

#### The Joint FASB/IASB Lease Project: Summary of Proposed Changes and Impact on Lessee Financial Statements

Working Paper Series - 11-05 | May 2011

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#### Introduction

As part of their major convergence efforts, the FASB and International Accounting Standards Board (IASB) have undertaken a joint project to comprehensively reconsider the existing accounting rules for leases, the result of which thus far is the August 17, 2010 issuance of their exposure draft (ED), *Leases (Topic 840)*, (FASB, 2010). The ED reflects the boards' mutual goal to develop a model to improve financial reporting by increasing comparability and transparency in lease accounting. The Boards plan to publish a final standard in the second quarter of 2011.

If the ED is finalized in its current form, the new rules will significantly change how lessees report leasing arrangements in their financial statements. The most significant proposed change eliminates the distinction between capital leases and operating leases that currently exists under both U.S. Generally Accepted Accounting Principles (US GAAP) and International Financial Reporting Standards (IFRS). Lessees will account for virtually all leases under a single accounting model by recognizing an asset, which reflects the lessee's right to use the underlying leased asset, and a corresponding liability for its obligation to pay rentals.

Thus, the current practice of "off-balance sheet financing," i.e., reporting operating lease information in the footnotes rather than in the financial statements, is eliminated under the proposed rules. The requirement for capitalizing all leases will have a significant impact on the statement of financial position of any company that utilizes operating leases to provide a substantial amount of its property, plant, and equipment. Even for companies with capital leases, the new rules could significantly change the measurement of the assets and liabilities because of the proposed requirement to include contingent rentals and renewal options. Because of these changes, many companies must consider the impact on debt covenants and other contractual obligations and possibly renegotiate those covenants with lenders. Furthermore, these changes may also have a significant effect upon employee compensation plans that grant bonuses, stock options, or restricted stock on the basis of the company achieving certain thresholds of earnings per share and/or return on assets.

In this paper, we describe, compare, and contrast the current US GAAP lease accounting rules with the proposed rules under the joint project's ED as modified according to the FASB's most recent project update as of March, 2011 (<a href="https://www.fasb.org">www.fasb.org</a>). Additionally, we discuss the potential impacts on financial statement and resulting financial ratios of the proposed changes and provide examples of the effects of constructive capitalization of operating leases on the financial statements and resulting ratios for two similarly-sized Global Fortune 500 companies in the retail industry that employ operating leases to different extents.

#### **Accounting for Leases-Current Rules**

The primary source for current lease accounting rules under US GAAP is *FASB ASC 840* (originally *SFAS No. 13*). In general terms, the standard requires lessees to classify leasing transactions under one of two categories. If sufficient risks and rewards of ownership are transferred to the lessee, the lessee essentially records the transaction as a purchase (referred to as a *capital* lease), creating an asset and related lease liability on its balance sheet. Absent the transfer of sufficient risks and rewards of ownership, the lessee records the transaction as a rental (i.e., an operating lease) which is not recorded on its balance sheet but instead as annual operating expenses (with only footnote disclosures describing the lease obligation).

Balance Sheet Recognition. The current rules that require lessee treatment as a capital lease are-

1. The lease transfers ownership to the lessee at the end of the lease term; or

- 2. The lease contains a bargain purchase option, under which the lessee can purchase the leased property at a price significantly below the expected fair value of the leased property at the end of the lease term; or
- 3. The term of the lease (plus any bargain renewal option) is equal to or greater than 75% of the estimated economic life of the leased property; or
- 4. The present value of the minimum lease payments is equal to or greater than 90% of the fair value of the leased property.

The last two criteria are the so-called "bright-line," all-or-nothing tests for determining if a lease is classified as a capital lease. It is these two measures, in particular, that are sometimes manipulated to accomplish the off-balance sheet financing referred to earlier.

Measurement. When a lease is classified as a capital lease, the lessee recognizes on its balance sheet a capitalized leased asset and a corresponding lease liability, measured at the lower of the present value of the required minimum lease payments or the asset's fair value. If the lease includes any residual value guarantee, the amount is included in the minimum lease payments at its maximum amount payable; contingent rentals that are based on an index or rate, or based on the lessee's usage or performance are excluded from the calculation. The lease term used in the calculation is the contractual lease period, plus any additional extensions that the lessee is "reasonably assured" (i.e., probable) that it will exercise. The discount rate to be used for the lessee's calculation of the present value under US GAAP is the lessee's incremental borrowing rate, unless the lessor's implicit rate is determinable by the lessee and is lower.

Annual expense recognition under capital lease accounting rules requires the capitalized lease asset to be depreciated using a policy consistent with similar owned assets. Typically, this is the straight-line method of amortization. Additionally, the lessee recognizes interest charges on the lease obligation under the effective interest method. Contingent rentals that are based on usage or the lessee's performance are recognized as expenses in the period incurred.

When a lease is classified as an operating lease (i.e., none of the criteria listed above are met), the lessee normally recognizes lease payments as expenses on a straight-line basis. Since this treatment is essentially that of a rental contract, the lessee does not record an asset or a related liability for the future required lease payments on its balance sheet.

Financial statement presentation. US GAAP requires lessees to use the same balance sheet and income statement classification and presentation for assets and related lease obligations under capital leases as they do for owned property, plant, and equipment and related debt; significant amounts are reported separately.

Since the majority of leases are currently classified as operating leases, cash payments for the related rental expense are included as operating activities on the statement of cash flows. Payments for interest related to capital leases are classified as an operating activity, whereas the cash payments for the principal reduction on the lease obligation are classified as a financing activity.

Additional disclosure requirements. Certain disclosures are required, regardless of whether leases are classified as capital or operating. These disclosures include a general description of the lessee's material leasing arrangements, including the basis for contingent payments, the existence of renewal and purchase options, and any restrictions imposed by the leasing contracts (e.g., restrictions on dividends, additional debt, further leasing). US GAAP also requires disclosures regarding guarantees.

US GAAP requires reporting a maturity analysis for future minimum lease payments under both capital and operating leases as of the current balance sheet date, which requires disclosure for each of the five succeeding years and in the aggregate for those beyond five years. The aggregate amount representing interest under capital lease obligations is deducted from the total gross payments, yielding the present value of the total lease obligation.

Additional disclosures are required for assets held under capital leases. US GAAP requires lessees to disclose assets at the gross carrying amount and related accumulated depreciation separately on the balance sheet or in the notes.

#### **Accounting for Leases-Proposed Rules**

To date, the FASB and IASB (the Boards) have published a joint Exposure Draft, *Leases (Topic 840)* (FASB, 2010). Projections are to publish a final joint standard in the second quarter of 2011. The discussion in this section is based on the Boards' Exposure Draft and the most recent project status update as of March 2011 (www.fasb.org).

In defining the scope of the project, the Boards define a lease as "a contract in which the right to use a specified asset is conveyed, for a period of time, in exchange for consideration." Although the lease definition is not limited to property, plant, and equipment, the proposed new lease requirements do not apply to assets other than property, plant, and equipment; leases of intangible assets, biological assets, and leases to explore for or use natural resources are specifically excluded. Also excluded are contracts that are in-substance a purchase of the underlying asset since these will be accounted for as a purchase by the lessee. A contract would represent an in-substance purchase if it transfers control and all but a trivial amount of the risks and benefits of the underlying asset to the lessee (e.g., automatic transfer of title).

In addition, the Boards have tentatively decided to provide a scope exclusion for short-term leases by permitting lessees to use a simplified form of lease accounting for leases that have a maximum possible lease term of less than 12 months. Under this simplified accounting, lessees may elect to exclude such leases from balance sheet recognition and treat all payments as rental expense as incurred.

Balance sheet recognition. The basic approach proposed is a single "right-of-use" lease accounting model that essentially eliminates all off-balance-sheet lease accounting (i.e., operating leases). This approach requires a lessee to recognize an asset representing the lessee's right-to-use the leased item for the lease term and a liability for its obligation to pay future rentals.

*Initial Measurement*. Lessees will initially record a capitalized leased asset and corresponding lease obligation at the present value of the lease payments. Three factors enter into the calculation of this initial measurement – the expected amount of the lease payments, the length of the lease term, and the discount rate.

Consistent with current rules, the amount of the lease payments includes all fixed rentals payable to the lessor over the lease term. Residual value guarantees are also included in the lease payments as under current rules; however, they will be measured as the difference between the expected residual value and the guaranteed residual value. In a departure from current rules, amounts payable under variable rental arrangements will be included in the computation of lease payments. Variable payments based on an index or rate are measured using prevailing (spot) indices or rates at lease inception; those not based on an index or rate (e.g., those based on a percentage of sales) will be included if they meet a high threshold (the methodology of which is still under consideration by the Boards). Both contingent rentals and residual value guarantees are to be reassessed each year if any new circumstances indicate there is a material change in the obligation.

The lease term will be measured as the non-cancelable period for with the lessee has contracted to lease the underlying asset, plus any optional periods to extend or terminate the lease when there is a significant economic incentive for the lessee to exercise such option to extend the lease, or to not exercise an option to terminate the lease. In an additional departure from current rules, the lease term is to be reassessed when there is a significant change in relevant factors such that the lessee would either have, or no longer have, a significant economic incentive to exercise any options to extend or terminate the lease.

In computing the present values of the lease payments, the rate that the lessor charges the lessee is to be used if that rate is available; otherwise, the lessee would use its incremental borrowing rate. This contrasts with the current capital lease rules that allow the lessee to use lessor's rate only if it is *lower* than the lessee's incremental borrowing rate. Revisions to this discount rate are not required due to any changes in the lessee's incremental borrowing rate or subsequent changes in the expected lease term.

Subsequent Measurement. In subsequent years, the asset is reported at amortized cost, with annual expense recognition described as amortization rather than as rental expense. The asset will be considered for impairment by referring to existing applicable standards for impairment (FASB ASC 350). The lease obligation is valued at amortized cost using the effective interest method. Changes in amounts

payable under contingent rentals and residual value guarantees arising from current or prior periods will be recognized in the current year's expenses (other changes are reflected as an adjustment to the capitalized asset and obligation).

Financial statement presentation. Lessees will present the right-of-use asset and leased assets that are in-substance purchases with property, plant, and equipment, but separately from other assets that are owned, on the face of the statement of financial position. Similarly, the lease obligation is to be separately presented from other financial liabilities on the face of the statement of financial position. Although current standards require disclosure of amounts related to assets and obligations under capital leases, these amounts are typically not separately presented on the face of the statement of financial position due to lack of significance.

Both amortization and interest expense arising in lease contracts will be separated from other amortization expense and other interest expense either on the face of the statement of comprehensive income or in the notes to the financial statements. Current standards do not require separate disclosure of these amounts.

Both cash repayments of amounts borrowed and interest payments arising in lease contracts would be classified as financing activities separately in the statement of cash flows. This would be a significant change from current standards under which the majority of leases are classified as operating leases and, therefore, cash payments for the related rental expense would be included as operating activities. Under current US GAAP, cash payments for interest related to capital leases are classified as an operating activity; principal payments are classified as a financing activity.

*Disclosures.* The ED requires disclosures to provide the lessee's quantitative and qualitative financial information arising from lease contracts that identifies and explains the amounts recognized in its financial statements arising from leases and describes how leases may affect the amount, timing, and uncertainty of the entity's future cash flows. These lessee disclosure requirements include:

- A general description of the lessee's leasing activities, including disaggregated information about
  its leasing activities (for example, by nature or function), a narrative disclosure of its assumptions
  and judgments on the amortization method used, purchase and/or renewal options, contingent
  rentals, residual value guarantees, and the discount rate used.
- The nature and amount of significant subleases.
- Reconciliations between opening and closing balances for its right-of-use assets and its obligation to pay rentals. Total cash rentals paid would be disclosed as part of the reconciliation for the lessee's obligation to pay rentals.
- A maturity analysis of the liabilities of the undiscounted cash flows on an annual basis for the
  first five years and a lump-sum figure for the remaining lease term; the maturity analysis will
  distinguish the minimum obligations specified in the lease (i.e., excluding contingent rentals and
  expected payments under term option penalties and residual value guarantees) and the amount
  recognized in the balance sheet.
- If a lessee applies a simplified form of lease accounting for short-term leases, that fact should be disclosed as well as the amounts recognized in the financial statements under the simplified model.
- If a lessee enters into a sale and leaseback transaction, the lessee should disclose that fact, any material terms and conditions related to that transaction, and any gains or losses arising from that transaction, separately from other types of sales of assets.

*Transition rules*. Lessees will be required to apply the new lease accounting requirements by recognizing and measuring an obligation to pay rentals and a right-of-use asset for all outstanding leases

<sup>&</sup>lt;sup>1</sup> The Boards have asked for comments in the Exposure Draft about whether the lessee's asset and liability should be separately presented on the face of the financial statements or in the notes to the statements.

as of the date of initial application, except for simple leases (leases that do not have options, contingent rentals, and/or residual value guarantees) that are currently classified as capital leases. Both the obligation to pay rentals and right-of-use asset would be measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on the transition date. The right-of-use asset would be subject to any adjustments required to reflect impairment.

For simple leases that are currently classified by lessees as capital leases, the measurement of the assets and liabilities would not be changed on transition or subsequently. Additional adjustments for prepaid or accrued rentals should be made when lease payments are uneven over the lease term.

#### Potential Impact of Proposals on Lessee Financial Statements

The major impacts on the balance sheet will be a significant increase in assets and liabilities for amounts previously excluded under operating leases. Companies with existing capital leases may also see increases (though not as dramatic) due to the differences in measuring the initial lease obligation. Adding the right-of-use assets will increase property, plant, and equipment and adding the lease obligation will increase both current and long-term liabilities.

The impact on the income statement will consist of changes in the timing of the expense recognition and the classification of the costs of the leasing transactions. Instead of recording rental expense under operating leases, companies would instead record interest expense on the lease obligation and amortization expense on the right-of-use asset. Timing of expense recognition will be impacted due to accelerated recognition of interest expense using the effective-interest method rather than straight-line expense recognition of rentals associated with most operating leases, thus "front-loading" the lease expense recognition.

On the statement of cash flows, the most significant impact will result from the change in classification of the cash outflows for operating leases. Rental payments are currently classified as operating activities, whereas under the proposed model, these payments will be classified as financing activities for both the reduction of the principal as well as the interest on the lease obligation. Although the total cash outflows would not be affected, this classification change will have the impact of increasing the amount of cash provided by operating activities. Table 1 summarizes the financial statement impacts of the ED.

As a result of the financial statement changes summarized in Table 1, companies with lease obligations will experience changes in certain financial ratios. Impacts on selected ratios are presented in Table 2.

# Table 1 Lessee's Financial Statement Effects from Operating and Capital Leases (Current GAAP) vs. ED

	Operating Lease (Current GAAP)	Capital Lease (Current GAAP)	ED
Balance Sheet			
- Recognition	None	<ul><li>Recognize an asset</li><li>Recognize a liability for the lease obligation</li></ul>	- Recognize a "right of use" asset - Recognize a liability for the lease obligation
- Initial Measurement	n/a	<ul> <li>Present value of lease payments</li> <li>Discounted at the lessee's incremental borrowing rate or lessor's implicit rate, if lower</li> <li>Lease term defined as the non-cancelable period plus optional periods if "reasonably assured" to be exercised</li> </ul>	Present value of lease payments     Discounted at the lessee's incremental borrowing rate or lessor's implicit rate     Lease term defined as the non-cancelable period under the contract plus any options to extend or terminate the lease when there is a "significant economic incentive to exercise" an option to extend the lease or not exercise an option to terminate the lease
		- Lease payments include residual value guarantees at lease termination	Lease payments include the difference between the expected residual value and the guaranteed residual value     Lease payments include estimate of variable rental payments, and term option penalties
- Subsequent Measurement	n/a	- Lease asset amortized over lease term  - Lease liability amortized (effective interest method)  - No reassessments of original recorded amount required	<ul> <li>Lease asset amortized over lease term; subject to impairment test</li> <li>Lease liability amortized (effective interest method for finance leases, straight-line for other-than-finance leases)</li> <li>Reassessments of lease term and lease payments required</li> </ul>
Income Statemen	it		,
- Classification of lease payments	- Rent Expense	- Depreciation Expense (Asset) - Interest Expense (Obligation)	- Amortization Expense (Asset)     - Interest Expense (Obligation)
Statement of Cas	h Flows		
- Classification of lease payments	- Operating Activity	Split between - Operating Activity (interest payments) & - Financing Activity (principal payments)	- Financing Activity (both principal and interest)

# Table 2 Likely Impact of FASB/IASB Lease ED on Selected Financial Ratios

Ratio	Likely Impact	Cause/Explanation
Liquidity Ratios (Current & Quick)	Decrease	Increase in current liabilities due to current portion of lease obligation
Leverage Ratios (Debt/Equity & Debt/Asset)	Increase	Increase in total liabilities due to total lease obligation. Present throughout lease term due to different amortization patterns of lease asset and lease obligation.
Profitability Ratios (ROA)	Variable	Pattern for recognizing interest element in lease obligation differs from rent expense. Increase in total asses due to recognition of right-of-use asset not previously recorded.
Activity Ratios (Sales/Total Assets & Sales/Fixed Assets)	Decrease	Increase in total assets due to recognition of right-of-use asset not previously recorded.
Operating Cash Flow Measures	Increase	Lease payments reclassified from Operating Activities to Financing Activities

The impacts on liquidity ratios (both current and quick) and any operating cash flow ratios are intuitive. A new current liability appears with the current portion of the lease obligation as a result of lease capitalization, without a corresponding change in current assets. Similarly, the shift in classifying lease payments from operating cash flows to financing cash flow increases the net cash flow from operations.

The impacts on the leverage ratios (debt/equity and debt/asset) and profitability ratio (ROA) are both due to the interest element in the lease obligation. The initial recognition of the right-of-use asset and related obligation causes an immediate increase in both of the leverage ratios. Because of the amortization methods applied to each element (straight-line amortization of the asset (usually) and effective interest amortization of the liability (required)), the leverage ratios will continue to decrease over the lease term as the carrying amount of the liability will exceed that of the asset, as shown in the graph below. Similarly, the pattern for the annual interest amortization under the effective interest method, coupled with straight-line amortization for the asset, has the effect of front-loading the expense recognition compared with the straight-line pattern for operating leases expense recognition current GAAP. These patterns are illustrated in the example below.

#### An Example Comparing Current Rules for Operating & Capital Leases with ED Proposal

The following example illustrates the differences in the current rules for leases versus the proposed changes in the ED. The example compares the treatment of a lease under the current rules (both operating and capital, although the two would technically be mutually exclusive) and the proposed rules in the ED.

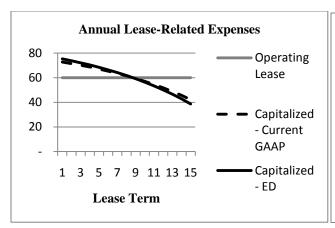
Company A's condensed balance sheet and income statement, prior to leasing an operating asset are shown below.

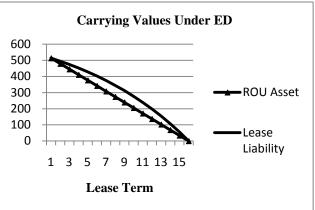
Balance Sheet				
Assets:				
Total Assets	<b>\$1,500</b>			
Liabilities:				
Total Liabilities	\$500			
Stockholders' Equity:	1,000			
Total Liabilities & Stockholders' Equity	<u>\$1,500</u>			
Income Statement				
Income before taxes	\$500			
Income tax expense (40%)	(200)			
Net Income	<u>\$300</u>			
Assume Company A enters into a leasing arrangement with the following characteristics -				
Fixed annual lease payments (end of year)	\$50			
Amount of annual contingent rentals meeting recognition threshold (end of	***			
year)	\$10			
Lease term (nonrenewable)				
Lessee's incremental borrowing rate	15 years 8%			
Present value of fixed lease payments (current GAAP measure)	\$428			
Present value of fixed lease payments and contingent rentals (ED measure)				
	\$514			

In order to isolate the differences in accounting for lease obligation, we make the following simplifying assumptions –

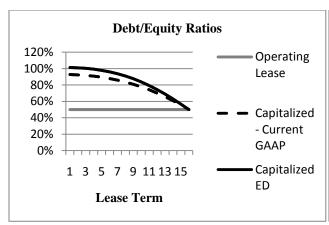
- All assets, liabilities, equity, and income, *other than* those that are lease-related, are constant throughout the lease term; and
- Annual payments of contingent rents equal the estimate at the lease inception.

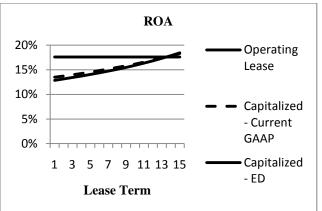
Appendix A presents the balance sheets and income statements under the three method at the ends of the 1<sup>st</sup> year, 8<sup>th</sup> year (mid-point of the lease term), and 15<sup>th</sup> year of the lease term. The patterns of the annual lease-related expenses (rent expense (operating) or amortization plus interest expense (capitalized)) and carrying values under the ED are presented in the graphs below. As is evident from the graphs, capitalizing the lease front-loads the annual expenses because of the interest component on the lease obligation. As discussed previously, the ED requires that any contingent rentals be included in the lease payments. Thus, the initial lease obligation measurement is larger, resulting in a modest increase in the initial annual expense measures. This same interest amortization pattern causes the discrepancy between the carrying values of the capitalized lease asset (assumed straight-line amortization) and liability. The graph below reflects the ED capitalization method; the current GAAP treatment for capital leases reflects a similar pattern.





Two of the primary ratios impacted from the capitalization of the lease are the debt/equity ratio and return on assets (ROA). The pattern in debt/equity ratio graph reflects the effective interest amortization for the lease liability. As stated earlier, the initial measure under the ED includes the contingent rentals expected over the lease term. ROA is negatively impacted throughout the lease term from lease capitalization for two reasons: (1) the accelerated pattern of lease expenses from capitalization reduces income immediately, and (2) total assets are increased due to the inclusion of the leased asset.





#### **Constructive Capitalization of Operating Leases**

Preliminary evidence on the magnitude of the ED's effects on ratios is quite revealing and suggestive of the potential impact on financial statement analysis of companies that utilize capital leases. To illustrate the primary effects of the lease accounting proposals on financial statements and resulting ratios, we perform constructive capitalization of operating leases for two Global Fortune 500 companies. We follow the same procedures we used for constructive capitalization of operating leases in a prior RMA article (Kilpatrick and Wilburn, 2007) that was developed in a series of papers by Imhoff et al. (1991, 1995, 1997). This process involves using the operating lease disclosures to estimate the amount of debt and assets that would have been reported on the balance sheet if the operating lease had been treated as a capital lease from its inception.

Firms included in this study. In this study, we examine the impacts for J.C. Penney and Kohl's, two companies from the retail industry which is one of the industries predicted to be most affected by the lease accounting changes (Johnson, 2009). We chose these firms from the Fortune Global 500 based on

<sup>&</sup>lt;sup>2</sup> Our constructive capitalization analysis is based solely on information provided by current disclosures; therefore, we are unable to include the potential impact of the proposals to capitalize contingent rentals or from additional periods that might be included in the lease term under the ED proposal.

similarity in size (ranked #484 and #495, respectively) and industry; yet as Table 3 indicates, the extent to which the two companies employ operating leases is very different. Characteristics of these two companies are reported in Table 3.

Table 3 Characteristics of Companies Used in Study						
Future mi lease payr Proportions Reported Imputed operating Global Total Leased/ capital operating (undiscour F500 Number Ground Leased/ leases as 8 leases as 8 sum of 6						Future minimum lease payments of operating leases (undiscounted) vs. sum of capital and operating
J.C. Penney	484	1,108	62%/11%/27%	0.0%	8.5%	99.9%
Kohl's	495	1,058	38%/27%/35%	2.2%	23.7%	97.6%

Development of assumptions. Although not required under current rules, J.C. Penney disclosed its discount rate used for its capital leases at 8.0%. Given that the two companies average interest rates on other long-term debt were similar, (7.3% for J.C. Penney and 6.6% for Kohl's), we used an 8% discount rate for both.

Over the life of a lease, the lease rental payments are equal to the sum of the depreciation and the interest expense. However, in any particular year, the estimated impact on net income from constructive capitalization is entirely dependent on the stage of the lease's life. That is, in the early stages of a lease, the total of depreciation and interest expense under the capital lease method exceeds the rent expense under the operating lease method. After a certain point, the reverse is true. (These differences assume level rental payments and straight-line depreciation; thus, the interest expense resulting from amortizing the capital lease obligation causes this pattern.) Although the income effect is potentially material at any specific point in time, currently-required footnote disclosures for operating leases do not provide sufficient information regarding the exact stage of the lease life. Moreover, assuming a company has multiple operating leases originating at different times, any income differences resulting from the various stages of those leases would tend to offset each other. Thus, we ignore any current-year income effects in this analysis.

The asset estimate assumes that both the asset and lease obligation are initially recorded at 100% of the original capitalized lease obligation, and that the asset is depreciated on a straight-line basis over the lease term. The difference between the leased asset and the lease obligation at any point in time is due to the different patterns of depreciation (straight-line) and the amortization of the obligation. (Thus, other than at the beginning and end of the lease, the lease asset will be less than the lease obligation.) In the year in which the net income effect is approximately zero (i.e., the expenses under the operating and capital lease models are about the same, the book value of the capitalized asset is 70% of the present value of the remaining lease obligation). Thus, assets under operating leases are capitalized at 70% of the present value of the remaining lease obligation.

As a result of the above discussion, our constructive capitalization computations are based on the following uniform assumptions:

- A discount rate for the required minimum lease obligation that approximates each company's implicit rate used in its capital leases;
- An average remaining life of 15 years for operating leases;
- End-of-year cash flows;
- The net effect on the current period's net income of zero.
- The unrecorded asset equals 70% of the unrecorded debt; and
- A combined effective tax rate of 40%.

Impact of operating lease capitalization. We examine the January 2010 financial statements of these companies, using their disclosures to estimate the balance sheet impact of capitalizing their operating leases using the same procedures employed in the previously-studies. (Table 4 demonstrates the mechanics of constructive capitalization). We calculate the balance sheet adjustments for total liabilities, total assets, and total equity, as well as the impacts of these changes on the debt-to-equity and return on assets (ROA) ratios resulting from the capitalization of operating leases.

### Table 4 Constructive Capitalization

**Estimated Present Value of Future Operating Lease Payments:** As indicated earlier, we used an 8% interest rate and remaining lease term of 15 years to discount the future lease payments to estimate the present value. Because the footnote disclosures require only the first 5 years of future lease payments to be separately identified with the remaining payments reported in the aggregate beyond year 5, a level payment pattern was assumed by taking the aggregate amounts divided by the remaining 10 years of the lease term. The resulting present value calculations are:

	JC Penney			Kohl's	
	Lease	Present	Le	ease	Present
Fiscal Year	<u>Payments</u>	<u>Value</u>	<u>Paym</u>	<u>ents</u>	<u>Value</u>
2010	\$263m	\$244m	\$4	79m	\$444m
2011	223m	191m	2	63m	191m
2012	185m	147m	2	23m	147m
2013	156m	115m	1	85m	115m
2014	140m	95m	1	56m	95m
Thereafter (annual for 10 years)	195m	<u>885m</u>	8	71m	<u>4,046m</u>
Total present value		<u>\$1,677m</u>			<u>\$5,839m</u>

**Balance Sheet Adjustments:** Constructive capitalization would result in an increase in assets. The analysis assumed that leased asset carrying values were, on average, 70% of the present value of remaining operating lease payments. The asset estimate assumed that both the asset and lease obligation were initially recorded at 100% of the original capitalized lease obligation, and that the asset was depreciated on a straight-line basis over the lease term.

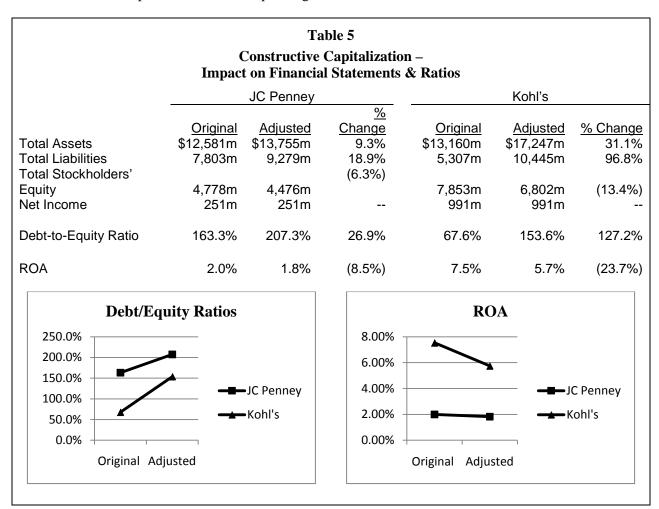
Constructive capitalization would have two effects on liabilities. First, liabilities would increase for the present value of future operating lease payments. Second, deferred taxes would decrease (assumed a net deferred tax liability previously existed) based on the tax effect for the difference between the lease obligation and leased asset. The analysis assumed an effective tax rate of 40%.

Finally, stockholders' equity would decrease for the remaining 60% (100% – 40% tax rate) difference between the lease obligation and leased asset. This also would result from the cumulative difference to date between total expenses under operating leases and expenses under constructive capitalization. At the point in time assumed by the analysis, expenses under constructive capitalization would be greater to date which would result in decreased retained earnings.

The constructive capitalization yields the following results for each company

		JC Penney	Kohl's
Assets		<del></del>	
	(70% x capitalized lease		
Net capitalized leased asset	obligation)	<u>\$1,174m</u>	<u>\$4,087m</u>
Liabilities			
Capitalized lease obligation	Present value	\$1,677m	\$5,839m
	[40% x (excess of liability >		
Deferred taxes	asset)]	<u>(201)m</u>	<u>(701m)</u>
			\$5,138m
Net effect		\$1,476m	
Stockholders' Equity			
	[60% x (excess of liability >		
Retained earnings effect	asset)]	<u>(302m)</u>	<u>(1,051m)</u>
		<u>\$1,174m</u>	<u>\$4,087m</u>

Table 5 presents summary statistics of the estimated amounts resulting from the operating lease capitalization procedures. As expected, the lease capitalization has a more significant impact on Kohl's financial statements and resulting ratios, since Kohl's use of operating leases (relative to J.C. Penney) is greater. The impacts for J.C. Penney and Kohl's, respectively, are: increase in total liabilities of 18.9% and 96.8%; increase in total assets of 9.3% and 31.1%; and decrease in equity of (6.3%) and (13.4%). Impacts on the financial ratios are also significantly different. The percentage increase in the leverage ratio (debt-to-equity) for J.C. Penney's is 26.9% and for Kohl's is 127.2%. Similar impacts were found in the ROA measures. The ROA as a result of capitalizing operating leases decreased (8.5%) for J.C. Penney and (23.7%) for Kohl's. As the graphs suggest, the differences between the two metrics are much smaller after constructive capitalization of their operating leases.



#### **Summary & Conclusions**

The inadequacies of the existing lease accounting standards have created concern over the off-balance sheet implications resulting from the availability of two very different accounting treatments for leases with similar economic consequences. Certainly, not all companies intentionally structure lease arrangements as operating leases for the sole purpose of avoiding balance sheet capitalization and the resulting negative impacts on financial ratios. Indeed, operating leasing arrangements have many economic advantages, perhaps most notably is providing companies with access to capital that might not available through other means (Global Insight, 2005).

Regardless, the joint FASB/IASB projects' objective is to create common global lease accounting requirements to ensure that the assets and liabilities arising from lease contracts are recognized in the statement of financial position. Such an approach should result in a consistent accounting treatment that reflects the economic substance of the transaction, rather than one that drives the structure of the transaction. Users can make more meaningful comparative evaluations of companies that currently have significant levels of off-balance sheet lease financing and better assess risk and performance levels.

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# **Appendix A**Company A, end of year 1

Balance Sheet

Balance	Sheet					
	Operating	Capitalized –	Capitalized-			
	<u>Lease</u>	Current GAAP	ED Proposal			
Assets:						
Leased Asset	\$ 0	\$ 399	\$ 479			
Other Assets	<u>1,500</u>	<u>1,500</u>	<u>1,500</u>			
Total Assets	<u>\$1,500</u>	<u>\$1,899</u>	<u>\$2,014</u>			
Liabilities:						
Lease Obligation	\$ 0	\$ 412	\$ 495			
Other Liabilities	<u>500</u>	<u>500</u>	<u>500</u>			
Total Liabilities	<u>500</u>	<u>912</u>	<u>995</u>			
Stockholders' Equity:	<u>\$1,000</u>	<u>\$ 987</u>	<u>\$ 985</u>			
Total Liabilities & Stockholders' Equity	<b>\$1,500</b>	<b>\$1,899</b>	<u>\$2,014</u>			
	1-1					
Income S		ф <b>г</b> оо	ф <b>г</b> оо			
Income before lease-related expenses	\$ 500	\$ 500	\$ 500			
Lease rental expense	(60)	(00)	(0.1)			
Amortization of leased asset (straight line)	-	(29)	(34)			
Interest on lease obligation	<u>-</u>	(34)	(41)			
Income before taxes	\$ 440	\$ 437	\$ 425			
Income tax expense (40%)	<u>(176)</u>	<u>(171)</u>	(170)			
Net Income	<u>\$ 264</u>	<u>\$ 256</u>	<u>\$ 255</u>			
Debt to Faville Detic	F0 00/	00.40/	404.00/			
Debt-to-Equity Ratio	50.0%	92.4%	101.0%			
Return on Assets	17.6%	13.5%	12.9%			
Company A, o	end of vear 8					
Balance	<u>*</u>					
	Operating	Capitalized –	Capitalized-			
	Lease	Current GAAP	ED Proposal			
Assets:						
Leased Asset	\$ 0	\$ 200	\$ 240			
Other Assets	1,500	1,500	1,500			
Total Assets	\$ <u>1,500</u>	\$ <u>1,700</u>	\$1,740			
Liabilities:	<del></del>	<del></del>	<del></del>			
Lease Obligation	\$ 0	\$ 260	\$ 312			
Other Liabilities	500	<u>500</u>	500			
Total Liabilities	<del>500</del>	<del>760</del>	<u>812</u>			
Stockholders' Equity:	\$1,000	\$ 940	\$ 928			
Total Liabilities & Stockholders' Equity	\$1,500	\$1,700	<u>\$1,740</u>			
,	<del></del>	<del></del>				
Income Statement						
Income before lease-related expenses	\$ 500	\$ 500	\$ 500			
Lease rental expense	(60)	(10)	-			
Amortization of leased asset (straight line)	-	(29)	(34)			
Interest on lease obligation	<u>-</u>	(23)	<u>(28)</u>			
Income before taxes	\$ 440	\$ 438	\$ 438			
Income tax expense (40%)	(176)	(175)	(175)			
Net Income	\$ 264	\$ 263	\$ 263			
Debt-to-Equity Ratio	50.0%	80.9%	87.6%			
Return on Assets	17.6%	15.5%	15.1%			

#### Appendix A, con't.

Company A, end of year 15

Balance	Sheet		
	Operating	Capitalized –	Capitalized-
	<u>Lease</u>	Current GAAP	ED Proposal
Assets:			
Leased Asset	\$ 0	\$ 0	\$ 0
Other Assets	<u>1,500</u>	<u>1,500</u>	<u>1,500</u>
Total Assets	<u>\$1,500</u>	<u>\$1,500</u>	<u>\$1,500</u>
Liabilities:			
Lease Obligation	\$ 0	\$ 0	\$ 0
Other Liabilities	<u>500</u>	<u>500</u>	<u>500</u>
Total Liabilities	<u>500</u>	<u>500</u>	<u>500</u>
Stockholders' Equity:	<u>\$1,000</u>	<u>\$1,000</u>	<u>\$1,000</u>
Total Liabilities & Stockholders' Equity	<u>\$1,500</u>	<u>\$1,500</u>	<u>\$1,500</u>
Income St	atement		
Income before lease-related expenses	\$ 500	\$ 500	\$ 500
Lease rental expense	(60)	(10)	-
Amortization of leased asset (straight line)	-	(29)	(34)
Interest on lease obligation	<u>-</u>	<u>(4)</u>	<u>(4)</u>
Income before taxes	\$ 440	\$ 457	\$ 462
Income tax expense (40%)	<u>(176)</u>	<u>(182)</u>	<u>(185)</u>
Net Income	<u>\$ 264</u>	<u>\$ 275</u>	<u>\$ 277</u>
Debt-to-Equity Ratio	50.0%	50.0%	50.0%
Return on Assets	17.6%	18.3%	18.5%