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Relationship of Operating Segments (IFRS 8) and Profitability of Universal Banks in the Philippines

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ABSTRACT

The study explored the relationship between the operating segments (IFRS 8) and profitability of universal banks in the Philippines. Empirical data were collected from the published annual report or audited financial statements of the twelve universal banks from reporting period 2016 to 2019. The study utilized panel data regression analysis using univariate analysis of variance technique to measure the relationship between the reportable segments to return on asset (ROA) and earnings per share (EPS) of universal banks. The findings of the study revealed that only reportable segment revenue is significantly related to ROA. None of the reportable segment revenue, profit or loss, assets, and external revenue as result of overall test is significantly related to EPS. The results of the study showed that all operating segments, with average of four, are grouped according to the nature of products or services offered. The most disclosed segmental information are information about interest revenue & interest expense, depreciation and amortization, material non-cash items such as credit and impairment losses, income tax expense, measures of revenue, profit or loss, assets and liabilities, revenue from external customer and revenue from transactions with other operating segment of the same entity. Implications to business decisions were made.

Keywords: IFRS 8, Operating Segment, Reportable Segment, Profitability

1. Introduction

One of the distinguishing features of the accounting standard on Operating Segment under the International Financial Reporting Standard 8 (IFRS 8) by the International Accounting Standard Board (IASB) effective 2009, is the use of "management approach." Management approach is an approach that requires the reporting entity to disclose information about operating segments in accordance with its internal reporting structure and such are presented and reported regularly to the Chief Operating Decision Maker (CODM). CODM is a function that allocates resources to segments and assesses its performance.

According to IFRS 8, an operating segment is a component of an entity (a) that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same entity), (b) whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance, and (c) for which discrete financial information is available. Accordingly, segment information disclosed and reported internally to CODM for decision-making must be disclosed also in the general-purpose financial statements for general use and for external reporting purposes (Bugeja et al., 2015; Pardal & Morais, 2011). This approach further allows reporting of non-IFRS segment measures that may be different or seem to be contradicting with the general acceptable evaluation under the IFRS accounting standards, as long as the measures are regularly reviewed and reported to CODM and it provides more relevant and reliable information to the users (Mutalib & Jaafar, 2019; Kopecka, 2016; Lucchese & Di Carlo, 2016; IFRS post-implementation 2013; Nichols et al.,2013; Crawford et al., 2012; Nichols et al., 2012). On this context, measurement, components, and accounts used in the determination of segment revenue, profit or loss, and assets of the operating segment may differ from the presented general-purpose financial statements thus, there is a need for reconciliation of segment financial information to the consolidated financial statements (IFRS 8).

Reporting or disclosure of segment information is required for reportable segment. A reportable segment is an operating segment that exceeds the quantitative thresholds – revenue, profit or loss and assets (IFRS 8, par 13). For revenue threshold, an operating segment is a reportable segment when the reported revenue, including both sales to external customers and intersegment sales or transfers, is 10 per cent or more of the combined revenue, internal and external, of all operating segments. For profit or loss threshold, an operating segment is a reportable segment when the absolute amount of its reported profit or loss is 10 per cent or more of the greater, in absolute amount, of (i) the combined reported profit of all operating segments that did not report a loss and (ii) the combined reported loss of all operating segments that reported a loss. For asset threshold, an operating segment is a reportable segment when its assets are 10 per cent or more of the combined assets of all operating segments. Operating segments that do not meet any of the quantitative thresholds may be considered reportable, and separately disclosed, if management believes that information about the segment would be useful to users of the financial statements (IFRS 8, par 13). For the overall threshold, it is determined when the total external revenue reported by the identified reportable segments constitutes at least 75 percent of the entity's revenue.

Salient disclosure requirements in adopting IFRS 8 include general information about the identification of entity's reportable segments, applications of aggregation criteria and types of products and services from which each reportable segment derives its revenue (IFRS 8, par 22), entity wide disclosures pertaining to the major customer when revenues from transactions with a single external customer amount to 10 % or more of the entity's revenues (IFRS 8, par 31), disclosures on information about profit or loss, assets and liabilities of each reportable segment (IFRS 8, par 23), measurement or the amount of each segment item reported to the chief operating decision maker for the purposes of making decisions about allocating resources to the segment and assessing its performance (IFRS 8, par 25), and reconciliations (IFRS 8, par 28). These segmental information disclosures are investigated in this study.

Management approach is not a manner the management can freely report segmental information as they want to, such as reporting a better position or performance of the reporting entity or concealing some information. This is an approach within an entity for the purpose of making informed business decisions and performance evaluations (Mutalib & Jaafar, 2019; Obradović & Karapavlović, 2016). It must be consistent with the core principle of IFRS 8 stating that an entity shall disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates. It is assumed that decision-making by the management is also useful for decision-making by the external users that gives them the possibility to see a company through the eyes of management (Obradović & Karapavlović, 2016; Pardal & Morais, 2011). Therefore, reporting of operating segments intends to further improve the quality of financial information for both internal and external.

Among the industries in the Philippines, universal banks are important economic drivers in the country since they provide the financial backbone for businesses and investments. Universal banks comprise 90% of the country's banking system resources (Dayag & Trinidad, 2019). It is interesting to study universal banks in the Philippines as some are working on different business units or segments that offer diversified products or services and in different geographical location, here and abroad, and technology plays a vital role in their operations even before the pandemic brought by COVID-19. The process of diversification and globalization of the operations have increased the importance of segment information (Mutalib & Jaafar, 2019; Obradović & Karapavlović, 2016).

Focusing on universal banks gives a common comparison among them as accounting approaches and practices may fluctuate as per industry and so with segmental disclosures (Mutalib & Jaafar, 2019). Twenty-one universal banks as per Bangko Sentral ng Pilipinas' (BSP) list have the authority to exercise powers such as an investment house as provided in existing laws and the power to invest in non-allied enterprises in addition to what a commercial bank can carry on the business such as accepting drafts and issuing letters of credit; discounting and negotiating promissory notes, drafts, bills of exchange, and other evidences of debt; accepting or creating demand deposits and receiving other types of deposits and deposit substitutes , among others (RA 8791).

Business decisions primarily rely on the effectiveness and efficiency of the resources and so to the allocated resources to each business unit that are utilized in generating revenues and incurring expenses, and in assessing its performances. This is squarely true for universal banks. The management approach of IFRS 8 is fundamentally the allocation of resources to operating segments by the CODM, and assessment and evaluation of the performances of the segments. The groupings of business segments are identified by CODM in which still considers mainly the risks and returns of the allocated resources based on their internal organizational structure.

Several studies and literature believed that segmental information influences the business decisions of the users of accounting information thus, relevance of management approach to various aspects of business decisions is predictable. Segmental information helps both financial analysts and general users of financial reports (Kang & Gray, 2013) and stakeholders improve the quality of their decisions (Altaf, 2014). Investors look over the risk and return of their investment. Segment reporting is useful due to the presumed diversities of risks and returns across reported segments (Troberg et al., 2010). It enables an investor or a creditor on assessing more realistically the amounts and timing of future earnings and cash flows of a company (Obradović & Karapavlović, 2016), and identifies the major sources of strengths of the firm and risk factors (Altaf, 2014). Therefore, segmental information allows evaluation and analyzing of the organization, its structure and strategic orientation of management before investing in the company (Obradović & Karapavlović, 2016; Kumar & Sridharan, 2014).

Disclosure of segmental information also leads to transparency of business unit or segmental activities that provide information about the position and performance of each business unit or operating segment in addition to an aggregated information about the position and performance for the whole reporting entity. As said, the whole is not the parts, and the parts tell differently what the whole is. Although segment reporting has no impact on total profit, the identification of reportable segments can reveal highly profitable segments (Bugeja et al., 2015) that could provide a better basis for business decision-making by looking at information about its segments (Obradović & Karapavlović, 2016). Therefore, segmental information is also expected to appreciate the financial position and performance of each business unit or operating segment for better predictability of the movements of activities and generation of future revenue and profit as business segments are grouped according to the risks and return. These are all consistent with the report on post-implementation of the standard that it should improve users' ability to predict future results and cash flows and highlight the risks that management consider as important (IFRS, 2013).

One of the topmost goals of any bank is the enhancement of its financial performance (Oluwalaiye et al., 2020), or profitability. Among the profitability measures in which the users of financial information are mostly interested are the return on investment through its Return on Assets (ROA) and Earnings per share (EPS).

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Earnings per share (EPS) is used to compare the available or generated income (net income) to the number of outstanding shares at the end of period (Thomas et al.,2020). EPS have significant and positive effect on market price of shares (Inyiama, 2015; Talamati & Pangemanan, 2015). EPS is used by investors in the stock exchange to enable them compare alternative investments and make their investment decisions (Oluwalaiye et al., 2020). Potential future income can be assessed by investors by looking at EPS (Rosikah et al., 2018).

Segment information resulted in empirical price-based evidence provides more information about stock price (Ettredge et al., 2005) and that segment reporting provided more information about future earnings, including foreign operations, thus, improving the ability to forecast firms' future earnings (Kang & Gray, 2013; Hope et al, 2009; Ettredge et al., 2005; Herrmann & Thomas, 2000). Disclosure of segmental information can make the investors evaluate better the integrity of their reported earnings (Morris et al., 2012) and that poor disclosure reduces earnings predictability that could therefore negatively affect the value of the firm (Hope et al., 2006). Additionally, the study of Heo & Doo (2018) found that analysts can make forecasts more accurately when firms disclose more persistent earnings component (i.e., segment operating income) and that disaggregated segment information can improve their forecasting performance. Managers are concerned with earnings predictability (Hope, Thomas & Winterbotham (2006). Therefore, if there is an increase on EPS growth, there is also an increase on investors' interest at company shares. High EPS provides greater income opportunity for investors (Talamati & Pangemanan, 2015) as it signals a dividend distribution to the shareholders. On the other hand, Rosikah et al. (2018) study of listed companies found that EPS is negative and has no significant effect on firm value. The study of Umar and Musa (2013) also suggested that prediction of stock price behavior should not be relied upon from the firms EPS as it was discovered that there is an insignificant relationship between stock price and EPS.

Based on the existing literature and studies, segmental information can help predict the earning capability of the company particularly on EPS. Various studies were conducted about relationship of disclosures of segmental information on the profitability of a company, but none have investigated on the reportable segments based on the quantitative threshold of IFRS 8. Thus, this study explored the relationship of the reportable segments to EPS of universal banks. Therefore:

Hypothesis 1a. Reportable segment revenues relate to EPS of universal banks.

Hypothesis 1b. Reportable segment profit or loss relate to EPS of universal banks.

Hypothesis 1c. Reportable segment assets relate to EPS of universal banks.

Hypothesis 1d. Reportable segment based on overall test threshold relate to EPS of universal banks.

Return on Assets (ROA) is also one of the widely used, and important (Rao & Dutta, 2013) bank's profitability measures. ROA is a ratio to measure about bank's capability to generate profits and manage the bank's overall business efficiency level (Thomas et al.,2020). ROA reflects how well bank managers use the bank's real investment resources to generate profits (Al-Harbi, 2019). It is thought to be the most effective instrument of measuring and monitoring the financial status of companies (Avlokulov, 2018). The study of Lassala et al. (2017) suggested that ROA is an important indicator of sustainability for companies of specific industries. The higher ROA of a company performance will lead to more effective company, and able to measure the company's ability to project future profits-based form the generated profits in the past (Rosikah et al., 2018).

The profitability of any bank depends to a great extent on the asset utilization of bank's resources invested in earning asset and operational efficiency at it contributes to the increased income and profitability of the bank (Jahan, 2014). Presumably, under IFRS 8, banks' resources are allocated and distributed among its operating segments. Segmental information facilitates investors to make informed investment decisions (Herrmann & Thomas, 2000), and assess and predict firm performance (Knutson, 1993). Disclosure of segmental information helps current and prospective investors to make investment decisions about the allocation of their resources and investments thus, improves the efficiency of the corporation's investment activities (Roberts, 2002 as cited in Azzat, 2018). Mutalib & Jaafar (2019) concluded that firm with large in size (assets) is very highly likely to operate more extensively in scope and areas which lead to high potential outcomes, or income.

The study of Rao & Dutta (2013) found that the major determinants influencing ROA are spread, operating expenses, provisions & contingencies, net performing assets and net interest income. Revenues from sales, total operating cost and asset structure of a company play an important role in shaping an acceptable ROA indicator (Avlokulov, 2018). Rosikah et al. (2018) study of listed companies found that ROA has positive and significant effect on firm value. Bilal et al. (2013) results of the study indicated that bank size, net interest margin and industry production growth rate had positive and significant impact on ROA of commercial banks. Asset, firm size, as element of ROA was found to predict the level of compliance with IFRS 8 among company age, audit quality, profitability, leverage, growth and industry as predictors of the level of compliance (Sucuahi, 2013). In the same manner, a study in Malaysia by Chow and Devi (2001, as cited in Mutalib & Jaafar, 2019) also indicated that firm size is positively related with segment disclosure.

On the other hand, Pardal & Morais (2011) study found out that ROA is a factor negatively related to higher disclosure practices similar with the study of Nichols & Street (2007) that revealed a significant negative relationship between disclosure and company returns in excess of the industry average. Assets are indirectly related to ROA or has negative relationship on ROA (Ranabhat, 2019; Lucchese & Carlo, 2016). Mutalib & Jaafar (2019) results of the study also revealed that there is no significant relationship between the level of compliance to reporting segment and profitability, and firm size.

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Based on the existing literature and studies, segmental information can help predict the earning capability of the company particularly on ROA. Various studies were conducted about relationship of disclosures of segmental information on the profitability of a company, but none have investigated on the reportable segments based on the quantitative threshold of IFRS 8. Thus, this study explored the relationship of the reportable segments to ROA of the universal banks. Therefore:

Hypothesis 2a. Reportable segment revenues relate to ROA of universal banks.

Hypothesis 2b. Reportable segment profit or loss relate to ROA of universal banks.

Hypothesis 2c. Reportable segment assets relate to ROA of universal banks.

Hypothesis 2d. Reportable segment based on overall test threshold relate to ROA of universal banks.

Revenue, profit or loss and external revenue as result of overall threshold are elements directly needed to calculate EPS and ROA. According to Troberg et al., (2010, as cited in Mutalib & Jaafar, 2019) it is beneficial for highly profitable companies to disclose the segments that contribute substantially to the overall performance as benefits outweigh the disclosure costs. Thus, the relationship of the repostable segment as per IFRS 8 with the EPS and ROA of universal banks in the Philippines is being explored in this study.

2. Method and Material

This study used a quantitative research design. Moreover, a correlational research approach was utilized to measure the relationship of reportable segments and profitability of the universal banks. Empirical data are collected from the accounting information reported by twelve universal banks in the Philippines on their published annual report or audited financial statements from 2016 to 2019 which are available on their respective websites since these universal banks are publicly listed entities. Among the twenty-one universal banks in the country, twelve universal banks, all private domestic banks, that adopted Philippine Financial Reporting Standards 8 (PRFS 8) which is a complete adaptation of IFRS 8, were the focus of the study. The other universal banks are foreign bank branches and have adopted IFRS 8, AASB or other standards on their operating segment, while the other universal banks are government banks and reporting segment are not available or incomplete.

The study described the reportable segment of the universal banks in terms of quantitative threshold as to revenues, profit or loss, asset and overall tests, and their financial performance or profitability in terms of return on assets (ROA) and earnings per share (EPS). Reportable segments are presented in terms of percentage quantity and amount. Percentage quantity is based on the number of reportable segments over the total number of all operating segments disclosed. Percentage amount is based on the total amount of revenue, profit or loss, assets, or of external revenue as result of the overall threshold of the reportable segments over the total amount of revenue, profit or loss, assets, or external revenue as result of overall threshold of all operating segments disclosed. The study is limited to the quantitative threshold even if the accounting standard allows segments that do not meet any of the above can be categorized as reportable segments if management through its CODM believes that information about them may be relevant for the users.

ROA and EPS data were also taken from the published annual report or audited financial statements. In case the financial performance is not available, the ratios were computed based on formulas where ROA is computed as net profit over average assets and EPS is computed as earnings available for ordinary shareholders or net profit over average issued and outstanding ordinary shares. Segmental information was gathered from their respective notes to financial statements.

Panel Data Regression Analysis under the Statistical Package for the Social Sciences (SPSS) was used to measure the the relationship of reportable segments to the profitability of the universal banks. Panel Data regression analysis is a combination of cross section data and time series, where the same unit cross section is measured at different times (Zulfikar, 2018). The reportable segments in percentage amount under revenue, profit or loss, assets, and overall tests were the independent variables whereas, EPS and ROA were the dependent variables. Under the general linear model univariate analysis of variance, the corrected model was found to be significant both to EPS and ROA with F value of 33.351 and Sig. value of .000, and F Value of 10.010 and Sig. value of .000, respectively, at 95% significance level. However, none of the independent variables was found significant under the test of between – subject effects and parameter estimates. This was caused by the significant correlation of the variables that indicates multi-collinearity of the independent variables that causes variance inflation which leads to inconsistent results in the regression. Based on the test of correlation, revenue, profit or loss and overall threshold were found to be significantly correlated thus, these independent variables were individually dropped or removed, and panel data regression analysis was repeated to measure the the relationship of reportable segments to the financial performance of the universal banks. This could be explained by the facts that segment revenue is a component of segment profit or loss, segment external revenue as result of overall test is a component of segment revenue, and thus, segment external revenue as result of overall test is a component of segment profit or loss.

3. Results and Discussions

3.1. Results

Table 1
Average EPS, ROA and Number of operating segments

Indicators	2019	2018	2017	2016	Average
EPS	6.39	5.16	5.36	5.03	5.49
ROA (%)	1.28	1.10	1.23	1.23	1.21
No. of Operating Segments	4.33	4.25	4.25	4.25	4.27

Table 1 presents the profitability or financial performance of the universal banks in terms of Earnings per share (EPS) and Return on Assets (ROA), and number of operating segments disclosed by the universal banks on their published financial statements year 2016 to 2019.

On the average, the universal banks have reported 5.49 earnings per share for the four-year period. Eleven universal banks showed increase in EPS while one universal bank has decreased its earnings per share from 2016 to 2019. Universal banks have reported an average increase in earnings per share from 5.03 in 2016 to 6.39 in 2019.

In terms of Return on Assets, on the average, the universal banks have reported 1.21% for the four-year period. The return on assets has increased from 1.23% to 1.28% for the last four years. Six or half of the universal banks have reported increased in ROA from 2016 to 2019. On the other hand, five, 41.67%, universal banks reported a decrease while one, 8.33%, universal bank has maintained its ROA.

On the average, the universal banks have an average of 4.27 or 4 operating segments. Two universal banks disclosed six operating segments, two have five operating segments, six have four operating segments, one has three operating segments, and one has two operating segments. There is only one universal bank that changed its number of operating segments from four to five operating segments from 2016 to 2019.

Table 2
Average Reportable Segments in Quantity Percentage and Amount Percentage

Universal Bank	Segment Revenue		Segment Profit or loss		Segment Assets		Overall	
	Quantity %	Amount %	Quantity %	Amount %	Quantity %	Amount %	Quantity %	Amount %
UB 1	50.00	119.30	80.00	91.44	35.00	84.32	90.00	95.51
UB 2	75.00	96.02	70.00	88.87	45.00	88.87	80.00	97.31
UB 3	20.83	88.09	16.17	89.12	16.17	94.79	20.83	87.97
UB 4	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
UB 5	100.00	100.00	93.75	101.05	75.00	119.37	100.00	100.00
UB 6	50.00	89.66	43.75	99.75	81.25	93.59	81.25	93.27
UB 7	79.17	97.04	75.00	93.40	50.00	84.64	83.33	99.50
UB 8	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
UB 9	75.00	92.34	68.75	95.85	87.50	96.67	100.00	100.00
UB 10	52.94	88.28	64.71	92.77	64.71	94.65	70.59	86.33
UB 11	87.50	95.51	68.75	97.30	62.50	94.89	93.75	100.00
UB 12	75.00	94.06	100.00	100.00	75.00	94.17	100.00	100.00

Table 2 presents the average reportable segments in quantity percentage and amount percentage of the universal banks for reporting periods 2016 to2019. It presents the operating segments that meets any of the quantitative thresholds which the universal banks have disclosed separate and distinct information on their published financial statements.

Analysis of the segment revenue threshold showed that 11, 91.67%, universal banks have at least half, 50%, of their operating segments are reportable segments. In terms of the segment revenue amount, all 12 universal banks on the average have reported at least 88.09% of their total segment revenue are reportable segments. In terms of segment profit or loss threshold, data showed that 10, 83.33%, universal banks have at least half, 64.71%, of their operating segments are reportable segments. In terms of segment profit or loss amount, on the average, all 12 universal banks have reported at least 88.87% of their total segment profit or loss are reportable segments. The segment asset threshold data showed that 9, 75%, universal banks have at least half, 50%, of their operating segments are reportable segments. In terms of segment asset amount, on the average, all 12 universal banks have reported at least 84.32% of their total segment assets are reportable segments.

Results of the analysis of the overall test threshold showed that 10, 83.33%, universal banks have at least 80.00% of their operating segments are reportable segments. Five (5), 41.67%, universal banks reported all operating segments as reportable segments. In terms of the total external revenue reported by identified reportable segments, all universal banks have constituted more than the 75% threshold, at least 86.33%, of the entire universal bank's revenue thus additional operating segments may not be needed to be identified as reportable segments. It is worthwhile to note that five, 62.50%, of the eight universal banks that reported "All Other Segment Category" are reportable segments or have qualified in any of the three quantitative thresholds.

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Table 3 presents the segmental information disclosures by the universal banks in relation to operating segment standard gathered from its most recent reporting period 2019.

Table 3
Segmental information disclosures

Segmental information	Number of Universal banks	Disclosure rate (%)
General Information		
Operating Segments		
According to nature of products or services offered	12	100.00
Based on geographical location	3	25.00
Chief Operating Decision Maker		
President	2	16.67
CEO	1	8.33
Management	2	16.67
Senior Management	2	16.67
BOD	1	8.33
President and CEO	1	8.33
Operating segment under “Other Category”	8	66.67
Information about profit or loss, assets and liabilities		
Revenue from External Customer	7	58.33
Revenue from transactions with other operating segment of the same entity	7	58.33
Interest revenue & interest expense		
Net Amount	8	66.67
Gross Amount	4	33.33
Depreciation and amortization	10	83.33
Entity’s interest in the profit or loss of associates and joint ventures accounted for by the equity method	2	
Income tax expense or income	8	66.67
Material non-cash items other than depreciation and amortization (Credit and Impairment Losses)	10	83.33
Investment in associates and joint venture accounted for by equity method (as part of measure of segment assets)	1 (total amount)	8.33
Deferred Tax assets (segment assets)	1	8.33
Measurement		
Information about Segment Asset	10	83.33
Information about Segment Liabilities	10	83.33
Information about Segment Revenue	11	91.67
Information about Segment Profit or Loss	11	91.67
Reconciliations	3	25.00
Entity wide disclosures		
Information about Significant (Major) Customer	7 (explicit no)	58.33
Information about products or services	12	100.00
Information about geographical areas	10	83.33

Analysis of the data on general information showed that all twelve universal banks grouped their operating segments according to the nature of products or services offered. Eight, 66.67%, universal banks have reported “Other category” operating segments. However, none of the universal banks has explicitly disclosed an aggregation of operating segments.

While a Chief Operating Decision Maker (CODM) identifies a function and not necessarily a manager with specific title, results of the study showed that four, 33.33%, universal banks identified their President and or CEO as CODM. Another four, 33.33%, universal banks also identified their senior management or management team as CODM. Segmental information disclosures also showed that seven, 58.33% universal banks explicitly disclosed that they have no significant customers which has 10% or more of their consolidated revenues. Ten, 83.33%, universal banks have disclosed geographic information of the foreign countries they operate but there are only three, 25%, universal banks that presented country specific segments.

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In terms of information about profit or loss, assets and liabilities, eleven, 91.67%, universal banks disclosed that transactions between segments are measured in an arm's length transaction. Of these, seven, 58.33%, universal banks presented revenue from external customers and revenue from transactions with other operating segment of the same entity. Eight, 66.67%, universal banks reported their interest income net of interest expense as performance measure. Ten, 83.33%, universal banks presented the amount of depreciation and amortization per segment, and other material non-cash items such as credit and impairment losses.

Results of the study also showed that two, 16.67%, universal banks reported the entity's interest in the profit or loss of associates and joint ventures accounted for by the equity method in each of the operating segments. It was also observed that only one, 8.33%, universal bank has reported investment in associates and joint venture accounted for by equity method as part of measure of segment assets in one of its operating segments.

In terms of measurement, data showed that ten, 83.33%, universal banks disclosed information about the measures of segment assets and liabilities whereas, eleven, 91.67%, universal banks disclosed information about measures of revenue and profit. Three, 25%, universal banks have presented reconciliations information.

Table 4
Parameter Estimates of Univariate Analysis of Variance on EPS

Hypotheses	Overall test dropped		Segment Profit or loss dropped		Segment Revenue dropped	
	B	Sig.	*B*	Sig.	*B*	Sig.
H1a: Revenues to EPS	0.082	0.059	0.074	0.087		
H1b: Profit or loss to EPS	0.039	0.301			0.051	0.179
H1c: Assets to EPS	0.027	0.597	-0.009	0.87	-0.002	0.973
H1d: Overall test to EPS			0.112	0.134	0.143	0.057
F-Value Corrected Model		33.902		35.238		33.961
Sig Value Corrected Model		0.000		0.000		0.000

Table 4 presents the parameter estimates of univariate analysis of variance on Earnings Per Share. Analysis of data indicated that the corrected model is significant in all cases when overall test, reportable segment profit of loss and reportable segment revenue were dropped with F-value of 33.902, 35.238 and 33.961 and significance value of 0.000, 0.000 and 0.000, respectively.

Results showed that reportable segment revenue is not significantly related to EPS. This is true in both cases where overall test and reportable segment profit or loss were dropped with >0.05 significance value of 0.059 and 0.087, respectively. This suggests that H1a is not supported. Similarly, data showed that reportable segment profit or loss is not significantly related to EPS. This is true in both cases where overall test and reportable segment revenue were dropped with >0.05 significance value of 0.301 and 0.179, respectively. This suggests that H1b is not supported.

Data also showed that reportable segment assets is not significantly related to EPS. This is true in cases where overall test, reportable segment profit or loss and reportable segment revenue were dropped with >0.05 significance value of 0.597, 0.870 and 0.973, respectively. This suggests that H1c is not supported. Likewise, data also showed that reportable external revenue as result of overall test is not significantly related to EPS. This is true in both cases where reportable segment profit or loss and reportable segment revenue were dropped with >0.05 significance value of 0.134 and 0.057, respectively. This suggests that H1d is not supported.

Table 5
Parameter Estimates of Univariate Analysis of Variance on ROA

Hypotheses	Overall threshold dropped		Profit or loss threshold dropped		Revenue threshold dropped	
	B	Sig.	*B*	Sig.	*B*	Sig.
H2a: Revenue to ROA	0.015	0.041	0.015	0.047		
H2b: Profit or loss to ROA	0.004	0.577			0.006	0.414
H2c: Asset to ROA	0.004	0.635	0.002	0.836	0.002	0.824
H2d: Overall to ROA			0.006	0.642	0.012	0.367
F Value Corrected Model		10.957		10.918		9.646
Sig Value Corrected Model		0.000		0.000		0.000

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Table 5 presents the parameter estimates of univariate analysis of variance on Return on Assets. Analysis of data indicated that the corrected model is significant in all cases where overall test, segment profit of loss and segment revenue were dropped with F-value of 10.957, 10.918 and 9.646 and significance value of 0.000, 0.000 and 0.000, respectively.

Results of analysis of data also showed that reportable segment revenue is significantly related to ROA. This is true in both cases where overall test and reportable segment profit or loss were dropped with <0.05 significance value of 0.041 and 0.047, respectively. This suggests that H2a is supported.

On the other hand, data showed that reportable segment profit or loss is not significantly related to ROA. This is true in both cases where overall test and reportable segment revenue were dropped with >0.05 significance value of 0.577 and 0.414, respectively. This suggests that H2b is not supported. Similarly, data also showed that reportable segment assets is not significantly related to ROA. This is true in cases where overall test, reportable segment profit or loss and reportable segment revenue were dropped with >0.05 significance value of 0.635, 0.836 and 0.824, respectively. This suggests that H2c is not supported.

In terms of overall test, data also showed that reportable external revenue is not significantly related to ROA. This is true in both cases where reportable segment profit or loss and reportable segment revenue were dropped with >0.05 significance value of 0.642 and 0.367, respectively. This suggests that H2d is not supported

3.2. Discussion

Findings of the study disclosed that universal banks have 2 to 6 operating segments. On the average, universal banks have 4 operating segments, similar with Nichols et al. (2013) with average of 4.19, Crawford et al. (2012), 3.56, Pisano & Landriana (2012, as cited in Nichols et al. (2013), 3.85, and Kang and Gray (2013), 3.69, but higher than the result of the study of He et al. (2012, as cited in Nichols et al. (2013), 3.10, Mardini et al. (2012, as cited in Nichols et al. (2013), 2.70, and Obradović, & Karapavlović (2016) with 3 operating segments in financial institutions. The findings indicate that the number of operating segments of the universal banks is practical as it does not exceed ten (IFRS 8). It was also disclosed that operating segments of all twelve universal banks are grouped according to their nature of products or services offered, or are mainly based on lines of business (Pardal & Morais, 2011). However, Kopecká, N. (2016) study results showed that listed entities identified their segments more as geographical area with 90% over as their products or services with 60%. The findings indicate that most of the operating segments are patterned after their organizational structure that represents a strategic business unit in which group of assets and operations are subject to risks and returns that are different from other operating segments. Some of their operating segments are commercial banks, consumer banking, corporate banking, investment banking, lending business, wholesale banking, retail banking, financial markets, treasury, trust, and branch banking among others.

Findings of the study revealed that at least half of operating segments of almost all universal banks qualified as reportable segments based on segment revenue, at least 50% by eleven or 92% of universal banks; segment profit or loss, at least 64% by ten or 83% of universal banks; segment assets, at least 50% by nine or 75% of universal banks; and overall tests, at least 75% by ten or 83% of universal banks. Likewise, findings of the study revealed that majority of the total segment revenue, segment profit or loss, segment assets and segment external revenue as result of overall test are reported on the reportable segments with at least 88% of the total segment revenue, at least 89% of the total segment profit or loss, at least 84% of the total segment assets, and at least 86% of the total external revenue of the universal banks. The findings indicate that the utilization and performances of the allocated resources may be observed in most of the operating segments of the universal banks.

None of the universal banks explicitly disclosed the aggregation of operating segments. The findings relate with ESMA (2011) and KPMG (2010, 81 Global 500 as cited in Nichols, 2013) that it is not clear whether segments have or have not been aggregated on their segmental disclosures.

The results of the study also revealed that segment revenue of the universal banks is primarily generated from net interest income, that is gross interest income less interest expenses, directly attributable to the segment. The segment profit or loss of the universal banks is derived after deducting segment expenses from segment revenue that are directly attributable to the operating segment. The segment assets of the universal banks are comprised primarily of operating assets that are directly attributable to the operating segment or can be allocated to the segment on a reasonable basis. It was further revealed that different measurement, components, and accounts are used to measure the segment revenue, segment profit or loss, and segment assets. Measures used for segment revenue are "Revenue – net of Interest Expense", by three universal banks, "Total Net Revenues" by two, "Segment Revenue" by two, and "Total Income", "Total Revenue", "Total Operating Income", "Net interest income and other income", and "Net interest income (expense)" each by one universal bank. Profit or loss accounts disclosed are "Net Income" by two universal banks, "Net income for the year", by two, and others used "Net Income (loss)", "Segment Net Income", "Operating Profit", "Segment Operating Profit (Loss)", "Segment Result" "Profit before tax" "Income before credit loss and tax" and "Net Income Before Tax". Six universal banks used "Total Assets" to disclose their segment assets, three used "Total Resources", two used "Segment Assets", and one used "Segment Resources." The findings prove the use of non-IFRS measures that signifies the use management approach (IFRS post-implementation report, 2013; Obradović & Karapavlović, 2016; Botosan & Stanford, 2005; Kajujter & Nienhaus, 2015 as cited in Kopecka, 2016).

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Results of the study revealed that nine, 75%, universal banks named their Chief Operating Decision Maker (CODM) as President, CEO, Management, Senior Management and or BOD. The findings relate with the study of Nichols et al. (2013), Mardini et al. (2012), and Kang & Gray (2013 as cited in Bugeja et al., 2015). Though not required by IFRS 8, disclosure of the identity of CODM is crucial as it provides information to the users of report about how key business decisions are organized and made (Mutalib & Jaafar, 2019; Crawford et al., 2012; Nichols, 2013).

It was revealed in the study that majority, 7 or 58.33%, universal banks disclosed that they have no significant or major customers. The findings agree with the study of Kopecka (2016), Azzat (2018) and Kopecká (2016) that major customer was disclosed only by few or no companies because of the 10% threshold requirement, or the information might be a sensitive point for competition (Mutalib & Jaafar, 2019; Bugeja et al., 2015 as cited in Kopecká, 2016) that limits disclosures and might conceal accounting information (Balakrishnan & Cohen, 2013). Furthermore, entity wide disclosures are not apparent since all operating segments are grouped according to line of business that support the study of Mutalib & Jaafar (2019) that revealed information on products and services are both items disclosed by 94 out of 97 firms, and not based on geographical information. Similarly, the result of the study revealed that only three, 25%, universal banks presented their operating segments based on geographical location though 10, 83.33%, have disclosed geographic information of the foreign countries they operate. The findings support the study of Street & Nichols (2002) and Cerealo et al. (2013, as cited in Nichols, 2013) with only 19 (16%), and 84 (24%) disclosures on country-specific segments, respectively. Majority, 7 or 58.33%, of the universal banks did not present their geographical segments since their revenue producing assets are mainly derived or located in the Philippines, or their foreign operations are immaterial or accounted only for minimal percentage.

It was disclosed in the study that majority, 7 or 58.33%, universal banks presented their revenue from external customers and revenue from transactions with other operating segment of the same entity. The findings agree with the study of Kopecká (2016) and Azzat (2018) with disclosure rate of 90% and 55%, respectively, for revenue from external clients; and with the intersegment and other operating segments at 70% (Kopecká, 2016) but disagrees with Azzat (2018) with 0.00% disclosure rate. Other universal banks have no disclosure on revenue from external customers which is somewhat alike with the paper of Pardal & Morais (2011) in which external revenue was not clearly identified which may include inter-segment revenue as the amount is immaterial or there might be no transactions involving intersegmental revenue. Majority, 8 or 66.67%, universal banks reported their interest income net of interest expense as performance measure. The amount of depreciation and amortization per segment was disclosed by almost all, 10 or 83.33%, universal banks which supports the study of Kopecká (2016) with 60% disclosure rate, and thus, one of the most disclosed segmental information (Pardal & Morais, 2011).

Findings of the study also revealed a low disclosure rate on interest in the profit or loss of associates and joint ventures accounted for by the equity method similar with that of Azzat (2018). On the other hand, income tax expenses were presented in each operating segment of eight, 66.67%, universal banks. The findings do not support the study of Pardal & Morais (2011) that revealed that tax was an item less disclosed, or no disclosure Azzat (2018). Disclosures of material non-cash items such as credit and impairment losses are high as these are reported in each operating segment of ten, 83.33%, universal banks. However, there is a very low, 1 or 8.33% universal bank, disclosure on investment in associates and joint venture accounted for by equity method as part of measure of segment assets in one of its operating segments. This supports the study of Pardal & Morais (2011) and Azzat (2018) in which investments accounted by the equity method was an item less disclosed.

Results of the study also revealed that disclosures on information about the measures of segment assets and liabilities, 10 or 83.33%, and revenue and profit or loss, 11 or 91.67%, are very high. The findings are consistent with Mutalib & Jaafar (2019) that the most reported items are both profit or loss, and external revenue followed by inter-segment revenue. Various measurements are explicitly included in the measure of the segment's revenue, profit or loss, assets or liabilities, and are allocated on reasonable basis that are reported to and used by their CODM. Similarly, assets and liabilities were the most disclosed items in the study of Kopecka (2016) and Pardal & Morais (2011). These findings are critical as these present the allocation of resources and thus, the efficiency and effectiveness of the management operations and decisions can be observed per operating segment. While reconciliation is expected for financial statement users to be able to have a clear insight on the relationship of the information on each reportable segment and information relating to the entity as whole (Haller et al., 2003 as cited in Obradović & Karapavlović, 2016) the findings of the study revealed a very low disclosure rate by 3, 25%, universal banks. Overall, the disclosure of segmental information revealed that it varies among the universal banks as it is also influenced by the firms' management purposes and daily business activities (Mutalib & Jaafar, 2019), and of their CODM.

Findings of the study revealed that reportable segment revenue, profit or loss, assets and overall test are not significantly related to EPS. The findings may support the study of Balaputhiran (2014) which found that there is no significant association between firms' performance (net profit) and EPS, and the study of He et al. (2016) which found that disaggregated segment information have not significantly improved the analysts' earnings forecasts. Although it is expected that segment revenue, profit or loss and overall test are directly proportional to EPS, the findings indicate that there is no sufficient evidence to establish relationship to EPS. The result may also be attributed to the average outstanding shares of the universal banks which is an element inversely related in computing EPS.

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Similarly, the findings of the study also revealed that reportable segment profit or loss, assets and overall test are not significantly related to ROA. Although it is expected that segment assets are inversely proportional to ROA and that segment profit or loss and overall test are directly proportional to ROA, the findings indicate that there is no sufficient evidence to establish relationship to ROA.

On the other hand, findings of the study revealed that only reportable segment revenue is significantly related to ROA. It indicates that for every unit increase in reportable segments revenue there is a 0.015 (b-value) increase in ROA. This suggests that reportable segment revenue is positively proportional to ROA. The findings may give support to the study of Bilal et al. (2013), Rao & Dutta (2013) and Avlokulov (2018) which found that net interest income (margin) and revenues (from sales) are major determinants influencing ROA. Further, the positive relationship between reportable segment revenue and ROA may indicate that management and investors may look upon the resources allocated to operating segments that generate most revenue, at least 10%, as it may project future profits (Rosikah et al., 2018).

4. Conclusion

Management approach of operating segment standard allows disclosure of segmental information of its operating segments based on the internal business structure and that allocation of resources and assessment of its performances is identified and must be regularly reviewed and reported to CODM for business decision making. The results of the study showed that all operating segments, with average of four, are grouped according to the nature of products or services offered. None of the universal banks has a single operating segment. Disclosure of geographical segments is very low. Majority, at least 75%, of the operating segments are reportable segments which also showed that at least 84% segmental revenue, profit or loss and assets are reported and observed on these reportable segments.

The results of the study also showed that the most disclosed segmental information are information about interest revenue & interest expense, depreciation and amortization, material non-cash items such as credit and impairment losses, income tax expense, measures of revenue, profit or loss, assets and liabilities, revenue from external customer and revenue from transactions with other operating segment of the same entity. The less disclosed segmental information are information pertaining to reconciliations, geographical segment reporting, entity's interest in the profit or loss of associates and joint ventures accounted for by the equity method and investment in associates and joint venture accounted for by equity method.

The results of the study also showed that none of the universal banks explicitly disclosed the aggregation of operating segments. Only one universal bank has changed or increased its number of operating segments during the four-year period. Segmental revenue of universal banks is mostly reported as interest income net of interest expense. No universal banks has identified major customer. It was also observed on the study the use of non-IFRS measures on segment revenue, segment profit or loss and segment assets.

Based on these, even as the operating segment standard requires the disclosures of discrete information on the reportable segments to enable users of financial statements evaluate the nature and effects of the business activities' operations (IFRS 8 par 20), the findings of the study indicated that disclosures are incomplete or not explicitly divulged or even supported with other relevant details. All the findings on segmental information disclosure could be also attributed to the fact that it is influenced by the reporting management and decision making of the CODM that serves as the "eyes of the management" given that it is a function that allocates resources to the operating segments and assesses the performances thereon.

The management approach of operating segment standard is expected to help predict entity's earning capability and future growth however, the result of this study revealed that only reportable segment revenue is significantly related to return on asset (ROA) of universal banks. None of the reportable segment revenue, profit or loss, assets, and external revenue as result of overall test is significantly related to earnings per share (EPS) of the universal banks. This indicates that the management and investors may pay attention to the universal banks' revenue generating activities to see the capability of the company to earn and grow in the future. It may also imply that resources (assets) allocated in the identified reportable segments, particularly under the segment revenue threshold, must be given attention in making business decisions.

Investors and other interested users of the financial statements should be skeptical in assessing or evaluating the financial position (assets and liabilities) and performances (revenue and profit or loss) of the company not only as one single reporting entity but also on its operating segments to give a better picture of the entity's business units. The findings of the study may not provide sufficient evidence on the relationship of the reportable segments to the universal banks' profitability, users of financial statements should not discount the fact that the disaggregation or segmental information of its operating segments, which includes most of reportable segments), reflects the internal business structure, internal business reporting and how decision making is organized and made and thus, reflects the company through the eyes of the management.

For future research, different industries may be considered and cover more reporting periods and samples for better analysis of data.

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