

# **A CASE STUDY OF ACCOUNTING STANDARDS CODIFICATION 842 LEASE ACCOUNTING**

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## **CASE DESCRIPTION**

*The inception of Accounting Standards Codification (ASC) 840 in 1977, involving the off-balance sheet treatment of most leases, resulted in decades of controversy. Recent US GAAP (Generally Accepted Accounting Principles) changes introduced significant modifications to lease accounting for public companies. The new ASC 842 rules became effective for periods beginning after December 15, 2018. The new rules require capitalization of all non-cancellable leases with terms greater than one year in duration. Liabilities created by the lease contract now become a balance sheet debt item resulting in a significant financial statement effect. Indeed, this recharacterization may produce a significant negative impact on a firm's debt ratios and covenant agreements. The combined effects of these changes may significantly affect the way entities conduct business. This case study focuses on differences in the treatment of leases under old lease accounting conventions and the new lease rules under US GAAP. The case requires students to examine the impact of these differences on financial statements and selected financial ratios. Students begin with GAAP financial statements under the old lease requirements and prepare a balance sheet and income statement and cash flow, reflecting the new lease rules. Designed for use at both the undergraduate and graduate levels, this case study may be appropriate for an Intermediate Accounting II, Accounting Theory, Financial Statement Analysis, or an International Accounting class.*

**JEL:** M40, M41, M49

**KEYWORDS:** US GAAP, Ratios, Capital Lease, Operating Lease, Financing Lease

## **INTRODUCTION**

This case study demonstrates the implications of Accounting Standards Codification (ASC) 842 on financial statements and firm's debt ratios. ACS 840 regulated accounting of leases from 1977 through 2018. ASC 842 superseded ASC 840 for financial statements fiscal periods beginning after December 15, 2018. The case study highlights accounting changes made and discusses the new lease reporting requirements. We illustrate differences between ASC842 and ASC 840 with examples. Professors of undergraduate and graduate-level courses can use this case study to facilitate student understanding of the ASC 842 pronouncement on leases.

The next part of the study discusses the literature and provides some background information on lease accounting rules. The following sections contain the case information and questions for students. The final section concludes the case study. The paper closes with some teaching notes for professors.

## **LITERATURE REVIEW AND BACKGROUND**

In 2018, the Financial Accounting Standards Board (FASB) amended FASB Accounting Standards Codification (ASC) and created Accounting Standards Update ASC 842 regarding lease accounting. This

update, along with International Financial Reporting Standards (IFRS) 16, Leases, is the result of the FASB's and the International Accounting Standards Board's (IASB's) efforts to improve financial reporting of leases (FASB Accounting Standards Update 2016).

The updates apply to financial statements prepared for fiscal years beginning after December 15, 2018 including interim periods. The update applies to public business entities, not for profit entities that are publicly traded and employee benefit plans that file financial statements with the U.S. Securities and Exchange Commission (SEC). For other entities, the new rules became effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. The FASB allows for early adoption of the changes for all entities (FASB ASC 2016\_02 Section A). The adoptions dates for private firms were subsequently pushed back to 2021 and 2022 (ASC 842 Review, 2021).

ASC 840, rules allowed reporting operating leases only in the footnotes of corporate financial statements. ASC 842 changed this provision. Specifically, ASC 842 requires businesses to recognize most leases on their balance sheet. Contracts that meet the lease definition, including operating leases, must now be recognized on balance sheets via a right-of-use (ROU) asset and a corresponding lease liability. The right-of-use asset recognizes a lessee's right to use the asset over the life of a lease. If a right-of-use asset should become impaired, the impairment is immediately recognized, thereby reducing the asset's carrying amount (FASB 2016). ASC 842 exempts the capitalization requirement only for short-term leases with lengths less than or equal to 12 months (ASC 842 Review 2018).

Another important change related to ASC 842 relates to classification of leases as Type A or Type B. The classification depends upon "level of consumption." Type A classification applies to leases where a significant amount of a leased asset's value is consumed during the lease period. Most leases other than property leases fall into this category. Type A leases generally include equipment and vehicle leases. Accounting for Type A lessees recognizes a right-of-use asset and a corresponding lease liability. The values are initially measured as the lease payment present value. The process involves unwinding the lease liability discount as interest, separately from the amortization of the right-of-use asset (Lease Query 2016).

In Type B leases, an insignificant portion of the leased asset is consumed during the lease period. Most real estate leases fit into this category. Type B lessees recognize a right-of-use asset and a lease liability initially measured as the present value of the lease payments. Rules require recognition of a single lease cost on a straight-line basis that combines unwinding the lease liability discount with amortization of the right-of-use asset (FASB 2016).

ASC 842 differs from International Financial Reporting Standards (IFRS) 16 in certain aspects of lessee accounting. ASC 842 distinguishes between finance and operating leases in the financial statements, whereas IFRS 16 requires all leases to be accounted for consistent with ASC 842 approach for financial leases (IAS, 2016). As a result, operating leases under ASC 842 are accounted for differently from IFRS. This results in differences between the statement of comprehensive income and the statement of cash flows. This case explores only the impact of ASC 842. Future case studies may explore and report the differences between the IFRS 16 and ASC 842.

## CASE INFORMATION

Peter Telecom Corporation, a publically traded NASDAQ company (symbol PTCOM), services and repairs telecommunication equipment. The company is based in Jacksonville, Florida, and become public on January 1, 2015. Peter Telecom Corp. operates in the United States and Latin American countries. Its stock sells for 35 US Dollars per share, and its 2015, 52-week price range was \$29.50 to \$37.15.

Their financial statements, presented here for the year ending December 31, 2015, were prepared using ASC 840, US GAAP rules. Given a high need for capital investment in the industry, the controller wants to identify the impact ASC 842 lease rules on the financial statements. Specifically, the controller wants to see the impact of these changes on the balance sheet, income statement, cash flow statement, and the various debt-related financial ratios. Table 1, 2 and 3 show the balance sheet, income statement and statement of cash flows under ASC 840 lease rules for the year ended December 31, 2015. Table 4 shows excerpts from relevant notes to the financial statements.

Table 1: Balance Sheet as of December 31, 2015

<b>Peter Telecom Corporation</b>			
<b>Balance Sheet</b>			
<b>December 31, 2015</b>			
<u>ASSETS</u>	\$	\$	
<b>Current Assets:</b>			
Cash & Cash Equivalents	79,339		
Contract Receivable	116,236		
<b>Total current assets</b>		195,575	
Property, Plant & Equipment	151,401		
Less: Accumulated Depreciation	<u>15,141</u>		
		136,260	
<b>Total Assets</b>		<u>331,835</u>	
<b><u>LIABILITIES AND SHAREHOLDER'S EQUITY</u></b>			
Accounts Payable	70,177		
Accrued Expenses	49,181		
Income Taxes Payable	100		
Auto Loan Payable	19,962		
Loans from Shareholders	26,188		
<b>Total Current Liabilities</b>		165,608	
Auto loan payable		97,948	
<b>Total Liabilities</b>		263,556	
<b>Stockholders' Equity</b>			
Common Stock	50,000		
Retained Earnings	18,279		
<b>Total Stockholders' Equity</b>		<u>68,279</u>	
<b>Total Liabilities and Stockholders' Equity</b>		<u>331,835</u>	

*This table shows the balance sheet for Peter Telecom Corporation as of December 31, 2015. The statements were prepared using ASC 840 accounting conventions for leases.*

Table 2: Statement of Income and Retained Earnings for Year Ended December 31, 2015

<b>Peter Telecom Corporation</b>			
<b>Statement of Income and Retained Earnings</b>			
<b>For Year Ended December 31, 2015</b>			
	\$	\$	
Contract Revenues Earned	667,604		
Cost of Revenues Earned	<u>499,351</u>		
<b>Gross Earnings</b>		168,253	
General and Administrative Expenses		<u>149,874</u>	
Income (Loss) Before Tax		18,379	
Income Tax Expense		100	
<b>Net Income</b>		<u>18,279</u>	
Retained Earnings, Beginning Period		0	
Retained Earnings, End of Period		<u>18,279</u>	

*This table shows the Statement of Income and Retained Earnings for the Year Ended December 31, 2015. Statements were prepared using ASC 840 accounting conventions for leases.*

Table 3: Statement of Cash Flows for Year Ended December 31, 2015

<b>Peter Telecom Corporation</b>		
<b>Statement of Cash Flows</b>		
<b>For Year Ended December 31, 2015</b>		
	\$US	\$US
Cash Flow from operating activities		
Net Income (loss)		18,279
Adjustments to reconcile net income		
To net cash used in operating activities:		
Depreciation	15,141	
Changes in assets (Increase) Decrease in:		
Contracts Receivables	(116,236)	
Changes in Liabilities Increase (Decrease) in:		
Accounts Payable	70,177	
Accrued Expense and taxes payable	49,281	
		<u>18,363</u>
<b>Net Cash flow from operating activities</b>		<b>36,642</b>
<b>Net cash flow from investing activities</b>		
Purchase of Property, Plant & Equipment		(151,401)
<b>Cash from financing activities</b>		
Shareholder Investment	50,000	
Increase in Auto Loan Payable	117,910	
Increase in Shareholders' Loan Payable	26,188	
<b>Net cash from financing activities</b>		<b>194,098</b>
<b>Net Increase (decrease) in cash or cash equivalents</b>		<b>79,339</b>
Beginning Cash and Cash Equivalents Balance		0
Ending Cash and Cash Equivalents Balance		<u>79,339</u>

*This table shows the Statement of Cash Flows for the Year Ended December 31, 2015. Statements were prepared using ASC 840 accounting conventions for leases.*

Table 4: Excerpts from Notes to the Financial Statements for Peter Telecom Corporation

<b>Additional Information Relating to Lease Agreements</b>
1. On January 1, 2015, Peter Telecom Corp. signed a 3-year non-cancellable lease term on a building where they maintain their business operations. The rental payment per month is \$3,000. There are no renew options. The estimated useful life of the building is 50 years, and its fair market value is \$1,000,000.
2. On January 1, 2015, Peter Telecom Corp. signed a 4-year non-cancellable lease for the use of a heavy-duty truck. The lease payment is \$616.67 per month. The useful life of the truck is six years, and the fair value of the truck on January 1, 2015, is \$30,500. Peter Telecom knows the implicit rate of this lease. The lessor designed this truck specifically for Peter Telecom's use, and the lessor has no alternate use for this truck after the lease term.
3. The company's incremental borrowing rate is 6.25% (they obtained a short-term loan in 2015 at this rate), and the risk-free rate of return is 2.5%. The implicit rate on the truck is 6.15%, which is known to the lessee.
4. There is no transfer of title or bargain purchase on the lease of the truck.
5. All lease payments listed above are made at the beginning of the period/month.

*This table shows excerpts from the Notes to the Financial Statements for Peter Telecom Corporation. The excerpts relate to lease financing activities.*

## QUESTIONS

1. Differentiate between an operating lease and a capital/financial lease for financial reporting purposes.
2. Under ASC 840 US GAAP, have the leases above been treated as a capital lease/financial lease or an operating lease?
3. Under the new ASC 842 US GAAP rules, should this lease be classified as an operating or a financial lease?

4. Prepare an income statement under the new ASC 842 US GAAP lease rules for the year ended December 31, 2015.
5. Prepare a balance sheet under the new ASC 842 US GAAP lease rules as of December 31, 2015.
6. Prepare a Statement of Cash Flows under the new ASC 842 US GAAP lease rules for the year ended December 31, 2015.
7. Compute the following ratios for 2015, under both the old ASC 840 US GAAP reporting lease rules and the new ASC 842 US GAAP reporting lease rules:
  - a. Current Ratio
  - b. Quick Ratio
  - c. Times Interest Earned
  - d. Debt Ratio
  - e. Debt to Shareholders' Equity Ratio
8. What conclusions can we note based on the findings of the ratios calculated above?
9. Compare ASC 840 and 842 Standards from a lessee point of view.
10. What recommendations can you make to ease the reporting effects of the new lease rule?
11. Write a brief note on the research findings related to the implementation of ASC 842. (This question is intended for graduate program courses)

# A CASE STUDY OF ACCOUNTING STANDARDS CODIFICATION 842 LEASE ACCOUNTING TEACHING NOTES

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## CASE DESCRIPTION

*The inception of Accounting Standards Codification (ASC) 840 in 1977, involving the off-balance sheet treatment of most leases, resulted in decades of controversy. Recent US GAAP (Generally Accepted Accounting Principles) changes introduced significant modifications to lease accounting for public companies. The new ASC 842 rules became effective for periods beginning after December 15, 2018. The new rules require capitalization of all non-cancellable leases with terms greater than one year in duration. Liabilities created by the lease contract now become a balance sheet debt item resulting in a significant financial statement effect. Indeed, this recharacterization may produce a significant negative impact on a firm's debt ratios and covenant agreements. The combined effects of these changes may significantly affect the way entities conduct business. This case study focuses on differences in the treatment of leases under old lease accounting conventions and the new lease rules under US GAAP. The case requires students to examine the impact of these differences on financial statements and selected financial ratios. Students begin with GAAP financial statements under the old lease requirements and prepare a balance sheet, income statement and cash flow statement, reflecting the new lease rules. Designed for use at both the undergraduate and graduate levels, this case study may be appropriate for an Intermediate Accounting II, Accounting Theory, Financial Statement Analysis, or an International Accounting class.*

## QUESTIONS

**Question 1:** Differentiate between an operating lease and a capital/financial lease for financial reporting purposes.

**Solution 1:** Operating lease payments are treated as a rent expense. Operating leases constitute off-balance sheet debt that does not affect the firm's debt ratios. Operating lease payments are reported as an expense on the income statement. Capital leases involve creation of an asset and liability on the balance sheet. Two expenses related to the lease are recognized on the income statement 1.) Depreciation/Amortization expense and 2.) Interest expense. Operating leases are generally preferred and provide significant advantages to companies.

**Question 2:** Under ASC 840 US GAAP, have the two leases above been treated as a capital lease/financial lease or an operating lease?

**Solution 2:** Under US GAAP-ASC 840, if the lessee is long-term (having a term longer than one year), is non-cancelable, and meets at least one of the four tests, the lease is treated as a capital lease; otherwise, it is an operating lease. Table 5 shows the appropriate lease evaluation.

Table 5: Tests to Determine Lease Classification under ASC 840

Test	Lease 1: Building Rental	Lease 2: Truck Rental
Test 1: Transfer of Ownership Test: If at the end of the lease term, ownership transfers to the lessee, then this test is satisfied.	No	No
Test 2: Bargain Purchase Option: If the lessee has the option to purchase the lease at a bargain purchase price, then this test is satisfied.	No	No
Test 3: Economic Life Test: If the lease term is equal to or greater than 75% of the economic life of the asset, it is a capital lease.	No, as 3/50=6%.	No, as 4/6 is 66.67%.
Test 4: Economic Recovery Test: If the present value of the minimum lease payments is 90 percent or higher of the fair market value of the asset, then it is a capital lease.	No, as the present value of 3,000 over 36 months at the 6.25% annual incremental borrowing interest rate with payments made at the beginning of the month equals \$99,586. This amount represents 9.5 percent of the \$1,000,000 fair value of the building.	No, as the present value of \$616.67 payments for 48 months at the implicit rate of 6.15% per annum, as it is known to the lessee with payments made at the beginning of the month equals \$27,096. This amount represents 88.83% of the \$30,500 fair value of the truck.

This table shows the four tests used to evaluate leases for classification as Operating or Capital. Both leases classify as Operating Leases.

The results indicate that both leases fail all four tests. Both leases classify as operating leases and therefore do not require balance sheet entries. Rather, the combined effect of the leases should be reported on the income statement as a rent expense of US\$43,400. The careful student will note that capital lease requirements were barely missed.

**Question 3:** Under the new ASC 842 US GAAP rules, should this lease be classified as an operating or a financial lease?

**Solution 3:** Under ASC 842 US GAAP rules, leases are classified as 1.) Type A, Financial Leases, 2.) Type B, Operating Leases or 3.) Short Term Leases. Professors should note that some students might use online lease classification tools such as the tool provided by LeaseAccounting.com to assist in making the classification (www.leaseaccounting.com, 2020).

All long-term, greater than one-year, non-cancellable leases must be capitalized and reflected on the Balance Sheet as a right-of-use (ROU) asset with a corresponding lease liability. The ROU asset is reflected in a separate part of the Property, Plant, and Equipment section of the Balance Sheet and is reduced by an Accumulated Amortization balance. ROU leases are termed as either Type A, financial or Type B operating leases. The importance of this classification lies in the income and cash flow statement treatment.

ASC 842 requires that Type A and B leases be reflected as a separate component of the Property, Plant, and Equipment section of the Balance Sheet. Each lease type is presented separately less its accumulated amortization amount. On the liability side, Type A and B leases should be presented separately in the current liabilities and long-term liabilities sections of the Balance Sheet.

For Type A leases, the lease payment incorporates an interest and principal component. The expense equals interest and amortization. The cash flow includes operating cash payments for the interest and financing cash flow for the principal payment amount. The total expense decreases each year because of a declining outstanding principal/liability balance. Hence, a Type A lease is sometimes termed an accelerated payment lease.

For Type B leases, the full amount of the lease payment is a rent expense that reflects as a cash outflow from operating activities. The rent expense occurs in equal amounts each year during the lease term. As a

result, sometimes operating leases are termed straight line leases. The rent expense equals the interest expense, plus amortization expense, which equals the annual lease expense less the interest expense. For short-term leases of one year or less firms may either capitalize the leases or treat them as an off-balance sheet transaction whereby the rent payment represents a rent expense.

ASC 842 requires entities to classify each lease (as either a Type A, B, or Short-term) at the commencement date. Special considerations affect renewal options. If it is probable, at the commencement date, that the lease will be renewed, the additional renewal provisions become part of the lease terms. Commencement date determinations are permanent. With few exceptions, the lease may not be reassessed after the commencement date.

We continue by identifying the requirements for Type A, Type B, and short-term leases. Type A leases, also referred to as Financial leases, occur when the lessee expects to consume a significant part of the economic benefits of the leased asset during the lease period. To qualify as a Type A lease, the contract must be long-term, which is defined as a non-cancellable lease for more than one year, and, meet one or more of the five tests as shown in Table 6.

Table 6: Tests for Lease Type under ASC 842

Test	Lease 1: Building Rental	Lease 2: Truck Rental
Test 1: Transfer of Ownership Test: If at the end of the lease term ownership transfers to the lessee, then this test is satisfied.	No	No
Test 2: Bargain Purchase Option: If the lessee has the option to purchase the lease at a bargain purchase price, which the lessee is reasonably sure to exercise, then this test is satisfied.	No	No
Test 3: Economic Life Test: The lease term is for the significant part of the remaining economic life of the leased asset. This test is satisfied if the lease term is equal to or greater than 75% of the economic life of the asset.	3/50=6% less than 75% No	4/6=66.67%. less than 75% No
Test 4: Economic Recovery Test: The present value of the sum of the lease payments and any residual value guaranteed by the lessee equals or exceed substantially all of the fair value of the underlying asset. This test is met if the present value of the minimum lease payments is 90 percent or higher of the fair market value of the asset. ASC 842 is silent as to which interest rate should be used in the present value calculation. The implicit rate of the lease or the lessee's incremental borrowing rate may be used for publicly traded companies. For non-public companies, ASC 842 allows for the use of a risk-free interest rate, such as the use of a US Treasury Bill, Note or Bond rate.	9.5%. See Table 5 Less than 90% No	88.83%, See Table 5. Less than 90% No
Test 5: Alternative use to lessor: If the leased asset is of such a specialized nature and is not expected to have any alternative use to the lessor at the end of the lease term, then it is classified as a Type A, financial lease. (As an example, if the property is so specialized and there is no resale value for this asset after the lease term, there is no alternative use for this asset).	No	Yes per facts in Table 4 (part 2)

Note that if there exist lease renewal options and it is reasonably certain the lessee will exercise the options, the renewal period is added to the lease term for the 2nd test and to the present value payment total for the 4th test. Thus, a one-year lease with a two-year renewal option which the lessee is reasonably sure to exercise will not exempt balance sheet reporting.

Lease 1, the main office lease, classifies as a Type B, Operating Lease. Table 7 shows calculations required to properly account for the lease. The rent payment on the main office equals \$3,000 per month for three years, 36-month payments made at the beginning of each month, which results in a Type B ROU asset and lease liability at inception for an amount of \$99,586. The calculations used a 6.25% incremental borrowing rate.



Lease 2, the truck lease classifies as a Type A, Financing Lease. The payment equal \$616.67 per month for four years, 48 months with payments made at the beginning of the month. At the implicit rate of 6.15%, the lease results in a present value of \$27,096, which is below the 90% threshold of the financing lease requirement of \$27,450. However, the fifth test is met in that the lessor has no alternate use for this asset after the lease term, thereby making this a Type A lease that results in a Type A ROU asset and lease liability at an inception amount of \$27,096.

Examining the Office Property lease we note the following: The lease is an Operating Lease so the straight-line method will be utilized. The lease payment equals US\$36,000 per year (\$3,000\*12). The Lease liability on January 1, 2015 equals \$99,586. The end-of-year lease liability equals \$68,589, calculated as \$3,000 payments for 24 months at 6.25% interest. The change in lease liability, the amortization amount, equals \$30,997 (\$99,586 – \$68,589). The interest expense equals the total lease payment less the change in lease liability as follows: \$36,000 - \$30,997 = \$5,003. Finally, the Long-term liability at the end of the year equals \$32,658 (calculations shown below in Table 7)

Table 7: Lease Calculations

<b>Panel A: Office Property-Type B Lease-Operating Lease Using the Straight Line Method</b>	
Lease liability at the beginning of the year, 1/1/2015	\$99,586
Lease liability end of year, 12/31/2015 = 68,589 =3,000 payment, 24 months at 6.25%	\$68,589 (\$3,000 payments made at beginning of period for 24 months at 6.25 percent annual interest rate)
Payment of Lease Liability	\$30,997 (\$99,586 - \$68,589)
Lease expense is 36,000 (3000*12).	\$36,000 (\$3,000 payments for 12 months)
Interest expense=amount paid less principal amount paid	\$5,003 (\$36,000 - \$30,997)
Amortization	\$30,997
Current Lease liability 12/31/15	\$35,931 (\$3,000 payments made at beginning of period for 12 months at 6.25% annual interest rate)
Long-term liability 12/31/15	\$32,658 Lease liability-12/31/15 from above less current liability from above) =\$68.589-35,931= 32,658
<b>Panel B: Calculation Notes</b>	
In a Type B lease, we have a rent (lease) expense for the lease payments by of use of the straight-line method for expense recognition Total lease expense –Type B lease =lease payments=3,000 times 12= 36,000. This will comprise of an interest expense amount and resulting plugged in amortization expense amount. In 2015-the lease expense is composed as follows: Interest expense= 5,003. Amortization expense=36,000 less 5,003=30,997.	
A) The result is that there will be a lease expense created by the Type B lease of 36,000 per year, which is part of operating expenses on the income statement and a cash outflow from operating activities on the statement of cash flows	
B) Note-the balance of a net ROU Type B lease equals the outstanding liability amount of a Type B lease. In this case, at 12/31/2015, the Type B lease will have the following balance sheet accounts.	
C. Asset. Right of use –Type B= Cost less Accumulated Amortization= 99,586-30,997=68,589. Lease liability-12/31/15=68,589; 35,931 current and 32,658 noncurrent.	

*This table shows calculations necessary to create the appropriate accounting entries for the office property lease.*

For the Automobile lease, a Type A lease, we use the Financial lease accelerated method. The rent expense equals the interest expense, plus amortization expense. The Amortization expense will be greater in the earlier years. The monthly lease payment equals \$616.67 implying a total lease payment for the year equaling \$7,400 (616.67 \* 12). For this lease, the Lease liability on January 1, 2015 equals US\$27,096. The end-of-year lease liability equals US\$21,161, which equals 36 months of \$616.67 per month payments at 6.15 percent. The change in lease liability during the year equals \$5,935 (\$27,096 – 21,161). The interest expense equals the total payments less the change in lease liability as follows: \$7,400 - \$5935 = \$1,465. The amortization expense equals \$6,774 calculated as the beginning lease liability divided by the term of the lease \$27,096/4. The total expense for 2015 equals the sum of the amortization and interest expenses: \$6,774 + \$1,465 = \$8,239. This amount is accelerated as it exceeds the lease payment of \$7,400.

The Balance Sheet effect of this Type A lease as of 12/31/15 is presented in Table 8. The Balance Sheet reports a current lease liability of \$6,313 and a long-term lease liability of \$14,848.

Table 8: Balance Sheet Effects of the Type A Lease

<b>Assets</b>	
Type A Lease	\$27,096
Less Accumulated Amortization	\$6,774
Net Lease	\$20,322
<b>Liabilities</b>	
Lease Liability Current	\$6,313
Lease Liability Noncurrent	\$14,848
Total Lease Liability	\$21,161

*This table shows balance sheet effects of the Type A Lease.*

*Lease liability-1/1/2015 = 27,096.*

*Lease liability end of year = 21,161=616.67 payment, 36 months at 6.15%*

*Difference=payment of lease liability= 5,935*

*Interest expense=amount paid less principal amount paid 616.67 times 12=7,400-5,935=1,465*

*Amortization expense=27,096/4 years=6,774*

*Total expense- Year 2015 = 6,774 plus 1,465= 8,239. Accelerated, as it more than the lease payment of 7,400 (616.67 times 12).*

*Lease liability –current at year ended 12/31/2015=6,313*

*Long term liability year ended 12/31/15=14,848*

On the Income Statement, we have; interest expense plus amortization expense. This equal 1,465 and \$6,774 respectively totaling 8,239. The amount is greater than the lease payment of 7,400, hence the accelerated method, which will be reversed in the later years of the lease term.

C)On the cash flow statement, we have a cash outflow from operating activities for the interest expense of 1,465 and cash outflow for the payment of the lease liability of 5,935= 7,400.

The effects above are reflected in our created Balance Sheet, Income Statement, and Statement of Cash Flows.

Total lease payments 2015=Type A 7,400 plus Type B 36,000= 43,400.

**Question 4:** Prepare an income statement under the new ASC 842 US GAAP lease rules for the year ended December 31, 2015.

**Solution 4:** Table 9 shows the Statement of Income and Retained Earnings for the year ended December 31, 2015.

Table 9: Income Statement for Peter Telecom Corporation for the Year Ended December 31, 2015 under ACS 842 Lease Accounting Rules

Peter Telecom Corporation Statement of Income and Retained earnings For the Year Ended December 31, 2015		
	\$	\$
Contract Revenues Earned	667,604	
Cost of Revenues Earned	<u>499,351</u>	
<b>Gross Earnings</b>		168,253
General and Administrative Expenses (See note 1)		<u>149,248</u>
Income (Loss) Before Tax		19,005
Interest expense (See note 2)		1,465
Income before Taxes		17,540
Income Tax Expense		100
Net Income		<u>17,440</u>
Retained Earnings, Beginning Period		0
Retained Earnings, End of Period (See note 3)		<u>17,440</u>

*This table shows the Statement of Income and Retained Earnings for Peter Telecom Corporation using the ASC 842 Lease Accounting rules. Notes: 1.) Under previous ASC 840 rules, General and Administrative expenses total \$149,874, which includes Lease/rent expense of \$43,400. Under the new ASC 842 lease rules, Lease/rent expense equals \$36,000 plus amortization expense of \$6,774, totaling \$42,774. This results in a decrease in General and Administrative expenses by \$626, to \$149,248. 2.) Interest Expense equals \$1,465 under ASC 842 rules. There was no interest expense under the earlier ASC 840 rules. 3.) Total lease related expenses under the new ASC 842 rules equals 44,239 (42,774+1,465) which is \$839 (44,239-43,400) more than under ASC 840 rules. The combined result is a decrease in net income under ASC 842 when compared to ASC 840 in an amount of \$839, (from 18,279 to 17,440). The difference occurs because of the accelerated expense in a Type A lease. This net income change will be reversed in the later years of the lease term.*

**Question 5:** Prepare a balance sheet under the new ASC 842 US GAAP lease rules as of December 31, 2015

**Solution 5:** Table 10 shows the Balance sheet when ASC 842 ruled apply.

Table 10: Peter Telecom Corporation Balance Sheet for Year Ending December 31, 2015 under ASC 842 Lease Rules

<b>Peter Telecom Corporation Balance Sheet December 31, 2015</b>		
<b>Assets</b>	<b>\$</b>	<b>\$</b>
<b>Current Assets:</b>		
Cash & Cash Equivalents	79,339	
Contract Receivable	116,236	
<b>Total current assets</b>		195,575
Property, Plant & Equipment	151,401	
Less: Accumulated Depreciation	<u>(15,141)</u>	
		136,260
Type A Lease	27,096	
Less: Accumulated Depreciation	(6774)	
		20,322
Type B Lease	99,586	
Less: Accumulated Depreciation	(30,997)	
		68,589
<b>Total Assets</b>		<b><u>420,746</u></b>
<b><u>LIABILITIES AND SHAREHOLDER'S EQUITY</u></b>		
Accounts Payable	70,177	
Accrued Expenses	49,181	
Income Taxes Payable	100	
Type A lease liability	6,313	
Type B lease liability	35,931	
Auto Loan Payable	19,962	
Loans from Shareholders	26,188	
<b>Total Current Liabilities</b>		207,852
<b>Long-Term Liabilities</b>		
Type A lease liability	14,848	
Type B lease liability	32,658	
Auto loan payable	97,948	
		145,454
<b>Total Liabilities</b>		<b>353,306</b>
<b>Stockholders' Equity</b>		
Common Stock	50,000	
Retained Earnings	17,440	
<b>Total Stockholders' Equity</b>		<b>67,440</b>
<b>Total Liabilities and Stockholders' Equity</b>		<b><u>420,746</u></b>

*This table shows the Balance Sheet for Peter Telecom Corporation for December 31, 2015. Statements were prepared under ASC 842 Lease Accounting Rules.*

**Question 6:** Prepare a Statement of Cash Flows under the new ASC 842 US GAAP lease rules for the year ended December 31, 2015

**Solution 6:** Table 11 shows the Statement of Cash Flows for Peter Telecom for the year ended December 31, 2015 under ASC 842 Lease Accounting rules.

Table 11: Statement of Cash Flows for Year Ended December 31, 2015 Under ASC 842 Rules

<b>Peter Telecom Corporation</b>		
<b>Statement of Cash Flows</b>		
<b>For the Year Ended December 31, 2015</b>		
	\$	\$
Cash Flow from operating activities		
Net Income (loss)		17,881
Adjustments to reconcile net income To net cash used in operating activities:		
Depreciation	52,912	
Type B Lease liability payment (see note)	(30,997)	
Changes in assets (Increase) Decrease in:		
Contracts Receivables	(116,236)	
Changes in Liabilities Increase (Decrease) in:		
Accounts Payable	70,177	
Accrued Expense and taxes payable	49,281	
		<u>25,137</u>
<b>Net Cash flow from operating activities</b>		<b>43,018</b>
<b>Net cash flow from investing activities</b>		
Purchase of Property, Plant & Equipment		(278,083)
<b>Cash from financing activities</b>		
Increase in lease liabilities (see note)	120,306	
Shareholder Investment	50,000	
Increase in Auto Loan Payable	117,910	
Increase in Shareholders' Loan Payable	26,188	
<b>Net cash from financing activities</b>		<b>314,404</b>
<b>Net Increase (decrease) in cash or cash equivalents</b>		<b>79,339</b>
Beginning Cash and Cash Equivalents Balance		0
<b>Ending Cash and Cash Equivalents Balance</b>		<b>79,339</b>

*This table shows the Statement of Cash Flows for Peter Telecom Corporation for Year Ended December 31, 2015 under ASC 842 Lease Accounting rules. Note the reduction in lease liability under a Type B lease is part of Cash outflows from Operating Activities, whereas, for Type A leases, the reduction in lease liability is a cash outflow from financing activities.*

**Question 7:** Compute the following ratios for 2015, under both the current US GAAP reporting lease rules and the new US GAAP REPORTING lease rules:

- a. Current Ratio
- b. Quick Ratio
- c. Times Interest Earned
- d. Debt Ratio
- e. Debt to Shareholders' Equity Ratio

**Solution 7:** Table 12 reports the completed ratio analysis.

Table 12: Ratio Analysis under both ASC 840 and ASC 842 Lease Accounting Rules

Ratio	ASC 840 Rules	ASC 842 Rules
Current Ratio	1.18	0.94
Quick Ratio	1.18	0.94
Times Interest Earned Ratio	No interest	12.97
Debt Ratio	79%	84%
Debt to Shareholders' Equity Ratio	3.85	5.24

*This table show ratio analysis for Peter Telecom Corporation under ASC 840 and ASC 842 Lease Accounting rules.*

**Question 8:** What conclusions can you state based on your findings of the ratios calculated above?

**Solution 8:** The new lease rules will make it more difficult the firm to borrow money. It will also be costlier to borrow as the key debt ratios will be weaker. The current ratio under ASC 842 is less than 1, indicating a liquidity problem for Peter Telecom. In addition, debt ratios deteriorate under ASC 842 as Peter Telecom now has an interest expense and higher debt levels.

**Question 9:** Compare ASC 840 and 842 standards from a lessee point of view.

**Solution 9:** Table 13 compares the characteristics of ASC 840 and ASC 842.

Table 13: Comparison of ASC 840 and ASC 842

	Title	ASC 840	ASC 842
1	<b>Financial lease</b>	Four tests	Five tests
2	<b>Operating lease (Balance sheet)</b>	Only financial leases are reported and recorded on the companies' balance sheet.	Both financial and operating leases are reported and recorded in the balance sheet. They are shown as an asset and also as a lease liability.
3	<b>Operating lease (Income statement)</b>	Financial leases show interest and amortization in the income statement separately. Operating leases show only lease expenses.	For financial leases interest and amortization of the lease are presented separately on the income statement. However, for operating leases, the interest and amortization of the lease are combined into one single item and shown as lease expenses (straight-line expense).

**Question 10:** What recommendations can we make to ease the reporting effects of the new lease rules?

**Solution 10:** ASC will negatively affect all US companies that utilize leases. Students might make various recommendations including the following to help reduce the effects of ASC 842.

- a. Short term leases are recommended, if applicable. Short term leases avoid balance sheet reporting requirements.
- b. Companies should treat all short-term leases as rental expenses, and consequently, keep these transactions off the balance sheet.
- c. In the case of Type A leases, the better choice is to purchase the asset rather than lease. Buying will be less costly as (a) the interest rate is lower, (b) it is possible to gain a tax advantage given accelerated tax depreciation under MACRS, and (c) the possibility of obtaining an immediate tax advantage by expensing 179 assets (personal property), if available.

- d. For Type B leases, shorter lease terms will result in a lower balance sheet valuation. As an example, two 5-year leases are preferable to a single ten-year lease, as the liability reporting amount is cut in half.
- e. Many smaller companies lease their offices from related shareholder owners. If so, a one-year lease may be utilized. Note however that the rental payments must be at arms-length and the lease should not include renewal options.
- f. Users may select the implicit incremental or risk-free rate of interest to capitalize the lease. We recommend avoiding use of the risk-free rate to capitalize the leased asset. The risk-free rate will always be lower than the implicit incremental rate and thus result in a higher liability.
- g. Firms might explicitly note to potential lenders the impact of ASC 842 on their financial statements. Perhaps a note to the financial statements indicating these effects would be beneficial until such time as lenders become well acquainted with the new rules.

**Question 11:** Write a brief note on the research findings on the implementation of ASC 842.

**Solution 11:** Students should select some peer-reviewed journal articles related to ASC 840 and ASC 842. For example, the 2012 Hales and Wilkes paper titled “Accounting for Lease Renewal Options: The Informational Effects of Unit of Account Choices” by discusses the impact of lease standard ASC 840 and states that proposed treatment of renewal options has a negative effect on lenders’ willingness to lend to a firm with renewal options.

## CONCLUSION

This case study examined the financial implications of the new lease rules ASC 842 under US GAAP. The paper compares previous ASC 840 lease rules with the new ASC 842 lease rules and examined its impact on financial ratios, borrowing capacity, and covenant agreements. The new lease rules became effective for periods after 2019. The results here indicate ASC 842 will negatively affect US companies. Students recommend actions that US companies may take to help ease the burden of the new lease requirements. Future research might study the effects of new IFRS rules on non-US GAAP reporting companies worldwide.

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## BIOGRAPHY

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