THE PENNSYLVANIA STATE UNIVERSITY
SCHREYER HONORS COLLEGE

DEPARTMENT OF ACCOUNTING

THE EFFECT OF ACCOUNTING STANDARDS UPDATE NO. 2016-2, LEASES (TOPIC 842) ON THE HOSPITALITY INDUSTRY

JULIA BOITANO
SPRING 2016

A thesis
submitted in partial fulfillment
of the requirements
for baccalaureate degrees
in Accounting
and Hospitality Management
with honors in Accounting

Reviewed and approved* by the following:

Karl Muller
Associate Professor of Accounting, Robert and Sandra Poole Faculty Fellow in Accounting
Thesis Supervisor

Orie Barron
Professor of Accounting, PricewaterhouseCoopers, LLP Research Fellow in Accounting
Honors Adviser

* Signatures are on file in the Schreyer Honors College.

ABSTRACT

The Financial Accounting Standards Board (FASB) released a new standard on accounting for leases (Topic 842) in order to create more transparency in financial statements for its users. This new standard will no longer allow companies to keep leases classified as operating leases off the balance sheet. Instead, companies will be required to include a lease asset and lease liability on their balance sheet with every lease. This new standard will have a large impact on the financial statements and financial ratios of companies after it is enacted. This thesis will analyze the effect this new standard will have on the hospitality industry by looking at 10 hotel companies and 10 restaurant companies. These companies are the top 10 companies in both the Hotel, Casinos, and Resorts and Food Services industries on the Fortune 1000 listing. First, I will look at each company's percent of operating versus capital leases. Then, the effects on the balance sheet and income statement will be analyzed as well as four financial ratios. These ratios include return on assets, debt to equity, debt to assets, and interest coverage. The impact on these ratios is the most important result of this research.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACKNOWLEDGEMENTS

I would like to first thank my thesis supervisor, Professor Muller, for his support and guidance with my thesis. I would not have been able to make it through this process without his help. Secondly, I would like to thank my honors advisor, Professor Barron, for his patience and assistance during this process. Lastly, I would like to thank my parents, Marie and Michael Boitano, for their constant support with not only my thesis but throughout my whole college career. They always offered any helping hand they could and listened whenever I had an issue.

Chapter 1

Introduction

Lease accounting has become a prevalent issue after financial users and many academic journals have complained about its lack of providing enough information. According to the Financial Accounting Standards Board (FASB), “Leasing is utilized by many entities. It is a means of gaining access to assets, of obtaining financing, and/or reducing an entity’s exposure to the full risks of asset ownership” ("Accounting Standards Update, Leases (Topic 842)", 2016). The importance of leases has caused financial users to request a change in financial reporting to gain a complete picture of all leasing activities for a company. Because of this, FASB started working with the International Accounting Standards Board (IASB) to create a joint lease project that will update the standards for accounting for leases. Preliminary meetings discussing this project date back to 2006. In 2009, a discussion paper was released and in 2010 the first exposure draft was completed. This exposure draft was updated and rereleased in 2013. On February 25, 2016, the leases project was completed and Accounting Standards Update No. 2016-2, *Leases* (Topic 842) was published. This update provides more transparency for financial users and ultimately requires all leases to be included on the balance sheet. Additionally, comparability is improved and the financial position of the lessee is more clearly represented ("FASB Understanding Costs and Benefits", 2016).

Prior research has been done on the capitalization of leases and the effect it has on financial statements but no studies have focused on the hospitality industry in the United States specifically. Additionally, since the final update was recently released, many of these studies occurred before the update was finalized. Some studies were focused on companies outside of the US. Wong and Joshi (2015) researched the impact of lease capitalization on Australian companies, Tai (2013) looked at this impact on the Hong Kong Fast Food Industry, and Fuelbier, Silva, and Pferdehirt (2008) focused on this impact on German companies. Some studies that occurred within the United States included Mulford and Gram's (2007) research on the retail industry, Kostolansky and Stanko's (2011) research on the S&P 100 companies, and McCarthy, Cotton, and Schneider's (2014) research on a grocery store, merchandise retailer, and airline. This thesis analyses the effect of Accounting Standards Update No. 2016-2, *Leases* (Topic 842) on the hospitality industry in the United States by looking at 10 food service companies and 10 hotel companies. This effect is measured by the impact on the financial statements and most importantly, the impact on the financial ratios of the companies.

Chapter 2

Literature Review

Extent of Preparations for the New Standards

According to a study conducted by Lan Jiang and Raymond Schmidgall in 2013, only 44% of hospitality accounting professionals were aware of this new accounting proposal. Jiang sent a questionnaire out to members of the lodging sector of the Hospitality Financial and Technology Professionals Association (HFTP). These individuals included, controllers of one hotel property, regional controllers, CFOs and other financial executives. These individuals were also broken up by the amount of years' experience they had, their major area of study, and their professional certifications. Two-thirds of individuals with more than 20 years' experience knew about the proposal while 0% of individuals with less than 10 years' experience knew about the new leasing rules. There was no correlation between professional certifications and awareness of proposal.

This could potentially be a big problem because according to Upneja (2001), less than 25% of the leases hospitality companies are involved in are capital leases. This means that the accounting standards for a majority of their leases are going to change. Additionally, Bloomberg BNA found that 85% of leases are not currently reported on balance sheets which amounts to more than $1 trillion in leasing obligations for US public companies. Chambers, Dooley, and Finger (2015), found that many companies do not have the documents relating to their lease contracts which would make it harder to retrospectively change their leases on the financial statements once the proposal comes into play. Most lease information sent to higher level accounting and finance units are done aggregately and for the new standard, information will be needed on an individual lease basis. Additionally, because this information may not be available, firms will not be able to predict the complete effect the new proposal will have. Companies that use financial statement numbers for employee incentive contracts may not be able to access the effect it will have on compensation.

Companies must begin to centrally report lease information in order to prepare for the new proposal. Executives must also create consistent standards for assessing leases and train their employees on the new procedures. According to Matson-Teig (2015), 47% of financial executives at major corporations are thinking about implementing real estate or facilities management systems in order to organize all the information needed for the new reporting procedures. Hepp and Gupta (2010) proposed an 8 step process to evaluate a new lease which could potentially require a new set of skills that the current people accounting for leases don't possess. Senior management may have to take over this role when it was more commonly done by lower level staff.

Financial Statement and Ratio Impact

Deloitte conducted a survey in 2013 that researched the expected impacts of the proposed lease standard. They asked 138 executives at companies who are either lessees or lessors. The study found that executives expect this new standard will have a large effect on financial reporting. Fifty eight percent of executives expect there will be an impact of the balance sheet while 46% expected impacts on financial ratios.

In Singh's (2011) case analysis, he was able to see the impact capitalizing operating leases would have on CEC Entertainment, most notably known for Chuck E Cheese's. The leverage ratio would increase due to the movement of off- balance sheet debt into long-term debt on the balance sheet. Debt to equity changed much more dramatically moving from 2.2 to 5.9. Operating income would increase because of the removal of rent expense and the inclusion of interest and depreciation. These numbers are expected to affect executive compensation, debt agreements, and lease versus buy decisions. Kostolansky and Stanko (2011) found that when looking at the S&P 100 companies, the return on assets ratio decreased by 4.14% when using a discount rate of 6%. Additionally, total debt to total assets ratio increased by 4.12%. There was an average increase in total liabilities of 10.39% and an average increase in total assets of 5.10%.

Impact of Future Lease Decisions

This new lease standard could have an impact on lessees' decisions to lease vs buy assets. Additionally, it could also affect the length of the lease term lessees are willing to agree to. According to the Deloitte Survey, executives believed that this will affect their lease or buy decisions. Fifty three percent believed companies would be more likely to purchase equipment than lease while 41% believed that companies would be more likely to purchase real estate than lease it. PWC also agreed that with this new standard the lease-buy decision would be affected. Companies were making some lease decisions based on the fact that they were off balance sheet transactions and with that changing, they may be more willing to buy ("Impacting your bottom line results - PricewaterhouseCoopers", 2013). On the other hand, Grant Thornton found that real estate executives do not foresee companies buying rather than leasing. They did find that these executives are concerned that lessees will now seek shorter-term leases which could put pressure on the real estate industry ("Preparing for Global Lease Accounting Standards", 2011). EisnerAmper believes that lessee may negotiate shorter-term leases, in order to lessen the effects of this new standard, which could impact lessors (Kaiser, 2016).

From my literature review, I was able to see that hospitality companies account for most of their leases as operating, which would make this accounting change affect them greatly. The balance sheet would see a huge change from this new standard as well as many financial ratios. There are also many changes associated with this proposal other than just the balance sheet differences. New skills, procedures, and systems will be needed to comply with the new rules. Not many financial professionals know about this proposal or have prepared, which could make the transition harder than it needs to be. Additionally, this standard change can also result in a change in leasing decisions. Accounting firms have found that companies may reassess their lease or buy decisions and they may also seek shorter term leases. This research indicates that this accounting standards update will have a large effect on hospitality companies and supported my reasoning to research this industry.

Chapter 3

Previous Lease Standard

Prior to this new leasing standard, leases were classified as either operating leases or capitalized leases on a lessee's financial statements. According to the Financial Accounting Standards Board (FASB), a lease is defined as "an agreement conveying the right to use property, plant, and equipment (PP&E) usually for a stated period of time" (Lee, 2003).

A capital lease transfers substantially all the benefits and risks of ownership to the lessee. There are four criteria that determine if a lease is a capital lease. If the lease satisfies any of the four criteria then it is a capital lease.

1. Ownership: the lease transfers ownership of the asset to the lessee by the end of the lease term
2. Bargain Purchase Option: agreement includes a bargain purchase option (BPO)
3. Estimated Economic life: the lease term is 75% or more of the economic life of the leased asset
4. Fair value: present value of minimum lease payments is 90% or more of the fair value of the leased asset.

At the inception of the lease, capital leases are included on the lessee's balance sheet. The present value of minimum lease payments is recorded as an asset and a liability. Each period interest expense and depreciation expense is recorded for the assets. Companies also have specific disclosures that must be included in their financial statements or footnotes related to capital leases. These include: the gross amount of assets under capital leases, future minimum lease payments for each of the five succeeding fiscal years, the total of minimum sublease rentals to be received in the future, and total contingent rentals incurred for each period an income statement is presented ("Statement of Financial Accounting Standards No.13", 1976).

In contrast, operating leases do not assume the risk of ownership over the asset and are not included on the lessee's balance sheet. This lease is a contractual agreement and rental payments are recorded as expenses. The disclosure required for operating leases are future minimum rental payments in the aggregate and for each of the five succeeding fiscal years and the total of minimum rentals to be received in the future under noncancelable subleases.

For a lessor, capital leases are divided into sales-type leases and direct financing leases. Sales type leases occur when the fair value of the lease is different than the carrying value. At the inception of the lease, the lessor would record a receivable for the price of the product and record cost of goods sold for the cost of the product. Additionally, the lessor would credit revenue for the price of the product and inventories for the cost of the product. Interest implicit in the minimum lease payments would be recorded each period. Direct financing leases are recorded the same way as sales type leases except there is no profit at the inception of the lease so the lessor would just record the lease receivable. Leveraged leases are a form of a direct financing lease. The lease must involve real estate and a long-term creditor who provides nonrecourse financing in order for the lease to be classified as leveraged. For operating leases, the lessor would record the rent payments from the lessee as rent revenue and recognize depreciation expense on the leased asset.

Chapter 4

Implications of New Lease Standard

The biggest change that comes along with Topic 842 is the recognition of leased assets and liabilities on the balance sheet for every lease. This means previous operating leases which were off balance sheet items will now affect the balance sheet with an asset and liability. The accounting standards update still includes two different classifications of leases for the lessee. Leases can either be classified as financial leases or operating leases. A financial lease has the same criteria for inclusion as the previous capital lease. When none of the four criteria are met, the lease is then an operating lease. For finance leases, a lessee records a right of use asset and lease liability as the present value of lease payments, recognizes interest on the lease liability, and amortization on the right of use asset. In the statement of cash flows, the repayments of the principle lease liability are recorded in financing activities while payments on interest on the lease liability are included in operating activities. For operating leases, a lessee will also recognize a right of use asset and lease liability at the present value of lease payments. They will recognize a single lease cost which will be allocated over the lease term on a straight line basis. In the statement of cash flows, all cash payments are included in operating activities.

Accounting for lessors has remained mainly the same with the new lease standard. FASB has updated definitions so that they align for both the lessee and the lessor. Additionally, the revenue recognition standards have been updated to align with Topic 606, Revenue with Contacts with Customers. The standard now says that “a lessor is precluded from recognizing selling profit or sales revenue at lease commencement for a lease that does not transfer control of the underlying asset to the lessee” ("Accounting Standards Update, Leases (Topic 842)", 2016). Lastly, the standard has prospectively eliminated leveraged leases.

The accounting standards update has also changed what disclosures are required for leases. Lessees and lessors will be required to disclose quantitative and qualitative information about lease transactions. According to KPMG, the qualitative disclosures could include nature of variable payment arrangements, termination, renewable, and purchase options, and significant accounting judgements and estimates. Quantitative disclosures could include amortization of right of use (ROU) assets and interest on lease liabilities, operating lease cost, weighted average remaining lease term, weighted average discount rate, and maturity analysis of lease liabilities ("FASB Balloons Balance Sheet with New Lease Accounting Standard", 2016).

Although the final update has been released, this new standard does not have to be implemented immediately. Public companies, non-for-profit entities with securities traded, listed, or quoted on an exchange or over the counter market, and employee benefit plans have until the fiscal year following December 15, 2018 to incorporate the change. All other organizations must incorporate the new standard in the fiscal year following December 15, 2019. Any organization may also incorporate the new lease standard earlier than these specified dates ("ASU 2016-02 Leases (Topic 842)", 2016).

Chapter 5

Research Methods

Company Selection

For this thesis, I researched and analyzed the effect this new standard will have on the hospitality industry. I chose to look at 10 hotel companies and 10 restaurant companies. I wanted to see the impact it would have on these two sectors of the hospitality industry and if it is the same for both. The specific companies were chosen by looking at the top 10 companies on the Fortune 1000 list in the Hotels, Casinos, Resorts and Food Services industries. It was essential that these companies were public and in the US in order to have access to their annual report (10-K) and keep them comparable. The hotel companies chosen were Las Vegas Sands, Marriott International, Hilton Worldwide Holdings, MGM Resorts International, Caesars Entertainment, Starwood Hotels & Resorts, Wynn Resorts, Wyndham Worldwide, Hyatt Hotels, and Boyd Gaming. The food service companies chosen were McDonald's Corporation, Starbucks Corporation, Yum Brands, Darden Restaurants, Bloomin' Brands, Chipotle Mexican Grill, Brinker International Inc., Cracker Barrel Old Country Store Inc., Panera Bread, and Wendy's. These companies are listed with their sales, ticker, location, and Fortune 1000 rank in Appendix A.

Capitalization Method

I was able to calculate the financial statement and financial ratio effect on this standard on companies using the present value constructive capitalization method formed by Standard and Poor's (S&P). Since companies are required to disclose their future minimum lease payments for operating leases on their financial statements, the present value of minimum lease payments can be calculated. Companies must disclose future minimum lease payments for each of the next five years as well as an aggregate amount for thereafter. The resulting present value is added to debt to represent the lease liability and it is also added to assets to account for the right to use leased property ("Capitalization of Operating Leases by Credit Rating Agencies", 2007).

When capitalizing operating leases, S&P also allocates minimum lease payments to interest and depreciation expenses. This is simply converting the previous rent expense into interest and depreciation expenses from the leased assets. The implicit interest is calculated by taking the average net present value of the current year and previous year multiplied by the discount rate. Selling, general, and administrative (SG&A) expenses are then adjusted by taking the average of the first year minimum lease payments for the current year and previous year. The depreciation expense is then calculated by taking the adjustment to selling, general, and administrative expenses and subtracting out the implicit interest ("Corporate Ratings Critera", 2006). In the end, net income is not changed but EBIT (Earnings before Interest and Tax) and EBITDA (Earnings before Interest, Tax, Depreciation and Amortization) are affected. EBIT is increased by the difference between lease depreciation and SG&A adjustments. EBITDA is increased by the implicit interest amount.

Discount Rate

Prior to 2005, Standard and Poor's used a 10% discount rate to calculate the present value of minimum lease payments for all companies. After their revision to this capitalization method, S&P used the estimate of companies' actual borrowing rate as the discount rate ("Capitalization of Operating Leases by Credit Rating Agencies", 2007). I was able to discount the minimum lease payments back to present value using an interest rate of 6.4%. Since the companies' borrowing rate is not disclosed on their financial statements, I found the median bond rating of all the companies chosen and used the operating lease rate corresponding with that rating determined by Moody's. The table of the bond ratings and corresponding discount rates is

Rating	1/29/2016
Aaa	2.39
Aa1	2.43
Aa2	2.66
Aa3	3.13
A1	3.07
A2	3.33
A3	3.24
Baa1	3.27
Baa2	3.72
Baa3	5.00
Ba1	6.40
Ba2	5.58
Ba3	6.32
B1	6.19
B2	7.64
B3	8.84
Caa	10.95

Figure 1: Operating Lease Interest Rates

displayed in figure 1. The median bond rating is Ba1 which corresponds to a discount rate of 6.4%.

For the ‘thereafter’ minimum lease payments, S&P assumes that the payments are equal to the payment in year five and the number of periods equals the ‘thereafter’ amount divided by the year five amount ("Corporate Methodology: Ratios and Adjustments", 2013). For consistency among the companies, I assumed that the thereafter minimum lease payments include equal payments or the next five years (2020-2024). Under this assumption, I took the present value of an annuity to discount it back to 2019 and then discounted them back to present value.

Ratio Choice

The four ratios I will be looking at are Return on Assets (ROA), Debt to Equity, Debt to Assets, and Interest Coverage. These ratios involve the components of a firm’s balance sheet and income statement that are affected by the capitalization of previous operating leases. Return on Assets tells how well a company’s assets are being used to generate net income. Debt to Equity and Debt to Assets are both financial leverage ratios and provide information on the long-term debt of a company. Debt to equity is the ratio of capital coming from creditors to the capital coming from investors while debt to assets measures how much debt is used to finance a company’s assets. The higher the debt to equity ratio, the greater the risk for a company’s creditors. The last ratio I will look at is the interest coverage ratio. This is the only ratio being measured that uses items from the income statement. This ratio measures a company’s ability to cover interest on debt. The formulas for these ratios are displayed in the table below.

Table 1: Ratio Formulas

Ratio	Formula	Financial Statement used
Return on Assets (ROA)	$\frac{Net\ Income}{Total\ Assets}$	Balance Sheet
Debt to Equity	$\frac{Total\ Debt}{Total\ Equity}$	Balance Sheet
Debt to Assets (Debt Ratio)	$\frac{Total\ Debt}{Total\ Assets}$	Balance Sheet
Interest Coverage	$\frac{EBIT}{Interest\ Expense}$	Income Statement

Data Collection

For all 10 restaurant companies and 10 hotel companies, I used the numbers disclosed in their 2014 annual report for my research. All of the 2015 annual reports were not released at the time of my analysis. I collected the balance sheet and income statement information as well as the future minimum lease payments for all the companies by using the compustat function of Wharton Research Data Services (WRDS). Additional information was found on each company's annual report. All of the data reported is in millions.

Chapter 6

Analysis

Proportion of Operating Leases versus Capital Leases

Table 2: Operating Leases versus Capital Leases

	Operating Lease	% of Total Leases	Capital Leases	% of Total Leases	Total Leases
Hotel Companies	$8,942.91	91.02%	$882.54	8.98%	$9,825.45
Restaurant Companies	$10,727.20	94.85%	$582.48	5.15%	$11,309.68
Total	$19,670.12	93.07%	$1,465.02	6.93%	$21,135.14

First, I looked at each company's percentage of operating leases and capital leases to total leases. This helped me see if they will be largely affected by the new leasing standard. This was determined by comparing the total future contractual obligations of operating leases as of 2014 to the future contractual obligations of capital leases as of 2014. Many companies disclose a summary of their contractual obligations in their 10-K. These obligations are usually broken down by the period in which they are due. The capital lease obligations for some companies were not reported so they were excluded from the formula. In Table 2, the operating leases and capital leases are broken down by hotel companies and restaurant companies. I then was able to calculate operating leases and capital leases as a percentage of total leases. Overall, operating leases made up 93.07% of total leases and capital leases were 6.93% of total leases in the hospitality industry. Hotel companies had a slightly larger proportion of capital leases compared to total leases. Operating leases made up 91.02% of total leases while capital leases made up

8.98% of total leases. Restaurant companies' operating leases were 94.85% of total leases while capital leases were 5.15% of total leases. This indicates that both of these sectors of the hospitality industry will be greatly affected by the new lease standard. A majority of the leases in this industry are operating leases and are kept off the balance sheet.

Off Balance Sheet Liabilities and Assets

After determining the off balance sheet liability created from operating leases and capitalizing the costs, it is easy to tell that companies are hiding a lot with the old way of accounting for leases. There are a large amount of liabilities and assets being left off the balance sheet which makes the financial statements less transparent for its users. When companies adopt the new standard, they will be providing more information on their capital structure and debt for creditors and users of their financial statements.

Table 3: Estimated Off Balance Sheet Liability and Asset

	Hotel	Restaurants	Total
Estimated Off Balance Sheet Liability	$ 6,115.62	$ 23,735.28	$ 29,850.90
% of Liabilities	4.97%	51.59%	17.65%
Estimated Off Balance Sheet Assets	$ 6,115.62	$ 23,735.28	$ 29,850.90
% of Assets	4.20%	32.19%	13.61%

The estimated off balance sheet liabilities and assets arising from operating leases for the 20 selected hospitality companies amounted to $29,850 million. The number represents 17.65% of total liabilities and 13.61% of total assets. Eighty percent of this number comes from restaurants while only 20% came from hotels, which is shown in the figure below.

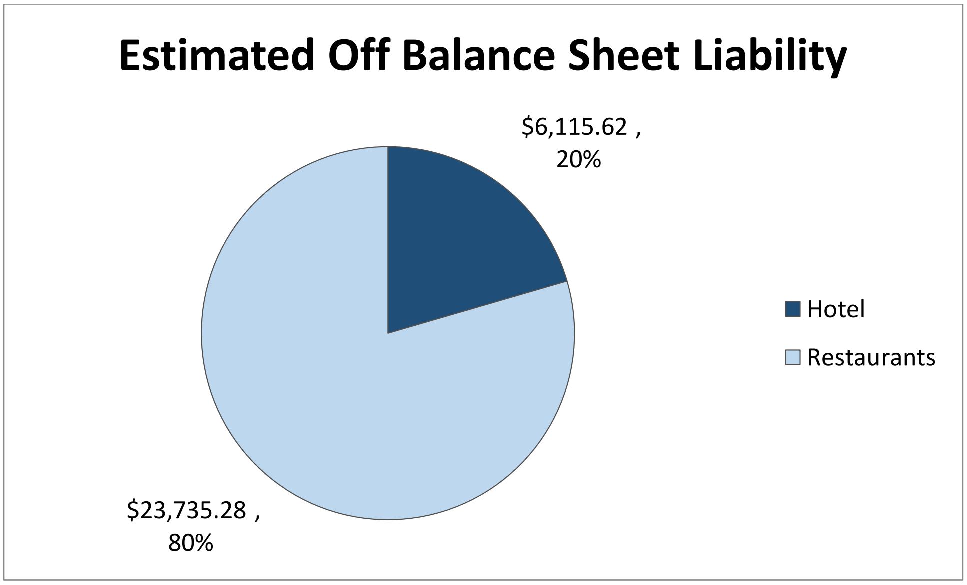

Figure 2: Hotel and Restaurant Percent of Total Estimated Off Balance Sheet Liability

Restaurants engage in more operating leases than hotels and are more greatly affected by this new lease standard. McDonald's alone contributed 31% to the total off balance sheet liability with $9,394.73 million. In Kostolansky and Stanko's (2011) study on the effect of the FASB lease project on the S&P 100 companies, McDonald's was the fourth most affected company. Restaurants have many more locations than hotels which is why there is a large difference between hotel and restaurant company off balance sheet lease obligations. The largest food service company analyzed, McDonald's, had 36,258 locations at the end of 2014 and Starbucks, the second largest, had 21,366. In contrast, the largest hotel company analyzed, Las Vegas Sands, only had nine locations and Marriott, the second largest, had 4,175 locations at the end of 2014. The companies are listed by off balance sheet liability in descending order in Appendix B.

Impact on Financial Statements

Table 4: Impact on Hotel Financial Statements

Hotels	**Before**	**After**	**% Change**
Assets	$ 145,611.99	$ 151,727.61	4.20%
Debt	$ 123,125.88	$ 129,241.50	4.97%
Equity	$ 22,486.03	$ 22,486.03	0.00%
Net Income	$ 3,518.27	$ 3,518.27	0.00%
EBIT	$ 12,804.39	$ 13,228.03	3.31%
Interest Expense	$ 5,276.69	$ 5,700.33	8.03%

Table 5: Impact on Restaurant Financial Statements

Restaurants	**Before**	**After**	**% Change**
Assets	$ 73,724.17	$ 97,459.45	32.19%
Debt	$ 46,011.52	$ 69,746.80	51.59%
Equity	$ 24,741.87	$ 24,741.87	0.00%
Net Income	$ 9,750.91	$ 9,750.91	0.00%
EBIT	$ 14,993.28	$ 16,512.21	10.13%
Interest Expense	$ 1,061.22	$ 2,580.16	143.13%

Table 6: Aggregate Impact on Hospitality Industry Financial Statements

Total	**Before**	**After**	**% Change**
Assets	$ 219,336.15	$ 249,187.06	13.61%
Debt	$ 169,137.40	$ 198,988.31	17.65%
Equity	$ 47,227.91	$ 47,227.91	0.00%
Net Income	$ 13,269.18	$ 13,269.18	0.00%
EBIT	$ 27,797.67	$ 29,740.24	6.99%
Interest Expense	$ 6,337.92	$ 8,280.49	30.65%

The accounting standards update will greatly inflate the balance sheets of corporations with operating leases. For hotels, assets increased by 4.2% and debt increased by 4.97%. For restaurants, assets increased by 32.19% and debt increased by 51.59%. Total equity was unchanged by the capitalization process. Total asset change ranged from .42% to 82.18% and the total debt change ranged from .70% to 391.91%. Chipotle saw the largest percent change in both total assets and total debt with 82.18% and 391.91% respectively. The figure below shows total debt before and after.

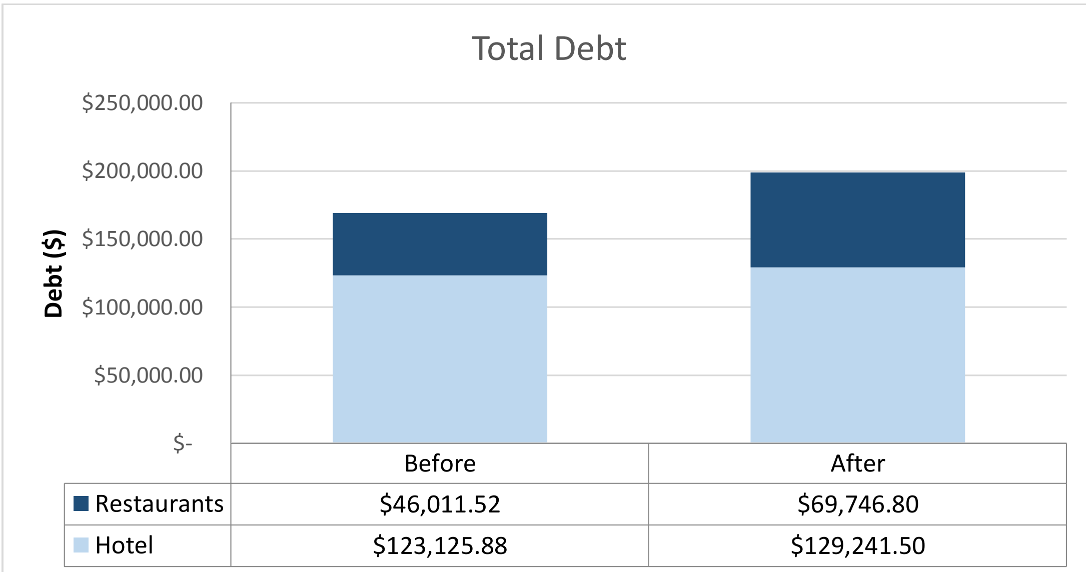

Figure 3: Change in Total Debt

While there was no change to net income with the capitalization process, earnings before tax and interest (EBIT) and interest expense faced changes. Aggregately, EBIT increased by 6.99% and interest expense increased by 30.65%. Restaurants saw a very large change in interest expense of 143.13%. Both EBIT and interest expense were increased by the implicit interest that arises from lease asset. The previous SG&A expense recorded for operating leases was converted into implicit interest and depreciation expense. Total implicit interest from these 20 hospitality companies amounted to $1,942.58 million. Both Chipotle and Starwood did not have an interest expense originally which make it impossible to calculate a percent change. Additionally, this caused the change in interest expense to be inflated.

Impact on Financial Ratios

Table 7: Financial Ratio Impact on Hotels

Hotels	Before	After	% Change
Return on Assets	2.42%	2.32%	-4.03%
Debt to Equity	547.57%	574.76%	4.97%
Debt to Assets	84.56%	85.18%	0.74%
Interest Coverage	2.42659519	2.320573392	-4.37%

Table 8: Financial Ratio Impact on Restaurants

Restaurants	Before	After	% Change
Return on Assets	13.23%	10.01%	-24.35%
Debt to Equity	185.97%	281.90%	51.59%
Debt to Assets	62.41%	71.56%	14.67%
Interest Coverage	14.12828583	6.399681552	-54.70%

Table 9: Financial Ratio Impact on Hospitality Industry

Total	Before	After	% Change
Return on Assets	6.05%	5.32%	-11.98%
Debt to Equity	358.13%	421.34%	17.65%
Debt to Assets	77.11%	79.85%	3.56%
Interest Coverage	4.385932755	3.591604305	-18.11%

From the ratios I looked at, return on assets and interest coverage decreased while debt to equity and debt to assets increased. Aggregately, return on assets decreased by 11.98%, debt to equity increased by 17.65%, debt to assets increased by 3.56% and interest coverage decreased by 18.11%. Return on assets was only affected by the increase in assets from the capitalization of the operating leases as net income did not change. For hotels, return on assets decreased by 4.03% and for restaurants return on assets decreased by 24.35%. Since this ratio decreased, it shows that companies are less efficient at using their assets to generate net income. The change to hotel companies is similar to the 4.14% change Kostolansky and Stanko saw in their 2011 study. The change for restaurant companies is much larger.

The second ratio that saw a decrease was interest coverage. This ratio measures EBIT to interest expense and shows how easily EBIT can cover interest expense. Both of these items are income statement items that were increased by the implicit interest. Hotel companies saw a similar decrease in this ratio as they did with return on assets. They had a decrease of 4.37% while restaurant companies saw a much larger decrease of 54.70%. Although interest coverage ratio decreased by a much larger percentage for restaurant companies, they still have a better ratio compared to hotel companies. Hotel companies EBIT is 2.3 times their interest expense while restaurants EBIT is 6.40 times their interest expense after the capitalization process. The decrease in this ratio could greatly affect a creditor's decision to provide the companies with capital.

Debt to equity and debt to assets both saw increases. Debt to equity had a greater percent change because only the numerator changed. Because of this, this ratio has the same percent change as total debt. Overall, there was a 17.65% increase in this ratio, with hotels increasing by 4.97% and restaurants increasing by 51.59%. Once again the same pattern is shown that restaurants have a higher percent change than hotels. Debt to assets saw a smaller increase because both the numerator and denominator increased. Because there was an overall increase in this ratio, it shows that debt had a greater percentage of increase than assets. This ratio only increased by .74% for hotels and by 14.67% for restaurants. The increase in both these ratios shows a higher risk and lower margin of safety for creditors.

Overall, the financial ratios are largely affected by this new lease standard. All four ratios that were analyzed changed for the worse. This shows that capitalizing operating leases provides users of financial statements with more transparency but negatively affects the companies. Creditors and other lenders may be less willing to provide companies with capital resources because of the decrease in return on assets and interest coverage and the increase in debt to equity and debt to assets.

Chapter 7

Conclusion

The Accounting Standards Update No. 2016-2, *Leases* (Topic 842) published on February 25, 2016 requires all companies to categorize their leases as either financing or operating leases and include a lease liability and lease asset on their balance sheet for both types of leases. This is a change from previous operating leases which were kept off the balance sheet. This standard update comes after complaints from financial users explaining the need for more transparency and comparability of financial statements. Because of this new update, financial statements and financial ratios will be greatly impacted.

Firstly, my research concluded that hospitality companies have a large majority of operating leases compared to capital leases. Secondly, after analyzing operating leases of 10 restaurant companies and 10 hotel companies, I was able to calculate the estimated off balance sheet liabilities and assets. This was found using S&P's constructive capitalization method with an interest rate of 6.4%. The amount currently being kept of the balance sheet because of operating leases amounts to $29,850.90 million for the selected companies with the majority coming from restaurant companies. This shows that the new standard update will create a 17.65% increase in total liabilities and a 13.61% increase in total assets. The increase in the each company's debt will negatively affect financial users' view of them. Additionally, EBIT and interest expense are increased by 6.99% and 30.65% respectively.

The impact on financial ratios are the most important result of this research. Financial ratios are used by analysts and creditors who influence the stock price of companies as well as their likelihood of receiving capital. Return on assets and interest coverage both decreased by 11.98% and 18.11% respectively. Debt to equity and debt to assets both increased by 17.65%

and 3.56% respectively. The changes in the financial ratios cause these companies to appear risker than previously.

This new accounting standard change has large impacts on the financial statements and financial ratios of hospitality companies. As the accounting firms PWC concluded, companies may reassess their lease or buy decision or as EisnerAmper stated, companies could seek shorter-term leases because of this change. Additionally, most companies must adopt this standard update in the fiscal year following December 15, 2018. They must start to prepare for this update and make decisions with this in mind, as it will have a large impact. Lastly, reporting of leases may become more complicated which could result in extra costs for the company. It will be beneficial to start preparations earlier rather than later.

Appendix A

Companies Used in Study

Hotel Company	Sales (Millions)	Location	Ticker	Fortune 1000 Rank	Number of Locations
Las Vegas Sands	$ 14,584.00	Las Vegas, NV	LVS	209	9
Marriott International, Inc.	$ 13,796.00	Bethesda, MD	MAR	221	4,175
Hilton Worldwide Holdings Inc.	$ 10,502.00	McLean, VA	HLT	280	4,322
MGM Resorts International	$ 10,082.00	Las Vegas, NV	MGM	289	23
Caesars Entertainment	$ 8,679.00	Las Vegas, NV	CZR	328	49
Starwood Hotels & Resorts	$ 5,983.00	Stamford, CT	HOT	442	1222
Wynn Resorts Limited	$ 5,434.00	Las Vegas, NV	WYNN	477	4
Wyndham Worldwide	$ 5,281.00	Parsippany, NJ	WYN	497	7800
Hyatt Hotels	$ 4,415.00	Chicago, IL	H	583	587
Boyd Gaming	$ 2,701.00	Las Vegas, NV	BYD	815	22

Food Service Company	Sales (Millions)	Location	Ticker	Fortune 1000 Rank	Number of Locations
McDonald's Corporation	$ 27,441.00	Oak Brook, IL	MCD	110	36,258
Starbucks Corporation	$ 16,448.00	Seattle, WA	SBUX	187	21,366
Yum Brands, Inc.	$ 13,279.00	Louisville, KY	YUM	228	41,546
Darden Restaurants, Inc.	$ 8,758.00	Orlando, FL	DRI	325	2,207
Bloomin' Brands, Inc.	$ 4,443.00	Tampa, FL	BLMN	580	1,510
Chipotle Mexican Grill	$ 4,108.00	Denver, CO	CMG	611	1,783
Brinker International, Inc.	$ 2,906.00	Dallas, TX	EAT	777	1,615
Cracker Barrel Old Country Store, Inc.	$ 2,684.00	Lebanon, TN	CBRL	818	633
Panera Bread Company	$ 2,529.00	Saint Louis, MO	PNRA	857	1,880
Wendy's	$ 2,061.00	Dublin, OH	WEN	993	6,515

Appendix B

Companies Ranked by Off Balance Sheet Liability

All Data is in millions

Company	Off Balance Sheet Liability
McDonald's Corporation	$ 9,394.73
Yum Brands, Inc.	$ 4,049.85
Starbucks Corporation	$ 3,860.87
Hilton Worldwide Holdings Inc.	$ 2,173.50
Chipotle Mexican Grill	$ 2,092.45
Panera Bread Company	$ 1,017.69
Darden Restaurants, Inc.	$ 904.74
Caesars Entertainment	$ 852.80
Marriott International, Inc.	$ 785.75
Bloomin' Brands, Inc.	$ 754.17
Wendy's	$ 748.18
Starwood Hotels & Resorts	$ 694.15
Cracker Barrel Old Country Store, Inc.	$ 516.80
Hyatt Hotels	$ 460.04
Brinker International, Inc.	$ 395.81
Wyndham Worldwide	$ 382.05
Boyd Gaming	$ 317.34
MGM Resorts International	$ 295.21
Las Vegas Sands	$ 92.97
Wynn Resorts Limited	$ 61.81

BIBLIOGRAPHY

Accounting Standards Update, Lease (Topic 842). (2016, February). Retrieved February 30, 2016, from http://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1176167901010

Arun Upneja, Ray Schmidgall, Equipment leasing in the U.S. lodging industry what, why, and how much, *The Cornell Hotel and Restaurant Administration Quarterly*, Volume 42, Issue 2, April 2001, Pages 56-61.

ASU 2016-02 Leases (Topic 842). (2016, February). Retrieved March 01, 2016, from http://www.fasb.org/jsp/FASB/FASBContent_C/CompletedProjectPage

Bloomin' Brands, Inc. (2014). *10-K Report*. Retrieved from Retrieved from SEC EDGAR website http://www.sec.gov/edgar.shtml

Boyd Gaming Corporation. (2014). *10-K Report*. Retrieved from http://boydgaming.investorroom.com/annual-reports

Brinker International, Inc. (2014). *10-K Report*. Retrieved from http://phx.corporate-ir.net/phoenix.zhtml?c=119205&p=irol-sec

Burkholder, S. (2016, February 25). FASB Issues Lease Rules; Will Have Big Balance Sheet Impacts. Retrieved March 05, 2016, from http://www.bna.com/fasb-issues-lease-n57982067931/

Caesars Entertainment Corporation. (2014). *10-K Report*. Retrieved from http://investor.caesars.com/secfiling.cfm?filingid=858339-15-55&cik=858339

Capitalization of Operating Leases by Credit Rating Agencies. (2007, February). Retrieved March 01, 2016, from http://www.elfaonline.org/cvweb_elfa/Product_Downloads/EFEB07FW.pdf

Chambers, D., Dooley, J., & Finger, C. A. (2015). Preparing for the Looming Changes in Lease Accounting. *CPA Journal*, 85(1), 38-42.

Chipotle Mexican Grill, Inc. (2014). *10-K Report*. Retrieved from http://ir.chipotle.com/phoenix.zhtml?c=194775&p=irol-sec

Corporate Methodology: Ratios and Adjustments. (2013, November 19). Retrieved March 01, 2016, from http://www.maalot.co.il/publications/MT20131127143756a.pdf

Corporate Ratings Criteria. (2006). Retrieved March 01, 2016, from http://www.kellogg.northwestern.edu/faculty/thompsnt/htm/d42/pdf/corporateratings_2006.pdf

Cracker Barrel Old Country Store, Inc. (2014). *10-K Report*. Retrieved from Retrieved from SEC EDGAR website http://www.sec.gov/edgar.shtml

Darden Restaurants, Inc. (2014). *10-K Report*. Retrieved from Retrieved from SEC EDGAR website http://www.sec.gov/edgar.shtml

FASB Balloons Balance Sheet with New Lease Accounting Standard. (2016, February). Retrieved March 01, 2016, from http://www.kpmg-institutes.com/institutes/financial-reporting-network/articles/2016/02/defining-issues-16-6-leases-asu-842.html

FASB Understanding Costs and Benefits. (2016, February 25). Retrieved February 30, 2016.

Fortune 500. (2015). Retrieved February 01, 2016, from http://fortune.com/fortune500/

Fuelbier, R. U., Silva, J. L., & Pferdehirt, M. H. (2008). Impact of Lease Capitalization on Financial Ratios of Listed German Companies. *Schmalenbach Business Review, 60*. doi:10.2139/ssrn.918223

Hepp, J., & Gupta, R. (2010). PREPARING FOR THE NEW LEASE ACCOUNTING. *Financial Executive*, 26(8), 49-54.

Hilton Worldwide Holdings Inc. (2014). *10-K Report*. Retrieved from http://api40.10kwizard.com/cgi/convert/pdf/HLT-20150218-10K-20141231.pdf?ipage=10084940&xml=1&quest=1&rid=23&section=1&sequence=-1&pdf=1&dn=1

Hyatt Hotels Corporation. (2014). *10-K Report*. Retrieved from http://s2.q4cdn.com/278413729/files/doc_financials/annual%202014/Hyatt-Hotels-Form-10-K.PDF

Impacting your bottom line results - PricewaterhouseCoopers. (2013). Retrieved March 01, 2016, from http://www.pwc.com/us/en/issues/ifrs-reporting/publications/assets/pwc-new-lease-accounting-standards.pdf

Jiang, Lan and Schmidgall, Raymond S. (2012) "Lease Accounting Proposal: Awareness Issues and Estimated Impacts," *Journal of Hospitality Financial Management*: Vol. 20: Iss. 2, Article 3

Kaiser, A., CPA. (2016, March 01). Lease Accounting Standard Issued. Retrieved March 05, 2016, from http://www.eisneramper.com/lease-accounting-standard-0316.aspx

Kostolansky, J., & Stanko, B. (2011). The Joint FASB/IASB Lease Project: Discussion And Industry Implications. *Journal of Business & Economics Research (JBER) JBER, 9*(9), 29. doi:10.19030/jber.v9i9.5633

Las Vegas Sands Corp. (2014). *10-K Report*. Retrieved from http://s1.q4cdn.com/133622603/files/doc_financials/2014/LVS-2014-Annual-Report.pdf

Lease Accounting survey Preparing for Implementation. (2014). Retrieved March 01, 2016, from http://www2.deloitte.com/content/dam/Deloitte/us/Documents/finance/us-fas-lease-accounting-report.pdf

Leases—Joint Project of the FASB and the IASB. (2015, April 10). Retrieved April 25, 2015.

Lee, S. S. (2003, October). Capital and Operating Leases. Retrieved March 01, 2016, from http://www.fasab.gov/pdffiles/combinedleasev4.pdf

Leonard, J., & O'Brien, R. (2012, Spring). Wharton Real Estate Review: The Proposed Lease Accounting Standards. Retrieved March 01, 2016, from http://realestate.wharton.upenn.edu/review/index.php?article=240

Marriott International, Inc. (2014). *10-K Report*. Retrieved from SEC EDGAR website http://www.sec.gov/edgar.shtml

Mattson-Teig, B. (2015). Unleashing the Lease. *National Real Estate Investor*, 57(1), 27-28.

McCarthy, M. G., Cotten, B., & Schneider, D. K. (2014). Proposed Accounting Standard Requires Capitalization of All Long-Term Leases for Lessees. *The Coastal Business Journal, 14*. Retrieved March, 2016.

McDonald's Corporation. (2014). *Annual Report*. Retrieved from http://www.aboutmcdonalds.com/content/dam/AboutMcDonalds/Investors/McDonalds2014AnnualReport.PDF

MGM Resorts International. (2014). *10-K Report*. Retrieved from http://mgmresorts.investorroom.com/sec-filings?s=127&year=2015&cat=1

Mulford, C. W., & Gram, M. (2007). The Effects of Lease Capitalization on Various Financial Measures: An Analysis of the Retail Industry. *Georgia Institute of Technology, Financial Analysis Lab*. Retrieved March, 2016, from http://hdl.handle.net/1853/15601

Panera Bread Company. (2014). *10-K Report*. Retrieved from https://www.panerabread.com/content/dam/panerabread/documents/financial/2014/2014-fiscal-form-10-k.pdf

Preparing for Global Lease Accounting Standards. (2011, August 8). Retrieved March 1, 2016.

Singh, A. (2011). A restaurant case study of lease accounting impacts of proposed changes in lease accounting rules. *International Journal of Contemporary Hospitality Management, 23*(6), 820-839. doi:http://dx.doi.org/10.1108/09596111111153493

Starbucks Corporation. (2014). *10-K Report*. Retrieved from http://investor.starbucks.com/phoenix.zhtml?c=99518&p=irol-sec

Starwood Hotel & Resorts Worldwide, Inc. (2014). *10-K Report*. Retrieved from http://d1lge852tjjqow.cloudfront.net/CIK-0000316206/3421156f-e69c-46c6-9147-76bd9c263317.pdf

Statement of Financial Accounting Standards No. 13. (1976, November). Retrieved March 01, 2016, from http://www.fasb.org/resources/ccurl/62/358/fas13.pdf

Tai, B. Y. (2013). Constructive Capitalization of Operating Leases in the Hong Kong Fast-Food Industry. *Ijafr International Journal of Accounting and Financial Reporting, 3*(1). Retrieved March 01, 2016.

The Wendy's Company. (2014). *10-K Report*. Retrieved from http://ir.wendys.com/phoenix.zhtml?c=67548&p=irol-sec

Wong, K., & Joshi, M. (2015). The Impact of Lease Capitalisation on Financial Statements and Key Ratios: Evidence from Australia. *AABFJ Australasian Accounting, Business and Finance Journal*, *9*(3), 27-44. Retrieved March 01, 2016.

Wyndham Worldwide Corporation. (2014). *10-K Report*. Retrieved from http://investor.wyndhamworldwide.com/phoenix.zhtml?c=200690&p=irol-sec

Wynn Resorts, Limited. (2014). *10-K Report*. Retrieved from http://phx.corporate-ir.net/phoenix.zhtml?c=132059&p=irol-sec

Yum! Brands, Inc. (2014). *10-K Report*. Retrieved from http://www.yum.com/investors/secfilings.asp

ACADEMIC VITA

Julia Boitano
Jmb6706@psu.edu

Education

Pennsylvania State University, Schreyer Honors College **May 2016**

Bachelor of Science with Honors in Accounting
Bachelor of Science in Hospitality Management

Honors and Awards

- Beta Gamma Sigma International Honor Society
- Phi Eta Sigma National Honor Society
- Eta Sigma Delta, Hospitality Honor Society
- Schreyer Honors College Academic Excellence Scholarship
- Robert W. Koehler Academic Excellence in Accounting Scholarship

Experience

Hyatt Hotels Corporation **June-Aug 2015**
Chicago, IL
Real Estate Accounting Intern: Prepared journal entries and account reconciliations for assets and accrual accounts. Performed quarterly straight line rent analysis and entries. Prepared cost segregation analyses, uploaded and analyzed data received from owned hotels, and gained experience with Oracle Systems.

InterContinental Hotels Group **January 2015**
Atlanta, GA
Transactions and Asset Management Intern: Read management contracts and complied information on a hotel property looking to switch from managed to franchised. Completed a feasibility analysis using competitive set and historical data, and shadowed the director of the department.

Millenium Hilton **June-Aug 2014**
New York, NY
Front Office Intern: Completed daily tasks to prepare for next day guest arrivals. Assisted managers with updating standards of operations and dealt with guest issues and questions. Gained proficiency in the OnQ Management System.

Service

Penn State Dance Marathon volunteer

Alternative Fundraising Captain: Planned and participated in fundraising events
Small Group Facilitator: In charge of 60 organization members, planning social engagements and encouraging involvement within the organization

Skills

- Proficiency in Microsoft Word, Excel, and PowerPoint
- Experience with Oracle, OnQ Management System, and OPERA Property Management System