



Intellectual Capital: The Cutting Edge of Firm Performance and Competitive Advantage

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ABSTRACT: The study aimed to determine the impact of intellectual capital on firm performance and competitive advantage of the three main players of the banking industry: Bank A, Bank B, and Bank C, in Malolos City, Bulacan. The respondents are key officers and staff of the aforementioned firms. Secondary data were taken from the firms' consolidated audited financial statements for the periods 2016 and 2017. Data gathered were submitted to a multivariate multiple regression analysis. Results revealed that collectively, intellectual capital constructs do not have a significant impact on firm performance as determined by return on assets (ROA) and return on equity (ROE). Individually, it was found that only customer/relational capital has impacted firm performance significantly. Conversely, intellectual capital significantly impact the firms' competitive advantage. Findings imply that the soundness of financial measures ensure the stability of the banking system. ROA and ROE are different, but together they offer a clear picture of management's efficiency and efficacy.

KEYWORDS: intellectual capital, competitive advantage. Firm performance, ROA, ROE, human capital, structural capital, relational capital, value, rarity, inimitability, organization

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I. INTRODUCTION

Intellectual capital or IC has become one of the most critical resources and influential element of value creation in the 21st century and has become more important for organizations oriented towards the future (Todericiu and Stanit, 2015). It is now an accepted fact that, just like financial capital or commodities or labor, IC is more than just an economic asset - it also forms the basis of a global market (Omotayo, 2015). What was once a quiet junction of the industry is now becoming a hot area in the business world.

These dynamic changes have significant implications for companies large and small. They also have implications for governments, which need to provide balance in their operational and management systems since these can be used to both promote and inhibit innovations. Companies and nations must evolve their thinking or risk losing out as IC becomes even more important in the global economy.

The increasing difference between the accounting book value of companies and their market value implies that physical and tangible assets are somehow losing their importance. There are empirical evidences (Ahmadi et al., 2012; Al-Nosur, et al., 2012; Jardon and Maltos, 2012; Hussinki et al., 2017) that the company's IC is the primary value creator rather than its physical and financial capital. In case of knowledge-intensive companies, where tangible assets and resources comprise between 15% to 25% of the firm value (Riley and Robinson, 2011), the main competitive advantage and firm performance come from their intangible or intellectual resources.

Traditional measures of a company's performance, based on conventional accounting principles, may be unsuitable in the knowledge-based economy which is driven by IC (Gan & Saleh, 2008). Although intellectual capital and knowledge assets are difficult to discern and quantify, their results are nonetheless reflected in the company's higher productivity and performance, efficiency, and overall profitability. The limitations of financial statements in defining company value underline the fact that the "source of economic value is no longer the production of material goods, but the creation of intellectual capital" (Chen, Cheng & Yuchang, as cited in Berzkalnea & Zelgalve, 2014).

Many papers were published on intellectual capital (IC) and company performance. The results by Chen, Cheng, & Yuchang (as cited in Berzkalne & Zelgalve, 2014) provided empirical evidence that investors place a higher value on companies with better intellectual capital efficiency, and that companies with better intellectual efficiency gain greater profitability and revenue growth in both the current and the following years.

Maditinos, Chatzoudes, Charalampos, Tsairidis, and Theriou (2012) found that IC has a positive correlation with profitability (return on assets) and market valuation (market-to-book ratio), while a negative correlation with productivity was observed. The study by Wang (2008, as cited in Berzkalne & Zelgalve, 2014) found that Tobin's Q, KCE (Knowledge Capital Earnings), and IC have a positive relationship with company value. Maditinos (2011) found a significant association between human capital efficiency and the return on equity. Rahman (2012) used a sample of 100 UK firms listed on the London Stock Exchange and confirmed that greater intellectual capital efficiency leads to better financial performance. The empirical analysis by Pucci, Simoni, & Zanni (2013) showed that there is a positive direct relationship between a company's intellectual capital value, its competitive advantage, and performance. Chang (2013) found that intellectual capital components generally have positive direct/indirect effects on financial performance. Findings by Lu, Wang & Kweh (2014) revealed that intellectual capital is significantly and positively associated with the company's operating efficiency.

The findings by Sumedrea (2013) showed that in crisis, the development of companies is influenced by the human and the structural components of intellectual capital. Several papers focus on intellectual capital and profitability. The study by Sydler, Haefliger & Pruksa (as cited in Berzkalne and Zelgalvea, 2014) concluded that an increase in intellectual capital is associated with a higher return on assets over time.

Daryae, Pakdel, Easapour, and Khalafu, (2011) stated that corporate value (in this case used Tobin's Q) is positively correlated with intellectual capital, however, have not found any relation between return on assets and intellectual capital.

According to Ding and Li (2010), there has been an upward trend in the importance and value of intellectual capital in Japan, US, and Germany in the period from 1990 –to 2001. As they stated, ".....the importance of intellectual capital management is indubitable...." Market competition in modern times is about innovation on products, marketing channels, and services (Ding et al., 2010). Vargas-Hernández (2010), points out that the fast expansion of goods and products has established intangible assets as the basis of competitive differentiation in many industries. Also, Firer (2005) agrees that the importance of intellectual capital, in other words, the relationships with business partners, and the awareness of a company brand and innovation capabilities, have increased over the past two decades.

Other studies did not find any significant relationships. For example, Ferreira & Martinez (2011) concluded that intellectual capital variables do not have a meaningful relationship with the company's financial performance. Shaban and Kavida (2013) likewise posited that no significant correlation was observed between IC with productivity, competitive advantage, and market valuation. Cleary and Quinn (2016) similarly found that structural capital, as an aspect of IC, has no significant relationship with financial performance although was found to have positively influenced accounting finance structure. Analysis by Mehralian, Rasekh, Akhavan & Sadeh (2012) also failed to support the impact of intellectual capital on market value. Results by Tanideh (2013) indicate that there is no significant relationship between intellectual capital and corporate value, which is a source of competitive advantage. Some studies found no association between intellectual capital and company performance, yet components of IC show different results (Chu, Chan, Yu, Ng & Wong, 2010; Gan & Saleh, 2008; Clarke, Seng, & Whiting, 2011). For example, Huang & Hsueh (2007, as cited in Berzkalne & Zelgalve, 2014) concluded that structural capital and relational capital have better performance, whereas human capital presents the poorest performance. Deep's and Narwal's (2014) study found that physical capital was the only one which was seen to have a significant impact on the profitability of the firm. Conversely, Dmitrović et al. (2016) suggest that human capital indicators used in their study do not significantly influence innovativeness of organizations from selected industries, where intellectual capital variables do not significantly determine innovation capability of organizations.

On the other hand, the pursuit of competitive advantage and understanding the sources of sustained competitive advantage is an idea very much at the core of the strategic management literature. The resource-based view stipulates that the fundamental sources and drivers of competitive advantage and superior performance are chiefly associated with the attributes of resources and capabilities, which are valuable and costly-to-copy (King, as cited in Rose, Ismad and Abdullah, 2011).

De Pablos, (2015) explained that the competitive advantage of a global organization lies to a great extent in its aptitude to recognize and transfer tactical knowledge among various geographic locations. A firm's capabilities largely determine its competitive advantage (Ferreira and Martinez, 2011; Noruzi & Vargas-Hernández, 2010; Yang, Lin, & Li, as cited in de Pablos, 2015).

Competitive advantage and firm performance are two different constructs with a complex relationship (Ma, as cited in Ismail, Abdullah, Rose and Uli, 2010). Overall, though, studies have demonstrated a significant relationship between competitive advantage and firm performance (Ma, 2004, Fahy, 2004; Gimenez & Ventura, 2002; Wang & Lo, Wiklund & Shepherd, Bowen & Ostroff, Morgan et al., 2010; Ray, Barney, & Muhanna, 2004, as cited in de Pablos, 2015). The age and size of firms are said to be moderators in the relationship between competitive advantage and performance (Ismail et al. 2010; Kipesha, as cited in de Pablos, 2015). Ketokivi and Schroeder (2014), Morgan et al. (2014) and Ainuddin, Beamish, Hulland, and Rouse

(2015) established a significant moderating role of firms' age in the relationship between competitive advantage and performance, when the age of firms was defined in terms of "new and old plants" (Ketokivi & Schroeder, 2004), "the number of years firm has been engaged in exporting operations" (Morgan et al., 2004) and "the age of international joint venture (IJV) formation" (Ainuddin et al., 2007).

As experience is perceived to be a factor contributory to the enhancement of firm performance, older firms are hypothesized to perform better than newer firms. However, research has shown mixed results in the relationship between competitive advantage and performance as moderated by the size of firms. Ketokivi and Schroeder (2004) and Morgan et al. (2004) report significant moderating role of the size of firms in the relationship between competitive advantage and performance, where the size of firms is described in terms of "the number of employees" (Ketokivi & Schroeder, 2004) and "the number of full-time employees" (Morgan et al., 2004).

On the other hand, Ainuddin et al. (2007) find a non-significant moderating effect of the size of firms in the relationship between competitive advantage and performance, where the size of firms is defined in terms of "the number of employees in the IJV formation" (Ainuddin et al., 2007). Nonetheless, as size or scale is presumed to be a critical factor in the performance of firms, it is thought that large firms will fare better than small and medium firms. The study, therefore, sought to address the gaps or dissimilarities in the way companies have coped with the issues presented so that new ways could be created to evaluate their performance, with precise results, by applying new and advanced business performance measurement methods as occasioned by IC.

1.1 Significance of the Study. The present study is hoped to be beneficial to the following:

Managers. In contrast to the traditional focus of the resource-based literature on determinants of firm performance, the paper contributes by presenting resource-based theory in a form that focuses on the doing of strategy from a strategy-as-practice perspective. From the same perspective, if at all, managers will be enjoined to currently undertake a formal analysis of their firms' resources and competence.

Business Organizations and Financial Institutions. For business organizations including financial institutions, the study would enable them to explore how they can expand their creative potential through integration of knowledge or intellectual capital via research and development. This study is likewise hoped to contribute additional insights and also support previous studies on the value of intellectual capital to organizations, specifically to the subjects of this study. This paper is hoped to contribute principally by delineating a concrete set of practices that relate to the dynamic capability of firms.

Financial Analysts. From the investment stand-point, intellectual capital is the most crucial thing that differentiates what is already known in the market and what prospects are like. Financial analysts may consider Intellectual Capital information when making portfolio management decisions.

Business researchers. It is likewise hoped that the study would contribute to literature that would serve as a springboard to future business researches on the same topic, related, or more advanced studies that may include other metrics of firm performance and competitive advantage.

Practitioners of Various disciplines. The study would be beneficial to various fields of study to understand what firms value with regards to the characteristics of intellectual capital within its dimensions of structural, human and relational (or customer) capital. Organizational learning mechanisms are essential in understanding the capability firms have and will have in meeting and addressing the challenges and changes in their environment.

This study is likewise expected to contribute to the literature, from which firms could draw upon the data and results this paper has outlined to establish their routines to manage their resources and competence to enhance firm performance and competitive advantage.

1.2 Theoretical/Conceptual Framework

The study was premised on the Dynamic Capability Theory (Wang and Hsu, 2010; Wang, 2014) which suggests that while a firm may have good performance in the short term, it may struggle with rivals in a turbulent environment, because accumulated capability may be scarce in the long run.

The interaction of the external environment with an organizational strategy is expected to be related to the firm's performance and competitive advantage. To maximize performance, managers need to pursue competitive strategies that best match the conditions of the external environment. In other words, managers' perceptions of the external environment are expected to affect a firm's internal processes and strategy. Therefore, a firm's strategy must be to deploy its resources to seize opportunities in the market. Dynamic capability (DC) offers a bridge that debates in the strategy field proposing either a resource-based value of the firm or the emerging discourse surrounding the external dynamic business environment.

The conceptual framework of the study is illustrated in Figure 1:

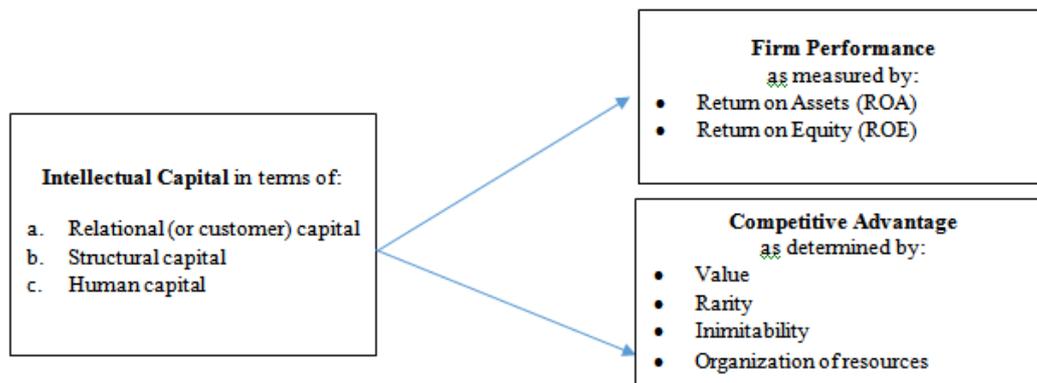


Figure 1. Conceptual Model of the Study

The research paper's conceptual map shows how the whole study was structured. In one box is the independent variable which is Intellectual Capital with its constructs: relational or customer capital, structural capital and human capital. The dependent variables are firm performance which was measured in terms of return on assets (ROA) and return on equity (ROE) and competitive advantage which was assessed by the firms' value, rareness, inimitability, and organization of resources.

The arrows that connect the independent variable and the dependent variables show causality. The study is therefore expected to determine an influence or an impact that the independent variable (intellectual capital) has on the dependent variables (firm performance and competitive advantage).

1.3 Statement of the Problem

The study aimed to determine whether Intellectual Capital variables have a significant impact on Firm Performance (as determined by Return on Assets, and Return on Equity), and Competitive Advantage. Specifically, it sought answers to the following :

1. How may the companies' intellectual capital be described in terms of :
 - 1.1 Relational (or customer) Capital,
 - 1.2 Structural Capital, and
 - 1.3 Human Capital?
2. How may the firms' performance be described in terms of the companies' average:
 - 2.1 Return on Assets, and
 - 2.2 Return on Equityas calculated from their Audited Financial Statements for the period ending 2016 and 2017?
3. How may the companies' competitive advantage be described in terms of :
 - 3.1 Value
 - 3.2 Rarity
 - 3.3 Inimitability, and
 - 3.4 Organization of resources?
4. What components of intellectual capital are individually or collectively significant predictors of :
 - 4.1 Firm Performance, and
 - 4.2 Competitive Advantage?
5. What business implications can be drawn from the study which could aid the companies in measuring their real worth?

1.3.1 Hypotheses of the Study

The following hypotheses were tested at .05 level of significance:

H₀1 - Intellectual capita does not significantly impact Firm performance

H₀2 - Intellectual capital does not significantly impact Competitive Advantage

1.4 Scope and Delimitation of the Study. The study is focused on determining whether intellectual capital has a significant impact on firm performance and competitive advantage. Intellectual Capital, which was the independent variable was measured using the following parameters: relational (or customer) capital, structural capital, and human capital. On the other hand, dependent variables were: firm performance that was assessed using returns on assets and equity, and competitive advantage which was determined using the firms' value, rarity, inimitability, and organized resources as metrics.

The study included respondents from branch offices in Malolos, Bulacan of the three main players in the banking industry namely: Bank A, Bank B, and Bank C, who are employees and managers or key officers of their respective institutions.

While respondents of the questionnaire came from bank branches located in Malolos, firm performance data such as those relating to ROE and ROA were computed based on the most recently available, and SEC-authenticated consolidated Audited Financial Statements for the years ending Dec 31, 2016, and 2017. These are documents that are made public by the companies and are available online and thru the SEC i-View express e-loading system.

There are several financial metrics that would gauge a firm's performance but the study focused on Return on Assets (ROA) and Return on Equity (ROE) only since these are two of the most important measures or components for evaluating company performance.

The researcher chose the three aforementioned banks since they are the top three private commercial banks ranked by the Bangko Sentral ng Pilipinas as to assets ([http:// www.bsp.gov.ph/banking/psoc/by_ranks/assets.htm](http://www.bsp.gov.ph/banking/psoc/by_ranks/assets.htm)), and among the top 30 publicly listed companies ([https:// www.pse.com.ph/stockMarket](https://www.pse.com.ph/stockMarket)). Further, these banks are among the top banks as to equity as per Bangko Sentral ng Pilipinas which have at least three branches in Malolos City, Bulacan (http://www.bsp.gov.ph/banking/psoc/by_ranks/equity.htm).

II. METHODOLOGY

A descriptive correlational research design was used to obtain a picture of the phenomenon under study which is the impact of intellectual capital on firm performance (as determined by its ROA, ROE) and competitive advantage.

Descriptive method of research refers to the type of research that is aimed at obtaining information on the current state of phenomena. This type of research sets out to provide an accurate profile of situations, people or events. Similar to these, accession authors like Polit et al. (cited in Rahi, 2017) have stated that descriptive research seeks to observe and document an occurring phenomenon which cannot be ascribed an objective value. This involves the collection of data that will provide an account or description of individuals, groups or situations.

A survey questionnaire was utilized to gather the data needed for intellectual capital and competitive advantage. For the needed data to compute for the returns on assets and equity (ROA and ROE), secondary documents such as the firms' SEC-authenticated, consolidated audited financial statements were used.

2.1 Respondents of the Study. The respondents of the study comprised of a total of 120 employees and managers or key officers of the office branches from the three main players in the banking industry namely: Bank A, Bank B, and Bank C in different locations in Malolos City Bulacan.

2.2 Instruments of the Study. The instruments used to gather the needed data were the following: For intellectual capital, a standardized instrument devised by Ferreira (2010) was used. This instrument was tested for validity and reliability with the following indices of internal consistency and reliability:

Eigenvalues	4.665	2.539	1.931
% of explained variance	29.157	15.868	12.0272
Cronbach's alpha	.88	.85	.85

For competitive advantage, the researcher patterned the questionnaire items on the VRIO questionnaire of de Guimarães, Severo, and Vasconcelos (2017) for sustainable competitive advantage with a general Cronbach's alpha of .787.

2.3 Data Gathering Procedure. Necessary permits to conduct the study were drafted. Permits were likewise secured from the target financial institutions' management to enable the researcher to gain access to information needed for the study.

The survey questionnaire was administered to target respondents who are employees and managers or key officers of the different branches of the three main players in the banking industry: Bank A, Bank B, and Bank C. Survey questionnaires were retrieved a day or two after distribution to the respondents. Retrieval of documents was at 97.5%.

2.4 Data Processing and Statistical Treatment. From the data gathered for intellectual capital, mean results for each variable (human, structural and relational) were extracted.

A 5-point Likert scale was used to analyze and interpret the results for intellectual capital as follows:

Scale	Range	Description	Verbal Interpretation
5	4.50 – 5.00	Strongly Agree	The Intellectual capital construct/component is very evident.
4	3.50 – 4.49	Mostly Agree	The Intellectual capital construct/component is evident.
3	2.50 – 3.49	Somewhat Agree	The Intellectual capital construct/component is somewhat evident.
2	1.50 – 2.49	Disagree	The Intellectual capital construct/component is not so evident.
1	1.00 – 1.49	Strongly Disagree	The Intellectual capital construct/component is not, in any way, evident.

The firms' performance was measured in terms of ratios using the following formulas:

$\text{Return on Assets (ROA)} = \text{Net Income or Profit (after tax)} / \text{Average Total Assets}$
$\text{Return on Equity (ROE)} = \text{Net Income or Profit (after tax)} / \text{Average Shareholder's Equity}$

Individual items for Competitive Advantage indicators were analyzed using the following Scale:

Scale	Range	Description	Verbal Interpretation
4	3.50-4.00	Strongly Agree	The firm possesses the competitive advantage indicator which is very evident to a very great extent.
3	2.51-3.49	Agree	The firm possesses the competitive advantage indicator which is evident to a great extent.
2	1.50-2.49	Disagree	The firm does not seem to possess the competitive advantage indicator which is fairly evident.
1	1.0 - 1.49	Strongly Disagree	The firm does not possess the competitive advantage indicator which is not evident.

The Overall firm Competitive advantage was measured using the VRIO questionnaire for the company's resource as follows:

Scale / Range	Description	Interpretation	Perceived Economic Performance
4 / 3.50-4.00	Strongly Agree	Sustainable Competitive Advantage (firm resources are valuable, rare, inimitable, and organized)	Above Normal
3 / 2.50-3.49	Agree	Temporary Competitive Advantage (firm resources are valuable, rare, but not costly to imitate)	Above Normal (at least for some amount of time)
2 / 1.50-2.49	Disagree	Competitive Parity (firm resources are valuable but common)	Normal
1 / 1.0 - 1.49	Strongly Disagree	Competitive Disadvantage (firm resources do not have value)	Below Normal

Resulting data were likewise subjected to multivariate multiple regression analysis via the Statistical Package for Social Sciences (SPSS) software.

III. RESULTS AND DISCUSSIONS

Intellectual capital is intangible and cannot be accurately measured. For example, Frykman & Tolleryd (2010) defined intellectual capital as all non-financial assets of a company that are not reflected in the balance sheet. Yet Tawy & Tollington (2012) have observed that there is no universal definition for intellectual capital and the cause and effect relationship between intellectual capital and value creation is, at best, indirect.

3.1 Intellectual Capital of Companies

3.1.1 Intellectual Capital In Terms of Relational or Customer Capital. Customer capital (CC) is one of the most important components of intellectual capital. Customer capital is mainly grounded on the relationship between the organization and its customers. Relationship with customers is very important for organizations because customers buy products or services from the enterprises (Roos et al., 2001; Hill and Jones, 2001). According to Tai-Ning et al., (as cited in Abbas, 2016), customers are main sources of an organization in revenue generation.

Therefore, customer capital is an important component of intellectual capital and it is based on customer satisfaction, loyalty and engagement

Overall Relational (or customer) Capital of Respondent-Banks. The Table illustrates the general situation of the respondent banks' customer/relational capital as a component of intellectual capital. It could be gathered from the results in Table 1 that on the whole, the respondent banks Mostly Agree with the items that determine their firms' customer/relational capital, as evinced by the overall mean score of 4.28.

All individual items were likewise rated by respondent-banks as Mostly Agree which are apparent from the mean scores computed as follows: item (1) There is a preoccupation to solve customer problems in little time ($\bar{x} = 4.17$); item (2) There is a preoccupation to support customers with quality ($\bar{x} = 4.30$); item (3) There is a preoccupation to know customers better ($\bar{x} = 4.42$); item (4) In my company there is a preoccupation with receiving customer satisfaction feedback ($\bar{x} = 4.34$); item (5) My company is customer-oriented ($\bar{x} = 4.14$).

Of the three banks, Bank C registered the highest customer/relational capital rating at a mean of 4.39, seconded by Bank A with mean result of 4.27, and then by the Bank B with a registered mean score of 4.18.

Table 1
Overall Intellectual Capital as Described in Terms of Customer or Relational Capital

Customer Indicators	Capital	BANK A		BANK B		BANK C		Weighted Mean	
1. There is a preoccupation to solve customer problems in little time (CC1)		4.08	MA	4.11	MA	4.31	MA	4.17	MA
2. There is a preoccupation to support customers with quality (CC2)		4.28	MA	4.18	MA	4.45	MA	4.30	MA
3. There is a preoccupation to know customers better (CC3)		4.33	MA	4.36	MA	4.56	SA	4.42	MA
4. In my company there is a preoccupation with receiving customer satisfaction feedback. (CC4)		4.28	MA	4.32	MA	4.43	MA	4.34	MA
5. My company is customer-oriented (CC5)		4.36	MA	3.83	MA	4.23	MA	4.14	MA
Grand Mean		4.27	MA	4.18	MA	4.39	MA	4.28	MA

3.1.2 Intellectual Capital in Terms of Structural Capital. Structural capital means a technological, informational and organizational support of implementing the staff capacities in the enterprise. It ensures the effective usage of human capital, contributes to the accumulation and acquisition of new knowledge, perfection of staff competencies through the usage of modern techniques of collaboration, business management principles, systems, training of specialists, communication systems, principles of organizational culture. Structural capital can be owned by a company and thereby traded. Structural capital is also referred to as organizational capital (Miroshnychenko, 2013).

Overall Structural Capital of Respondent-Banks. It could be deduced from the combined overall data presented in Table2 that the structural capital as a component of intellectual capital of all respondent banks obtained a Mostly Agree rating, as demonstrated by an overall mean score of 4.26.

Overall weighted mean for each individual item resulted in the following: item (6) Sales have increased ($\bar{x} = 4.25$); item (7) Sales profits have increased ($\bar{x} = 4.25$); item (8) The company's profits have increased recently ($\bar{x} = 4.36$); item (9) My company has research and development support structure which obtained a mean score of ($\bar{x} = 4.40$); item (10) New products are well accepted in the market ($\bar{x} = 4.28$); item (11) There is a return from all money invested ($\bar{x} = 4.17$).

Table 2
Overall Intellectual Capital as Described in Terms of Structural Capital

Structural Indicators	Capital	BANK A		BANK B		BANK C		Weighted Mean	
6. Sales have increased	4.22	MA	MA	4.30	MA	4.22	MA	4.25	MA
7. Sale profits have increased	4.19	MA	MA	4.33	MA	4.23	MA	4.25	MA
8. The company's profits have increased recently	4.28	MA	MA	4.44	MA	4.35	MA	4.36	MA
9. My company has research and development support structure	4.39	MA	MA	4.48	MA	4.35	MA	4.40	MA
10. New products are well accepted in the market	4.17	MA	MA	4.33	MA	4.33	MA	4.28	MA
11. There is a return from all money invested	4.17	MA	MA	4.26	MA	3.94	MA	4.17	MA
Grand Mean	4.24	MA	MA	4.32	MA	4.23	MA	4.26	MA

It is noteworthy to mention that Bank C branches have the lowest rating for item (11) There is a return from all money invested, with mean result equivalent to 3.94 which is quite surprising given that Bank C has the highest audited net income of P 28.1B for the period ending 2017 as compared to Bank A and Bank B with net incomes of P 22.736B and P 21.27B respectively.

Of the three banks, Bank B registered the highest structural capital rating at a mean of 4.32, succeeded by Bank A with mean score of 4.24, and then by Bank C with a registered mean score of 4.23.

3.1.3 Intellectual Capital as Described in Terms of Human Capital. Fitz-enz (as cited in Khalique, 2011) stated that human capital consists of knowledge, talent and experience of employees. Human capital is a major source of value addition in organizations and it is based on skills, knowledge and expertise, competence, attitude, and intellectual agility of employees.

Overall Human Capital of Respondent-Banks. It could be deduced from the combined overall data presented in Table 3 that the human capital as a component of intellectual capital of all respondent banks obtained a Somewhat Agree rating, as demonstrated by an overall mean score of 3.01.

It could be inferred from the overall results that the banks are of a consensus that the human capital construct of intellectual capital is fairly or slightly evident in their banks. This result could imply that relationship between staff and leaders is not a perfect one and that conflicts usually arise.

Overall weighted mean for each individual item resulted in the following: item (12) There are no bad relations between workers ($\bar{x} = 3.40$); item (13) There are usually no conflicts between leaders and workers ($\bar{x} = 3.13$); item (14) Turn-over is lesser than in other companies ($\bar{x} = 2.65$); item (15) There are no problems when somebody resigns from the companies ($\bar{x} = 2.98$); item (16) People have no difficulties in measuring the consequences derived from their decisions ($\bar{x} = 3.13$).

It is noteworthy to mention that when it comes to human capital, Bank C registered the highest human capital rating at 3.14 mean score. Bank B and Bank A with overall mean scores of 3.10 and 2.94, accordingly.

Table 3
Overall Intellectual Capital as Described in Terms of Human Capital

Human Indicators	Capital	BANK A		BANK B		BANK C		Weighted Mean	
12. There are no bad relations between workers	3.25	SoA	SoA	3.43	SoA	3.51	MA	3.40	SoA
13. There are usually no conflicts between leaders and workers	2.89	SoA	SoA	3.19	SoA	3.32	SoA	3.13	SoA
14. Turn-over is lesser than in other companies	2.58	SoA	SoA	2.72	SoA	2.66	SoA	2.65	SoA
15. There are no problems when somebody resigns from the companies	2.97	SoA	SoA	2.98	SoA	2.98	SoA	2.98	SoA
16. People have no difficulties in measuring the consequences derived from their decisions.	3.00	SoA	SoA	3.19	SoA	3.19	SoA	3.13	SoA
Grand Mean	2.94	SoA	SoA	2.94	SoA	3.14	SoA	3.01	SoA

3.2 Firm Performance

3.2.1 In Terms of Return on Assets (ROA). Return on Assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives a manager, investor, or analyst an idea as to how efficient a company's management is at using its assets to generate earnings.

Banks, according to Knight (as cited in Gallo, 2016), tend to have low ROAs at around 1%. Since banks are highly leveraged, a 1% ROA indicates huge profits.

The results presented in Table 4 suggest that except for Bank A, the other banks' ROAs are within the industry norm – a little higher at that – with Bank B registering a ROA of 1.24 percent and Bank C registering a ROA of 1.1 percent. On the other hand, Bank A has recorded a ROA of 0.92% which is 0.08% below what the rule of thumb dictates. These figures were extracted by dividing net income for the period ending December 31, 2017 by the average assets (or resources) balance which was obtained by adding the ending assets/resources balances of 2016 and 2017, then dividing the sum by two.

Table 4
Return on Assets

Bank			Return on Ave. Assets
	Net Income, 2017	18,223M	
Bank A (in millions of Php)	Assets Balance, 2016	1,876,009M	0.92%
	Assets Balance, 2017	2,080,292M	
	Average Assets	1,978,150.5M	
	Net Income, 2017	22,416M	
Bank B (in millions of Php)	Assets Balance, 2016	1,725,696M	1.24%
	Assets Balance, 2017	1,903,905M	
	Average Assets	1,814,800.5M	
	Net Income, 2017	28,070M	
Bank C (in millions of Php)	Assets Balance, 2016	2,324,999M	1.1%
	Assets Balance, 2017	2,668,104M	
	Average Assets	2,496,551.5M	
	Average ROA for the three Banks		

If this sectoral measure would serve as the basis, the Bank B's and Bank C's ROAs are within the industry norm. Bank A's low ROA may be attributed to high taxes (since its ROA is taken after tax) or by policy lending obligations that burden it. It is likewise noteworthy to mention that of the three banks, Bank A has the least net income.

The higher the ratio, the more efficient company's asset management process is. However ROA is only comparable for similar-sized companies, because the higher the level of capitalization of a firm, the more difficult it is to reach high return on assets. This ratio commonly is an object of interest of company's management, because it includes all kinds of assets to calculation.

As a whole, as per Standard and Poor's report (Philippine Financial Services of the Oxford Business Group, 2019), Philippine banks' return on assets was 1.2% on the average since 2016. Although banks have invested heavily in building branch networks, expansion of branches outside of Manila is likely to increase costs faster than assets. This has, however, created significant opportunities in the country's burgeoning fintech industry, which is expected to significantly improve financial inclusion and credit access in the coming years (PFS-Oxford Business Group, 2018).

3.2.2 In Terms of Return on Equity (ROE). Return on Equity (ROE) is the amount of net income returned as a percentage of shareholders equity. It reveals how much profit a company earned in comparison to the total amount of shareholder equity found on the balance sheet.

ROE is one of the most important financial ratios and profitability metrics. It is often said to be the 'mother of all ratios' that can be obtained from a company's financial statement. It measures how profitable a company is for the owner of the investment, and how profitably a company employs its equity.

Table 5 reports the banks' Return on Equity. It could be gleaned from the data gathered that all three banks, Bank A, Bank B, and Bank C. have an ROE equal to an average of 11.15 percent where: Bank A's Return on Average Equity is at 9.16 percent; Bank B's ROE is 12.96 percent; and Bank C's Return on Average Equity is at 10.9 percent. These figures were extracted by dividing net income for the period ending December 31, 2017 by the average equity balance which was obtained by adding the ending equity balances of 2016 and 2017, then dividing the sum by two.

In many markets, the rule of thumb is that a Return on Equity between 10 to 20 percent is acceptable performance in most circumstances (Golin and Delhase, 2013). It could be inferred therefore, that the two

respondent-banks (Banks B and C) are within the acceptable ROE range albeit Bank D's ROE is just a little above the acceptable lower range. On the other hand, it could be gleaned from the results that Bank A has the lowest return on equity at 9.16%. It could be further inferred that this result for Bank A could be attributed to heavy credit concentration in low-yielding corporate loans, with higher-yielding retail loans, such as mortgages and auto loans, seen as having the potential to boost interest margins.

Further, the results for Bank B and Bank C are supported by Enhanced Report of the Philippine Financial System for the First Semester of 2018 (www.bsp.gov.ph), which reported that the annualized ROE of the Philippine banking system stabilized at around 10 percent from Q2 2015 to Q2 2018 and still reflecting a decent double-digit gain for shareholders.

Apparently, except for Bank A, if this sectoral measure would serve as basis, Bank B's and Bank C's Returns On Equity are way above the industry average.

As a whole, as per Standard and Poor's report (Oxford Business Group, 2018), profitability of Philippine banks has not kept pace with the broader sector growth, where return on equity was 9.5% on the average since 2016. Still, noteworthy is Bank A's 9.16% ROA which is still below 9.5%.

Table 5
Return on Equity

Bank			Return on Ave. Equity
Bank A (in millions of Php)	Net Income		18,223M
	Equity Balance, 2016	201,955M	
	Equity Balance, 2017	196,002M	
	Average Equity		198,978.5M
	Net Income		22,416M
Bank B (in millions of Php)	Equity Balance, 2016	165,134M	
	Equity Balance, 2017	180,688M	
	Average Equity		172,911M
	Net Income, 2017		28,070M
Bank C (in millions of Php)	Equity Balance, 2016	216,816M	
	Equity Balance, 2017	297,488M	
	Average Equity		257,152M
	Average ROE for the three Banks		

3.3 Firms' Competitive Advantage

3.3.1 Overall Competitive Advantage of Respondent-Banks. It could be gleaned from the results presented that overall, the banks have a Temporary Competitive Advantage as evinced by the overall weighted mean score of 3.24. This means that in general, the banks have valuable products and services that create value to clients. Aside from being valuable, these products and services are considered as rare or unique in as far as the banks are concerned. However, the banks somehow believe that their products and services are not too costly to be replicated or imitated by existing rivals or even prospective competitors. The perception is that their economic performance is above the normal but only for a certain period of time until their competitors are able to replicate their strategies and simultaneously implement a duplicate.

On the whole, for Bank B, it could be noted that four out of seven competitive advantage observation variables obtained weighted mean ratings equivalent to Strongly Agree : item (1) Value ($\bar{x} = 3.50$); item (4.1) Organization ($\bar{x} = 3.30$); item (4.2) Organization ($\bar{x} = 3.30$); item (4.3) Organization ($\bar{x} = 3.30$). The results indicate that the firm possesses the competitive advantage indicators which is also very evident to a very great extent. The respondents Agree with three other competitive advantage indicators presented accordingly: item (2) Rarity ($\bar{x} = 3.12$); item (3.1) Inimitability ($\bar{x} = 3.08$); and item (3.2) Inimitability ($\bar{x} = 3.08$) which means that the foregoing indicators are evident to a great extent.

In general, it could be gathered from the results for Bank C that it has obtained an Agree rating as evidenced by the grand mean score of 3.21. Individual items has been rated overall as follows: item (1) Value ($\bar{x} = 3.19$); item (2) Rarity ($\bar{x} = 3.04$); item (3.1) Inimitability ($\bar{x} = 3.20$); item (3.2) Inimitability ($\bar{x} = 3.18$); item (4.1) Organization ($\bar{x} = 3.09$); item (4.2) Organization ($\bar{x} = 3.38$); item (4.3) Organization ($\bar{x} = 3.36$). This could be inferred that the indicators of competitive advantage are apparent to a great extent in the bank's day-to-day activities and transactions.

Table 6
Overall Firms' Competitive Advantage

Competitive Advantage Observation Variables	BANK A		BANK B		BANK C		Weighted Mean	
1. VALUE: key resources represent value for exploring market opportunities or assisting the organization in defending itself against environmental threats through an increase in revenue and/or a reduction in spending.	3.39	A	3.30	A	3.19	A	3.29	A
2. RARITY: key resources are unavailable to other organizations. These resources are very difficult for competitors to acquire.	3.17	A	3.12	A	3.04	A	3.12	A
3. INIMITABILITY:								
3.1 key resources are difficult for competitors to imitate or duplicate.	3.17	A	3.08	A	3.20	A	3.15	A
3.2 Key resources are strategically irreplaceable (Durable): key resources are difficult to replace with another strategic equivalent	3.22	A	3.08	A	3.18	A	3..16	A
4. ORGANIZATION:								
4.1 Environmental Sustainability: the company adheres to environmental sustainability in the use of key resources in the productive process and product development.	3.31	A	3.26	A	3.09	A	3.22	A
4.2 The company is also committed to the wellbeing of workers, society and the environment.	3.47	A	3.29	A	3.38	A	3.38	A
4.3 The company responsibly uses key resources in terms of the following aspect: economic :(to provide society with goods and services) legal (regarding legal premises) ethics (respect for practices that are expected or prohibited by society) philosophy (promote the well-being or quality of life of society).	3.42	A	3.29	A	3.36	A	3.36	A
Grand Mean	3.31	A	3.20	A	3.21	A	3.24	A

Overall, it could be noted that with regards to individual items, all competitive advantage observation variables for Bank A obtained weighted mean scores equivalent to Agree : item (1) Value ($\bar{x} = 3.39$); (2) Rarity ($\bar{x} = 3.17$); item (3.1) Inimitability ($\bar{x} = 3.17$); item (3.2) Inimitability ($\bar{x} = 3.22$); item (4.1) Organization ($\bar{x} = 3.31$); item (4.2) Organization ($\bar{x} = 3.47$); item (4.3) Organization ($\bar{x} = 3.42$). The results indicate that the firm possesses the competitive advantage indicators which are also evident to a great extent. Of the three banks, Bank A exhibits the greatest competitive advantage ($\bar{x} = 3.31$), albeit a temporary competitive advantage; followed by Bank C ($\bar{x} = 3.21$), then by Bank B ($\bar{x} = 3.20$).

3.4 Impact of Intellectual Capital on Firm Performance

3.4.1 Impact of Intellectual Capital on Return on Assets (ROA). The correlation and regression analyses were conducted to examine the impact of intellectual capital on return on assets (ROA). Table 7 summarizes the statistics and analysis results. As can be seen, each of the intellectual capital indicators are correlated with the criterion, ROA, in varying degrees as evidenced by their B coefficients which are non-zero.

The intellectual capital variables namely: customer/relational capital, structural capital, and human capital are positively correlated (or have direct relationship) with return on assets (ROA), indicating that the higher the predictor scores are, the higher the criterion scores. Conversely, the lower the predictor scores are, the lower the criterion scores.

The B coefficients present the amount of change in ROA that is associated with a change in one unit of the aforementioned variables under Intellectual Capital. The magnitude of their values (B coefficients) is relative to the means and standard deviations of the independent and dependent variables in the equation. The same results indicate that for every unit increase in the Intellectual Capital variables of Customer Capital, Structural Capital and Human Capital, a corresponding increase in ROA is generated at .024, .015, .007, respectively.

Moreover, with a closer look at the coefficients, it may be gleaned that Customer/Relational capital recorded a B coefficient with associated probability of .048 which is less than the significance level set at .05. It is for this reason that it could be inferred that in terms of the Customer/Relational capital construct of

Intellectual Capital's impact on ROA, the hypothesis that intellectual capital does not have a significant impact on firm performance is rejected. It could be culled that the result is statistically significant and cannot be attributed to mere chance alone. This finding further suggests that every unit increase in the Customer/Relational construct of Intellectual Capital, would result to a corresponding increase in ROA by as much 4.8 percent.

In the same vein, every unit increase in the Structural Capital and Human Capital constructs of Intellectual Capital would result to a corresponding increase in ROA by as much as 24.1 and 42.7 percent accordingly. The previously mentioned variables likewise impact firm performance in terms of ROA, but not to a significant extent.

The beta value, which is measured in units of standard deviation, measures how strongly each predictor variable under Intellectual Capital influences the criterion (dependent) variable which is Return on Assets (ROA). Therefore, a beta value of .203 indicates that a change of one standard deviation in the predictor variable Customer/Relational Capital resulted in a change of .203 standard deviations in Return on Assets. Since the beta value of Customer/Relational Capital is the highest of the three (3) variables under Intellectual Capital, it could be culled that Customer/Relational Capital has the greatest impact on ROA. This is followed by Structural Capital with a Beta value of .119, then by Human Capital with a Beta value equivalent to .075.

The R square figure of ROA indicates that the explanatory power of the independent variable is .042 which implies that only 4.2 % of the variation in Return on Assets is explained or accounted for by changes in Intellectual Capital.

The ANOVA result is non-significant at $\alpha = 0.05$ ($df_1 = 3$; $df_2 = 114$; $F_{crit} = 1.580$), which means that the predictor variables (customer/relational capital, structural capital, and human capital) collectively do not account for a statistically significant proportion of the variance in the criterion variable, Return on Assets.

Results of the regression run revealed that Customer Capital registered the highest B coefficient of .024, seconded by Structural Capital, with a B coefficient of .015, then by Human Capital with a resulting B coefficient of .007.

On the other hand, p values likewise tell us whether a variable has statistically significant predictive capability in the presence of the other variables (Nahm, 2017). Singly, the variable Customer/relational Capital has a statistically significant predictive capability on ROA as evinced by the p-value of .048, at $\alpha = 0.05$ while the other variables Structural capital and human capital, with respective p-values of .241 and .427, considered individually, have no statistically significant predictive capability on Return on Assets.

Table 6
Regression Results on the Impact of Intellectual Capital on Firms' Performance as Indicated by Return on Assets (ROA)

Variables	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.254	.068		18.312	.000
Customer/Relational Capital	.024	.012	.203	2.004	.048
Structural Capital	.015	.013	.119	1.178	.241
Human Capital	.007	.008	.075	.797	.427
R-squared = .042					
F-value = 1.580					
p-value = .198					
alpha = 0.05					

The results of the study found support in the study of Amri and Abdoli (2012) where overall results indicate that relational capital components significantly affect firm performance. The components of relational capital namely business relational capital (relationship with customers and employees) and social relational capital (relationship with competitors and community) positively correlated with firm performance. The study showed that relational capital had the capacity to increase the financial performance of firms. Soumet (2007); Bataineh & Zoabi (2011) affirm that firms must exhibit a high sense of salesmanship and marketability with its sales team so as to positively impact on the financial performance of a firm.

Further, based on the results of the study by Taghieh, and Poorzamani (2013), relational capital has significant and positive effect on financial performance and firm value.

The study of Wang (2011) found that the relationship between structural capital and firm performance was insignificant. But the paper concluded that the firms achieve positive performance when they emphasize on human training, customer related management and research and development.

3.4.2 Impact of Intellectual Capital on Return on Equity (ROE). The correlation and regression analyses were conducted to examine the impact of intellectual capital on return on equity (ROE). Table 7 summarizes the statistics and analysis results.

Apparently, each of the intellectual capital indicators are correlated with the criterion, ROE, in varying degrees as evidenced by their B coefficients which are non-zero.

The intellectual capital variables namely: Customer/relational capital, structural capital, and human capital are positively correlated (or have direct relationship) with return on equity (ROE), indicating that the higher the predictor scores are, the higher the criterion scores. Conversely, the lower the predictor scores are, the lower the criterion scores.

The B coefficients present the amount of change in ROE that is associated with a change in one unit of the aforementioned variables under Intellectual Capital. Furthermore, a closer look at the coefficients reveals that Customer/Relational capital recorded a B coefficient with associated probability of .050 which is equal to the significance level set at alpha .05. It is for this reason that it could be culled that in terms of the Customer/Relational capital construct's impact on ROE, the hypothesis that intellectual capital does not have a significant impact on firm performance is rejected. It could be further gleaned that the result is statistically significant and cannot be attributed to mere chance alone. This finding further suggests that every unit increase in the Customer/Relational construct of Intellectual Capital, would result to a corresponding increase in ROE by as much 5 percent.

In the same vein, every unit increase in the Structural Capital and Human Capital constructs of Intellectual Capital would result to a corresponding increase in ROE by as much as 25 and 47.2 percent correspondingly. The said variables likewise impact firm performance in terms of ROE, but not to a significant extent.

The ROEs' R square indicates that the explanatory power of the independent variable is .039 which implies that only 3.9 % of the variation in Return on Equity is explained or accounted for by changes in Intellectual Capital.

The beta value, which is measured in units of standard deviation, measures how strongly each predictor variable under Intellectual Capital influences the criterion (dependent) variable which is Return on equity (ROE). Therefore, a beta value of .198 indicates that a change of one standard deviation in the predictor variable Customer/Relational Capital resulted in a change of .198 standard deviations in Return on Equity. Since the beta value of Customer/Relational Capital is the highest of the Three (3) variables under Intellectual Capital, it could be culled that Customer/Relational Capital has the greatest impact on ROE. This is followed by Structural Capital with a Beta value of .117, then by Human Capital with a Beta value equivalent to .068.

The ANOVA result is non-significant at $\alpha = 0.05$ ($df_1 = 3$; $df_2 = 114$; $F_{crit} = 1.471$), which means that the predictor variables (customer capital, structural capital, and human capital) collectively do not account for a statistically significant proportion of the variance in the criterion variable, Return on Equity.

Results of the regression run revealed that Customer Capital registered the highest B coefficient of .251, seconded by Structural Capital, with a B coefficient of .162, then by Human Capital with a resulting B coefficient of .064.

On the other hand, p values likewise tell us whether a variable has statistically significant predictive capability in the presence of the other variables. Singly, the variable Customer Capital has a statistically significant predictive capability on ROE as evinced by the p-value $\leq .05$, at $\alpha = 0.05$ while the other variables Structural capital and human capital, with respective p-values of .250 and .472, considered individually, have no statistically significant predictive capability on Return on Equity.

In the study of Oyedokun and Saidu (2018) the Pearson correlation analysis revealed that ROE is positively and significantly correlated with intellectual capital $p = 0.001$, with R-squared at 0.664, about 66% of the variations in ROE is determined by changes in intellectual capital.

On the other hand, the results of the research made by Moradi, Saeedi, Beshkuh, Maham and Naslmosavi (2013) found that intellectual capital components have a direct influence on ROE, although the relationship is not significant.

The results of this study somehow does not support the study of Chen et al. (2005) and Tan et al. (2007) which claimed that Intellectual capital as a whole, significantly influences changes in ROE, but supports the results of Firer's and Williams' (as cited in Oyedokun and Saidu, 2018) research which proved that intellectual capital as a whole, has no significant effect on the change in ROE.

Table 7
Regression Results on the Impact of Intellectual Capital on Firms' Performance as Indicated by Return on Equity (ROE)

Variables	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	12.403	.741		16.745	.000
Customer/Relational Capital	.251	.129	.198	1.946	.050
Structural Capital	.162	.141	.117	1.156	.250
Human Capital	.064	.089	.068	.721	.472

R-squared = .039
F-value = 1.471
p-value = .226
alpha = 0.05

3.5 Impact of Intellectual Capital on Competitive Advantage

To determine the impact of intellectual capital on competitive advantage, correlation and regression analyses were conducted. Table 8 summarizes the statistics and analysis results. Apparently, each of the intellectual capital indicators are correlated with the criterion, Competitive Advantage, in varying degrees as evidenced by their B coefficients which are non-zero.

The intellectual capital variables namely: Customer/relational capital, structural capital, and human capital are positively correlated (or have direct relationship) with competitive advantage, indicating that the higher the predictor scores are, the higher the criterion scores. On the contrary, the lower the predictor scores are, the lower the criterion score.

The B coefficients present the amount of change in competitive advantage that is associated with a change in one unit of the aforementioned variables under Intellectual Capital. The magnitude of their values (B coefficients) is relative to the means and standard deviations of the independent and dependent variables in the equation. The same results indicate that for every unit increase in the Intellectual Capital variables such as Customer Capital, Structural Capital and Human Capital, a corresponding increase in competitive advantage is generated at .147, .156, .099, respectively.

The Competitive Advantage's R square indicates that the explanatory power of the independent variable is .280 which implies that 28 % of the variation in Competitive Advantage is explained or accounted for by changes in Intellectual Capital.

Furthermore, a closer look at the coefficients reveals that Customer/Relational capital recorded a B coefficient with an associated probability of .002. Similarly, Structural Capital and Human Capital exhibited B coefficients with identical associated probabilities of .003. It could be culled from these results that the associated probability values are less than the significance level set at alpha .05. It is for this reason that one could infer that the hypothesis that intellectual capital does not have a significant impact on Competitive Advantage is rejected. It could be further gleaned that the statistically significant results cannot be attributed to mere chance alone.

This finding further suggests that: every unit increase in the customer/relational capital construct of Intellectual Capital, would result to a corresponding increase in Competitive Advantage by as much 0.2 percent; every unit increase in the structural capital construct of Intellectual Capital, would result to a corresponding increase in Competitive Advantage by as much 0.3 percent; and every unit increase in the human capital construct of Intellectual Capital, would result to a corresponding increase in Competitive Advantage by as much 0.3 percent

The beta value, which is measured in units of standard deviation, measures how strongly each predictor variable under Intellectual Capital influences the criterion (dependent) variable which is Competitive Advantage. Therefore, a beta value of .273 indicates that a change of one standard deviation in the predictor variables under Intellectual Capital resulted in a change of .273 standard deviations in Competitive Advantage. Since the beta value (.273) of Customer/Relational Capital is the highest of the three (3) variables under Intellectual Capital, it could be culled that Customer/Relational Capital has the greatest impact on Competitive Advantage. This is followed by Structural Capital with a Beta value of .264, then by Human Capital with a Beta value equivalent to .246.

The ANOVA result is significant at $\alpha = 0.05$ ($df_1 = 3$; $df_2 = 114$; $F_{crit} = 14.022$), which means that the predictor variables (customer capital, structural capital, and human capital) collectively account for a statistically significant proportion of the variance in the criterion variable, Competitive Advantage.

Results of the regression run revealed that Customer/Relational Capital, registered the highest B coefficient of .173. This was seconded by Structural Capital with a recorded B coefficient of .156, then by Human Capital with a resulting B coefficient of .099.

On the other hand, p values likewise tell us whether a variable has statistically significant predictive capability in the presence of the other variables. Individually, the regression run shows that all intellectual capital constructs namely: Customer Capital, Structural Capital, and Human Capital have statistically significant predictive capabilities on Competitive Advantage as evinced by their p-values recorded at .002, .003, and .003, respectively. Foregoing results are less than the significance level set at $\alpha = 0.05$ which means that results could not be attributed to mere chance alone. Therefore, the null hypothesis that intellectual capital does not significantly affect competitive advantage is rejected.

Table 8
Regression Results on the Impact of Intellectual Capital on Firms' Competitive Advantage

Variables	Unstandardized		Standardized		
	Coefficients		Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	2.211	.273		8.249	.000
Customer/Relational Capital	.173	.048	.273	3.099	.002
Structural Capital	.156	.052	.264	3.009	.003
Human Capital	.099	.033	.246	2.997	.003

R-squared = .280
F-value = 14.022
p-value = .000
alpha = 0.05

The findings of this study is similar to a study conducted by Kamukama et al., (2010) which revealed a positive relationship between competitive advantage and intellectual capital. Čater and Čater (2009) likewise concluded in their research work that there is a positive relationship between customer capital and cost-leadership and differentiation advantage. However, the study further found that human and structural capital only had a positive effect on differentiation advantage. Čater and Čater (2009) observed that human capital and structural capital come at a cost, as remuneration and staff complement is usually not part of a cost-based strategy. However, it is the distinctive capabilities of people who add value to a differentiation advantage. The results of the present study does not support the findings of Kangarlouei, et al. (2012) which claimed that there no significant relationship between intellectual capital and competitive advantage. However, their study showed a positive and weak relationship between social capital and competitive advantage.

IV. BUSINESS IMPLICATIONS

The indicators of the financial soundness of the banks' performance suggest that their banking systems are stable. Meanwhile, the findings imply that consequent risks from lending should be monitored especially in the event of excessive uncertainties that could place additional pressures on the banking system in the short and medium run.

ROE and similar ratios measure net profits against shareholder's equity while ROA measures net profits against total assets, which for a bank consists largely of financial assets such as loans. In general, ROA provides a more general measure of how effectively the banks' assets are being managed to generate revenues. In contrast, ROE is of particular interest to equity investors as it measures the return of their investment. However, a lofty ROE as well as affording greater profit to equity investors suggests the possibility of greater peril, either as a result of higher leverage or through holdings of high-risk financial assets. Therefore a bank that generates attractive ROE without incurring materially greater risks will have much less trouble attracting additional capital from equity investors than a competitor that registers only lackluster figures.

ROA and ROE are different, but together they provide a clear picture of management's effectiveness. If ROA is sound and debt levels are reasonable, a strong ROE is a solid signal that managers are doing a good job of generating returns from shareholders' investments. ROE is certainly a hint that management is giving shareholders more for their money. On the other hand, if ROA is low or the company is carrying a lot of debt, a high ROE can give investors a false impression about the company's fortunes.

Overall, the Philippine financial system's positive performance has been grounded on the BSP's sustained implementation of proactive reforms that will raise the bar on risk management systems, promote sound liquidity and capital positions, and enable greater access to financial services. Banks' commitment to these reforms and prudent risk-taking ensure the stability and soundness of the financial system.

V. CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of this study, the following conclusions may be drawn:

1. The respondents find the Human capital construct of Intellectual Capital as somewhat evident in their everyday transactions with clients while the Customer or Relational Capital and Structural Capital were found to be evident in their day-to-day bank activities.

2. Bank B's and Bank C's returns on assets are within the industry norm while their returns on equity are above the industry average. Bank A's low ROA may be attributed to taxes and policy lending obligations while its low ROE may be attributed to high-yielding retail loans, such as mortgages and auto loans. Of the three banks, Bank A has the least net income.
3. The firms have an overall Temporary Competitive Advantage - where key resources are valuable, value-creating strategies are employed, products and services are considered rare or uncommon products but which are not so difficult nor costly to imitate. Further, the firms did not extensively exploit their available resources to create a sustainable competitive advantage. Economic performance is believed to be above the normal but only for a certain period of time, until products or services are replicated by existing or prospective rivals.
4. Collectively, Intellectual Capital constructs do not significantly affect Firm Performance as measured by ROA and ROE. Singly, only the Customer Capital construct of Intellectual Capital has a statistically significant impact on firm performance as measured by both ROA and ROE. On the other hand, Intellectual Capital significantly affects the firms' Competitive Advantage.
5. The indicators of financial soundness of the banks' performance suggest that their banking systems are stable.

With the findings and conclusions drawn from the study, the researcher proposes the following:

1. In as much as the human capital construct of intellectual capital was found to have obtained the lowest rating, more attention should be given to the human side of the intellectual capital, and reliance should not strictly be focused on the numeric evaluation and improvement. The banks may likewise employ measures to improve their interpersonal relations within the organization, between and among its key officers and staff.
2. **On ROA.** To increase its ROA, the firms should examine all of its holdings to determine which assets aren't contributing to operational efficiency. Increasing the selling price will increase revenues, assuming that sales remain consistent. Although increasing revenue may seem straightforward on paper, these types of decisions require careful analysis. The companies should strive to boost the value of their intellectual assets for its ultimate effect on ROA through maximization of their market value, **On ROE.** Since return on equity is the product of three factors: profit margin, financial leverage and asset turnover. Increasing any one of these factors while holding the others constant would increase ROE. DuPont analysis points to these three controllable inputs as ways to optimize return on equity. Management, however, should carefully weigh the costs and benefits of these strategies.
3. Banks may focus on the following to somehow sustain their "edge" or business advantage over other rival banks:
 - (3.1) cost efficiency that can be derived from new technology, efficient operations, and a low-cost base
 - (3.2) offering a difference, typically with a premium product or service that is more desirable to customers. There is a risk of other companies following suit, which requires companies using this strategy to improve their proposition continuously.
 - (3.3) A niche market segment with propositions explicitly tailored to that segment. Derived from specific expertise, this strategy drives lower cost and strong customer loyalty within the niche.
4. Banks need to assess their unique qualities that drive their competitive advantage and to also identify where they are currently positioned. Based on that, they can then define what pure strategy suits them best and focus all their efforts towards that direction.

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