Business Horizons (2014) 57, 759—765

Available online at www.sciencedirect.com

ScienceDirect

KELLEY SCHOOL OF BUSINESS
INDIANA UNIVERSITY

www.elsevier.com/locate/bushor

ACCOUNTING MATTERS

The path of lease resistance: How changes to lease accounting treatment may impact your business

Andrew D. Gross [a,*], G. Ryan Huston [b], Janet M. Huston [b]

[a] Southern Illinois University Edwardsville, Edwardsville, IL 62026, U.S.A.
[b] Arizona State University, Tempe, AZ 85287, U.S.A.

KEYWORDS
FASB;
Accounting Standards Updates—Leases;
Lease accounting

Abstract In this installment of Accounting Matters, we examine potential consequences of the Financial Accounting Standards Board's Proposed Accounting Standards Updates for Leases. In the context of a previous accounting change (FIN 48), we investigate how these changes will affect firms' accounting choices, investment decisions, debt covenant requirements, and analysis of other key financial data. Changes in accounting standards may have significant indirect economic effect on companies as they can trigger debt covenant violations, restrict access to capital, and distort key financial information used by investors and lenders. New accounting standards may also directly affect the calculation of employee bonuses and incentives that utilize EBITDA or operating income as benchmarks. We include recommendations for managers and identify specific debt covenant components that may limit the negative consequences of the proposed change to lease accounting.
© 2014 Kelley School of Business, Indiana University. Published by Elsevier Inc. All rights reserved.

1. Introduction

Industry experts estimate that approximately $1.25 *trillion* in operating lease payments will be brought to corporate balance sheets if a proposed accounting standard for leases is enacted (Securities and Exchange Commission, 2005). Currently, lease expense from operating leases is treated as an operating expense and typically included in the calculation of earnings before interest, taxes, depreciation, and amortization (EBITDA). However, the expenses of capital leases—such as depreciation and interest expense—are excluded from EBITDA calculations. On May 16, 2013, the Financial Accounting Standards Board (FASB) issued the Proposed Accounting Standards Update for Leases (Topic 842), rescinding the highly controversial 2010 proposal (Topic 840). The most significant change in this proposal involves no longer granting operating lease treatment for any lease termed 12+ months, hence bringing lease payments to corporate balance sheets. In this installment of Accounting Matters, we outline what the proposed changes will mean to businesses with operating

* Corresponding author
E-mail address: angross@siue.edu (A. Gross)

0007-6813/$ — see front matter © 2014 Kelley School of Business, Indiana University. Published by Elsevier Inc. All rights reserved.
http://dx.doi.org/10.1016/j.bushor.2014.06.006

leases, applying what we have learned from the most recent standard change: Accounting for Uncertain Tax Positions (ASC 740, more commonly referred to as 'FIN 48').

As was the case with FIN 48, the proposed changes in accounting principles associated with leasing activity do not appear to directly impact the economics of the company, other than to change the way that these transactions are reported for financial statement purposes. However, the changes in generally accepted accounting principles (GAAP) could have real economic consequences for firms using operating leases—as well as for their creditors, employees, investors, and other financial statement users. Debt covenants, management bonuses, and various contracts are often contingent on ratios or other measures calculated using financial accounting data. Changes in the standards of accounting—such as the proposed changes for lease accounting—may cause firms to violate debt covenants or distort employee compensation calculations, and perhaps affect other contracts.

Not only do the proposed changes have the ability to affect contracts, but also how financial information is used and interpreted. EBITDA, financial ratios, and other financial indicators could be substantially altered due to the proposed accounting changes. Managers, investors, and financial statement users need to understand how these measures will change and revise how such information is interpreted if the proposed changes in leases are implemented. The American Bankers Association (2013) included the following in a comment letter to the FASB:

> The (proposed lease) requirements will change key metrics used to analyze both a lessee's financial position and its financial performance if those metrics are derived strictly off of amounts recorded on the balance sheet, income statement, and statement of cash flows. The requirements will naturally present operational challenges to any organization in the U.S. that leases property or equipment due to the need to set up and continuously account for the new assets and liabilities, as well as to auditors and users of financial statements who must understand the new and ongoing complexities.

Clearly, the proposed changes should be of concern to managers, business owners, and financial statement users. Perhaps most importantly, the proposed changes may affect firms' business models, especially as regards the lease/buy decision and lease terms (i.e., length and maintenance). Currently, companies have an incentive to utilize operating leases, in part because operating leases are kept off the balance sheet. Under the proposed new standards, companies might be forced to negotiate shortened lease terms to keep the leases off the balance sheet; alternatively, they might choose to simply purchase these assets rather than lease them. This article begins with a technical explanation of the proposed accounting standards changes and explores potential impacts of the changes. Then, it investigates which types of companies will likely be most impacted by the proposed changes, before concluding with recommendations for managers and business owners alike.

2. Background on the proposed standards

Existing accounting models for leases require lessees and lessors to classify their leases as either capital or operating leases. Recently, the FASB suggested that these models do not always provide a faithful representation of the transactions because lessees are not required to recognize assets and liabilities from operating leases. To alleviate this criticism, the FASB—in a joint project with the International Accounting Standards Board (IASB)—proposed that future lease accounting require assets and liabilities be recognized in the statement of financial position on the expectation that the proposed standards will improve comparability of financial statements.

Under the proposed standard, leases whose maximum term is more than 12 months would be classified as either Type A leases (generally, machinery and equipment) or Type B leases (generally, real estate). For both types, a lessee would recognize (1) a right-of-use asset representing the firm's right to use the leased asset and (2) a liability for lease payments for the lease term based on an initial measurement of the present value of the lease payments. Both the lease liability and right-of-use asset decrease over the lease term as payments are made. Firms which currently have long-term operating leases would be the most impacted by this proposed change, as they would be required to suddenly report assets and related liabilities for the leases. Firms with capital leases under current GAAP already record lease assets and lease liabilities, but these firms would adjust the amounts of those assets and liabilities to comply with the new standards.

The two types of leases differ regarding how they are recognized on the income statement. For Type A leases, the lessee recognizes interest expense and amortizes the right-of-use asset over the term of the lease. Expenses associated with the lease are classified as interest expense and amortization, which

would be excluded from EBITDA and operating earnings. Accordingly, Type A lease expenses are higher at the beginning of the lease term, due to the calculation of interest on the remaining lease liability. For Type B leases, the lessee recognizes lease expense on a straight-line basis. Expenses for Type B leases would be classified as lease expense and typically included in EBITDA calculations, in contrast to Type A (which would be excluded from EBITDA).

While the proposed standard has not yet been adopted, the FASB and the IASB agree that changes to lease accounting are necessary, fueling momentum toward the adoption of new lease accounting standards. Both boards agree on the broader issue regarding capitalization of operating leases; however, the two sides continue to work out specific details. Given the continued progress and general agreement among the two boards, eventual adoption of new lease standards seems very likely. As such, businesses should proactively consider the implications of these proposed standards.

3. Transition to the new standard

3.1. Accounting choices and investment decisions

Under the new standard, both lessee and lessor would recognize and measure leases at the beginning of the earliest period presented using either a modified retrospective approach or a full retrospective approach. Therefore, leases entered into prior to implementation of the new standard will be added to the balance sheet. To the extent that the lease liability differs from the value of the right-of-use asset, this transition would lead to an adjustment in retained earnings with respect to the change in accounting principle, referred to as a cumulative effect adjustment (CEA) that could have significant effects on a company's net worth. Further, these changes to the balance sheet may immediately impact companies' standings relative to debt covenant thresholds. To the extent that there is managerial discretion associated with the new accounting principle, managers have different incentives as regards the timing of their adjustments. Beyond accounting discretion, managers may also change their method of asset acquisition, shortening lease terms or choosing to purchase assets as opposed to leasing.

3.2. Market response and cost of debt

Alexander, Gross, Huston, and Richardson (2014) examined the transition effects of another recent change in accounting standards, FIN 48. They focused on the adjustment to retained earnings when firms had to book uncertain tax positions, beginning in 2007. Prior to the enactment of FIN 48, concern was expressed by practitioners and even the IRS surrounding impact of the adjustment to retained earnings at FIN 48 adoption, specifically for companies near debt covenant thresholds as it was assumed that the adjustment would be equity-decreasing for most companies. The assumption was that such a negative adjustment could push these companies past debt covenant thresholds, leading to costly renegotiations or even default.

The researchers' findings suggested that the equity market shared the concern that firms near debt covenant thresholds would be negatively impacted based on a significant price decrease for these firms on the announcement of enactment of FIN 48. Additionally, they found that firms near debt covenant thresholds managed the CEA in a more equity-increasing manner to avoid violating debt covenants, and this management was reflected in these firms' cost of debt. Specifically, firms near debt covenant thresholds with a decrease in equity at the adoption of FIN 48 saw a significant increase in cost of debt, whereas those firms with an increase in equity saw a significant decrease in cost of debt.

Debt covenant violations are expensive, especially in stricter credit markets, so firms have reason to avoid these violations. While the contexts and incentives differ subtly between uncertain tax positions and operating leases, the implications are similar: It is important to consider firms' incentives and consequences relating to changes in accounting principles because they can often lead to predictable behavior.

4. Implications for contracting

Several comment letters from bank associations, lease providers, and other lenders suggest that costs associated with the proposed changes in lease accounting would reduce the ability of some firms to enter into leases. Debt covenants, management bonuses, and other contracts are often contingent on ratios or other measures calculated using financial accounting data. Changes in the standards of accounting—such as the proposed changes for lease accounting—may cause firms to violate debt covenants, distort employee compensation calculations, and alter other contracts.

4.1. Debt covenants

Borrowers use debt covenants to achieve better interest rates while lenders use debt covenants to

require borrowers to maintain certain levels of net worth, restrict the amount of debt/liabilities the firm has, or meet certain financial ratios such as debt to equity or current ratio (Krishnaswami, Spindt, & Subramaniam, 1999). These covenants allow lenders to monitor the company's financial position and give the bank the opportunity to react quickly if the borrower's financial situation starts to deteriorate. One of the biggest concerns mentioned in the comment letters centered on potential for the change in leases to lead to debt covenant violations: almost 100 pieces of correspondence specifically expressed apprehension that the changes in accounting for leases would directly result in firms being unable to meet debt covenant obligations. According to the American Bankers Association (2013): "As users of financial statements prepared by bank borrowers, we believe that most existing debt covenants will need to be changed as a result of the new standard."

For example, a firm that has a debt covenant restricting its amount of total debt may enter into leases which are treated as operating leases under current accounting rules because the company is not required to record the liability for the leases on its balance sheet. Under the new accounting standards, long-term operating leases would be capitalized as a right-of-use asset, with the associated debt for future payments included as a liability on the balance sheet. Even though the substance of the company's financial health has not changed, reporting requirements under the new accounting rules may force the company into debt covenant violations if measurement is based on floating GAAP because liabilities have increased based on the new standards (see Section 4.2.).

While it may seem a technicality, this violation can be costly. Although firms could seek a waiver of the violation, renegotiate the contract, or find a new lender, all of these solutions are expensive. Alexander et al. (2014) found that firms which were close to debt covenant violations that decreased equity related to changes in accounting for income taxes incurred higher costs of debt. According to a comment letter from the Mortgage Bankers Association (2013):

> [The] MBA. . .notes that loan covenants and regulatory capital ratios are based upon existing GAAP or IFRS. It will take preparers significant time and effort to change loan covenants and for regulators to amend capital rules, and it is not a stretch to say some lenders may find this an opportune time to exact further guarantees/covenants from the borrower.

Even if the proposed changes in the accounting standard do not directly cause debt violations, they can weaken the slack associated with various debt covenants. Firms that are close to debt covenant violations have less flexibility to grow and pay dividends. Therefore, maintaining enough slack in debt covenants allows companies to take advantage of future growth opportunities and to maximize firm value.

4.2. Fixed versus floating GAAP contracts

Whether or not a change in accounting would affect a specific contract is based on the terms of the contract and how accounting is defined by the contract. There are two general ways in which contracts define GAAP: (1) fixed GAAP and (2) floating—or flexible—GAAP. Fixed GAAP contracts define GAAP as being determined by the accounting standards at the time the contract is executed. Under fixed GAAP contracts, ratios and restrictions incorporated into the agreements are calculated using the GAAP that was effective at the time the contract was entered into, and therefore are not affected by the subsequent issuance of new accounting standards. Under fixed GAAP contracts, firms have little concern about changes in accounting related to their current contracts, but should be aware of new accounting standards as they enter into future contracts.

Under floating GAAP contracts, accounting measures are calculated using the most current GAAP throughout the life of the contract. If a new accounting standard is issued, the ratios and restrictions of the contract are calculated based on the accounting prescribed by the new standard. Therefore, even though the economic position of a company hasn't changed, a change in accounting could lead to violations of covenants or changes in other measures used in contracts.

As such, firms with fixed GAAP contracts are less likely to be immediately affected by the proposed changes in accounting. However, Shroff (2010) found that approximately 60% of firms do not use fixed GAAP in the calculation of debt covenants. Even if fixed GAAP is used for debt covenants, firms may have entered into other contracts with vendors or employees that use floating GAAP or do not clearly define GAAP as being fixed or floating. Therefore, managers should examine how any changes in accounting principle could potentially affect their contracts. This is particularly true regarding the proposed changes in accounting for leases, which will require firms to include lease assets on the balance sheet, along with corresponding lease liabilities.

4.3. Compensation and other contracts

Accounting for leases would also affect compensation contracts and vendor agreements. Employers

that calculate bonuses or profit sharing for employees based on operating earnings, EBITDA, or similar earnings measures may have their calculations distorted by new classifications of expenses. For example, under current GAAP, the lease expense related to operating leases reduces income from operations. If these operating leases are classified as Type A leases under the proposed accounting change, the related expense will be treated as interest and amortization. This may artificially inflate the income that is used to calculate the bonus or profit sharing. On the other hand, if a firm currently has capital leases that do not reduce operating earnings and the new standard requires those leases to be treated as Type B leases, the expenses may reduce the operating earnings and penalize employees.

Managers may want to redefine or amend bonus contracts to reflect accounting changes so no misunderstandings occur regarding how bonuses are calculated. According to a comment letter by E&C Industries (2013): "Existing employee compensation arrangements, such as bonuses and share-based payments based on existing performance measures, will need to be evaluated and appropriately revised to ensure equitable treatment of employees upon adoption of the Proposed Standard." Revising or renegotiating compensation before implementation of a new accounting standard may help employees understand and accept necessary changes in the compensation calculation.

Some vendors have agreements that allow customers to purchase on credit, as long as the customer maintains certain financial ratios. Changes in financial reporting could substantially affect the company's ability to meet those ratios. While vendors will probably be willing to waive or renegotiate the contract without extracting extra concessions to maintain the relationship with a good customer, managers may want to be proactive and address these concerns before changes in accounting standards are made so there are no surprises or misunderstandings.

5. Ratio analysis

Beyond contracting, the proposed changes to leasing standards may impact how financial information is used and interpreted. EBITDA, financial ratios, and other financial indicators could be significantly distorted by the proposed changes. Managers, investors, and financial statement users need to understand how these measures will change and revise how such information is interpreted if the proposed changes in leases are implemented.

EBITDA is an important measure that helps investors and lenders interpret the enterprise value or the core earnings of the company. Often, companies will report EBITDA when announcing earnings. EBITDA is commonly used in contracts and debt covenants to capture the operating health of the company and is used to value business by investors and potential merger partners. Accounting changes to leases could directly affect the calculation of EBITDA.

While EBITDA is not defined by accounting standards, data from financial statements are used to calculate EBITDA. Currently, expenses of capital leases—such as depreciation and interest expense—are excluded from EBITDA calculations, while the lease expense from operating leases is treated as an operating expense, decreasing EBITDA. Under the proposed new standards, the expenses of Type A leases (interest and amortization) would be excluded from EBITDA, but the expenses of Type B leases (lease expense) would reduce EBITDA. Since not all capital leases will necessarily be Type A leases and not all operating leases will be Type B leases, the proposed changes could have a significant effect on EBITDA. Understanding how contracts and firms define EBITDA is also important. Since EBITDA is defined by the contract or user, there could be variations in how leases are calculated. Investors and other financial statement users should clearly understand what is included in EBITDA before comparing it to historical information or competitors.

Any rules of thumb regarding financial ratios (e.g., debt-to-equity ratio) used to measure the financial health of an investment or credit customer may need to be revisited. In Table 1, we list the anticipated impact of changes in lease accounting on commonly used metrics and ratios. These predictions are based on the required accounting entries, as well as concerns expressed in comment letters. Individual circumstances and structures of lease could cause the actual impact to vary.

5.1. What kinds of companies might be affected?

When we examine a Fiscal Year 2012 sample of large, publicly traded corporations from the Compustat database (see Table 2), it becomes clear that industry represents an important categorization regarding which subset of firms will be impacted by the proposed changes. Our results suggest that over 70% of companies in every industry except for Mining and Minerals (51.3%) and Financial Services (18.1%) utilize operating leases, either alone or in conjunction with capital leases. While we are unable to

Table 1. Expected impact of proposed change on leases

	Operating Leases		Capital Leases	
	If Classified as Type A	If Classified as Type B	If Classified as Type A	If Classified as Type B
EBITDA[a]	Increase	Not material for most companies	Not material for most companies	Decrease
Net Worth[b]	Slight Decrease	Slight Decrease	Not material for most companies	Not material for most companies
Debt to Equity[c]	Increase	Increase	Not material for most companies	Not material for most companies
Current Ratio[d]	Decrease	Decrease	Not material for most companies	Not material for most companies
Return on Assets[e]	Decrease	Decrease	Not material for most companies	Not material for most companies

These reflect the most likely scenario of the impact of the changes in accounting on some commonly used ratios. Managers and financial statement users should carefully analyze the effects of changes based on the terms of each individual lease to fully understand the implications. Other ratios may also be affected by the proposed change.

[a] While the timing of income may have a small effect on EBITDA, the reclassification of expenses will have the most material effect.

[b] Net Worth will most likely decrease slightly for operating leases since the lease liability may be greater than the right-of-use asset as the lease term progresses; the difference in Net Worth will probably not be significant.

[c] Debt to Equity ratio will increase for leases currently treated as operating leases reflecting the increase in debt from adding the lease liability to the balance sheet.

[d] Current Ratio will decrease for leases currently treated as operating leases for any portion of the lease that is classified as a short-term liability on the balance sheet.

[e] The return on assets will likely decrease for operating leases since the capitalization of the right-of-use asset will increase total assets, but the net income will likely not change.

Table 2. Sample breakdown

Industry	# Obs.	% with Op. Lease	% w/o Op. Lease	% w/o Leases
Food	150	84.0%	4.7%	11.3%
Mining and Minerals	676	51.3%	3.0%	45.7%
Oil/Petroleum	528	71.4%	1.0%	27.7%
Textiles, Apparel, Footware	56	94.7%	1.8%	3.6%
Consumer Durables	82	92.7%	1.2%	6.1%
Chemicals	118	88.1%	5.1%	6.8%
Drugs, Soap, Perfumes, Tobacco	246	87.0%	1.2%	11.8%
Construction	155	82.6%	3.9%	13.6%
Steel	78	75.6%	3.9%	20.5%
Fabricated Products	29	82.8%	3.5%	13.8%
Machinery/Business Equipment	606	90.4%	2.3%	7.3%
Automobiles	87	82.8%	3.5%	13.8%
Transportation	232	79.3%	3.0%	17.7%
Utilities	287	76.0%	0.0%	24.0%
Retail Stores	174	90.8%	2.3%	6.9%
Financial Institutions	3,497	18.1%	0.4%	81.5%
Other	2,074	85.3%	2.1%	12.6%
Total	**9,075**			

ascertain whether the lease terms are greater than 12 months based on available data, we believe it is safe to say that a significant percentage of companies will be impacted by the proposed changes.

6. Conclusion

In this article, we explored the potential impact of proposed changes in accounting principles

associated with leasing activity (Topic 840). This proposal would change future lease accounting, for leases with terms greater than 12 months, such that firms would be required to recognize assets and liabilities from leases in the statement of financial position. Specifically, a lessee would book a new asset representing its right to use the leased asset, and also a new liability for the accompanying lease payments.

We know from prior academic research that such accounting changes are not costless and the implications can be far-reaching. As was the case with FIN 48, at face value, the proposed accounting standard changes for leases do not appear to directly impact the economics of the company but rather alter the way these transactions are reported for financial statement purposes. However, changes in GAAP could have real economic consequences for firms using leases, as well as for their creditors. Debt covenants, management bonuses, and other contracts are often contingent on ratios or other measures calculated using financial accounting data. Changes in the standards of accounting—such as the proposed changes for lease accounting—may cause firms to violate debt covenants, distort employee compensation calculations, and alter other contracts.

While the contexts of the two standards are certainly very different, we believe that the implications from research on FIN 48 have significant application to this proposed accounting standard change and that these changes are important to managers, auditors, financial statement users, and academics. Specifically, the provisions relating to operating leases with a term less than 12 months could change the length of lease terms going forward to avoid capital lease treatment; alternatively, these provisions could lead firms to discontinue leasing activity entirely. Based on our findings with respect to the current data and the proposed changes, we make the following recommendations to management:

1. Before the proposed changes to accounting standards are enacted, consider arranging debt covenants utilizing fixed GAAP as opposed to flexible GAAP, along with removing covenants that would be more severely impacted by the proposed changes (e.g., debt-to-equity ratios);

2. Revise employee compensation contracts to avoid distortion of bonuses and profit sharing due to accounting changes;

3. Revise vendor agreements based on financial ratios that could be impacted by the proposed standards;

4. Re-evaluate lease terms in the context of the proposed changes, considering whether it is better to shorten any operating lease terms to less than 12 months or even purchasing assets as opposed to leasing; and

5. Inform analysts and investors through the use of modified EBITDA to ensure that they are building the impact of the change in accounting principles into their expectations.

The proposed accounting changes for leases could have a substantial impact on the financial statements of corporations, particularly for those companies with operating leases. These financial changes could have real economic consequences. Managers and financial statement users who are aware of the impact of the proposed changes in lease accounting and proactive in addressing potential problems may be able to mitigate negative consequences of the proposed new accounting standards.

References

Alexander, R. M., Gross, A., Huston, G. R., & Richardson, V. J. (2014). *Tightening the noose: The impact of FIN 48 on private debt* (Working Paper). Lexington, VA: Washington and Lee University.

American Bankers Association. (2013, August 28). *Letter to Russell G. Golden, Chairman, Financial Accounting Standards Board* (File Reference No. 2013-270; Comment Letter No. 44). Washington, DC: ABA.

E&C Industries. (2013, September 13). *Letter to Technical Director, Financial Accounting Standards Board* (File Reference No. 2013-270; Comment Letter No. 376). Washington, DC: ABA.

Krishnaswami, S., Spindt, P., & Subramaniam, V. (1999). Information asymmetry, monitoring, and the placement structure of corporate debt. *Journal of Financial Economics, 51*(3), 407—434.

Mortgage Bankers Association. (2013, September 3). *Letter to Russell G. Golden, Chairman, Financial Accounting Standards Board* (File Reference No. 2013-270; Comment Letter No. 58). Washington, DC: ABA.

Securities and Exchange Commission. (2005). *Report and recommendations pursuant to section 401(c) of the Sarbanes-Oxley Act of 2002 on arrangements with off-balance sheet implications, special purpose entities, and transparency of filings by issuers* (p. 4). Available at http://www.sec.gov/news/studies/soxoffbalancerpt.pdf

Shroff, N. (2010). *Managerial investment and changes in GAAP: An internal consequence of external reporting* (Working Paper). Cambridge, MA: Massachusetts Institute of Technology.