACA), Value Added Human Capital (VAHU) , Structural Capital Value Added (STVA), Loan to Deposit Ratio (LDR) dan Return on Assets (ROA).

---

### INTRODUCTION

The service industry is a type of industry that produces end products in the form of services or services that can be utilized to support other industrial activities or directly utilized by consumers, divided into two categories, namely finance and non Financial. The financial services industry is an industry consisting of various formal and informal organizations that provide financial services. It generally focuses on two markets, namely the capital market and the money market. Examples of the financial services industry are banks, insurance companies, pension funds, mutual funds, financing institutions, etc ([www.ojk.co.id](http://www.ojk.co.id)).

Banking is anything related about banks. Gathering funds from the public bank through deposits or savings and channeling funds made through credit or lending to the public. The Bank is mentioned as a business entity that raises funds from the community in the form of deposits and channel it to the community in the form of credit and or other forms to improve the living standards of the community (Law Number 10 Year 1998 about banking).

A private owned Bank or BUMS is a business entity that was established and funded by a certain person or group of people. BUMS is a business entity that is all capital from private parties owned by one or several people (Sattar, 2017:60). The number of BUMS in Indonesia is increasing quite large, currently there are 43 BUMS foreign exchange ([www.sahamok.com](http://www.sahamok.com)). Similar to the company in general, BUMS aims to find profits to reach the objectives that have been targeted. However, over the past few years this profit earned BUMS not maximally even some banks suffered losses and a decline in net profit compared to net profit obtained by state-owned enterprises.

Financial performance is the determination of certain measures that can measure the success of an organization or company in generating profits. According to Cashmere (2016:196) There are several types of profitability ratios, including profit margin ratio (Net Profit Margin), equity return (Return on Equity) ratio and return on assets ratio. This research used the ratio of profitability to return on assets as a ratio to measure the ability of the company in

generating profit from the use of existing assets in the company.

Based on data obtained from the annual report of the foreign private owned public Bank (BUMS) company in the Indonesia Stock Exchange (IDX), the year 2014-2015 reflects the profit of each year and continues to increase as presented in the table below:

**Tabel 1. Total Aset BUMS**

Tahun	Total Assets
2014	1.011.641.966.326.600
2015	1.063.182.385.768.940
2016	1.073.545.361.993.940
2017	1.210.947.922.989.610
2018	1.217.531.937.396.260

As for the Return on Assets (ROA), private owned banks (BUMS) are volatile as presented in the following table:

**Tabel 1. Net Income BUMS**

Tahun	Net Profit	ROA
2014	19.011.595.203.329	0,01879
2015	7.473.426.119.920	0,00703
2016	3.392.083.399.169	0,00316
2017	11.513.157.822.470	0,00951
2018	13.414.414353488	0,01102

In the middle of the asset increased stable but from the figure 1.2 above can be concluded that net profit BUMS decreased in 2015 of Rp 11.538.169 million and again decreased but not too significant in the year 2016 of Rp 4.081.342 Million. This indicates that the total increase in assets is not accompanied by a profit increase as it should. In 2017 net profit increased Rp 8.121.074 million and in 2018 increased back by Rp 1.901.256 million. While Return on Assets (ROA) BUMS in 2014-2018 is volatile, in 2014 showed the next 1.87% figure in 2015 was dropped to 0.70% because the year's profit declined. The year 2016 decreased back to 0.31% while in 2017 and 2018 had an increase of 0.95% and 1.10% respectively.

According to Tandellin (2003), ROA describes the extent to which the capabilities of the company's assets can generate profit. The higher the ROA, the greater the level of profit achieved by the bank and the better the position of the bank in terms of asset use

(Syamsudin, 2011). Based on the background that has been displayed, the authors use the public Bank object of private foreign exchange and Return on Assets (ROA) to measure the financial performance of public foreign exchange banks in 2014-2018.

Microcredit is said to be a decrease in profit reduction at Bank Danamon. Satinder Ahluwalia, finance director of Bank Danamon said, it deliberately brake the distribution of microcredit because it wants to enlarge the segment of the non-mass market such as small and medium enterprises (SMES), homeownership loans (KPR) and motor vehicle Credit (KKB). "Net profit is not down but stable. This is because the micro portfolio dropped," He said, Wednesday (25/7). The banks of the BDMN share code in the Indonesia Stock Exchange recorded a reduction in micro portfolios ranging from Rp 3 trillion to Rp 4 trillion. Consequently, the total micro-distribution is only Rp 4.5 trillion in the first semester of 2018, or lower than the achievement of Rp 7 trillion-Rp 8 trillion in the past year. Meanwhile, Bank Panin still records the increase in the credit distribution amid the profit slowdown. The credit flow grew 6.52% to Rp 147 trillion. The majority of the credits or 58.7% flow to the credit retail and commercial sectors.

From the explanation above, researchers use the ratio of Loan To Deposit Ratio (LDR) to measure the health level of private public banks. The best standard of LDR is above 85%. Some researchers have stated that the Loan To Deposit Ratio (LDR) has a positive effect on financial performance (Priyanto et al. 2015; Usman Harun 2014) because the high LDR will generate high returns as well as influential ROA. However, Andy Setiawan et al. (2017) proved the LDR to have a significant and negative effect on ROA. This shows that the lower LDR then the smaller the credits are channeled and will lower the profit.

## LITERATURE REVIEW

### *Stakeholder Theory*

This theory considers that organizational accountability is not confined to economic or financial performance only, so companies need to make disclosures about intellectual capital more than required by the competent body. Organizational management should be maximally concerned with the creation of value added that can promote the improvement of the Organization's financial

performance, by utilizing all potential organizations, human capital, physical capital, and Structural capital.

### **Resource Based View Theory**

RBV states that the company's resources and capabilities are critical to the company, as it is the foundation of the Competitiveness and performance of the company. The knowledge-based theory considers knowledge as a resource that is very important to the company because knowledge is an asset that if managed properly will improve the company's performance.

### **Bank Indonesia Regulation on General Bank Health Assessment 13/1/PBI/2011**

The bank is obliged to conduct an assessment of the Bank's health either individually or in consolidation using a risk approach. The Bank's health level assessment is consolidated for the Bank that conducts control of the subsidiaries. The Bank's health valuation factors consist of risk profile, Good Corporate Governance, rentability (earnings), and capital). The attachment of Bank Indonesia Circular letter No. 9/24/DPbS states the general Bank health assessment based on sharia principles is done by taking into account the CAMELS factor through quantitative and or qualitative approaches to various aspects that affect the condition or performance of the Bank by conducting assessments of financial factors and management factors.

### **Return on Assets**

ROA represents a good measure of the company's profitability as it shows the company's efficiency levels in using the assets to earn profit. The measurement of ROA safitry (cashmere, 2016) as follows:

$$ROA = \frac{\text{Profit after Tax}}{\text{Total Aset}}$$

### **Intellectual Capital**

Intellectual Capital is generally identified as three components including human capital (HC), Structural Capital (SC) and customer Capital (CC). Intellectual capital can be measured with Value Added Intellectual Coefficient (VAIC) model developed by Pulic in 2005.

The VAICTM Model has the following phases of calculation (Pulic, 1999 in Anggraeni et al. 2016).

The first stage of Value Added (VA), calculated with the difference between the output and input.

$$VA = OUT - IN$$

The second phase of Value Added Capital Employed (VACA), is an indicator for VA created by one unit of physical Capital. This ratio shows the contribution of each CE unit to the company's value-added.

$$VACA = \frac{VA}{CE}$$

The third phase of Value Added Human Capital (VAHU), shows how much VA is generated with the funds spent on Labor. This ratio reflects the contribution of each rupiah invested in the HC against the company's value-added.

$$VAHU = \frac{VA}{HC}$$

The fourth stage of the Structural Capital Value Added (STVA), measures the amount of SC needed to generate 1 rupiah from the VA and is indicative of how SC's success is in the creation of value.

$$STVA = \frac{SC}{VA}$$

The fifth stage of Value Added Intellectual Coefficient (VAICTM), indicating the intellectual ability of the company which is the sum of the three components of the previous, namely: VACA, VAHU, and STVA.

$$VAIC^{TM} = VACA + VAHU + STVA$$

### **Loan to Deposit Ratio**

The Loan to Deposit Ratio is a ratio for measuring the bank's ability to meet the financial obligations that must be met. LDR is calculated from a comparison between the total credits with third-party funding. The best standard of LDR ratio is above 85%.

$$LDR = \frac{\text{Total Credit}}{\text{hird Party Funding}}$$

## METHODS

The purpose of research in this research is a descriptive purpose. According to Sugiyono (2014) "A descriptive method is a method used to describe or analyze a research result but is not used to make a broader conclusion" using quantitative research methods.

### **Population, Sample, Techniques**

The population in this research is a sub-sector company of public owned foreign exchange Bank, registered in IDX period 2014-2018, which reports its financial statements and annual reports, and is open to the public by 20 companies. The sample of this study is 16 companies with a 5 year research period that reports on its financial statements periodically and is open to the public and based on PSAK. In this research, the data used is secondary data. Thus 16 x 5 years = 80 data.

The data analysis technique in this research is a regression model of panel data. Descriptive statistics are statistical methods used to analyze the data by describing or describing existing data and accumulating as it should be without intent to make any generalized and general conclusions (Sugiyono, 2014).

Before testing the panel data regression model conducted a classical assumption test in this study using two Tests namely Multicollinearity test and heteroskedasticity test. Next, you choose the appropriate and appropriate models for this study whether it is a comment effect, fixed effect or random effect.

### **Hypothesis Testing**

The simultaneous hypothesis testing or so-called test-F is a test involving all free variables against a variable bound to test whether or not a significant effect is simultaneously or jointly (Sunyoto, 2011:54). With probability significant value of > 0.05, then Ho accepted. If probability a significant value of < 0.05, then Ho is rejected.

## RESULTS AND DISCUSSION

**Table 1 Multicollinearity test**

Redundant Fixed Effects Tests

Equation: Untitled

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.908316(15,60)		0.5593
Cross-section Chi-square	16.370922	15	0.3578

Table 1 is the results of multicollinearity test, based on the data on the test results indicates that the correlation value between all the free variables tested < 0.9. It can be concluded that in this study there was no multicollinearity.

### **Heteroskedasticity Test: Breusch-Pagan-Godfrey**

F-statistic	0.28608
Prob. F(4,75)	0.8861
Obs*R-squared	1.202301
Prob. Chi-Square(4)	0.8777
Scaled explained SS	5.319925
Prob. Chi-Square(4)	0.2560

Based on the data above the test results heteroskedasticity using the Breusch Pagan test method, indicating that the value of Prob. Chi-Square (4) amounted to 0.8777 > 0.05 Based on the data on the test results can be concluded that H0 is accepted or can be stated that there is no heteroskedasticity on the spread of data.

**Tabel 2. Fixed Effect Model (Uji Chow)**

	VACA	VAHU	STVA	LDR
VACA	1.000000	0.047632	0.087183	-0.126386
VAHU	0.047632	1.000000	-0.027189	-0.020650
STVA	0.087183	-0.027189	1.000000	0.041143
LDR	-0.126386	-0.020650	0.041143	1.000000

Table above shows Chow test result with Chi-square cross-section probability value of 0.3578 > 0.05. Based on the data on the test results can be concluded that H0 was received so that on this research model regression data panel with common effect model better than fixed-effect model. After testing Chow then the next step is to test between common effect method with random effect using Lagrange multiplier test.

**Table 3 Random Effect Model (Lagrange Multiplier)**

Lagrange Multiplier Tests for Random Effects			
Null hypotheses: No effects			
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided			
(all others) alternatives			
	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	0.117472 (0.7318)	7.273603 (0.0070)	7.391075 (0.0066)

In table below is the result of the Lagrange multiplier test, obtained the probability value of Breusch-Pagan (BP) by 0.7318 > 0.05. Based on such data, it can be concluded that the H0 is received so that on this research the data regression panel is used which is a common effect model better than using a regression model data panel with a random effect model. From the test results of the three models that have been done, the common effect model is the right model in this study.

**Table 4 Model Common Effect**

Dependent Variable: ROA  
 Method: Panel Least Squares  
 Date: 12/19/19 Time: 20:07  
 Sample: 2014 2018  
 Periods included: 5  
 Cross-sections included: 16  
 Total panel (balanced) observations: 80

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-154.3452	105.2143	-1.466961	0.1466
VACA	2.372512	2.922380	0.811842	0.4195
VAHU	0.621582	6.950942	0.089424	0.9290
STVA	68.62236	9.043278	7.588217	0.0000
LDR	141.0098	80.71682	1.746970	0.0847
R-squared	0.459787	Mean dependent var	181.5871	
Adjusted R-squared	0.430976	S.D. dependent var	241.9066	
S.E. of regression	182.4791	Akaike info criterion	13.31161	
Sum squared resid	2497396.	Schwarz criterion	13.46049	
Log likelihood	-527.4644	Hannan-Quinn criter.	13.37130	
F-statistic	15.95855	Durbin-Watson stat	1.876252	
Prob(F-statistic)	0.000000			

Based on the results of the testing significance common effect model in table 4.11 can be formulated that the equation of data regression panel, as follows:  $ROA = -154.3452 + 2.372512 VACA + 0.621582 VAHU + 68.62236 STVA + 141.0098 LDR + \epsilon$ .

From table above, it can be known that the Adjusted R-Square value of this research model is 0.430976 or 43.09%. Thereby, it can be concluded that the independent variables Value Added Capital Employee, Value Added Human Capital, Structural Capital Value Added and Loan to Deposit Ratio are able to explain the dependent variable that is Return on Assets in the company public Bank of foreign exchange amounted to 43.09%, while the remaining of 56.91% is explained by other variables outside of this research. Then shows that the value of prob (F-Statistic) is 0.000000 < 0.05 and then H01ditolak and HA1 accepted can be interpreted that value-added Capital Employee, Value-added Human Capital, Structural Capital Value Added and Loan to Deposit Ratio have a significant effect on the simultaneous impact on Return on Assets. According to table 2.4, the test results stated that Value Added Capital Employee (VACA) probability value of 0.4195. The value shows that 0.4195 > 0.05, it can be concluded that H02 was accepted and HA2 rejected, so Value Added Capital Employee has not partially had a significant effect on Return on Assets.

Value Added Human Capital probability value of 0.9290. The value shows that 0.9290 >

0.05, it can be concluded that  $H_03$  is accepted and  $H_{a3}$  rejected, so Value Added Human Capital partially has no significant effect on Return on Assets. The probability value of Structural Capital Value Added is 0.0000. The value shows that  $0.0000 < 0.05$ , then it can be concluded that  $H_04$  rejected and  $H_{a4}$  received so that the Structural Capital Value Added has been a partially significant influence on Return on Assets. A probability value of Loan to Deposit Ratio of 0.0847. The value indicates that  $0.0847 > 0.05$ , it can be concluded that  $H_04$  received and  $H_{a4}$  rejected so that the Loan to Deposit Ratio has not partially Against Return on Assets.

#### ***Effect of Value Added Capital Employee on Return on Assets***

Partial test results in table 4.15, the probability value of value Added capital employee is  $0.4195 > 0.05$ , it can be concluded that  $H_02$  received and  $H_{a2}$  rejected so that the value-added capital employee partially did not have a significant influence on Return on Assets (ROA) on the company of private-owned public Bank foreign exchange 2014-2018. The regression coefficient of VACA is 2.372512 in the positive direction, indicating that there is a direct connection between VACA and ROA. If, the value of Vaca has increased Sebesar1satuandengan assuming another variable is worth 0 or constant then it will increase ROA value by 2.372512.

VACA is a value-added efficiency indicator of the physical/financial capital used by the company. The results showed that VACA had no effect on ROA because the company that manages its equity capital effectively would generate maximum profit for the company and increase the stable ROA.

#### ***Effect of Value Added Human Capital on Return on Assets***

The results of a partial test probability value Added human capital variable is  $0.9290 > 0.05$ , it can be concluded that  $H_02$  received and  $H_{a2}$  rejected so that the value-added human capital partially did not have a significant influence on Return on Assets (ROA) on the company of private owned public Bank foreign exchange 2014-2018. The regression coefficient of VAHU is 0.621582 in the positive direction, indicating

that there is a direct connection between VAHU and ROA. If, the value of the Vahu increased by 1 unit assuming another variable is 0 or constant, then it will increase ROA value by 0.621582.

VAHU is an indicator of the efficiency of value-added human capital. HCE is the ratio of Value Added (VA) to Human Capital (HC). This relationship illustrates the ability of human capital within the company to provide added value to a company. The results showed that VAHU has no effect on ROA because human capital in BUMS Devisa is managed effectively according to the profit earned in those years so that the mean human capital is much more under mean return on assets.

#### ***Effect of Structural Capital Value Added on Return on Assets***

The results of the partial test table 4.15 The probability value of the variable's structural capital value added is  $0.0000 < 0.05$ , then it can be concluded that  $H_02$  rejected and  $H_{a2}$  received so that a partial structural capital value-added has a significant influence on Return on Assets (ROA) on the company's public Bank, foreign exchange 2014-2018. The regression coefficient of STVA is 68.62236 in a positive direction, indicating that there is a direct connection between STVA and ROA. If the value of STVA increases by 1 unit Assuming another variable is 0 or constant, then it will increase ROA value by 68.62236.

STVA is an indicator of efficiency value-added structural capital. SCE is the ratio of SC to VA. This ratio measures the amount of SC needed to generate 1 rupiah from the VA and is an overview of how SC's success is in creating value. The results showed that STVA had a positive effect on ROA in accordance with the hypotheses that had been presented because the SC produced could raise the VA in the private Bank of foreign exchange.

#### ***Effect of Loan to Deposit Ratio on Return on Assets***

In table 2.4 variable probability value of the loan to deposit ratio is  $0.0847 > 0.05$ , it can be concluded that  $H_02$  received and  $H_{a2}$  rejected so that partial loan to deposit ratio has no significant influence on Return on Assets (ROA) on the company public owned

commercial foreign exchange 2014-2018. The regression coefficient of LDR is 141.0098 in a positive direction, indicating that there is a direct link between LDR and ROA. If, the LDR value has increased by 1 unit assuming another variable is 0 or constant, then it will increase ROA value by 141.0098.

The Loan to Deposit Ratio is a ratio for measuring the bank's ability to meet the financial obligations that must be met. LDR is calculated from a comparison between the total credits with third party funding. The results showed that LDR does not have any effect on ROA is not in accordance with the hypotheses that have been presented because the LDR owned by the public private Bank of foreign exchange above 86% on average stipulated in accordance with the provisions of Bank Indonesia means that the better LDR can not affect ROA on the public Bank of private foreign exchange.

## CONCLUSION

The purpose of this research is to know the influence of independent variables consisting of a value-added capital employee, Value-added human capital, structural capital value-added and loan to deposit ratio of dependent variables i.e. return on assets on Private bank sector companies listed on the Indonesia Stock Exchange period 2014-2018. Samples on this study as much as 80 consisting of 16 companies with a research period of 5 years. Based on the results of descriptive analysis and discussion, it can be concluded a few things as follows

Based on the results of the descriptive analysis test. First, Variable Value-added capital employee during the year 2014-2018 has a maximum value of 5.563428 owned by QNB Indonesia and a minimum value of 0.4078 is owned by bank Jtrust Indonesia. So that in this research, data varies or fluctuation. Second, Variable value-added human capital during the year 2014-2018 has a maximum value of 20.7496 owned by bank Bukopin Tbk and a minimum value of -2.852 owned by bank Permata. So that in this research the data is not varied or relatively homogeneous. Third, Variable Structural Capital Value-added has been in the year 2014-2018 has a maximum value of 9.493 by Bank MNC International Tbk. and a minimum value of -4.590 owned by Bumi Arta. So in this research, the data is not varied or relatively homogeneous (varies). Forth, Variable loan

to deposit ratio during the year 2014-2018 has a maximum value of 1.684 owned by Bank Danamon Indonesia Tbk and a minimum value of 0.502 owned by bank Capital Indonesia. So that in this research the data is not varied or relatively homogeneous. Fifth, Based on the test of simultaneous significance (test statistical f) Value Added Capital employee (Vaca), Value added human capital (Vahu), structural capital Value added (STVA) and loan to deposit ratio (LDR) simultaneously significant effect on the tax Avoidance on the private bank company of foreign exchange listed on the Indonesia Stock Exchange on 2014-2018. Based on partial hypothesis testing. First, Value-added Capital employee has no influence on return on assets in private bank companies listed on the Indonesian Stock exchange in the year 2014-2018. Second, Value-added human capital has no effect on return on assets in private bank companies listed on the Indonesian stock exchange in 2014-2018. Third, Structural Capital Value-added has a positive influence on return on assets in the privately owned foreign exchange company registered on the Indonesian Stock exchange in the year 2014-2018. Forth, Loan to deposit ratio has no influence on return on assets in private bank companies listed on the Indonesian Stock exchange in the year 2014-2018.

## REFERENCES

- Agus Tri Basuki, N. P. (2016). Analisis Regresi dalam penelitian Ekonomi dan Bisnis. Jakarta: PT. Rajagrafindo Persada.
- Banjarnahor, E. (2019). Analysis Of Value Added Intellectual Capital to the Financial performance listed Banking Companies in Indonesia. International Journal of Contemporary Accounting Volume 1 , 61-67.
- Bougie, U. S. (2016). Research Methods For Business.
- Catur Sasongko, Q. a. (2018). Akuntansi Pengantar 1. Jakarta: Salemba Empat.
- Fahmi, I. (2016). Analisis Laporan Keuangan . Bandung: Alfabeta.
- Hermanto, A. S. (2017). Comparative study determinant on Banking profitability between Buku 4 and Buku 3 Bank In Indonesia. Benefit Jurnal Manajemen dan Bisnis ISSN: 1410-4571 E-ISSN: 2541-2604 .
- Hery, S. (2015). Analisis Kinerja Manajemen menilai kinerja manajemen berdasarkan rasio keuangan. Grasindo.
- Ikatan Akuntan Indonesia. (2015). Pernyataan Standar Akuntansi Keuangan No. 19. Jakarta: Salemba Empat.

- Ikatan Akuntansi Indonesia. (2014). Standar Akuntansi Keuangan Nomor 1 per Efektif 1 Januari 2015. Jakarta: Salemba Empat.
- Kasmir. (2014). Analisis Laporan Keuangan. Jakarta: PT Raja Grafindo Persada.
- Kasmir SE, M. (2018). Dasar- dasar Perbankan. Raja Grafindo Persada.
- Kieso, D. E. (2016). Intermediate Accounting. IFRS Edition 2nd.
- Munawir. (2014). Analisa Laporan Keuangan. Yogyakarta: Liberty.
- Otoritas Jasa Keuangan. (2018). <https://www.ojk.go.id/id/kanal/perbankan/Pages/Bank-Umum.aspx>. Dipetik 2019, dari [www.ojk.go.id](http://www.ojk.go.id):
- Rosadi, D. (2012). Analisis Ekonomika dan Runtun Waktu Terapan dengan Eviews. Yogyakarta: Andi Offset.
- Sanusi, A. (2019). Metodologi Penelitian Bisnis. Jakarta: Salemba Empat.
- Sitanggang, L. M. (2018). Kredit mikro disebut-sebut sebagai biang kerok penurunan laba. [Kontan.co.id](http://Kontan.co.id).
- Sugiyono. (2016). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: PT Alfabet.
- Sugiyono. (2014). Metodologi Penelitian. Bandung: Alfabeta.
- Sunyoto, S. (2011). Analisis Regresi untuk Uji Hipotesis. Yogyakarta: Caps.
- Ulum, I. (2015). Intellectual Capital Disclosure: Suatu Analisis dengan Four Way Numerical Coding System. [doi.org](http://doi.org) Volume 19 No. 1 .
- Yuliadi, B. d. (2015). Ekonometrika Teori& Aplikasi . Yogyakarta: Mitra Pustaka Nurani.