# EFFECTS OF PFRS 16 ON THE PERFORMANCE METRICS OF THE AIRLINE INDUSTRY

Jenevy Rabina, Sharina Mae Cagaoan, Alysa Ashley Seguritan, Keith Jasmin Jiminez, Benadette Pagunuran,

Jerome Marquez, CPA

School of Accountancy, Business and Hospitality University of Saint Louis Tuguegarao City, Cagayan

Abstract— This study was conducted to determine the effects of PFRS 16 on the Performance Metrics of the Airline Industry. Data was collected through the usage of the financial statements of Cebu Pacific Air and Philippine Airlines that utilizes the PFRS 16 accounting standard and the translated financial statements utilizing the IAS 17 standard to collect the necessary data for the computation of the key financial ratios specifically the Profitability Ratio (Return on Asset and Return on Equity), Liquidity Ratio (Cash Flow Operation), Leverage Ratio (Debt to Equity Ratio, Interest Coverage Ratio, and Debt to Asset Ratio), Activity Ratio (Asset Turnover Ratio and Fixed Asset Turnover Ratio), and Market Ratio (Price Earnings Ratio and Book Value Per Share). The data gathered was analyzed using the Industry Average Ratio to determine the performance of Cebu Pacific Air and Philippine Airlines after the change in accounting standard. In addition, the key difference of the key financial ratios was gathered to determine the consistency and inconsistency of the computed ratios for both airlines. The study then revealed that the new standard greatly affected profitability, leverage, and activity. It is noticed that the change in standard to PFRS 16 is more favorable to Philippine Airlines, than Cebu Pacific Air and on the other hand, IAS 17 is more favorable to Cebu Pacific Air than Philippine Airlines.

Keywords— PFRS 16, IAS 17, Operating Leases, Financial Leases, Financial Ratios

## I. INTRODUCTION

The International Financial Reporting Standards Foundation (IFRS, 2019) noted that 13th January 2016, International Accounting Standards Board issued the new lease standard, IFRS 16. A term lease was a contract that illustrated the right to use an asset (the underlying asset) for a while in exchanged for consideration that would provide the lessee, also identified as the tenant, the utilization of the property for the monthly bill of the lessor or the property owner, according to the Philippine Financial Reporting Standards 16 Leases (PFRS 16), the localized and adopted version of International Financial Reporting Standards 16 Leases (IFRS 16) in the Philippines. The hotly debated and long anticipated IFRS 16 has become effective for all financial periods commencing on or after the 1st January 2019. According to Dillion (2014) and Ernst & Young (2016) it is expected to have a far-reaching effect on companies both globally and in South Africa. For entities that have a significant number of operating leases, IFRS 16 is anticipated to materially change certain numbers in the financial reports, which, in turn, would impact the capital structure, liquidity and profitability. Numerous stakeholders including investors and lenders depend on these reported figures and ratios to make entity-related decisions IFRS 16 is the outcome of a plan by the IASB and the Financial Accounting Standards Board (FASB) that enhance the accounting for leases in response to concerns over the deficiency in transparency of information about lease obligations.

The old lease standard, the International Accounting Standard 17: Leases (IAS 17), has been used in the past by entities in accomplishing 'off-balance sheet' financing by a lessee, whereby the lessee could obtain the used of an asset and has an obligation for lease payments to the lessor; however, it is permitted under IAS 17 not reflect the lease assets and liabilities in their financial statements (IASB, 2016).

In the study of Koppeschaar, et al. (2016) states that the Securities and Exchange Commission (SEC) calculated that the United States had \$1.25 trillion in off-balance sheet financing resulting from operating leases in 2005 (SEC 2005). Therefore, companies that reported material offbalance sheet leases under IAS 17 can be forced under IFRS 16 to capitalize a lease asset based on the present value of the lease payments and recognized a financial liability if lease payments were made over time.

According to the International Financial Reporting Standards Foundation (IFRS, 2019) a term lease is a contract that illustrates the right to use an asset (the underlying asset) for a while in exchange for consideration that would provide the lessee, also identified as the tenant, the utilization of the property for the monthly bill of the lessor or the property owner. Leasing is a common type of financing for many firms, especially in aviation, retail, and shipping. Even though leases created actual liabilities, most leases were categorized as "operating leases" but were not reported on the statement of financial position under earlier regulations. The lack of data on the balance sheet showed that the company's obligations and profits appear to be lower than they should be. Due to the factors mentioned earlier, it has become necessary to develop a new leasing standard. Furthermore, the new lease standard, or IFRS 16, is already in effect during 2019 since it was issued in January 2016.

According to the recent study terms of the lessee, IFRS 16 eliminated the distinction between an operational and a financial lease and ensured that all leases were visible on the balance sheet (Ozturk et al., 2016). The change in standards is expected to have a significant impact on lessees' financial statements, as all ongoing and upcoming lease transactions that would have been accounted for as operating leases by the lessee in the past should be recognized as right-of-use assets and liabilities in their Statement of Financial Position as (Le Roux, 2021). Hladika, M & Valenta, I. (2018) stated that the

new accounting lease standard (IFRS 16) and model would provide certain users of a financial statement with more precise information in analyzing a company's financial situation and value its debt obligations, and to more properly assess the risks it takes. When fully implemented, the new norm would significantly impact the firm's financial statements, which relied heavily on operating leases. Due to policies and rules, the IASB-affiliated "Effects Analysis Consultative Group" published research in 2014 on the industries affected. According to the survey, the new regulations would significantly impact nearly half of the world's businesses. It was also discovered in (Maagli, 2018) a study that the airline industry or businesses could be one of the most affected industries since several airlines rent their aircraft through operational leases (Maagli, 2018). Commonly, airline firms relied on leasing aircraft, airport infrastructure, and offices worldwide.

According to the study by You (2017) on the operating lease capitalization of 31 listed airline companies worldwide, they found that the adjusted assets and obligations increased, but the adjusted equity decreased. You (2017) findings also showed a growth in leverage ratios, also to the median ROE and ROA. Susanti, et al. (2020) investigated the aviation firm's financial statements and relative financial ratios in Indonesia after using the new accounting lease standard, IFRS 16. The study's findings revealed that profitability (ROA), solvency, and asset utilization efficiency decreased.

The standard, PFRS 16, is relatively new, so local studies about this were currently non-existent in the Philippines. In previous studies done internationally, the assumptions and predictions of the impact of PFRS on different businesses had been their focus. However, this study is dedicated to see the effect of the PRFS 16 by translating the financial statements of the airlines industries from 2019 onwards to IAS 17. The researchers preferred Philippine Airline, Inc. (PAL) and Cebu Pacific Air, Inc. and Subsidiaries as it is one of the most affected industries because of their heavy use of operating lease models.

This study aims to broaden the knowledge and understanding of people in academe, specifically the accounting department with the changes that will occur on the lease subject upon the implementation of PFRS 16. This research also aids in identifying whether the transition to PFRS 16 will achieve the Financial Reporting Standard Council's expectations for a company to have solid financial reporting practices and whether it improves in providing proper and complete disclosure for whole-year accounts. The study, on the other hand, will benefit bigger firms, particularly those that depend exclusively on lease transactions. This study will provide full disclosure and greater transparency, including accountability for financial statement users such as investors and creditors of Cebu Pacific Air, Inc. and Subsidiaries and Philippine Airlines, Inc. Investors will also have a more comprehensive understanding of the company's performance allowing them to spot critical risk areas that could lead to asset value losses. This allows them to establish financial ratios, which can be used to measure a company's profitability and insolvency risks. This study provides creditors with more facts about the company's credit risk, allowing them to comprehend and evaluate the risks and firms will be able to comprehend the shift that has occurred in investor investing activities. With regards to the curriculum, this study enhances and further provides timely data that has been non-existent before. Previous assumptions about the standard will be elaborated with factual data.

#### **II. METHODS**

The study utilized quantitative research design employing case study methods. This study relied on secondary data such as financial reports and other supporting materials among the two chosen airlines which are Cebu Pacific Air, Inc. and Subsidiaries and Philippine Airlines, Inc. as the subject of the study. The companies were chosen with the following characteristics: the company is a lessee that accounts for most of its lease transactions using the operational lease accounting method; the company has a financial statement with an unqualified opinion for 2019 and the company's annual report includes supporting data on asset leasing activities. The researchers asked permission from the Vice-President for Academics through the Academic Dean of the School of Accountancy, Business and Hospitality on the conduct of the study. After permission is granted, the researchers conducted the document analysis with the following data needed:

Ratio	Data Needed
Profitability a. Return on assets (ROA) b. Return on Equity (ROE)	• The company's total net income, as well as the average total assets used to include prior years assets.
	• Net income and shareholder's equity are needed, including expenses and taxes.
Liquidity a. Cash Flow Operation (CFO)	• Net income, under the income statement. The net income statement includes expenses that have not yet been paid for. As a result, net income should be adjusted by deducting all non-cash expenses such as depreciation, stock-based compensation, and others.
Leverage a. Debt to Equity Ratio (DER) b. Interest Coverage Ratio (ICR) c. Debt to Asset Ratio (DAR)	<ul> <li>Total liabilities and Total amount of shareholders' equity. Total liabilities include both current (short-term) and long-term liabilities. Shareholders' equity is calculated as total assets less total liabilities.</li> <li>The annual income before interest and income tax expenses of the corporation, as well as its annual interest expense, are necessary for the Interest Coverage Ratio.</li> <li>The accounts needed in computing Debt to Asset Ratio are the borrowings of the company such as long term and short-</li> </ul>

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Activity a. Asset Turnover Ratio (ATR) b. Fixed Asset Turnover Ratio (FTR)	<ul> <li>term debt, as well as all assets – tangible and intangible assets.</li> <li>Net sales from the income statement, also known as operating revenues, as well as total assets, which include fixed assets and intangible assets.</li> <li>Net sales from the net income statement and net fixed assets out from the balance sheet through determining the average of the beginning and ending net fixed assets.</li> </ul>
Market a. Price Earnings Ratio (P/ER) b. Book Value Per share (BVPS)	<ul> <li>Yearend price in the stock market and the net income from income statement and preferred dividends from shareholder's equity, as well as the outstanding shares.</li> <li>The accounts needed in computing the Book Value per Share are the shareholder's equity, preferred equity, as well as the number of common shares.</li> </ul>

In the Notes to Consolidated Financial Statements for 2019, 2020 and 2021 the researcher gathered existing data on operating leases, such as type and number of airlines leased and operating lease payments.

Upon the collection of the needed information, the researcher analyzed the significance of the changes between IAS 17 to PFRS 16 on the financial statements of Cebu Pacific Air, Inc. and Subsidiaries and Philippine Airlines, Inc. After the data is gathered, it is then analyzed and interpreted

The data on profitability, liquidity, leverage, activity and market is computed using financial ratios. To determine the qualitative description of the specific ratios computed by the researchers, an industry ratio was created based on the average ratios of the airline industry.

Legend	Profitabilit y	Liquidit y	Leverag e	Activit y	Mark et
Very Good	>0.075	>0.0255	<0.02	<0.702 5	>16
Good	0.051 - 0.075	0.02526 - 0.0255	0.02 - 0.025	0.7025 - 0.7275	13 - 15
Moderat e	0.026 - 0.05	0.02501 - 0.02525	0.0251 - 0.03	0.7276 - 0.7525	10 - 12
Bad	0.001 - 0.025	0.02475 - 0.025	0.031 - 0.035	0.7526 - 0.7775	7 - 9
Terrible	<0.001	<0.0247 5	>0.035	>0.777 5	<7
	Average Indu y Ratios and . for Analysis	Air Transp	ort Service	Financial	

#### III. RESULTS

TABLE I. FINANCIAL RATIOS USING PFRS 16 (CEBU PACIFIC AIR, INC. AND PHILIPPINE AIRLINES, INC)

		Cebu F	acific Air,	Cebu Pacific Air, Inc. and Subsidiaries	sidiaries			Philippine	Philippine Airlines, Inc.	1
Financial Ratios	2019	2020	2021	Mean	Qualitative Description	2019	2020	2021	Mean	Qualitative Description
Profitability										
a. Return on Assets (ROA)	0.0018	0.0099	-0.0035	0.0027	Bad	-0.03053	-0.32068	-0.03053 -0.32068 0.312678 -0.01284	-0.01284	Terrible
b. Return on Equity (ROE)	0.0064	0.0562	-0.0458	0.0557	Good	-1.98112	1.07308	-1.98112 1.07308 35.87272	11.65489	Very Good
Liquidity										
a.Cash Flow Operation (CFO)	0.1807	0.3676	0.0366	0.1950	Very Good	0.349254	-0.67478	-0.62232	0.349254 -0.67478 -0.62232 -0.31595	Terrible
Leverage										
a. Debt to Equity Ratio (DER)	1.6626	4.6612	12.031	6.1182	Terrible	63.89506 -4.34622	-4.34622	113.7275	113.7275 57.75878	Terrible
b. Interest Coverage Ratio (ICR)	0.4727	0.2792	-1.0009	-0.0830	Very Good	-1.17766	-7.95651	-1.17766 -7.95651 8.408393 -0.24192	-0.24192	Very Good
c. Debt to Asset Ratio (DAR)	0.7153	0.8233	0.9232	0.8207	Terrible	0.984591	1.298845	0.984591 1.298845 0.991284 1.091573	1.091573	Terrible
Activity										
a. Asset Turnover Ratio (ATO)	0.5907	0.1581	0.1180	0.2889	Very Good	0.597788	0.202533	0.597788 0.202533 0.27837	0.359564	Very Good
b. Fixed Asset Turnover Ratio (FTO)	0.8411	0.2286	0.1901	0.4199	Very Good	0.65392	0.316982	0.515849	0.65392 0.316982 0.515849 0.495584	Very Good
Market										
a. Price/Earnings (P/E) ratio	188.88	23.793	-51.831	53.615	Terrible	-8092.88	-1091.67	-8092.88 -1091.67 1309.81	-2624.91	Very Good
b. Book value per share	74.721	37.798	16.816	43.112	Very Good	0.000422	-0.00587	0.000146	0.000422 -0.00587 0.000146 -0.00177	Terrible

Table 1 represents the data gathered using PFRS 16 for the financial ratios of Cebu Pacific Air, Inc. and other subsidiaries, as well as in Philippine Airline, Inc. Under Cebu Pacific Air, Inc., the Profitability area of the company has shown negative results with a 0.002736 mean for the Return on Assets (ROA) and 0.0557 mean for the Return on Equity (ROE), indicating that the two ratios have a "Bad" and "Good" result, respectively. These results had been affected by the inclusion of the Right-of-use Asset in the ROA and the increase in Deficit on the Equity account. The Liquidity Ratio of the company on the other hand used the Cash Flow Operation ratio yielding a 0.19499 mean showing a "Very Good" result which indicates that the company has a low percentage in terms of paying its current debts with its current cash. Leverage Ratio evaluates a company's capacity to meet its liabilities and for Cebu Pacific Air, Inc. and other subsidiaries, a positive result has been gathered. The Interest Coverage Ratio (ICR) has resulted to "Very Good" with a mean result of -0.08301 while on the other hand the Debt to Equity Ratio (DER) and Debt to Asset Ratio (DAR) has both shown a "Terrible" result with a 6.118236 and 0.820651 respectively. On the other hand, the Activity Ratio was determined through the use of Asset Turnover Ratio (ATO) and Fixed Asset Turnover Ratio (FTO). Both ratios had shown a "Very Good" result yielding a 0.288943 for ATO and a 0.419936 for FTO. Lastly, the Market Ratio was determined through the computation of the Price Earnings Ratio (P/E Ratio) with a result of 53.6146 and Book Value Per Share (BPS) with a 43.11177 value. P/E Ratio has been determined to have a "Terrible" result while the BPS on the other hand has a "Very Good" result.

On the other hand, PAL's profitability ratio was measured using Return on Assets (ROA) and Return on Equity (ROE) which was both interpreted as "Terrible" for ROA and "Very Good" for ROE with the means of -0.01284 and 11.65489. The Liquidity ratio which was measured using Cash Flow Operation (CFO) also has a "Terrible" qualitative description because of its -0.31595 mean which signifies that the airline's outflow of cash for operating activities is not that high or is decreasing for the past three years. Under Leverage are Debt to Equity Ratio (DER), Interest coverage Ratio (ICR), and Debt to Asset Ratio (DAR). Both DER and DAR with a mean of 57.75878 and 1.091573 is noted as "Terrible" for having high DER and it signifies a higher risk to lenders and investors, while ICR is "Very Good" for having low mean -0.24192. For the PAL's Activity, both Asset Turnover Ratio (ATO) and Fixed Asset Ratio (FTO) has a "Very Good" qualitative description with the means 0.359564 and 0.495584 as it reveals that the air which was measured using the Price Earnings Ratio (P/E Ratio) with a mean of -2624.91, resulted in a very good while, while Book Per Share (BPS) with a mean of 0.00177 resulted in terrible impact.

#### TABLE II. FINANCIAL RATIOS USING IAS 17 (CEBU PACIFIC AIR, INC. AND PHILIPPINE AIRLINES, INC)

		Cebu	Cebu Pacific Air, Inc. and Subsidiaries	. and Subsid	laries			Philippines	Philippines Airlines, Inc.	с.
Financial Ratios	2019	2020	2021	Mean	Qualitative Description	2019	2020	2021	Mean	Qualitative Description
Profitability										
a. Return on Assets (ROA)	0.00228	0.013259	-0.00445	0.003698	Bad	-0.07936	-0.07936 -0.42617	-0.178	-0.22784	Terrible
b. Return on Equity (ROE)	0.0557	0.154942	0.03101	0.068157	Good	-0.17259	-0.17259 -6.21136	-0.28243	-2.22213	Terrible
Liquidity										
a.Cash Flow Operation (CFO)	0.07707	0.0844	-0.06989	0.03052	Very Good	0.017137	-1.03856	0.017137 -1.03856 -2.34136 -1.12093	-1.12093	Terrible
Leverage										
a. Debt to Equity Ratio (DER)	7.122317	7.122317 10:68591	-7.97622	3.277334	Terrible	1.174849	13.5748	1.174849 13.5748 0.586643 5.112096	5.112096	Terrible
b. Interest Coverage Ratio (ICR)	1.620867	1.720851	1.620867 1.720851 Not Applicable 1.670859	1.670859	Terrible	-3.29583	-17.2397	-3.29583 -17.2397 -6.83134 -9.12228	-9.12228	Very Good
c. Debt to Asset Ratio (DAR)	0.876882	0.876882 0.914427	0.308051	0.699787	Terrible	0.540198	0.931388	0.540198 0.931388 0.369738 0.613775	0.613775	Terrible
Activity										
a. Asset Turnover Ratio (ATO)	0.66769	0.66769 0.204709	0.153258	0.341886	Very Good	0.399053	0.159241	0.399053 0.159241 0.194956 0.251083	0.251083	Very Good
b. Fixed Asset Turnover Ratio (FTO)	0.866205	0.866205 0.272773	0.233101	0.45736	Very Good	0.524539	0.247186	0.524539 0.247186 0.35465 0.375458	0.375458	Very Good
Market					25					
a. Price/Earnings (P/E) ratio	-10.0082	-9.6777	-8.4019	-9.3626	Very Good	-3054,47	-561.27	-3054,47 -561.27 -1390.80 -1668.85	-1668.85	Very Good
b. Book value per share	25.58549	13.69851	-26.1204	4.387872	Terrible.	0.000422	-0.00587	0.000422 -0.00587 0.000146 -0.00177	-0.00177	Terrible

Table 2 shows the financial ratio of Cebu Pacific Air, Inc. and other subsidiaries, as well as in Philippine Airlines, Inc. using the restated old standard IAS 17. It shows that if it changes to the old standard, the qualitative description of Cebu Air in terms of Return on Asset (ROA) has a bad impact with a mean of 0.003698, while it has good performance in Return on Equity (ROE) with a mean of 0.68157. It has greatly impacted the liquidity ratio into very good description under Cash Flow Operation (CFO) with a mean of 0.03052. Under Leverage, the Debt-to-Equity Ratio (DER) with a mean of 3.277334, the Interest Coverage Ratio (ICR) with a mean of 1.670589 and the Debt to Asset Ratio (DAR) with a mean of 0.699787 has a terrible impact as restated in the old standard. On the other hand, Activity under Asset Turnover Ratio (ATO) with a mean of 0.341886 and Fixed Asset Turnover Ratio (FTO) with a mean of 0.45736 shows very good impact. Price Earnings Ratio (P/E Ratio) with a mean of -9.3626 has resulted in a very good impact and Book Value per Share (BPS) with a mean of 4.387872 decreased, resulting in a terrible impact.

In application of the old standard IAS 17, it shows that the qualitative description from the year 2019-2021 of Philippine Airlines has a terrible performance in terms of Return on Asset (ROA) with a mean of -0.22784 and Return on Equity (ROE) with a mean of -2.22213. It also has terrible performance in Cash flow Operation (CFO) with a mean of -1.12093. On the part of leverage, the Interest Coverage Ratio (ICR) with a mean of -9.12228 had a very good performance while Debt to Equity Ratio (DER) with a mean of 5.112096 and Debt to Asset Ratio (DAR) with a mean of 0.613775 had a terrible performance but in terms of Asset Turnover Ratio (ATO) with a mean of 0.251083 and Fixed Asset Turnover Ratio (FTO) with a mean of 0.375458 had a very good performance. Under Market, the Price Earnings Ratio (P/E Ratio) with a mean of -1668.85 resulted in a very good impact and the Book Value Per Share (BPS) with a mean of -0.00177 resulted in a terrible performance when the IAS 17 applied.

TABLE III. DIFFERENCE IN THE FINANCIAL RATIOS USING PFRS 16 AND IAS 17

	C	bu Pacific Ai	ir, Inc.
	IAS 17	PFRS 16	Difference
Profitability			
a. Return on Assets (ROA)	0.003698	0.002736	-0.00096
b. Return on Equity (ROE)	0.068157	0.0557	-0.012457
Liquidity			
a. Cash Flow Operation (CFO)	0.03052	0.19499	0.16447
Leverage			
a. Debt to Equity Ratio (DER)	3.277334	6.118236	2.840902
<ul> <li>Interest Coverage Ratio (ICR)</li> </ul>	1.670859	-0.08301	-1.75387
c. Debt to Asset Ratio (DAR)	0.699787	0.820651	0.120864
Activity			10000000000000000000000000000000000000
a. Asset Turnover Ratio (ATO)	0.341886	0.288943	-0.05294
b. Fixed Asset Turnover Ratio (FTO)	0.45736	0.419936	-0.03742
Market			
a. Price/Earnings (P/E) ratio	-9.3626	53.6146	44.252
<ul> <li>Book value per simre</li> </ul>	4.387872	43.11177	38.7239

	Phil	ippine Airli	nes, Inc.	
	1AS 17	PFRS 16	Difference	Qualitative Description
Profitability				2.6
<ul> <li>Return on Assets (ROA)</li> </ul>	-0.22784	-0.01284	0.215	Inconsistent
b. Return on Equity (ROE)	-2.22213	11.65489	13.87702	Inconsistent
Liquidity	1.00		A A A A A A A A A A A A A A A A A A A	000019920-0753
a. Cash Flow Operation (CFO)	+1.12093	-0.31595	0.80498	Consistent
Leverage				
a. Debt to Equity Ratio (DER)	5.112096	57.75878	52.64668	Consistent
b. Interest Coverage Ratio (ICR)	-9.12228	-0.24192	8.88036	Inconsistent
c. Debt to Asset Ratio (DAR)	0.613775	1.091573	0.477798	Consistent
Activity				
a. Asset Turnover Ratio (ATO)	0.251083	0.359564	0.108481	Inconsistent
b. Fixed Asset Turnover Ratio (FTO)	0,375458	0.495584	0.120126	Inconsistent
Market				
a. Price-Earnings (P/E) ratio	-1668.85	-2624.91	-956.06	Inconsistent
b. Book value per share	-0.00177	-0.00177	0	Inconsistent

Under Cebu Pacific Air, Inc. and Subsidiaries on its profitability ratio, both Return on Assets (ROA) and Return on Equity (ROE) resulted in a negative difference. A negative of -0.00096 in Return on Assets (ROA) is due to the recognition of two accounts that are not recognized previously in the old standard such as Right of use assets and lease liabilities, with that, the asset and liabilities under IAS 17 is much higher than in PFRS 16, resulting also in higher retained earnings under IAS 17 which affected it's equity thereby resulting also in a negative of -0.012457 in Return on Equity (ROE). Meanwhile in Philippine Airlines, Inc. their Return on Assets (ROA) has a positive difference of 0.215, as well as in Return on Equity (ROE) having a 13.87702 result. Reason for this is that though they have net loss in 2019 and 2020, the major increase in their total assets and liabilities brought by the recognition of the two accounts cannot be ignored, also considering a great increase in their retained earnings.

Its liquidity ratio mainly Cash Flow Operation (CFO) gave a positive difference of 0.16447 due to the increase in depreciation expense and finance cost as we recognized right of use assets resulting in an increase on the company's operating cash flow. Same is true to the Philippine Airlines, Inc. which also has a positive difference of 0.80498. As to their leverage ratio, in their Debt-to-Equity Ratio (DER) it resulted in a positive difference of 2.840902 but it is interpreted as a negative or not good because the company became highly levered due to the increase in lease liabilities and retained earnings, same interpretation is applied to Philippine Airlines, Inc. with a positive difference of 52.64668. The Interest Coverage Ratio (ICR) has a negative difference of -1.75387 because even though they have a net income, their interest expense is still higher which means it's not good and risky which also corresponds to their Debt to Equity Ratio (DER), unlike in Philippine Airlines, Inc. their Interest Coverage Ratio (ICR) has a positive difference of 8.88036, though they have net loss still they see it as a positive if PFRS 16 is applied. Under Debt to Asset Ratio (DAR), there is a positive difference of 0.120864 because the total assets are higher than the total liabilities after the implementation of PFRS 16 as we recognized the two accounts namely ROUA and lease liabilities, and its consistency of having a high leverage ratio is consistent in

Debt to Asset Ratio (DAR) of Philippine Airlines, Inc. with a positive difference of 0.477798.

Under activity ratios such as Asset Turnover Ratio (ATO) and Fixed Asset Turnover Ratio (FTO) have both resulted in a negative difference of -0.05294 and -0.03742. This negative difference is due to the changes in total assets and net of property plant and equipment after the recognition of right of use assets while their sales remain constant. Meanwhile in Philippine Airlines, Inc. its Asset Turnover Ratio (ATO) and Fixed Asset Turnover Ratio (FTO) has resulted in positive differences of 0.108481 and 0.120126 due to the reclassification of their property and equipment during the pandemic which has decreased the value of the said Asset. Lastly, the market ratio has resulted in a 44.252 in the Price Earnings Ratio (P/E Ratio) and a 38.7239 in the Book Value per Share (BPS) of Cebu Pacific Air. The increase in the valuation of earnings per share and the decrease of the value per share has created a negative result on both ratios. The Philippine Airlines, Inc. on the other hand has yielded a -956.06 on its P/E Ratio and 0 on its BPS. In contrast with Cebu Pacific Air, Inc. the P/E Ratio of Philippine Airlines, Inc. has a positive result stating that despite the decreasing value of the stocks the earnings per share still have a positive result and the Book Value per Share have no change

# II. DISCUSSION

## Key Financial Ratios if PFRS 16 is applied

The profitability ratios such as ROA and ROE are expected to increase with the capitalization of operating leases (Arkan, 2016). The changes of the standard from IAS 17 to PFRS 16 brought an inconsistent profitability level for both Cebu Pacific Air, Inc. and Subsidiaries and Philippine Airlines, Inc. It is seen that Philippine Airlines, Inc. was heavily reliant on operating leases, as manifested by the fact that most of the amount reclassified to Right of Use Assets are from operating leases. Meanwhile, Cebu Pacific Air, Inc. and Subsidiaries are heavily reliant on financial leases. Furthermore, these ratios provide users with a clear understanding of how effectively the company has managed its assets to generate profit and shareholder value by Arkan, T (2016). Liquidity ratios measure companies' ability to pay off short-term obligations. A major part of the current liabilities for airlines consists of customer transportation prepayments (Robinson, van Greuning, Henry, Broihahn, 2009). Its effect is indeterminate, and the main reason is the elimination of lease expenses so that the cash flow from operating activities increases. Although there has been an increase in cash flow operation, the total cash flow has remained relatively unchanged. Given that new financial assets and liabilities not previously accounted for as such are recognized under IFRS 16 Leases, the first time it is implemented will increase assets and liabilities by Ellimäki, P (2016). D/E and D/A ratios are increasing because financial liability increases, and equity is expected to decrease. On the other hand, the interest coverage ratio depends on whether the EBITDA and interest expense will increase upon applying PFRS 16. The positive difference between the Debt-to-Equity Ratio and Debt to Asset ratio implies that the firm is highly levered. The underlying cause of these consequences was an increasing debt load represented by an increased lease liability, as well as changes in operating expenses and depreciation affected profitability as stated by Gushchina (2021).

Meanwhile, the Interest Coverage Ratio has a negative difference between Cebu Air and a positive difference on PAL, the change in the interest coverage ratio will depend on the characteristics of the lease portfolio (Ozturk, et al, 2016). As a result of the initial application of IFRS 16, leases on liabilities will affect financial leverage (Ozturk, et al, 2016). The shift of accounting standards from IAS 17 to PFRS 16 has impacted both airlines. Philippine Airlines had a positive result with an increase in ATO and FTO, indicating that they are generating more revenue per peso of their assets. On the other hand, Cebu Air had lower Asset Turnover Ratio (ATO) and Fixed Asset Turnover Ratio (FTO) after the implementation of PFRS 16. According to Meryem Öztürk et al, (2016) the decrease happened because lease assets are recognized as part of total assets. The change of accounting standard had a negative impact on activity ratios, this result is consistent with the purpose of off-balance sheet financing where managers take advantage of operating lease method to hide liabilities of balance sheet so that financial position and performance of companies seem better (Nurvani, 2015). From the perspective of financial ratios and performance metrics of lessees, the adoption of new lease accounting standards causes the financial ratio and performance of the lessee to appear worse (Susanti et. al. 2020).

As a consequence of such shift from IAS 17 to IFRS 16, the asset turnover will decrease. This means that firms which once could seem very efficient as they had not many assets of property and not many financial leases, are now affected 'negatively' by the new way in which leases are accounted (Giannini, 2020). Lastly, market value ratios are financial measurements that assess stock prices and evaluate them about the competition's stock prices and other data points. The higher the Price Earnings Ratio is the more valued the stock price is resulting to an increase of sale which can lead to the decrease of stock price. Based on the study results, there is an increase in both Price/Earnings Ratio and Book Value per Share of Cebu Pacific Airlines when it is computed by PFRS 16. Due to the implementation of PFRS 16, the increase suggests that there could be an increase in the valuation of the share. It also means that investors or markets are anticipating higher growth in the future. Meanwhile, PAL's Price/Earnings Ratio decreases and its Book Value Per Share remains the same because all the changing factors pulling the price in different directions could develop an abnormal return. It is enough that, after the implementation of the standard, the stock price is "more" explained by EPS and Book Value per Share, which these sometimes do not change but better explain the stock price, because it now adjusts the best information (Giner and Pardo, 2018).

## Key Financial Ratios if IAS 17 is applied

IAS 17 on Key Financial Ratios It turned out that the implementation of IAS 17 on Cebu Pacific Air and Philippine Airlines had an unfavorable effect on profitability, specifically ROA and ROE. They determined that the profitability ratios, particularly the liability/equity ratio, return on asset, and current ratio, are negatively affected by not recognizing assets and liabilities and capitalizing operating leases (Branswijck et.al, 2011). In terms of liquidity the application of IAS 17, particularly to cash flow operations, does not result in an increase in liquidity when compared to the application of PFRS 16. This is because when IAS 17 is applied, finance cost is not recognized. Susanti et al. (2020) reported that the Cash Flow Operation expanded due to lower lease expenses, which increased cash flow from operating activities. Previous studies with similar findings supported these findings.

This indicates that if IAS 17 was used, its liquidity ratio or cash flow operating activities would not be increased. The effect of IAS 17 on leverage is that finance leases are recognized as assets, and operating leases are recognized as expenses (Dili, 2017). The reason is that the old standard does not recognize the two new accounts, implicating how it affects the leverage ratio. Furthermore, Morales and Zamora (2018) found that using the methodology used in this study, leverage, total assets, and total liabilities would increase significantly while interest coverage would decrease, indicating that when IAS 17 is used, it is less levered. On the other hand, the Activity Ratio specifically the Asset Turnover Ratio shows better result using the IAS 17 in comparison to the usage of such ratio with IFRS 16. According to IAS 17, if a lease was classified to be operational, as a result any measure which was accounted was recorded off-balance sheet. Such accounting procedure was therefore seen as kind of contradicting, as in nearly all cases, operating leases did create assets for the firms and were also utilized in their activities or production (Giannini, 2020).

In particular, the authors found significant changes in leverage relationships that could affect the structure of capital, debt ratios, market ratios and corporate image with the use of IAS 17 (Maglio, 2018). In addition, Maglio, R. et. al. (2015) also claimed that the strongest impact was observed in leverage ratios, while the one on the profitability ratios and market ratio often used for valuation purposes was only minor. Higher market ratio means better financial performance of the firm which results in higher probability of growth (Nuryani, 2015).

# *Key Difference in the financial ratios between PFRS 16 and IAS 17*

Leases are classified as operating or finance leases from the perspective of the lessee, according to IAS 17. Operating leases are off-balance-sheet, with lease payments accounted for as an expense over the lease's term. Finance leases include those that transfer to the lessee substantially all the risks and rewards associated with asset ownership are recorded on the balance sheet as an asset and a financial liability, therefore, the new standard will affect balance sheet and also the related ratios. PFRS 16 differs significantly from these requirements for lessees. With a few exceptions, all leases are recorded on the balance sheet and result in the existence of an asset and a liability (Aurora, 2016).

The key differences between the old and new standards had a distinct influence on Cebu Pacific Air, Inc. and Philippine Airlines, Inc on some of their financial ratios, while others had the same effect. As the researchers stated multiple times in this study and supported by other studies, Cebu Pacific Air, Inc.'s profitability ratio under PFRS 16 has lower ROA and ROE than when IAS 17 is applied, which results in higher profitability, having the same impact on Philippine Airlines, Inc. In terms of liquidity ratio, Cebu Pacific Air's cash flow operation is higher when PFRS 16 is applied than when IAS 17 is applied, and the same is true for Philippine Airline, Inc.'s liquidity ratio. Moreover, under PFRS 16, Cebu Pacific Air, Inc.'s debt to equity ratio and debt to asset ratio are highly leveraged than when IAS 17 is used. Its interest coverage ratio, on the other hand, has a negative difference because IAS 17 seems more levered than PFRS 16, which is due to the recognition of interest expense as PFRS 16 applies. In the case of the activity ratio, the asset turnover ratio and fixed asset turnover ratio of Cebu Pacific Air, Inc. showed a negative difference, indicating that applying PFRS 16 reduces their activity level compared to applying IAS 17, because of to a change in asset capitalization. While the application of PFRS 16 is advantageous for Philippine Airlines, Inc., it increases their activity ratio due to changes in recognition, which results in a positive difference.

In addition, under Cebu Pacific Air, Inc. price earnings ratio, with the application of the PFRS 16, it gave a high price in the stock market, indicating a not good opportunity to buy as compared to IAS 17, which is good because it resulted in a negative, same effect in Philippine Airlines. On the other hand, Cebu Pacific Air, Inc.'s book value per share showed a positive difference, indicating that PFRS 16 is beneficial to them, whereas it remained constant in Philippine Airlines, Inc. Additionally, PFRS 16 will influence the income statement, because an entity now must recognize interest expense on the lease liability and depreciation on the rightof-use asset. Consequently, for lease contracts previously classified as operating leases the total amount of expenses at the beginning of the lease period will be higher than under IAS 17.

## IV. CONCLUSION AND RECOMMENDATION

It is concluded that the application of PFRS 16 gave an inconsistent result in the profitability, activity, and market ratios among the five key financial ratios. In contrast, the leverage and liquidity ratios have a consistent difference. Under Cebu Pacific Air, Inc., on the profitability ratio, both ROA and ROE have a negative difference which gave an inconsistent result to the positive difference of Philippine Airlines, Inc. Leverage, as well as liquidity ratio, has resulted in positive differences after implementing PFRS 16 which make it consistent to the result of Philippine Airlines, Inc. Moreover, activity ratio and market ratio also gave an inconsistent result in contrast with that of Philippine Airlines, Inc. The new standard greatly affected profitability, leverage, and activity due to recognizing new unrecognized accounts and capitalizing on other accounts. It is noticed that the change in standard to PFRS 16 is more favorable to Philippine Airlines, Inc. than Cebu Pacific Air, Inc. On the other hand, IAS 17 is more favorable to Cebu Pacific Air, Inc. than Philippine Airlines, Inc.

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