



UNIVERSITAS BHAYANGKARA JAKARTA RAYA

Kampus I : Jl. Darmawangsa I/1 Kebayoran Baru, Jakarta Selatan 12140 - Telp. : (021) 7231948, 7267655, Fax : (021) 7267657
Kampus II : Jl. Raya Perjuangan, Marga Mulya, Bekasi Utara - Telp. : (021) 88955882 Fax. : (021) 88955871
Website : www.ubharajaya.ac.id

SURAT KETERANGAN KLARIFIKASI TINGKAT SIMILARITAS ARTIKEL SKET/ 815 /XII/2018/UBJ

Rektor Universitas Bhayangkara Jakarta Raya dengan ini menerangkan bahwa:

Nama : Dr. Irma Setyawati, S.E., M.M
NIP : 196610011993032001
NIDN : 0001106601
Fakultas/Program Studi : Ekonomi/Magister Manajemen

Dosen sebagaimana di atas, telah melakukan publikasi karya ilmiahnya, sebagai berikut:

Nama artikel : Intellectual Capital and Corporate Governance in Financial Performance Indonesia Islamic Banking
Penulis : Sugeng Suroso, Tri Widiastuti, M. Noor Salim, Irma Setyawati
Nama jurnal : International Journal of Economics and Financial Issues
Volume : Volume 7, Issue 4
Tahun : Juli, 2017
Penerbit : EconJournals

Hasil *scan plagiarism* dengan menggunakan dengan menggunakan *software Turnitin*, pada tanggal 5 November 2018, ditemukan tingkat similitas sebesar 98%. Adapun klarifikasi yang kami berikan adalah:

1. econjournals.com sebesar 96%, berasal dari URL penerbit International Journal of Economics and Financial Issues di mana artikel tersebut diterbitkan.

a.

International Journal of Economics and Financial Issues

econjournals.com
Internet Source

International Journal of Economics and Financial Issues ISSN: 2146-4138 available at <http://www.econjournals.com> International Journal of Economics and Financial Issues, 2017, 7(4), 96-103. Intellectual Capital and Corporate Governance in Financial Performance Indonesia Islamic Banking Sugeng Suroso 1 *, Tri Widyastuti 2 , M. Noor Salim 3 , Irma Setyawati 4 1 University of Bhayangkara Jakarta Raya, Jakarta, Indonesia, 2 Pancasila University, Jakarta,

Intellectual Capital and Corporate Governance in Financial

/ b...

b.

https://www.econjournals.com/index.php/ijefi/article/view/4827

INTERNATIONAL JOURNAL OF ECONOMICS AND FINANCIAL ISSUES

HOME ABOUT LOGIN REGISTER SEARCH CURRENT ARCHIVES ANNOUNCEMENTS EDITORIAL BOARD
SUBMISSIONS INDEXING-ABSTRACTING CONTACT

Home > Vol 7, No 4 (2017) > Suroso

INTELLECTUAL CAPITAL AND CORPORATE GOVERNANCE IN FINANCIAL PERFORMANCE INDONESIA ISLAMIC BANKING

Sageng Suroso, Tri Widayanti, M. Nur Salim, Irma Seprensi

ABSTRACT

This study analyzes the influence of intellectual capital and corporate governance on the financial performance of the company. The data from eleven sharia banking in Indonesia. The analytical method used is Seemingly Unrelated Regression, with two dependent variables, namely return on asset (ROA) and asset growth (AG) and seven independent variables, namely human capital (HC), structural capital (SC), capital employed (CE), which is a sub variable of intellectual capital, and the board of size (BS), the board of demography (BD), the board of education (BE), the board of evaluation (BEV) is a sub variable of corporate governance. The results of this study indicate that intellectual capital has a positive and significant effect on return on assets, and no effect on asset growth. While corporate governance has a positive effect on return on assets and does not affect the growth of corporate assets.

Keywords: Intellectual capital, corporate governance, company's performance

JEL Classifications: D22, G21

OPEN JOURNAL SYSTEMS
Journal Help
USER
Username
Password
 Remember me

NOTIFICATIONS
View
Subscribe
JOURNAL CONTENT
Search
Search Scope
All

Browse
By Issue
By Author
By Title
Other Journals

- Submitted to Gulf University for Science and Technology sebesar 2%, terkait dengan kata-kata International Journal of Economics and Financial Issues yang merupakan footer dari nama jurnal di tiap-tiap halaman dari artikel

tion of agency theory is needed before
rate governance. Managers (agents) will try
personal interests that may be different from
company own
arise when a
performance,
rly when du

At present, good corporate governance (GCG) is a necessity to
improve accountability and transparency of banking management

< Submitted to Gulf University for Science & Te... >
Student Paper

Because submitted papers remain the intellectual property of their authors, instructors, and
respective institutions, we are unable to show you the content of this paper at this time. If you
would still like to view this paper, please click on the institution name above to submit a
permission request to the author's instructor.

2
International Journal of Economics and Financial Issues | Vol 7 • Issue 4 • 2017

1
Suroso et al.: Intellectual Capital and Corporate Governance in Financial Performance Indonesia Islamic Banking

/ Demikian...

Demikian surat pernyataan klarifikasi tingkat similitas artikel jurnal untuk dapat digunakan sebagaimana mestinya.

Jakarta, 07 Desember 2018

**REKTOR UNIVERSITAS BHAYANGKARA
JAKARTA RAYA**



Dr. H. BAMBANG KARSONO, Drs, S.H., M.M.
INSPEKTUR JENDERAL POLISI (PURN)



Intellectual Capital and Corporate Governance in Financial Performance Indonesia Islamic Banking

Sugeng Suroso^{1*}, Tri Widyastuti², M. Noor Salim³, Irma Setyawati⁴

1
¹University of Bhayangkara Jakarta Raya, Jakarta, Indonesia, ²Pancasila University, Jakarta, Indonesia, ³Mercu Buana University, Jakarta, Indonesia, ⁴University of Bhayangkara Jakarta Raya, Jakarta, Indonesia. *Email: sugengsuroso1@gmail.com

ABSTRACT

This study analyzes the influence of intellectual capital and corporate governance on the financial performance of the company. The data from 11 sharia banking in Indonesia. The analytical method used is seemingly unrelated regression, with two dependent variables, namely return on asset (ROA) and asset growth (AG) and seven independent variables, namely human capital, structural capital, capital employed, which is a sub variable of intellectual capital, and the board of size, the board of demography, the board of education (BE), the board of evaluation is a sub variable of corporate governance. The results of this study indicate that intellectual capital has a positive and significant effect on ROA, and no effect on AG. While corporate governance has a positive effect on ROA and does not affect the growth of corporate assets.

Keywords: Intellectual Capital, Corporate Governance, Company's Performance

JEL Classifications: D22, G21

1. INTRODUCTION

Knowledge has become the basis for regional economic growth and transforms the economic growth of production as output to the resource aspect as input. One important factor in the economy of a country is intellectual capital. Investment in intellectual capital will support national economic growth and improve economic performance. Intellectual capital is a pillar for economic growth in developing countries (Brooking, 1997).

The basic foundation of agency theory is needed before implementing corporate governance. Managers (agents) will try to maximize their personal interests that may be different from the interests of the company owner (Jensen and Meckling, 1976). Agency issues will arise when agents have good knowledge but poor morale and performance, thus neglecting responsibilities and performing poorly when duty is granted (Eisenhardt, 1989).

In general, the performance of Islamic banks is determined by internal and external factors. Internal determinants may include factors that affect the performance of banks, such as bank size, capital adequacy, asset quality, liability portfolio diversification,

overhead costs, liquidity ratio, human resources and ownership (Ramlall, 2009; Setyawati, 2016). Intellectual capital is capital owned by human resources, because intellectual capital is all the knowledge possessed by individuals within the organization that can generate value for the organization. By having qualified and competent human resources, it is possible for banks to have high intellectual capital (Cantu et al., 2009). Research on intellectual capital has been done by several researchers and found empirical evidence that intellectual capital improves company performance (Chen et al., 2005; Gan and Saleh, 2008).

At present, good corporate governance (GCG) is a necessity to improve accountability and transparency of banking management. The financial services authority has issued regulation No.8/POJK.03/2014 related to GCG implementation, viewed from the micro prudential side. In terms of macro prudential, in this case Bank Indonesia has issued Bank Indonesia Regulation No. 11/33/PBI/2009 regarding the implementation of GCG for Islamic banks and Islamic business units and Bank Indonesia Circular Letter No. 12/13/DPbS, April 30, 2010, on the implementation of GCG for Islamic banks and Islamic business units in realizing sustainable growth required a strong foundation for an enterprise

1
with a consistent and sustainable implementation. Several studies have found empirical evidence that corporate governance improves financial performance (Black and Khanna, 2007; Black et al., 2006; Brown and Caylor, 2009).

The purpose of this study is to analyze the influence of intellectual capital and GCG on the performance and the asset growth (AG) of sharia bank in Indonesia. This research is expected to have two contributions, first, improving the performance of the banking sector as knowledge-intensive, skill-based industries. The nature of the banking sector business requires highly intellectual personnel because the industry relies for its survival on large amounts of human capital (HC) and customer capital. Second contribution is avoiding possible conflicts that may arise agency that ultimately degrade the bank performance.

2. LITERATUR REVIEW

2.1. Intellectual Capital

Intellectual capital is the knowledge shared by everyone in an organization that can provide added value to an organization (Cantu et al., 2009). Intellectual capital is an intangible asset that is not displayed in the company's financial statements. If the asset is well managed, it is an advantage for the company as it will improve the organization's performance and generate added value in achieving competitive advantage (Cater and Cater, 2009).

Value added intellectual coefficient is a method used to measure the coefficient of intellectual capital. This method was discovered by Pulic (1998). This model is used to determine the efficiency of the overall value in the organization. The total value of the organization is the difference between output and input. The resulting value is profit from operations, personnel cost, depreciation and amortization. The contribution of physical capital to the added value is calculated as the ratio of physical capital used for the total value created. Based on the Scandia model, HC and structural capital (SC) are the main components of intellectual capital formers. The contribution of HC is calculated as the ratio between the personnel costs incurred on the added value obtained. While the contribution of SC is to calculate the ratio between capital structuring with added value generated.

1
With existing data on audited financial statements as inputs, the measurement of intellectual capital coefficients will be more objective and can be easily verified (Pulic, 1997). The formula for the intellectual capital of total value creation is:

$$AIC = \text{cost} + \text{capital contribution of human capital} = (VA/HC) + ([VA-HC]/VA)$$

VA (value added) = Total operating profit, personnel costs, depreciation, and amortization.

HC (human capital) = The amount of salaries and wages.

2.2. Corporate Governance Structure

The relationship between investors and corporate managers is put forward in the theory of genes that is the basis of the concept of governance. The agency theory explains that cooperation between

1
owner and manager is a must. Although this relationship cannot be separated from the conflict.

In the theory of governance, a good company can increase the value of a company's stock, reducing the risks that the board of directors can make with their favorable decisions. Good governance can further increase investor confidence to invest. In turn will have a positive effect on the value of the stock.

3. METHODOLOGY

This research attempts to test following hypotheses:

H₁: Intellectual capital positively impact on return on asset (ROA)

H₂: Corporate governance positively impact on ROA

H₃: Intellectual capital positively impact on AG

H₄: Corporate governance positively impact on AG.

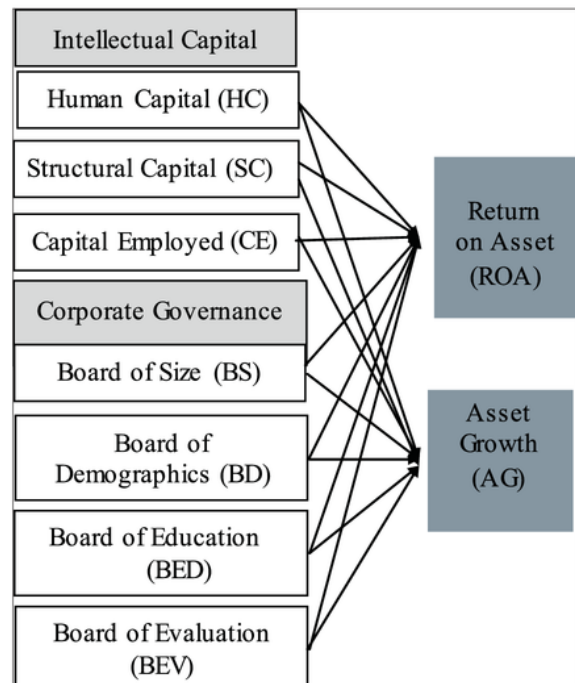
3.1. Proposed Model for Testing

This study developed a different model to examine the interaction between intellectual capital and corporate governance on financial performance using seemingly unrelated regression (SUR). The proposed model is presented in Figure 1. The model was tested by using Stata version 11.

3.2. Framework for the Study

This research focuses on empirical testing of models developed based on the proposed theoretical basis, that is intellectual capital and GCG variables. The data are taken from the report of Islamic bank publication in Indonesia, using monthly data during 2012-2014, so there are 396 observations.

Figure 1: Theoretical model for testing the relationship among variables



Source: Data processed, 2017

1

3.3. Performance Measurement

In this research, company performance is measured by ROA and AG, as the dependent variable. ROA shows the use of assets held to generate profits per dollar. ROA is very important to show the ability of managers in managing banks in the use of assets owned to generate profits (Hassan and Bashir, 2003; Setyawati, 2016; Setyawati et al., 2015). Intellectual capital acts as a competitive advantage factor, especially for the banking sector, as the efficiency of intellectual capital is critical to the welfare, growth and development of cutting-edge strategies. The banking sector has an intensive intellectual or personnel business nature and it takes more intellectually homogeneous human resources than any other economic sector. With the increasing complexity and competition in the banking sector, competitiveness is influenced by the quality of human intellectual capital and the ability to utilize it (Lipunga, 2015). Governance related to the ownership of the company, as it relates to the parties working for the owner. If not managed properly, will lead to agency conflict.

Another measure to evaluate company performance is company growth. The growth of the company can be seen from the development of its asset value. Total bank assets are often used as a measure of bank growth, because total asset's bank cover all aspects of growth, while other company growth measures, such as loans or income are very rarely used (Setyawati and Suroso, 2016).

3.4. Intellectual Capital

Intellectual capital as independent variable, that consists of sub variants, that are HC, SC, and capital employed (CE).

3.5. HC

HC is the most important element of intellectual capital and is an important source of sustainable competitive advantage. HC consists of individual education, skills, values and experience. These elements, vary with each company and not permanently in an organization (Cabrita and Bontis, 2008). Intellectual capital consists of the competence and commitment of employees (intellectual capital = competence × commitment), which will lead the company to other positive such as customer loyalty, productivity and work performance (Dave, 1998). Some research finds a strong positive relationship between HC with company performance (Bontis and Fitz-enz, 2002; Cabrita and Bontis, 2008; Joshi et al., 2010; Seleim et al., 2007; Wang and Chang, 2005).

3.6. SC

SC is a strategic asset that is important and valuable, which consists of non-human assets such as information systems, routines, procedures and databases. SC is the building and the size of the organization, as it provides information, tools and architectures to preserve, package and transferring knowledge throughout the value chain. SC as the knowledge generated by an organization and cannot be separated from the entity (Cabrita and Bontis, 2008; Joshi et al., 2010). SC has a significant positive effect on company performance (Hajeb et al., 2015; Piluso, 2013; Rehman et al., 2012; Rehman et al., 2011; Ulum et al., 2014).

3.7. CE

CE is an indicator of value added (VA) that is created by one unit of physical capital. Value added is an indicator to assess business success and demonstrate the company's ability in value creation. If one unit of CE produces a higher rate of return than another company, it means the company is better at using its CE. CE is the total investment of organization in the form of material or the amount of investment invested to increase total assets by the organization (Aslam et al., 2014; Ismail and Nik, 2009). From several studies, CE has a positive effect on company performance (Rehman et al., 2012; Rehman et al., 2011; Ulum et al., 2014).

3.8. Corporate Governance

Corporate governance as independent variable, that consists of sub variants, that are board of size (BS), board of demographics (BD), board of education (BED), and board of evaluation (BEV). Good corporate performance is gained from the management of GCG, whereby firms that run the business activities in accordance with established provisions, will perform better than companies that have bad rules (Antwi and Binfor, 2013; Hassan and Marimuthu, 2016; Hassan et al., 2014; Nanka-Bruce, 2011).

3.9. BS

The BS is one of the corporate governance mechanisms, providing compensation and incentives to board members or top executives with the aim of minimizing agency conflicts (Antwi and Binfor, 2013; Gill and Mathur, 2011). In this research, BS measured by the number of directors in the company. In several studies, BS has a significant negative effect on company performance (Bennedsen et al., 2008; Chiang and Lin, 2011; Gill and Mathur, 2011; Hassan and Marimuthu, 2016; Hassan and Farouk, 2014; Nath et al., 2015; Rashid et al., 2010; Rouf, 2011), because when the number of directors increases, there is a problem of coordination, communication and decision making. The possibility that can happen, is a trade-off in the board, if the number of members increased, so that it can further hamper the company's performance (Uadiale, 2010).

3.10. BD

Demographic of diversity consists of members of the director who have different characteristics and backgrounds, such as gender, age, and ethnicity. Such differences can lead to benefits for the company's success (Hassan et al., 2015; Hassan and Farouk, 2014). In this study, BD was measured by the age of the director. From various studies, the BD has a negative and significant effect on company performance (Bennedsen et al., 2008; Chiang and Lin, 2011; Darmadi, 2011; Hassan et al., 2015; Nath et al., 2015).

3.11. BE

Board of commissioners who have a business education background, usually have an effect on their knowledge, although it is not a must for business actors to have business education, but it would be better if the board of commissioners have a business education background. The board of commissioners shall consist of persons knowledgeable of accounting and financial procedures to ensure that they are able to provide better disclosure to shareholders and the public (Renee, 2010). In this study, BE is measured by the education level of the director. The level of education of the board of commissioners has a negative effect on

1
the company performance (Tulung, 2010). While the other studies, states that directors who have high school education level have a negative effect on company performance, but directors who have the level of undergraduate education have a positive influence On company performance (Basyith, 2016).

3.12. BEV

Good governance requires an effective board of commissioners, as it should evaluate and assess management performance at least once a year. The evaluation process is a constructive mechanism to improve board effectiveness, maximize strength and overcome weaknesses, leading to a direct improvement in the performance of the entire organization (Chiang and Lin, 2011). In this study, a proxy of the number of director meetings will be used as the basis for determining the BEV. By using controlling size as a proxy of the BEV, it was found that BEV has a positive effect on company performance (Chiang and Lin, 2011).

3.13. Econometric Specification

In this study used panel data in making estimation, research data has two dimensions, that are cross-section and time-series (Jeffrey, 2009). To examine the relationship between ROA and assets growth as the dependent variable with intellectual capital and corporate governance, was used SUR. Seemingly unrelated regression model is part of a multivariate regression. SUR can be estimated using several methods such as maximum likelihood, generalized least square (GLS) and feasible GLS methods (Greene, 2002).

3
estimation model used in this research, that is:

$$ROA_{it} = \alpha_0 + \beta_1 HC_{it} + \beta_2 SC_{it} + \beta_3 CE_{it} + \beta_4 BS_{it} + \beta_5 BD_{it} + \beta_6 BE_{it} + \beta_7 BEV_{it} + e_{it} \quad (1)$$

$$AG_{it} = \alpha_1 + \beta_8 HC_{it} + \beta_9 SC_{it} + \beta_{10} CE_{it} + \beta_{11} BS_{it} + \beta_{12} BD_{it} + \beta_{13} BE_{it} + \beta_{14} BEV_{it} + e_{it} \quad (2)$$

The SUR model, as shown in equations 1 and 2, is resolved with the least square fixed effect approach, ordinary least square (OLS) test, such as multicollinearity, heteroscedasticity, and autocorrelation tests are required. The fixed effect remains selected, rather than random effects, after the Hausman test. Another reason to choose a fixed effect is the amount of research time (T) is greater than the number of individual/Islamic banking in Indonesia (N), so the use of fixed effect panel data model is more appropriate. In addition, by using fixed effect panel model, it will show the individual effect of each Islamic bank (Greene, 2002; Kenward and Roger, 1997; White, 1980).

Base on Appendix 1: The OLS test consisting of multicollinearity, heteroscedasticity, and autocorrelation tests. The correlation coefficient between independent variables showed by multicollinearity test, where if the partial correlation value between independent variables is <0.8, it means there is no multicollinearity between independent variable. In Appendix 2, heteroscedasticity test performed by Bruesch-Pagan Lagrange Multiplier test (L-BP test) and likelihood ratio test (LR test), where P < 0.05, which means that the model variance structure is not heteroscedastic. While Appendix 3: The Wooldridge test for autocorrelation, the P < 0.05, indicating the absence of autocorrelation (Gujarati and Porter, 2010).

Table 1: Estimation result

Variable	Model 1	Model 2
	Dependent variable ROA	Dependent variable AG
INTERCEPT	+0.0308455*** (0.00496707)	+0.0156702*** (0.003185)
HC	-0.0011487* (0.0000373)	+0.0005212 (0.003)
SC	+0.0206574*** (0.003118)	+0.0329586 (0.0324113)
CE	+0.0274869*** (0.0016499)	+0.0175771 (0.0171504)
BS	+0.00124** (0.0005158)	+0.0054284 (0.031)
BD	-0.0017781*** (0.0003649)	-0.0062558* (0.0037928)
BE	+0.0353703*** (0.0080724)	+0.1496402* (0.031)
BEV	-0.0000074 (0.0001724)	-0.0002173 (0.0002632)
R ²	0.6599	0.7250
F (prob)	0.0000	0.0000

****Indicates significant at the 1%, 5%, and 10% levels respectively

4. RESULT AND DISCUSSION

4.1. Empirical Result

Test F statistics (global test), indicates that models 1 and 2 are significant, because the p value < 0.05, so the model is appropriate and can describe the dependent variable. Model 1 has R² of 66%, meaning that the variation of ROA can be explained by the variation of its independent variables, while 34% is explained by variations of other variables, which are not in the model. Model 2 has R² of 72.5%, meaning that variation of AG can be explained by the variation of the independent variable, while 34% is explained by variations of other variables, which are not in the model. Table 1 shows the summary of the dependent variable and its explanatory variables.

Estimation results of the research model (model 1), as follows:

$$ROA_{it} = 0.031 - 0.001HC_{it} + 0.021SC_{it} + 0.027CE_{it} + 0.001BS_{it} - 0.002BD_{it} + 0.035BE_{it} - 0.0000074BEV_{it}$$

In the first model, HC, SC, CE, BS, BD, and BE have a significant effect on ROA, meaning HC, SC, CE, BS, BD, BE may affect ROA in any Islamic bank in Indonesia. HC has a significant negative effect on ROA, thus, Islamic banks in Indonesia has not fully apply the values of micro (aspects of competence/professionalism and attitude of trust), so it has not seen the spirit of human resource development to better implement the role of Islamic economics in work and life. Some research suggests the intellectual capital have a negative impact on profitability (Chen et al., 2005; Diez et al., 2010; Maditinos et al., 2011; Mondal and Ghosh, 2012).

SC has a significant positive effect on ROA. This shows that the level of profit earned by Islamic banks in Indonesia is significantly affected by SC, its meaning that the organization of Islamic banks in Indonesia have good systems and procedures. However, if it

1

is associated with a negative effect between HC and ROA, then the business expansion undertaken by Islamic banks in Indonesia has not used sufficient human resource competence to exploit expansion. SC efficiency has increased with increasing ROA, but not yet fully supported by HC. Some studies have shown that SC has a significant positive effect on ROA (Rehman et al., 2012; Rehman et al., 2011; Salman et al., 2012). While other research states that there is no statistically significant influence between SC and ROA on the banking sector in Turkey (Ozkan et al., 2016). The SC has no significant effect on profitability in financial institutions in Malaysia and Australia (Joshi et al., 2013; Ting and Lean, 2009).

CE has a significant positive effect on ROA. This indicates that the high value of CE, Islamic banks in Indonesia are able to utilize the CE. If one unit of CE produces greater profits than other companies, then the company is better able to use its CE. Thus, a better utilization of the CE is part of the intellectual capital of companies (Pulic, 1998; Pulic, 2016). Several studies shown that CE has a positive effect on the value added banking in Indonesia (Rehman et al., 2012; Rehman et al., 2011; Ulum et al., 2014).

BS has a significant positive effect on ROA. The number of board membership more, can increase the number of variations of the skills and capabilities of the board (Daily et al., 1999; Eisenberg et al., 1998; Naranjo-Gil et al., 2008; Raheja, 2005), but often they will be more difficult to coordinate because of the amount of interaction is more among the members of the board. In some studies, BS has a significant negative effect to profitability (Bennedsen et al., 2008; Chiang and Lin, 2011; Hassan and Farouk, 2014; Nath et al., 2015; Rashid et al., 2010; Rouf, 2011).

BD has a significant negative effect on ROA, shows that the board of commissioners' age reflected in the BD has a significant negative effect on ROA, meaning that the board of commissioners has not been able to increase profits and has not increased the internal operation of Islamic banks in Indonesia. In some research the BD and ROA has a negative and significant effect (Bennedsen et al., 2008; Darmadi, 2011; Hassan et al., 2015).

BE has a significant positive effect on ROA, is meaning that BE significantly affect the increase of ROA. BE of commissioners has a negative effect on ROA (Tulung, 2010). The other research states, if the education from director of high school level, it will have a negative influence on ROA, while the BE undergraduate level will have a positive effect on ROA (Basyith, 2016).

Base on Appendix 4, Maybank Syariah Indonesia has a highest constant value, because Maybank Syariah profitability management is good. Although the presence of Maybank Syariah Indonesia is relatively new in Indonesia's Islamic banking industry and is the only mixed Islamic bank, it is active in the utilization of its assets into productive assets with the support of competent resources in its field. In addition, in 2013, Maybank Syariah Indonesia awarded Infobank magazine with a very good predicate of performance.

Estimation results of the research model (model 2), as follows:

$$AG_{it} = 0.016 + 0.001HC_{it} + 0.033SC_{it} + 0.018CE_{it} + 0.005BS_{it} - 0.006BD_{it} + 0.115BE_{it} - 0.0002BEV_{it}$$

In the second model, BD and BE have significant effect on AG, meaning BD and BE may affect AG in any Islamic bank in Indonesia. BD has a significant negative effect on AG. The proxy used by the BD is the age of the board of commissioners, because age can be considered as the level of experience and risk taking. Young managers are more likely to engage in risky strategies, and companies with young managers will experience higher growth than firms with older managers (Hambrick and Mason, 1984). By using Tobin Q as the dependent variable and age as independent variable, the age of board of commissioner <50 years become the respondent. The results showed that age has a positive and significant effect on Tobin Q (Darmadi, 2011). While other studies suggest that age has a positive effect on Tobin Q and significant negative effects on Altman Z Score (Topal and Dogan, 2014).

BE has a significant negative effect on AG. The proxy used by the BEV is the number of meetings held by the board of commissioners. The meetings are held to discuss company plans, supervise and control the activities undertaken by management and make decisions on issues raised in the meeting, such as seat-right control, stock-right control, earning distribution right, shareholder's profit target (Chiang and Lin, 2011).

Based on Appendix 5, Bank Muamalat Indonesia has a highest constant value, because since its establishment on 27 Syawal 1412 Hijriah (1992 AD), it has opened a service for people who want to conduct sharia-based financial transactions. Bank Muamalat Indonesia is positioned as the first pure Islamic banking, besides being equipped with the widest real time network on line advantage in Indonesia and providing services through 312 outlets spread over 33 provinces, supported by a network of over 3800 online Post Offices throughout Indonesia (Setyawati, 2016).

5. CONCLUSION

This study found that the ROA of Islamic banks in Indonesia is affected by HC, SC, CE, BS, BD, and the BE. While AG of Islamic banking in Indonesia affected by the BD, and the BE. It is very interesting in this study is that HC has a effect on ROA, but it does not affected on AG in Islamic banks. This shows that Islamic banks have low HC, because less supported by intellectual capital, emotional capital, social capital, fortitude capital, moral capital and health capital. Therefore, Islamic bank is expected to apply the micro values for its human resources, so that profitability and AG can be achieved.

Likewise, BD has a negative effect on ROA and AG. BD is shown by the board's age, where age can be considered as the level of experience and risk taking. The younger board of directors is more likely to engage in risky strategies than the old board of directors. Islamic banking in Indonesia requires a board of directors of youth to further develop and expand Islamic business.

In the future, this research can be continued by using different proxies, such as gender, ethic, board composition, board ownership and CEO duality.

REFERENCES

- Antwi, S., Binfor, F. (2013), The effect of corporate governance on strategic change in financial institutions: Evidence from Ghana. *International Journal of Academic Research in Business and Social Sciences*, 3(3), 159-179.
- Aslam, S., Makki, M., Nawaz, H.M.S., Latif, M. (2014), Mediating role of intellectual capital efficiency in capital structure and financial performance of quoted banks of Pakistan. *Research Journal of Finance and Accounting*, 5(17), 141-150.
- Basyith, A. (2016), Corporate governance, intellectual capital and firm performance. *Research in Applied Economics*, 8(1), 17.
- Bennedsen, M., Kongsted, H.C., Nielsen, K.M. (2008), The causal effect of board size in the performance of small and medium-sized firms. *Journal of Banking and Finance*, 32(6), 1098-1109.
- Black, B.S., dan Khanna, V. (2007), Can corporate governance reforms increase firm market values? Event study evidence from India. *Journal of Empirical Legal Studies*, 4, 749-796.
- Black, B., Jang, H., Kim, W. (2006), Does corporate governance affect firms' market values? Evidence from Korea. *Journal of Law, Economics and Organization*, 22, 366-413.
- Bontis, N., Fitz-Enz, J. (2002), Intellectual capital ROI: A causal map of human capital antecedents and consequents. *Journal of Intellectual Capital*, 3(3), 223-247.
- Brooking, A. (1997), The management of intellectual capital. *Journal of Long Range Planning*, 30(3), 364-365.
- Brown, L., Caylor, M. (2009), Corporate governance and firm operating performance. *Review of Quantitative Finance and Accounting*, 32(2), 129-144.
- Cabrita, M.D.R., Bontis, N. (2008), Intellectual capital and business performance in the Portuguese banking industry. *International Journal of Technology Management*, 43(1), 212-237.
- Cantú, F.J., Bustani, A., Molina, A., Moreira, H. (2009), A knowledge-based development model: The research chair strategy. *Journal of Knowledge Management*, 13(1), 154-170.
- Cater, T., Cater, B. (2009), Tangible resources as antecedents of a company's competitive advantage and performance. *Journal for East European Management Studies*, 14(2), 186-209.
- Chen, M., Cheng, S., Hwang, Y. (2005), An empirical investigation of the relationship between intellectual capital and firms' market value and financial performance. *Journal of Intellectual Capital*, 6(2), 159-176.
- Chiang, H.T., Lin, M.C. (2011), Examining board composition and firm performance. *The International Journal of Business and Finance Research*, 5(3), 15-27.
- Daily, C.M., Johnson, J.L., Dalton, D.R. (1999), On the measurements of board composition: Poor consistency and a serious mismatch of theory and operationalization. *Decision Sciences*, 30(1), 83-106.
- Darmadi, S. (2011), Board diversity and firm performance: The Indonesian evidence. *Corporate Ownership and Control*, 9(1F), 524-539.
- Dave, U. (1998), Intellectual capital - Competence x commitment. *Sloan Management Review*, 39(2), 5.
- Díez, J.M., Ochoa, M.L., Prieto, M.B., Santidrián, A. (2010), Intellectual capital and value creation in Spanish firms. *Journal of Intellectual Capital*, 11(3), 348-367.
- Eisenberg, T., Sundgren, S., Wells, M.T. (1998), Larger board size and decreasing firm value in small firms. *Journal of Financial Economics*, 48(1), 35-54.
- Gan, K., Saleh, Z. (2008), Intellectual capital and corporate performance of technology-intensive companies: Malaysia evidence. *Asian Journal of Business and Accounting*, 1(1), 113-130.
- Gill, A., Mathur, N. (2011), Board size, CEO duality, and the value of Canadian manufacturing firms. *Journal of Applied Finance and Banking*, 1(3), 1-13.
- Greene, W.H. (2002), Econometric analysis. *Journal of the American Statistical Association*, 97, 1167-1179.
- Gujarati, D.N., Porter, D.C. (2010), *Essentials of Econometrics*. New York: McGraw Hill/Irwin.
- Hajeb, H.R., Moghaddam, A.G., Alipour, S. (2015), An investigation of intellectual capital impact on companies' market value and financial performance. *Academic Journal of Accounting and Economic Research*, 4(3), 131-139.
- Hambrick, D.C., Mason, P.A. (1984), Upper echelons: The organization as a reflection of its top manager. *The Academy of Management Review*, 9(2), 193-206.
- Hassan, M.K., Bashir, A.H. (2003), Determinants of Islamic Banking Profitability. 10th ERF Annual Conference. Vol. 7. Morocco.
- Hassan, R., Marimuthu, M. (2016), Corporate governance, board diversity, and firm value: Examining large company using panel data approach. *Economics Bulletin*, 36(3), 1737-1750.
- Hassan, S.U., Farouk, M.A. (2014), Board of director's characteristics and performance of listed deposit money banks in Nigeria. *Journal of Finance and Bank Management*, 2(1), 89-105.
- Ismail, M.K.A., Nik, M.N.M. (2009), Intellectual capital efficiency and firm's performance: Study on Malaysian financial sectors. *International Review of Economics and Finance*, 1(2), 206-212.
- Jeffrey, M.W. (2009), *Introductory Econometrics*. London: Nelson Education, Ltd.
- Jensen, M.C., Meckling, W.H. (1976), Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Joshi, M., Cahill, D., Sidhu, J. (2010), Intellectual capital performance in the banking sector: An assessment of Australian owned banks. *Journal of Human Resource Costing and Accounting*, 14(2), 151-170.
- Joshi, M., Cahill, D., Sidhu, J., Kansal, M. (2013), Intellectual capital and financial performance an evaluation of the Australian financial sector. *International Journal of Logistics Management*, 14(2), 264-285.
- Kathleen, M.E. (1989), Building theories from case study research. *Academy of Management Review*, 14(4), 532-565.
- Kenward, M.G., Roger, J.H. (1997), Small sample inference for fixed effects from restricted maximum likelihood. *Biometrics*, 53(3), 983-997.
- Lipunga, A.M. (2015), Intellectual capital performance of the commercial banking sector of Malawi. *International Journal of Business and Management*, 10(1), 210-222.
- Maditinos, D., Chatzoudes, D., Tsairidis, C., Theriou, G. (2011), The impact of intellectual capital on firms' market value and financial performance. *Journal of Intellectual Capital*, 12(1), 132-151.
- Mondal, A., Ghosh, S.K. (2012), Intellectual capital and financial performance of Indian banks. *Journal of Intellectual Capital*, 13(4), 515-530.
- Nanka-Bruce, D. (2011), Corporate governance mechanisms and firm efficiency. *International Journal of Business and Management*, 6(5), 28-41.
- Naranjo-Gil, D., Hartmann, F., Maas, V.S. (2008), Top management team heterogeneity, strategic change and operational performance. *British Journal of Management*, 19(3), 222-234.
- Nath, S.D., Islam, S., Saha, A.K. (2015), Corporate board structure and firm performance: The context of pharmaceutical industry in Bangladesh. *International Journal of Economics and Finance*, 7(7), 106-115.
- Ozkan, N., Cakan, S., Kayacan, M. (2016), Intellectual capital and financial performance: A study of the Turkish banking sector. *Borsa Istanbul Review*, 20, 1-9.
- Piluso, F. (2013), Intangible assets and profitability in the Italian banking industry: Which relationship? *Borsa Istanbul Review*, 1(2), 1-15.

Pulic, A. (1998), Measuring the Performance of Intellectual Potential in Knowledge Economy. In: The 2nd McMaster World Congress on Measuring and Managing Intellectual Capital by the Austrian Team for Intellectual Potential. p1-20.

Pulic, A. (2016), The Principles of Intellectual Capital Efficiency - A Brief Description. Burlington, USA: Butterworth-Heinemann.

Raheja, C.G. (2005), Determinants of board size and composition: A theory of corporate boards. *Journal of Financial and Quantitative Analysis*, 40(2), 283-290.

Ramlall, I. (2009), Bank-specific, industry-specific and macroeconomic determinants of profitability in Taiwanese banking system: Under panel data estimation. *International Research Journal of Finance and Economics*, 34(34), 160-167.

Rashid, A., De Zoysa, A., Lodh, S., Rudkin, K. (2010), Board composition and firm performance: Evidence from Bangladesh. *Finance Journal Australasian Accounting, Business and Finance Journal*, 4(41), 76-95.

Rehman, W., Rehman, C.A., Rehman, H., Zahid, A. (2011), Intellectual capital performance and its impact on corporate performance: An empirical evidence from Modaraba sector of Pakistan. *Australian Journal of Business and Management Research*, 1(5), 8-16.

Rehman, W.U., Rehman, H.U., Usman, M., Asghar, N. (2012), A link of intellectual capital performance with corporate performance: Comparative study from banking sector in Pakistan. *International Journal of Business and Social Science*, 3(12), 313-321.

Renee, A., Hermalin, B.E., Weisbach, M.S. (2010), The role of boards directors in corporate governance : A conceptual framework & survey. *Journal of Economic Literature*, 48(1), 58-107.

Rouf, M.A. (2011), The relationship between corporate governance and value of the firms in developing countries : Evidence from Bangladesh. *The International Journal of Applied Economics and Finance*, 5(3), 237-244.

Seleim, A., Ashour, A., Bontis, N., Seleim, A., Ashour, A., Bontis, N. (2007), Human capital and organizational performance: A study of Egyptian software companies. *Management Decision*, 45(4), 789-801.

Setyawati, I. (2016), Determinants of growth and profitability by bank specific variable and market structure in Islamic banking in Indonesia. *Academy of Strategic Management Journal*, 15(3), 1-14.

Setyawati, I., Kartini, D., Rachman, S., Febrian, E. (2015), Assessing the Islamic banking financial performance in Indonesia. *International Journal of Education and Research*, 3(10), 233-248.

Setyawati, I., Suroso, S. (2016), Determinants growth of total assets by bank specific variable and market share in Islamic banking in Indonesia, period 2011-2015. *Journal of Economic Education*, 5(1), 52-68.

Ting, I.W.K., Lean, H.H. (2009), Intellectual capital performance of financial institutions in Malaysia. *Journal of Intellectual Capital*, 10(4), 588-599.

Topal, Y., Dogan, M. (2014), Impact of board size on financial performance: The case of BIST manufacturing industry. *International Journal of Business Management and Economic Research (IJBMER)*, 5(4), 74-79.

Tulung, J.E. (2010), The case of Indonesian mining companies. *International Research Journal of Business Studies*, 2(3), 169-181.

Uadiale, O.M. (2010), The impact of board structure on corporate financial performance in Nigeria. *International Journal of Business and Management*, 5(10), 155-166.

Ulum, I., Ghozali, I., Purwanto, A. (2014), Intellectual capital performance of Indonesian banking sector: A modified VAIC (M-VAIC) perspective. *Asian Journal of Finance and Accounting*, 6(2), 103-110.

Wang, W., Chang, C. (2005), Intellectual capital and performance in causal models. *Journal of Intellectual Capital*, 6(2), 222-236.

White, H. (1980), *Econometrica*. *Journal of the Econometric Society*, 48(4), 817-838.

1
APPENDIX

Appendix 1: Multicollinearity test

	gpa	ku	ke	ca	ba	bd	ba	new
gpa	1.0000							
ku	0.0923 0.0666	1.0000						
ke	-0.4586 0.0000	0.2254 0.6148	1.0000					
ca	0.2416 0.0000	0.2642 0.2020	0.8075 0.0000	1.0000				
ba	0.4941 0.0000	0.2410 0.4138	-0.1228 0.0144	0.0573 0.2573	1.0000			
bd	0.0231 0.6426	0.2809 0.2086	-0.2170 0.0000	-0.0298 0.5541	0.4620 0.0000	1.0000		
ba	-0.0942 0.0412	-0.3133 0.7413	0.0027 0.9543	-0.0039 0.9384	0.1413 0.0049	0.3258 0.0000	1.0000	
new	0.1703 0.0007	0.2803 0.2628	-0.4315 0.0000	-0.2826 0.0000	0.0479 0.5417	-0.2675 0.0000	-0.4991 0.0000	1.0000
new	-0.0482 0.1754	-0.2149 0.7691	-0.1392 0.0015	-0.0384 0.4464	0.0087 0.8942	-0.2488 0.0000	-0.0872 0.1914	0.4148 0.0000

1 Appendix 2: Heteroscedasticity test

```

. reg roa hc sc ce bs bd be bev
-----+-----
Source |           SS           df           MS           Number of obs =       396
-----+-----
Model |   0.17714472         7   .02530639           F( 7, 388) =       76.34
Residual |   0.12861781       388   .00033149           Prob > F =       0.0000
Total |   0.30576253       395   .00077408           R-squared =       0.5794
                                           Adj R-squared =     0.5718
                                           Root MSE =       .00878

-----+-----
roa |           Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-----+-----
hc |   -.0008195   .0003964     2.07   0.039   -.0016131   -.0000259
sc |   .0175041   .0029712    5.89   0.000   .0115623   .0234458
ce |   .0242646   .0015383   15.77   0.000   .0212401   .0272893
bs |   -.0017793   .0003002   -5.93   0.000   -.0026894   -.0008692
bd |   -.0002755   .0001657   -1.66   0.097   -.0008004   .0002594
be |   -.0026643   .0029335   -0.91   0.364   -.0084318   .0031033
bev |   -.000028   .0000137   -2.04   0.042   -.0003555   .0003000
_cons |   -.0097003   .0122416   -0.79   0.429   -.0337685   .0143668

. hettest
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of roa
chi2(1) = 379.29
Prob > chi2 = 0.0000

. reg pta hc sc ce bs bd be bev
-----+-----
Source |           SS           df           MS           Number of obs =       396
-----+-----
Model |   1.19775507         7   .00499055           F( 7, 388) =       1.13
Residual |   1.19775507       388   .00308698           Prob > F =       0.9411
Total |   2.39551014       395   .00607797           R-squared =       0.0200
                                           Adj R-squared =     0.0024
                                           Root MSE =       .05556

-----+-----
pta |           Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-----+-----
hc |   -.0033243   .0038255   -0.87   0.385   -.0108456   .0041977
sc |   -.0506029   .0286729   -1.76   0.078   -.1069755   .0057717
ce |   -.0118358   .0148447   -0.80   0.428   -.0410217   .0173507
bs |   -.0026745   .0028965   -0.92   0.356   -.0084694   .0031204
bd |   -.0015472   .0015994   -0.97   0.334   -.0046918   .0015974
be |   .0388539   .0283085   1.37   0.171   -.0167974   .0945173
bev |   -.0001801   .0001325   -1.36   0.175   -.0004006   .0000404
_cons |   -.1242847   .1181335   -1.05   0.293   -.3566467   .1079772

. hettest
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of pta
chi2(1) = 13.78
Prob > chi2 = 0.0002
    
```

Appendix 3: Autocorrelation tests

```

. xtserial roa hc sc ce bs bd be bev
Wooldridge test for autocorrelation in panel data
Ho: no first order autocorrelation
F( 1, 10) = 0.869
Prob > F = 0.3766

. xtserial pta hc sc ce bs bd be bev
Wooldridge test for autocorrelation in panel data
Ho: no first order autocorrelation
F( 1, 10) = 0.891
Prob > F = 0.3675
    
```

Appendix 4: Individual effects (first model)

Bank	Effect	Constant
BCA Syariah	0.030845	0.03084
Jabar Banten Syariah	0.011155	0.04200
BNI Syariah	0.012600	0.04344
BRI Syariah	0.014323	0.04516
Syariah Bukopin	0.003033	0.03387
Syariah Mandiri	0.000365	0.03121
Maybank Syariah	0.034741	0.06558
Syariah Mega Indonesia	-0.003657	0.02718
Muamalat Indonesia	0.018987	0.04983
Panin Syariah	0.008026	0.03887
Victoria Syariah	0.001452	0.03229

Appendix 5: Individual effects (second model)

Bank	Effect	Constant
BCA Syariah	0.015670	0.01567
Jabar Banten Syariah	0.0334161	0.04909
BNI Syariah	0.0253737	0.04104
BRI Syariah	0.0409034	0.05657
Syariah Bukopin	-0.0101183	0.00555
Syariah Mandiri	-0.0245245	-0.00885
Maybank Syariah	0.0427426	0.05841
Syariah Mega Indonesia	-0.0422714	-0.02660
Muamalat Indonesia	0.0588039	0.07447
Panin Syariah	0.021904	0.03757
Victoria Syariah	-0.010597	0.00507

ORIGINALITY REPORT

98%

SIMILARITY INDEX

98%

INTERNET SOURCES

16%

PUBLICATIONS

90%

STUDENT PAPERS

PRIMARY SOURCES

1

econjournals.com

Internet Source

96%

2

Submitted to Gulf University for Science & Technology

Student Paper

2%

3

Submitted to Universitas Siswa Bangsa Internasional

Student Paper

<1%

Exclude quotes On

Exclude matches Off

Exclude bibliography On