The Effect Analysis of Intellectual Capital, Firm Size and Corporate Social Responsibility on Firm Performance

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Purpose - The aim of this study is to analyze the effect of Intellectual Capital, Firm Size and Corporate Social Responsibility on Property Firm Performance listed in Indonesia Stock Exchange (IDX) during 2013 up to 2017 period.

The research design, data and methodology- The secondary data in the form of financial annual report collected from IDX website, sample used is purposive sampling and research object is Intellectual Capital, Firm Size and Corporate Social Responsibility as independent variables and Firm Performance as dependent variable analyzing used SPSS 2.0, Eviews 9.0 version.

Result - The result showed that Intellectual Capital in total (VAIC) as well as its components (VAHU, STVA and VACA) significantly affect Firm Performance and the VAIC dominated by human factor which is VAHU, meanwhile Firm Size does not significantly affect Firm Performance while Corporate Social Responsibility also has positive signficatly affect on Firm Performance.Conclusion- The Intellectual Capital dominated by human factor and Corporate Social Responsibility affects Firm Performance meanwhile Firm Size does not affect Firm Performance.

Indexed Terms: Intellectual Capital, Firm Size, CSR, Firm Performance

I. INTRODUCTION

The goal of every company is that all invested economic resources will grow time to time to give more benefit for all its stakeholder. To reach such thing, the management should be able to create added value for every dollar invested in order to have sustainable growth in the form of high corporate performance. Firm with high performance will ensure its future sustainability also as an indicator in winning competition. In macro perception, business competition means so many business actors that could increase the total of productivity factors (Nickel,2014) that effect the company's performance and in

aggregate this will drive the accumulation of economic development movement that appears in its economic growth. The achievement of company performance beneficial for company itself, industry and state economy as a well.

From theoretically side, there is so many factors affected firm performance (FP) which come from the combination of all economic and non-economic resources own by company whether in the form tangible or intangible, but the three following variables still find the practically controversial which is Intellectual Capital (IC), Firm Size (FS) and Corporate Social Responsibility (CSR).

The relation effect of IC on FP explained by Choong (2015) stated that this effect seen on the value creation of IC and further, Gioacasi (2014) declared that: "IC is considered the most important resources of enterprise in order to provide financial health and value for business partners". Meanwhile Marr Carson et all, Enhard and Anghel at Alipour (2011) proposed that all economy practices based on knowledgebased information has placed IC as the important factor in value creation in FP achievement. Meanwhile researches resulted that IC affected on FP found on studies by A'layi (2014), Matinfard Khavari(2015), Ameneh, Bagher and Zhale(2015), Fahim, Maleki, Yousefnezhad(2012), but opposite result found on Rita, Vera, Rulyanti and Misa (2016), Ameneh, Bagher and Zhale(2015).

Further, theoretical explanation about the effect of FS on FP explained clearly by Dang and Li (2015) that made elaboration of various measure of FS in affecting on FP based on basic economy comprehension concluded that size affects result, getting smaller the firm smaller also the result and vise versa. Studies resulted FS affected FP found on researches by Opeyemi (2019), Luqman's Banindele, Fatai (2013),

Dogan, M (2013), Yisau Abiodene (2013), Philip Kioko (2013), Wati (2017) but opposite result found on Niresh and Velnampy (2014).

On the other side, the effect of Corporate Social Responsibility (CSR) on FP theoretically explained by Hamidu, Haron and Amran (2015) which declared that the CSR concepts enables the management to use CSR as a tool in strategy building to be always obey the rules, the laws, maintain the standards, construct company reputation to have customer loyalty which in the end will increase profitability and achievement of all company goals. Meanwhile, researches resulted that CSR affected FP found on studies by Kumar and Priyadarsini (2017), Ocran, E (2011), but Dilashenyi (2018) found that business risk, company reputation and stakeholder concern affected on FP, but employee engage did not affect.

Based on the above expalanations concluded that past researches still inconsistent, although theoretically Intellectual Capital, Firm Size and Corporate Social Responsibility affects Firm Performance and considering that FP is important for the company as well as for national economic, and there is still existence of researches controversion in the effect of IC,FS and CSR on FP and there is also rare study in property sectors made this study titled as the affect analysis of IC, FS and CSR on FP, evidence from Indonesia property companies.

II. LITERATURE REVIEW

1. Agency Theory

The difference interest between the firm owner (the principal) and the management (the agent) has driven the appearance of agency problem. In practice, firm management which leaded by a Chief Executive Officer(Berk, Jonathan; DeMarzom Peter, 2011) had a power to make business decision in order to achieve the company goal, which is to make the principal more wealthier time to time(Brigham, Eugene F; Houston, Joel F, 2004). In the other side, management has its own interest to posse income and other facilities for this job that seems opposite with the principal interest, as giving benefit to management is a cost and cost will deduct their expected wealth. This condition could be diminished by the absence of place in doing such thing

stated by good corporate governance (Miller and Sardis, 2011 in Terrance & Mercedes, Jalbert, 2011).

2. Firm Performance (FP)

Firm Performance (F)P could be seen from various side depended on its company stakeholder, that is the comprehensive approach that facilitate its is stakeholder approach (Santos, Juliana Bononi; Ledur Brito, Luiz Artur, 2012) which enables to construct the conceptual of firm performance indicator and dimension with take into account social dimension in company goals which in some cases seen opposite with share holder maximization goal. Selvam et all (2016), Santos and Brito (2012) stated that "different stakeholder represented by different performance of the firm based on their interests". In stakeholder approach, prime priority interest must be fulfilled is shareholder's interest that could be served only if firm reach the superior financial perfromance with indicator among others is profitability, growth and market value (Cho and Pucik, 2005 in Juliana Bonomi and Luiz Artur (2012). Second priority interest to be served is the employee and customer. Employee satisfaction could be obtained with existence of clear standard operation procedure, employee improvement through trainings, clear career path, and acceptable reward policy. Satisfy employee will deduct the level of employee turn over and become attractiveness for outside new employee. Customer sues the firm to produce a quality product that give a value added so as increase customer willingness to pay as value creation made by the company. Third priority interest that must be served by the management is indirect stakeholder such as government, local community affected by firm business activities categorized as environment and social actions which could be diminished with eco safe business practices, improvement of product safety and quality, ethics promotion, minority employment and developing social projects. Based on stakeholder interest fulfillment, FP at least consisted of 7 aspects videlicet growth, profitability, market value, customer satisfaction, employee satisfaction, environment and social performance. This 7 aspects detailed by dimensions as profitability, growth, market value, customer satisfaction, employee satisfaction, environmental audit, corporate governance and social governance. (Juliana Bonomi and Luiz Artus ,2012 Selvam et all (2016)). From shareholder side, the stake

holder concepts that could satisfy ia a super normal profitability, growt, market value that could be measured by Return on Equity or Return on Asset as parts of dari Accounting Based Measurement of Performance or measured by Tobin's Q formula as represented of Market Based Measurement of Performance (Matari and Swidi, 2014).

3. Intellectual Capital (IC)

The development of information technology and globalization process induces a fundamental change of organization resource structure become more diverse. This new wave economy much depend on information and knowledge that place IC become more important (Anghel, 2008) so that IC together with financial capital considered as main factor in firm profitability. Alipour (2012) explains that IC is a group of knowledge asset own and controlled by firm at the most pushes value creation mechanism which consisted the combination of intangible asset and knowledge asset as a basic of firm's competence where Ordonez DE Pablos in Alipour(2012) stated that investment in IC could not be reported on firm financial statement, so that have need of other concept in measuring IC for sustainable performance improvement.

Papula and Volna (2011) clarifies that the substance of IC is value creation through combination of intangible asset, knowledge, proficiency, technology process and experience applied in the organization to obtain market competitive advantage. Based on knowledge and skill orientation, Edvinsson 1997, Sveiby 1997, Stewart 1998, Bontis 2002, Mauritsen et all 2002 and Pablos 2003 in Holienka M & Pilkova, A (2014) explained that IC components consisted of Human Capital, Organizational Capital and Relational Capital (Papula and Volna ,2011) as seen on Figure 1.



Figure 1: Components of intellectual capital

Source: Papula & Volna (2011)

Skill and experience oriented inside employee self included in Human Capital component, those that oriented inside employee self but still in firm area is a part of Organizational Capital, meanwhile those that oriented outside employee and company will be included in Relational Capital. This orientation concept enables to explain IC components clearly but in practice it is difficult to measure of each component. In measuring IC, Ante Pulic (2000) proposed the Value Added Intellectual Coeficient (VAIC) which formed as addition of 3 coefficients that is: a) Physical Capital Coefisient (VACA), b) The Human Capital Coefficient (VAHU) and c) The Structural Capital Coefficient (STVA). Public model designed to provide information about the efficiency of value creation of tangible and intangible asset which computed in several steps, namely : a) compute Corporate Value Added (VA), VA = OP + EC + D + A, where OP=operational Profit, EC= Employee D=Depreciation, and A = Amortisation, b) compute the efficiency of Capital employed (VACA), VACA= VA/CA, where CA is Capital Employed calculated as Book Value of Total Asset - Intangible Asset, c) compute the efficiency of Human Capital (VAHU), VAHU= VA/HU, where VAHU is Value Added Human Capital, while HU is total employed cost regarded as Human Capital/Wages, d) compute the efficiency of Structural Capital (STVA), SC=VA-HC, where SC is Structural Capital and HC is Human Capital, so that, STVA=SC/VA, e) compute Value Added Intellectual Capital (VAIC), VAIC=VACA+VAHU+STVA. This study used Pulic model as a proxy of IC.

4. Firm Size (FS)

Trigueiros (2000) stated that FS could be seen in wider scale, but in general meaning FS is the size of the firm in accounting side which could be seen from sales amount, total asset value or market capitalization. In their theoretical study, Dang and Li (2013) proposed that FS affects result, the bigger the firm the more earned the firm achieve. The big company relatively has more opportunity to produce more profit than the small one, the bigger the company, the bigger opportunity to create value so that firm will increase its scale time to time, it means the higher the performance. This study uses Ln Total Asset as a measure of FS.

5. Corporate Social Responsibility (CSR)

The CSR definition run to evolution in 3 steps. Step 1, 50-60 period indicated the need of phylantrophic activity in the form of contributing in development and social welfare, so that the definition of CSR in this period interpreted as voluntarism and contributing towards social welfare. Step 2 is period of consciousness and employee rights concern, stakeholder satisfaction and management relationship, regulated CSR practice and consumer protection. Step 3, is the period of instrumentalty and sustainability signed by CSR adoption as a strategy tool in achieving firm's goal, CSR institutionalized and standardized by the international index related with social responsibility and sustaianability.this 3 development explain the history of CSR activity by business organization starting with voluntary activity, managing external factor, stakeholder management, alignment of social and economis responsibility, considering practices and values, finally extending CSR beyond philantrophyc activities. development of CSR theory begins with the rasionalisation application some theories in study of the effect of CSR on firm's performance and reputation. The classic theory has contributed shareholder view that there is no objection in CSR expense as long company coul take benefit in the long run. The rest theory, all emphasize to place CSR as undivided part from strategy to reach company goals. The goal of CSR activities made by the firm to ensure that firm in running its business conform with ethics and consider the effect of firm activity on society that disclosed in sustainability reporting (Hamidu ea al, 2015). Study by Wiwik Utami (2015) resulted that there was relation between the quality of CSR disclosure and Firm Value, so as the proxy of CSR in this research is CSR disclosure in firm financial report calculated based on Global Reporting Initiative (GRI).

6. Previous Studies

Studies related the effect of IC on FP with result that IC had affected on FP found on Fahim, Maleki, Yousefnezhad (2012), A'layi (2014) Matinfard and Khavari (2015), Ameneh, Bagher and Zhale (2015).A'layi (2014) investigated firms listed in

Tehran Stock Exchange (TSE), year 2007-2010 period, found that there was positive significant impact of IC on FP proxied by Return on Asset (ROA), Return on Equity (ROE) and Tobin's O ratio. Matinfard and Khavari (2015) researched the same object with A'layi (2014) year 2006 up to 2012 period, resulted that there was a positive significant impact of IC on FP. Meanwhile Ameneh, Bagher and Zhale (2015) studied 14 Banks listed in TSE year 2004 up to 2013 period resulted that there was a positive significant impact of IC on FP. The other study by Fahim, Maleki, Yousefnezhad (2012) to firms listed on TSE year 2004 up to 2010 period resulted that there was a significant relation between IC and Stock Returns, Tobin's Q and Market to Book (MTB) ratio. Studies related the effect of IC on FP with result that IC had not affected on FP found on Ameneh, Bagher and Zhale (2015), Rita, Vera, Rulyanti dan Misa (2016). Ameneh, Bagher and Zhale (2015) investigated 14 banks listed in TSE year 2004 up to 2012 period, found that one IC component which was Physical Capital Efficincy did not affect on FP. Meanwhile Rita, Vera, Rulyanti and Misa (2016) studied property industry sector firms listed in Indonesia Stock Exchange (IDX) year 2009 up to 2012 period found that IC did not effect on FP.

Meanwhile study concerning about the effect of FS on FP resulted that FS affected on FP found on Kioko (2013), Yisau Abioden (2013) Dogan, M (2013), Luqman's Banindele, Fatai (2013), Oyelade (2019). Kioko (2013) investigated 43 comercial banks in Kenya year 1998 up to 2012, resulted that there was a moderate correlation between FS (net asset, total loan, total deposit) and FP (ROA). Meanwhile Yisau Abioden (2013) inspected manufacturer firms listed in Nigeria Stock Exchange year 2000 up to 2009 found that FS measured by total asset and total sales positively significant effect on FP measured by ROA. Dogan, M (2013) investigated 200 active firms listed in Istambul Stock Exchange (ISE) year 2008 up to 2011 found that there was positive correlation between Size Indicator and FP. The other works by Lugman, Banindele, Fatai (2013) on nonfinancial firms in Nigeria year 2005 up to 2013 resulted that FS measured by Total Aset had negative affect on FP calculated by Total Sales, but had positive affect when FP measured by ROE. Positive result found also on Oyelade (2019) to building companies in Nigeria.

Opposite results stated that there was no indication relation of FS (Total Asset, Total Sales) on FP (Net Profit) found on study by Niresh and Velnampy (2014) to 15 manufacturing firms listed in Colombo Stock Exchange (CSE) year 2008 up to 2012.

Meantime research related the effect of CSR on FP found on studies by Ocran, E (2011) to Nestle Ghana Limited, Kumar and Priyadarsini (2018) to some selected banks resulted that CSR affected positively on FP, but other research by Selvarajah, Murthy, Massilaamany (2018) to 153 firms respondens in Malaysia resulted that business risk, company reputation, and stakeholder concern affected FP, but employee engage variable did not affect.

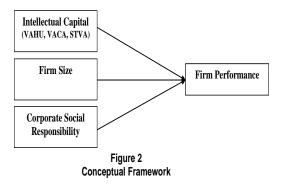
7. Conceptual Framework and Hyphotheses

Intellectual Capital (IC) is a group of knowledge asset own and controlled by firm at the most pushes value creation mechanism is a basic of firm's competence (Alipour, 2012) further Papula and Volna (2011) clarifies that the substance of IC is value creation to obtain market competitive advantage, In measuring IC, Ante Pulic (2000) proposed the Value Added Intellectual Coeficient (VAIC) which formed as addition of 3 coefficients that is: a) Physical Capital Coefisient (VACA), b) The Human Capital Coefficient (VAHU) and c) The Structural Capital (SCVA), Coefficient that SO VAIC=VACA+VAHU+STVA. Based on these explanations, theoretically IC (totally or each components) significantly affect Firm Performance (FP), where this supported by majority researches found on studies by Fahim, Maleki, Yousefnezhad (2012), A'layi (2014) Matinfard and Khavari (2015), Ameneh, Bagher and Zhale (2015). A'layi (2014), Matinfard and Khavari (2015), Ameneh, Bagher and Zhale (201), Fahim, Maleki, Yousefnezhad (2012) so that proposed the hypotheses as

H1: Intellectual Capital Signifcantly Affect Firm Performance. Dang and Li (2013) proposed theoretical statement that FS affects result, the bigger the firm the more earned the firm achieve, the bigger the company, the bigger opportunity to create value the higher the performance which is supported by works done by Kioko (2013), Yisau Abioden (2013) Dogan, M

(2013), Luqman's Banindele, Fatai (2013), Oyelade (2019), hence the hypothese drafted as

H2: Firm Size significantly affect Firm Performance. The last theory of Corporate Social Responsibility (CSR) placed CSR as undivided part from strategy to reach company goals. The goal of CSR activities made by the firm to ensure that firm in running its business conform with ethics and consider the effect of firm activity on society that disclosed in sustainability reporting (Hamidu ea al, 2015) and there was relation between the quality of CSR disclosure and Firm Value (Wiwik Utami (2015) so that in theory's perspectives the CSR must affect FP and at least the study by Ocran, E (2011) supported it, so that the proposed hypotheses is H3: the Corporate Social Responsibility significantly affect Firm Performance. The conceptual framework as seen Figure 2.



III. THE METHODOLOGY

This study is a causal quantitative research with subject is all manufacturing firm, property industry sub sector listed in Indonesia Stock Exchange (IDX) year 2013 up to 2017, sample used is purposive sampling and research object is Intellectual Capital, Firm Size and Corporate Social Responsibility as independent variables and Firm Performance as dependent variable. Data collected from web site IDX and analyzing used SPSS 2.0 and Eviews 9.0 version.

IV. RESULT

1. Descriptive Statistic

Following the statistic descriptive result as seen on table 1 and 2 explains the mean minimum and maximum for variables observed and graph 1 up to 4 which declares the key points results of these variables.

Table. 1. Research Variable Description

VARIABLE	Min	Max	Mean
Firm Performance	.22	1.99	.9978
Human Capital	2.55	43.96	10.5818
Capital Structure	.61	.98	.8522
Capital Employed	.03	.28	.1232
Firm Size	15.55	31.46	26.0779
CSR	.30	.60	.4119

Source: Processed IDX data, 2019

Table 2.a Research Variable Mean

YEA R	VAHU	STVA	VACA	VAIC
2013	13.1696 4	0.87044 9	0.13909 9	14.1791 8
2014	13.1062 1	0.87457 7	0.13846 5	14.1192 5
2015	10.1281 9	0.84556 4	0.12369	11.0974 5
2016	8.37723 1	0.83912	0.11090 8	9.32725 9
2017	8.12794 8	0.83151	0.10361 1	9.06307 1

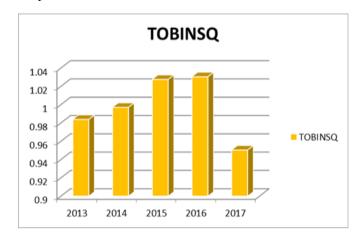
Source: Processed IDX data, 2018

Table 2.b Research Variable Mean

YEAR	SIZE	CSR	TOBINSQ
2013	26.88477	0.411867	0.983855
2014	27.05176	0.411867	0.997001
2015	27.19365	0.411867	1.027533
2016	24.54748	0.411867	1.030469
2017	24.71203	0.411867	0.950386

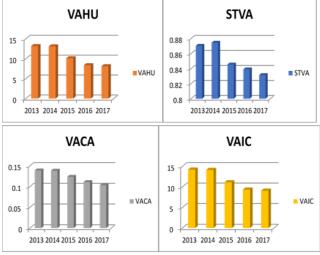
Source: Processed IDX data, 2018

Graph.1. Firm Performance Mean



Source: Processed IDX data, 2018

Graph. 2. Intelectual Capital Mean



Source: Processed IDX Data, 2019

2. Classical Asumption Test

As the result of model election test for panel data regression equation model was Random Effect Model so that classical asumption test not required (Indra Sakti, 2018).

3. Hypotheses Test

Hypotheses test used in this research was multiple regression with panel data, where the total amount of property sector firm fitted with the criteria was 15 listed in IDX during 2013-2017 period, so that the total data observed was 75 panel data and hypotheses test used weighted general least square with Software Eviews 9.0 version.

Table 3. The Effect of VAHU, SIZE, CSR ON Firm Value

Dependent Variable: TOBINSQ

Method: Panel EGLS (Cross-section weights)

Date: 07/16/19 Time: 11:57
Sample: 2013 2017
Periods included: 5
Cross-sections included: 15
Total panel (balanced) observations: 75
Linear estimation after one-step weighting matrix

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C VAHU SIZE CSR	0.309201 0.012552 -0.000105 1.404613	0.238106 0.004176 0.007653 0.435711	1.298588 3.005404 -0.013737 3.223724	0.1983 0.0037 0.9891 0.0019
	Weighted	Statistics		
R-squared Adjusted R-squared S.E. of regression F-statistic Prob(F-statistic)	0.237895 0.205693 0.403209 7.387673 0.000224	S.D. dependent var 1. Sum squared resid 11		1.525621 1.060806 11.54303 0.692853
	Unweighted	l Statistics		
R-squared Sum squared resid	0.060544 13.34908	Mean depe Durbin-Wa		0.997849 0.475429

Source: 9.0 Version E-views Output

Table 4. The Effect of STVA, SIZE, CSR ON Firm Value Dependent Variable: TOBINSQ

Method: Panel EGLS (Cross-section weights)

Date: 07/16/19 Time: 11:58 Sample: 2013 2017 Periods included: 5 Cross-sections included: 15

Total panel (balanced) observations: 75 Linear estimation after one-step weighting matrix

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C STVA	-0.203268 0.813821	0.366182 0.368136	-0.555101 2.210655	0.5806 0.0303
SIZE	-0.001724	0.007549	-0.228367	0.8200
CSR	1.349287	0.439985	3.066665	0.0031
	Weighted	Statistics		
R-squared	0.178232	Mean depe	endent var	1.499171
Adjusted R-squared	0.143510	S.D. deper	ndent var	0.957312
S.E. of regression	0.408319	Sum squar	ed resid	11.83742
F-statistic	5.133041	Durbin-Wa	tson stat	0.680597
Prob(F-statistic)	0.002860			
	Unweighted	l Statistics		
R-squared Sum squared resid	0.070739 13.20422	Mean depe Durbin-Wa		0.997849 0.437065

Source: 9.0 Version E-views Output

Table 5. The Effect of VACA, SIZE, CSR ON Firm Value

Dependent Variable: TOBINSQ

Method: Panel EGLS (Cross-section weights)

Date: 07/16/19 Time: 11:58 Sample: 2013 2017 Periods included: 5 Cross-sections included: 15

Total panel (balanced) observations: 75 Linear estimation after one-step weighting matrix

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Variable	Coefficient	Std. Error	t-Statistic	Prob.		
С	0.289200	0.244661	1.182042	0.2411		
VACA	2.118670	0.795407	2.663629	0.0096		
SIZE	-0.002696	0.007720	-0.349182	0.7280		
CSR	1.318077	0.449411	2.932899	0.0045		
Weighted Statistics						
R-squared	0.196304	Mean depe	endent var	1.471282		
Adjusted R-squared	0.162345	S.D. depen	ident var	0.875579		
S.E. of regression	0.405661	Sum squar	ed resid	11.68383		
F-statistic	5.780629	Durbin-Wa	tson stat	0.643108		
Prob(F-statistic)	0.001355					
Unweighted Statistics						
R-squared	0.071726	Mean depe	endent var	0.997849		
Sum squared resid	13.19019	Durbin-Wa		0.439584		

Source: 9.0 Version E-views Output

Table 6. The Effect of VAIC, SIZE, CSR ON Firm Value

Dependent Variable: TOBINSQ

Method: Panel EGLS (Cross-section weights)

Date: 07/16/19 Time: 12:12
Sample: 2013 2017
Periods included: 5
Cross-sections included: 15
Total panel (balanced) observations: 75
Linear estimation after one-step weighting matrix

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.300338	0.238408	1.259764	0.2119
VAIC	0.012434	0.004125	3.014476	0.0036
SIZE	-0.000152	0.007649	-0.019926	0.9842
CSR	1.402448	0.435783	3.218222	0.0019
	Weighted	Statistics		
R-squared	0.238293	Mean depe	endent var	1.526056
Adjusted R-squared	0.206108	S.D. deper	ndent var	1.061297
S.E. of regression	0.403180	Sum squar	ed resid	11.54132
F-statistic	7.403881	Durbin-Wa	tson stat	0.692232
Prob(F-statistic)	0.000220			
	Unweighted	d Statistics		
R-squared	0.060835	Mean depe	endent var	0.997849
Sum squared resid	13.34494	Durbin-Wa		0.474888

Source: 9.0 Version E-views Output

Table 7
Research Model Test Result $TOBINSQ = \alpha + \beta IVAHU_{ii} + \beta 2STVA_{ii} + \beta 3VACA_{ii} + \beta 4VAIC_{ii} + \beta 5SIZE_{ii} + \beta 5CSR_{ii} + \epsilon_{1...}(4.1)$

Variable	Prediction		TobinsQ			
Constant		0.309	-0.2033	0.2892	0.3003	
VAHU	βPositif	0.0126***				
STVA	βPositif		0.8138**			
VACA	βPositif			2.1187 ***		
VAIC	βPositif				0.0124***	
SIZE	βPositif	-0.0001	-0.0017	-0.0027	-0.0002	
CSR	βPositif	1.4046***	1.3493***	1.3181***	-0.001***	
R ²		0.2379	0.1782	0.1963	0.2383	
Adjusted R ²		0.2057	0.1435	0.1623	0.2061	
Fstat		7.388***	5.133***	5.7806***	7.4039***	

Source: Processed Data, 2018

V. DISCUSSION

Table 1 provides research variables description, which is FP measured by Tobin's formula, IC represented by Human Capital (VAHU), Capital Structure (STVA) and Capital Employed (VACA), FS measured by Log

Total Asset and CSR calculated based (Global Reporting Initiative (GRI) 4,0 with content analysis. The amount of property sector companies is 15, observed year start from 2013 tp to 2017 so that total observation data is 75 companies data. Minimum value of FP proxied by Tobin's Q of property sector is 0.22 own by Bekasi Fajar Industrial Estate Tbk (BEST) year 2014 and the maximum value is 1.99 found on Pakuwon Jati Tbk (PWON) year 2014. The mean of FP is 0.9978 implied that on average property sector has not have the invetment prospect yet caused the value below 1.0. meanwhile the minimum value of Human Capital, VAHU of 2.55 found on Lippo Karawaci Tbk (LPKR) year 2017, and the maximum of 43.96 own by PWON year 2014. The VAHU mean is 10.5818. The minimum value of Capital Structure, STVA of 0.61 own by LPKR year 2017 and the maximum value of 0.98 found on PWON year 2014 and the STVA mean is 0.85. The minimum value of Capital Employed, VACA of 0.03 found on Duta Anggada Realty Tbk (DART) year 2017 and the maximum value of 0.28 own by BEST year 2013 and the mean of VACA is 0.123. The average proportion of VAIC dominated by VAHU (89.68%), then STVA (9.18%) and the last is VACA (1.14). Meantime the minimum value of FS of 15.55 own by Lippo Cikarang Tbk (LPCK) year 2016 and the maximum value of 31.46 found on Bumi Serpong Damai (BSDE) year 2017 and the mean of FS is 26.08. While the minimum CSR disclosure of 0.30 found on Metropolitan Land Tbk (MLTA) year 2016 and the maximum value of 0.60 own by Kawasan Industri Jababeka (KIJA) year 2016 and the mean of CSR disclosure is 0.4110 implied that on average CSR disclosure consiousness in Indonesia property sector still low. Table 2 clarifies the mean of research variables from year to year starting from year 2013 up to 2017.

As seen on Graph 1, the mean of Tobin's Q which is FP indicator, every year had increased from year 2013 up to 2016 but decreased in 2017. The Graph 2 explains the Mean of Intelectual Capital (VAIC) which had experienced decreasing from year to year, as seen also on its components which was VAHU, STVA and VACA decreased as well. The mean of property companies Firm Size fluctuated during research year, increasing slightly during 2013 up to 2015 period, then significantly decreased in 2016 - 2017 period as seen on Graph 3. While the trend of

^{***}Statistic Supported on alpha 1%, ** on alpha 5%, *10%

CSR disclosure relative stable during research year as the mean value quite same from year to year as appeared on Graph 4, it was concluded that there was no increasing in the consciousness of CSR disclosure of property sector companies in Indonesia during research year.

Based on table 3 up to table 7, seen that Intellectual Capital (IC) variable, in totally (VAIC) as well as its components that is VAHU, STVA and VACA had positive significantly effect on Firm Performance (FP) and based on table 2 with average proportion of VAHU (89.68%), STVA (9.18%) and VACA (1.14%), so that in property firm the dominated component of IC was VAHU. This result in line with statement by Choong (2015) declared that the effect of IC on FP seen from the value creation of IC, and Gioacasi (2014), Carson et al, Enhard dan Anghel in Alipour (2011) explained that the practice of economic which based on knowledge based information so as placed IC as important factor in value creation to achieve firm performance. These also support by researches done by A'layi (2014), Matinfard and Khavari (2015), Ameneh, Bagher and Zhale (2015), Fahim, Maleki, Yousefnezhad (2012) which resulted that IC significantly affect FP.

Meanwhile the effect of Firm Size (SIZE) on Firm Value (FV) appeared on table 6 resulted that Size does not affect on FV, it seem opposite with theory statement of Trigueiros (2000) and Dang and Li (2013) declared that SIZE affects FV and also anequal with the most studies by Kioko (2013), Yisau Abioden (2013) Dogan, M (2013), Lugman's Banindele, Fatai (2013), Oyelade (2019). Philip (2013), Yisau Abioden (2013), Dogan, M (2013), Lugman, Banindele, Fatai (2013) but in line with work by Niresh and Velnampy (2014). Based on graph 2, although in the last 2year experienced decreasing, on average, the mean of FS relative stable there is no variation, meanwhile during research year the FV also stable realtiive that is why FS does not affect FV. If Size significantly increasing it may be will drive FV to change, so that it is in line with the stated theory.

The result test of the affect of Corporate Social Responsibility (CSR) on FV supports the hypotheses proposed as CSR significantly positive affects on FV (table 6) in 1% significance level (table 7) which is in line with the theory described by Hamidu, Haron and Amran (2015) stated that the CSR's concepts make it possible for management to use CSR in a firm as a tool in firm strategy building, to be always obey the law, maintain standards, firm reputation construct to have customer loyalty and at the end will increase firm's profitability and achieving all firm's goal. This result supported by works of Dilashenyi (2018), Kumar and Priyadarsini (2017), Ocran, E (2011).

The research model goodness of fit as measured by the value of R² of Firm Value model with the total of Intellectual Capital of 23.83% and statistic F value for the 4 models is significance in 1% level means that the 4 research models by the total Intellectual Capital as well as through its components viz VAHU, STVA and VACA all is suitable, fit.

VI. CONCLUSION

The result of this research concluded that Intellectual Capital, in total (represented by VAIC) as well as its components (VAHU, STVA and VACA) significantly affect Firm Performance and the VAIC dominated by human factor which is VAHU, meanwhile Firm Size does not significantly affect Firm Performance, and the last that Corporate Social Responsibility positive signficatly affect Firm Performance. Meanwhile although Firm Size does not significantly affect FirmPerformance, it is still in line with the stated theory because the both variable, SIZE as well as FV stable relative make SIZE does not affect FV, if SIZE change significantly during observation the result may be different. Based on Goodness of fit test, all variables simultaneously affect Firm Performance, so that the implication of this study that firm management in the effort in performance improvement to please consider Intellectual Capital, Firm Size and Corporate Social Responsibility in their improving performance strategy. The component that dominated Intellectual Capital is human factor viz VAHU, so that considering Intellectual Capital is considering about the human factor, the human resource management is the key of Intellectual Capital in property sector in improving firm performance. In Firm Size management must pay more attention to take advantage on firm scale to improve performance. Management also required to always improving in Corporate Social

Responsibility disclosure as better disclosure will increase Firm Performance.

REFERENCES

- [1] Al-Matari, Ebrahim Mohammed; Al-Swidi, Abdulah Kaid; Hanim, Faudziah, 2014. The Measurements of Firm Performance Dimensions, Asian Journal of Finance and Accounting, Vol 6, NO. 1..
- [2] Alipour,M(2012). The effect of intellectual capital on firm performance: an investigation of Iran insurance companies. Measuring Business excellence. Emerald Group Publishing Limited, Vol 16, No. 1
- [3] Anghel, I. (2008). Intellectual capital and intangible assets analysis and valuation. Theoretical and Applied Economics, Vol. 2, pp. 75-84. VOL. 16
- [4] A'layi, Azar Sharbandar, 2014. The Impact of Intelellectual Capital on Retursn and Stock Price of Listed Companies in Tehran Stock Exchange. Applied Science Report Vol 4, No 3
- [5] Ameneh, Zarei; Bagher, Shamszadeh; Zhale, Zarei, 2014. The Effect f Intellectual Capital on Financial Performance of Banks Listed InTehran Stock Exchange. Journal of Money and Economy, Vol 9, No 4
- [6] Brigham, Eugene F; Houston, Joel F, 2004. Fundamental of Financial Management. University of Florida, Thomson Southwestern, USA
- [7] Berk, Jonathan; DeMarzo, Peter, 2011. Corporate Finance. second edition, Stanford University, Pearson International, USA
- [8] Choong, Kwee Keong, 2008. Intelectual Capital: Definitions, Categorization and Reporting Models. Journal of Intelectual Capital.
- [9] Dogan, Mesut, 2013. Does Firm Size Affect the Firm Profitability? Evidence FromTurkey. Research Journal of Finance and Accounting, Vol 4, No 4.
- [10] Dang, Chongyu (David); Li, Frank, 2015. Measuring Firm Size in Empirical Corporate Finance. Richard Ivey School of Business, University of Western, Ontario
- [11] Fahim, SR Seyednezhad; Maleki, M; Yousefnezhad, S, 2013. Effect of Intellectual Capital on Market Criteria in The Performance Evaluation of Accepted Companies in Tehran SEC. International Journal of Applied Operational Research, Vol 3, No. 2.

- [12] Gioacasi, Diana, 2014. Intellectual Capital: A Critical Approah on Definitions and Categorization. CES Working Paper-Volume 6 Issue 4
- [13] Holienka M & Pilkova A, 2014. Impact of Intellectual Capital and its Components on Firm Performance Before and After Crisis. Electronic Journal of Knowledge Management, Volume 12 Issue 4.
- [14] Hamidu, Aminu Ahmadu; Haron, Harashid Md; Amran, Azlan, 2015. Corporate Social Responsibility: A Revie on Definitions, Core Characteristics and Theoretical Perspective. Meditrranean Journal of Social Sciences Vol 6 no 4, MCSER Publishing, Rome-Italy
- [15] Indra Sakti, SM, 2018. Analisis Regresi Data Panel Menggunakan Eviews. Universitas Esa Unggul, Jakarta Barat.
- [16] Kumar, Praveen, 2014. Impact of Corporate Social Responsibility on Organizational Performance with Reference to Selected Banks in India-Reviews and Conceptual Framework. 1st International Conference on Contemporary Management University of Jaffna.
- [17] Luqman S, Olawale; Bamidele M, Ilo; Fatai K, Lawal, 2017. The Effect of Firm Size on Performance of Firms in Nigeria. The IEB International Journal of Finance.
- [18] Matinfard, Mehran & Khavari, Ali, 2015. The Impact of Intellectual Capital on Firm Performance: Evidence FromTehran Stock Exchange. Management Science Letter.
- [19] Mercedes and Terrance, Jalbert,2011. Does Educational Background Affect CEO Compensation and Firm Performance? University of Hawai, The Institute for Business and Finance Research, USA.
- [20] Nickel, S, 1996. Competition and Corporate Performance. Journal of olitical Economy.
- [21] Oyelade, Aduralere Opeyemi, 2019. The Impact of Firm Size on Firm Performance n Nigeria: A Comparative Stud OfSelected Firms in The Building Industry in Nigeria. Asian Development Pilicy Review, Vol 7, No 1, 1-9.
- [22] Niresh, Alloy & Velhampy, T, 2014. Firm Size and Profitability: A Study of Listed Manufacturing Firms in Sri Lanka. International Journal of Business and Management, Vol 9, No. 4.
- [23] Ocran, Emanuel, 2011, The Effect of Corporate Social Responsibility (CSR) on Profitability of Multinational Companies, A Case Study of Nestle Ghana Limited.

- Kwame Nkrumah University of Science and Technology
- [24] Pulic A, 2000. VAIC: an accounting tool for IC Management. International Journal of Technology Management, Vol 20, No 8, pp 5-8
- [25] Papula, J. and Volná, J. (2011). Intellectual capital as value adding element in knowledge management, Knowledge as Business Opportunity. Proceeding of the Conference of the International School for Social and Business Studies, Celje, Slovenia, June.
- [26] Philip Kioko, Nzioka, 2010. The Relationship Between Firm Size and Financial Performance of Commercial Banks in Kenya. Thesis for the Degree of Master of Business Administration, University of Nairobi.
- [27] Rita Martini & Rulyanti Wardhani, 2016. Effect of Intellectual Capital ToReturn OnEquity (StudyOn Consumer Goods Industry listed in Indonesia Stock Exchange). International Journal of Business, Accounting and Management, Vol 1, Issue 2.
- [28] Selvarajah, Dilashenyi Devi; Murthy, Uma; Massilamany, Mathavi, 2018. The Impact of Corporate Social Responsibility on Firm's Financial Performance in Malaysia. International Journal of Business and Management, Vol 13, No 3
- [29] Selvam, Murugesan; Gayathri, Jayapal; Vasanth, Vinayagamoorthi; Lingaraja, Kaslingam; Marxioli, Sigo, 2016. Determinants of Firm Performance: A Subjective Model. International Journal of Social Science Studies, Vol 4, no 7.
- [30] Santos, Juliana Bonomi; Ledur Brito, Luiz Artur, 2012. Toward a Subjective Measurement Model for Firm Perfromance. BAR. Rio de Janeiro, V. 9, Special Issue art 6, pp. 95-117.
- [31] Trigueiros, Duarte, 2000. A Theoritical Definition and Statistical Description of Firm Size. The Annual Conference of The British Accounting Association, Exeter.
- [32] Wiwik Utami,.2015. FinancialPerformance and the Quality of Sustainability Disclosure Based on Global Reporting Initiative: Value Relevances Study in Indonesia Stock Exchange. Mediteranean Journal of Social Sciences, Vol 6, No 5.
- [33] Yisau Abiodun, Babalola, 2013. The Effect of Firm Size on Firms Profitability in Nigeria. Journal of Economics and Sustainable Development, Vol 4, No 5.