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Bank Corporate Lending: A Bubble in Progress and Suggested Remedies

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Authors' contributions

This work was carried out in collaboration between both authors, who jointly designed the study, wrote the protocol, and wrote the first draft and final version of the manuscript. Both authors managed the literature searches, and performed the study analyses. Both authors approved the final manuscript.

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ABSTRACT

The causes of the Great Recession (beginning in 2008) and the solutions to prevent a recurrence have been argued over endlessly. The government has responded with various actions: e.g., the Dodd-Frank Act (2010); stronger oversight of the activities of commercial and investment banks; etc. A significant unaddressed financial concern is the process of bank lending to businesses, which is largely unrestricted as to loan policies, required collateral and other safeguards, and the strength of loan covenants that protect the bank during the duration of the loan. This article discusses the situation with regard to loan covenants and suggests various remedies.

Keywords: Bank lending; loan covenants; cov-lite; loan agreements.

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1. INTRODUCTION

Law and regulation that limit individual and organizational behavior are at the core of our government. With regard to business activity, there is a bifurcated attitude: liberals generally presume that companies are inherently evil, while conservatives often hold that restricting economic activity reduces productivity and wealth creation. The legislative process with regard to business is nearly always reactive as it attempts to prevent the recurrence of a recent disaster: another stock market crash (i.e, the Glass-Steagall Act of 1933),[1] another corporate fraud (i.e., the Sarbanes-Oxley Act of 2002)[2] or another Great Recession (i.e., the Dodd-Frank Act of 2010).[3] The problem with this response is that the Legislative and Executive branches are often looking for a scapegoat rather than the underlying cause of the problem.

Name your favorite villain: the commercial banks, the investment banks, the traders, the regulators, Congress, federal agencies, and the list goes on. In all of this, the actual culprits are seldom identified. In some cases such as in the case of the housing/sub-prime mortgage meltdown, it is because there are many participants, each one of which played a supporting role. In other cases it is convenient to blame supposed contributors: financial engineers using derivatives to enhance financial leverage; bankers originating mortgages, securitizing them and packaging these securities for sale to investors; regulators who failed to adequately do their jobs. Regulation should thoughtfully address the issue of behaviors that should be permitted or forbidden, and the metrics and control appropriate to measure and resolve these questions.

2. CORPORATE LENDING POST-GREAT RECESSION

In the aftermath of the recent Great Recession, Congress attempted to address the causes of the 2008 near-collapse of the financial system. However, despite the nearly 370,000 words in Dodd-Frank, the Act is strangely silence on corporate lending, which continues to be the purview of various parties. These include bank examiners, the Office of the Comptroller of the Currency (the OCC), the Federal Deposit Insurance Corporation (the FDIC), and procedures and rules as established by individual banks in the private market.

Corporate lending failures and inadequate participation in oversight by banks and other counterparties played a significant role in the situation. Collapses and near-collapses occurred throughout the U.S. economy; bankruptcies included A&P (grocery), Loehmann's (clothing), MGM (entertainment), Lehman Bros. (investment banking), and Fortunoff (home furnishings) [4] Leading "rescues" included AIG (insurance), General Motors and Chrysler (transportation), and GMAC (financing) which survived because of federal government intervention.

According to the International Monetary Fund data, as much as 17 to 23 percent of debt write-downs in the period 2007– 2010 in the U.S., U.K., and European Union were comprised of commercial mortgage and corporate loans [1].[5] The proportion of nonperforming U.S. commercial and industrial loans, and leases, increased more than three times during this period [2].[6] When loans have gone into default, banks have sometimes adopted the strategy of "extend and pretend" rather than properly classifying them as non-performing. Bad loans extended beyond their maturity date temporarily prevents a loss, but does not assist in the timely payment of debt service.

A company applying for funding will not know if a loan will be offered, what terms and collateral will be required, how the loan will be monitored, or how the lender will manage a loan in default. A bank in California may offer a loan if the borrower agrees to move all of its financial business to that bank; a financial institution in New York may reject the application; and a non-financial lender (such as a commercial finance company) in the

[1]Formally known as the Banking Act of 1933, Pub. L. No. 73–66, 48 Stat. 162. Congress enacted this legislation to separate commercial and investment banking; the law was effectively repealed in 1999 by the Gramm-Leach-Bliley Act, Pub. L. No. 106–102, 113 Stat. 1338.

[2]Pub. L. No. 107–204, 116 Stat. 74. This law was in response to various corporate scandals and frauds, and established mandates for the corporate governance of public companies.

[3]Formally known as the Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376; hereinafter "Dodd-Frank". This law attempted to develop a framework for the prudent management of banks and other financial institutions in response to the Great Recession that began in 2008.

[4] For a representative list of recent bankruptcies, see en.wikipedia.org/wiki/Category:Companies_that_have_filed_for_Chapter_11_bankruptcy

[5]From Table 1.2 in Global Financial Stability Report, World Economic and Financial Surveys, April 2010.

[6]Calculated from Federal Reserve data; the increase noted in the text is based on mid-2007 and mid-2009 data, and excludes real estate, consumer and agricultural loans.

Midwest may offer the loan without further conditions. In other words, this entire process is a "black-box" that can produce a positive or negative outcome for all parties, largely subject to the whims and attitudes of the lenders.

Assume that we are now at the California bank. In the loan documentation, the bank will require a series of warranties, conditions, covenants, pledging of collateral, copies of financial statements, and other material documentation [3]. A naïve borrower may assume that these requirements are standard, but that assumption would be incorrect. Banks design their own requirements, and the entire process can be a "take it or leave it" choice for a small or medium-sized business, or a negotiation for a large company [4]. The customized content loan agreement covenants depends on the characteristics of borrower and lender in each contract.

This article discusses certain of the many disparities in lending to corporate borrowers, showing variations in covenant content and depth, collateral requirements, problems in using financial data to measure borrower compliance with lender standards, and why banks – as private market participants – will not migrate to a logical covenant protocol. Recommendations are provided for regulatory action to require more rigorous loan agreements, thereby preventing a possible future "bubble" in banking.

3. CONTENTS OF LOAN COVENANTS

Bank lending to corporations traditionally involves covenants that require a debtor to meet specific measures of financial and operational performance. For example, the borrower must achieve earnings above a stated multiple of interest expenses, the current ratio (current assets divided by current liabilities) must be maintained in excess of a specified amount, and restrictions may be imposed on future borrowing. Various positive and negative covenants provide the creditor with some assurance that the debtor retains its capacity to service its debt.

A decline in debtor performance can force a loan restructuring, the seizure of collateral or other remediation. Covenants act as surveillance and control in lending situations, providing an opportunity for creditors to work with borrowers before the situation leads to a default, a bankruptcy or other dire outcomes. However, covenants impose costs: restrictions may be too restrictive and may constrain the borrower's flexibility to take necessary actions in response to business opportunities or threats [5,6].

Covenants are legal promises whose breach can trigger a default. Most covenants are either: (1) promises to take or refrain from taking specified actions (such as insuring assets, selling assets, paying excessive dividends, or additional borrowing); and (2) thresholds whose violation triggers default (such as the debt ratio, the current ratio or other financial ratios). Asymmetric information problems explain the use of covenants and other provisions in loan agreements. Lenders cannot discern a borrower's true existing financial condition despite the availability of financial statements and other supporting documentation, and certainly have no idea of future conditions that will be in effect during the life of the loan.

Debt contracts vary over time between traditional covenants and "covenant-lite" (sometimes referred to as "cov-lite") versions that impose minimal restrictions on borrowers. Practitioners label different formulations of covenants as "lender-friendly" or "borrower-friendly", with the choice in terms of the allocation of bargaining or market power. The source of such power appears to be largely a function of demand and supply. For example, a market is "lender-friendly" when demand for credit exceeds supply, putting upward pressure on interest rates. Practitioners suggest that these conditions also yield "lender-friendly" covenants.

The term "covenant lite" as defined by a leading credit rating agency refers to loan agreements with incurrence covenants rather than maintenance covenants. Incurrence covenants are tested when a borrower takes an action that is limited by the covenant. If the borrower can demonstrate compliance with the covenant, then the action is permitted and the covenant is not retested unless the borrower engages in another action in the future that is subject to the covenant. Covenant-lite loans represented 57 percent of total bank loan issuance in 2013 and now constitute nearly half of the bank loan market [7].[7]

Maintenance covenants are tested on a regular basis, most often at the end of each fiscal quarter of the borrower. These covenants are considered to be more restrictive than incurrence tests

[7] *The number of "cov-lite" loans increased from four in 2005 to over 100 by 2007.*

because a maintenance covenant can be breached as a result of a deterioration of the borrower's financial performance. Conversely, as long as a borrower is able to avoid taking any action subject to an incurrence covenant, the borrower never has to demonstrate compliance with the covenant even if the borrower's financial performance has declined Chew et al. [8].

4. CURRENT PRACTICES: "COV-LITE" LOANS AND THE "PROTECTION" AFFORDED BY COLLATERAL

Covenant-lite deals became increasingly common through the first decade of this century, at least until the onset of the Great Recession; see Tables 1 and 2 [9]. Market observers attributed this to an excess supply of credit [10].[8] The market for covenant-lite loans collapsed in the second half of 2007. A period of tighter and more extensive covenants followed until 2009. Reports suggested that covenant-lite deals then resurfaced, at least for higher-grade borrowers, because of an excess supply of bank funds [11,12].

Covenant-lite issuance can be seen as a late-market cycle phenomenon, appearing a year or so before a significant downturn. Covenant-lite loans typically have only one or two provisions, compared to four or more in a complete covenant loan agreement. Proponents of covenant-lite loans contend that financial covenants provide creditors with only limited protection, given that during the recent downturn, recovery rates for covenant-lite loans made during the pre-crisis era were similar to recovery rates for loans with more covenants. OCC statistics show that new commercial loans with reduced covenants totaled $258 billion in 2013, which was nearly as much as the total issued from 1997 to 2012 [13,14].[9] The argument is that successful recoveries from troubled borrowers may depend more on the depth of a debtor's capital structure than on covenants [15].[10]

Table 1. Cov-lite loans issuance

Year	Cov-lite loans ($ billions)
2006	$20B
2007	100B
2008	NM
2009	NM
2010	$5B
2011	$60B
2012	$100B
2013	$260B
2014	$240B

Table 2. Percent of loan agreements with Cov-lite provisions

Year	Loans with 3 or fewer covenants
1998	18%
2000	22%
2002	38%
2004	36%
2006	75%
2008	80%
2010	80%
2012	95%
2014	98%

Covenants become more extensive and restrictive as the risk-free rate of interest rises and as other economic influences change the borrower / lender dynamic. The tightening of or the expanded demand for credit leads not only to higher interest rates but also to more extensive covenants. Conversely, increased credit supply or decreased demand leads to lessened covenant limitations.

Empirical studies show determinants to include such macroeconomic factors as growth in the Gross Domestic Product (GDP), the risk-free rate of interest, and the extent of concentration in lending markets Berger et al. [16]. Sadly, the Great Recession was a revealing laboratory for changes in credit standards. Numerous reports provided evidence of the reluctance of lenders to provide loans to borrowers that would normally qualify due to the economic conditions [17].

Collateral requirements vary over time depending on the nature of the borrower and practice within its industry segment. For example, a company with industry-specific fixed assets (such as agriculture or airline service) will be required to pledge its assets at nearly 100% of fair value, while a business with fungible assets (such as commercial real estate) may be granted a lesser proportion of its assets to pledge as collateral.

[8] *Standard & Poor's reports a "… growing investor demand from structured finance vehicles and hedge funds, have allowed bank facilities with weakened 'covenant-lite' loan structures to emerge as the instruments of choice for many issuers. As the volume of leveraged loans reaches an all-time high, the proportion of covenant-lite facilities has increased tremendously…."*

[9] *According to* Leveraged Finance News*, "A recent horizontal review of midsize and community bank asset-based lending ... found evidence of gradually loosening credit policies in response to competitive pressures…"*

[10] *Covenant-lite loans had a 70% recovery rate, compared to a 65% recovery rate for traditional loans with covenants, according to S&P Capital IQ data for a limited sample period.*

For typical language in a credit agreement, see Exhibit 1.

The problem in either situation is that collateral value is subject to relatively volatile conditions as economic conditions change. As the result, a $1,000 asset pledged as collateral could be worth $1,000, or $800, or even $500 at the time that the collateral is liquidated. Furthermore, collateral seized by a lender will have significantly less value in a forced liquidation compared to a "going concern" use of those assets.

The research on collateral focuses primarily on the issue of interest rates on loans secured with collateral compared to unsecured loans [18]. There has apparently been no research on the outcome of collateral sales due to loan defaults; in practice, bankers generally assume that such asset sales will produce only about ten to fifteen percent of the book value.

5. ANALYSIS OF LOAN AGREEMENTS

Various researchers have analyzed databases of specific credit agreements in the attempt to resolve such questions as whether covenants cause defaults [19], whether bank lines of credit are a liquidity substitute for cash [20], and whether banks use unreasonable covenants to renegotiate loan terms and/or reduce their risk exposure [21]. More theoretical analysis has examined other questions related to loan covenants [22,23,24,25].[11]

The research has uniformly assumed that the standard measures are useful and appropriate, providing information to the lender as to the viability of the borrower. However, these studies lack a critical examination of the efficacy of traditional covenants, and U.S. banking regulators have remained silent on the issue of whether specific measures are relevant or necessary, or if they should be mandatory in credit agreements. In the present economic situation, a fresh examination appears to be appropriate. Despite their general acceptance in the financial community, covenants based on financial statement data have various problems in application, as summarized in Exhibit 2.

Bank loan covenant analyses have been somewhat limited due to the private nature of these agreements [26,27].[12] The general tone of many critiques follows the argument that certain banks are simply too large and complex to be managed "too big to fail", [28]; that loan sales and securitizations inevitably reduce the bank's incentive to choose and monitor their corporate borrowers; [13] and that the previous regulatory regime requiring the separation of commercial and investment banking was more effective than the current situation.

In a private market setting – albeit with Comptroller of the Currency supervision – fewer loan covenants in bank credit agreements have become an inevitability. Securitizations, loan sales and loan syndications weaken the motivation of an originating bank to monitor borrower performance, resulting in less rigorous oversight across dispersed creditors. This situation can only result in continued credit "bubbles" and a repeat of the cycle of loans to marginal corporate borrowers, inadequate credit review, the dispersal of loans to investors and other banks, and rescues by the FDIC, [14] the Federal Reserve and possibly the U.S. Treasury.

There are no statistics on the extent of commercial loan losses that led to the 2008 bank crisis. Much of the research quite correctly focuses on residential and commercial real estate, particularly sub-prime lending. However, a leading report on this situation also concludes that "[t]he failed banks also had often pursued aggressive growth strategies … and exhibited weak underwriting and credit administration practices." [29].

As noted in the section "Corporate Lending Post-Great Recession" that began this article, there were many recent business bankruptcies, and as commercial loans and leases constitute about

[11] *These include such issues as whether bondholders derive implicit protection by this form of bank monitoring; whether tightly written loan covenants result from private information accessible only to banks and other lenders; whether loan covenants affect the rights of creditors; and whether loan agreements impact corporate governance.*

[12] *There are various reviews of bank failures relating to inadequate protection for corporate loan portfolios; see references 26 and 27.*

[13] *"…for over a decade, federal bank regulators cautioned banks against weakening covenants …'" see reference 25. Curiously, there is no mention of loan covenants, securitizations or loan sales in Dodd-Frank.*

[14] *During the 20 year period from 1995 through August 2014, the average number of FDIC failed and assisted banks was 28.5; in the worse years of the Great Recession – 2008-2011 – the numbers of FDIC fails and assists was 148, 154 and 92 respectively, or some 4½ times typical experience, with FDIC losses of $81.67 billion.*

25% of all bank loans,[15] this debt constitutes a considerable exposure when there are relatively weak lending practices.

6. HOW FINANCIAL DATA CAN CONFUSE COVENANT METRICS

Loan covenants must be sufficiently comprehensive to accurately reflect a borrowing firm's true position; that is, are earnings, financial leverage and liquidity sufficient to reasonably assure debt service payments? The accountant's role is to provide financial statements using FASB and, in the future, IASB standards[16] that provide reasonably close measures of a company's position, particularly net income after taxes, debt as a percentage of total assets, and cash and access to lines of credit.

Simple enough – but what can go wrong? Financial statement data can be manipulated by many techniques; see Exhibit 3, 4 and 5 for situations that involved the use of earnings, financial leverage and liquidity results as reported on public company financial statements [30]. Although GAAP is considered as the foundation of financial reporting in the U.S., significant latitude is permitted in the calculation of financial statement accounts. For example, costs are subject to various conventions, such as LIFO (last in, first out) or FIFO (first in, first out) for inventory, and accelerated, sum-of-years'-digits or double declining depreciation methods for capital assets. ("Cash accounting" focuses on the dates these events occur, but is used mostly by small businesses.)

These are not new problems, and were recognized and dissected as early as 1934 by Graham and Dodd [31]. Renowned for investment commentary, the authors spent about one-quarter of their landmark text *Security Analysis* (Chapters 10 – 20) on understanding and re-computing earnings from published financial reports. In the effort to develop an accurate portrayal of earnings, their suggested adjustments involve:

- Restating non-recurring income or expenses
- Eliminating any unjustified recognition of income
- Correcting any entries to net worth such as reserve accounts
- Adjusting earnings resulting from the operations of subsidiaries and affiliates
- Recalculating income taxes based on the preceding adjustments
- Including or excluding certain unrecorded assets and liabilities

Misleading and deceptive financial reports cause bankers to rely on results which fail to accurately reflect revenues and costs. When the markets accept these data and earnings were actually manipulated, lenders (and investors and vendors) may suffer significant loses. More than fifteen years ago, the SEC became committed to attacking financial statement "management", the manipulation of earnings by CEOs obsessed with making their earnings numbers [32].

7. CONCLUSION

The causes of the Great Recession will likely be debated for many years, although the scholarship has generally coalesced around the issues of sub-prime mortgages; inadequate regulatory supervision by federal housing, banking and securities agencies; and pressure by politicians to use available devices to help the poor and underserved of American society. This article argues that the most glaring omission from the resulting remediation has been in corporate lending. Loans to businesses constitute a significant portion of bank activity, yet much of this activity is conducted in the private market and beyond the close monitoring of the regulators.

The safeguards that are now in use are inadequate to provide the protection that banks (and their depositors and stockholders, and the public) require. Covenants are satisfactory when the originating bank(s) maintains oversight of the loan and keeps "skin in the game". The current use of securitizations, loan sales, covenant-light agreements, and inadequate requirements for collateral do not begin to offer adequate restitution or minimal protection should the borrower encounter business difficulties.

[15] *The Federal Reserve publishes data on "commercial and industrial" (C&I) loans and on leases. In its latest report of data from August 2014, the Fed calculated that C&I loans were $1.538 trillion and leases were $1.103 trillion of a total $10.986 trillion in commercial bank assets other than investment securities.*

[16] *FASB is the U.S. Financial Accounting Standards Board that establishes (GAAP) Generally Accepted Accounting Standards for financial reporting. IASB is the International Accounting Standards Board. IASB and FASB have been working since 2002 to achieve accounting standard convergence.*

The solution is for the regulators – perhaps mandated by an amended Dodd-Frank Act – to require that banks include in lending agreements sufficient number of rigorous covenants to clearly understand the performance of the corporate borrower in the attempt to minimize the likelihood of deception. A few financial statement accounts in covenants can certainly be manipulated; it is considerably more difficult to influence results throughout a comprehensive set of covenants based on the status of the business, the income statement and the balance sheet.

Critically important covenants could be mandatory while others could be suggested, particularly as some metrics are industry specific. Twelve proposed covenants for inclusion are listed in Exhibit 6, which is certainly more than the number found in a cov-lite loan agreement. Each suggested financial ratio can be compared longitudinally (to previous years' results) and cross-sectionally (to industry results).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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EXHIBITS

Exhibit 1. Typical Language in a Lending Agreement Governing Collateral

As collateral for the Borrower's obligations…, Borrower hereby grants to Lender a security interest in all right, title, and interest now owned or hereafter acquired by Borrower in and to the personal property of Borrower, including, but not limited to, the following: accounts, chattel paper, documents, commercial tort claims, commingled goods, consumer goods, deposit accounts, equipment, farm products, fixtures, general intangibles, healthcare-insurance receivables, instruments, inventory, investment property, letter-of-credit rights, manufactured homes, money, payment intangibles, proceeds, software, books, and supporting obligations, including accessions to any of the foregoing and proceeds of all the foregoing (the "collateral")… the Lender shall subordinate the security interests granted pursuant to this section to the holders of all …purchase money security interests granted by Borrower in the Collateral.

Excerpted from: ded.mo.gov/moloan/sampleagreement (2011).pdf (for a small business loan). Examples of credit agreements are at www.techagreements.com/credit-agreements.aspx.

Exhibit 2. Problems in the Use of Financial Statement Ratios in Loan Covenants

- Fiscal Year. Balance sheets are published on an "as of" date, and do not represent a year's financial results (in contrast to the income statement). A fiscal year is a period used for publishing a company's annual financial statements as required by regulation in many countries. The choice of the actual fiscal year-end closing is at the discretion of management. The general practice is to choose a time when any seasonality effect is minimized. There is no direct way to interpret the results from a balance sheet in terms of events during the fiscal year, and any ratio constructed from the balance may not truly represent the borrower's actual situation.
- Accrual Accounting. Nearly all companies use accrual accounting, which attempts to match revenues and the expenses that were incurred to generate that activity. This involves the use of such conventions as depreciation (for physical property), amortization (for intellectual property) and depletion (for natural resources).
- Window Dressing. Because of the fiscal year problem, companies may be tempted to present results consistent with investor, banker and analyst expectations. Unfortunately, there have been numerous instances of short-term adjustments to financial statement accounts that are reversed the following business day. Various misrepresentations have been sustained by such practices, and the Sarbanes-Oxley Act of 2002 was enacted to induce greater honesty and transparency in the presentation of financial results by U.S. public companies (Fraser, 2002; Stlowy and Breton, 2004).
- Aggregated Data. Various accounts are used in constructing financial ratios, two of which are listed below.

o Current ratio

- Current assets, including cash, accounts receivable and inventory
- Current liabilities, including accounts payable, notes payable and accrued expenses

o Leverage

- Debt, including bonds payable and loans payable
- Owners' equity, including common stock and retained earnings

These ratios involve aggregated data that may misrepresent the actual position of the borrower.

- Off-Balance Sheet Obligations. Companies may have arrangements for debts that are not recorded on the balance sheet, including leases, contingent liabilities, unused lines of credit, and special purpose entities (SPEs) (sometimes known as special purposes vehicles [SPVs]) that may be construed as a responsibility of the entity. SPEs became a key element in the failure of Enron, when investments that were losing money were moved off of the balance sheet and into SPEsContingent liabilities or off-balance sheet obligations arise from either:

- Past events the existence of which will be confirmed only by the occurrence of one or more uncertain future events not wholly within the entity's control such as a lawsuit, or
- A present obligation, such as an operating lease, that arises from past events but is not recognized because either it is not probable that a transfer of economic benefits will be required to settle the obligation or because current accounting conventions do not require its recognition.

Off-balance obligations can significantly alter the profitability and net worth of the borrower.

Exhibit 3. Earnings Manipulation

- Requiring dealers/retailers to accept delivery of merchandise for which payment is not due for extended periods, and then only if the goods are sold to their customers. Sunbeam used this technique to improve their financial results in 1997.
- Capitalizing rather than expensing certain costs to increase earnings.
- Including “unbilled services” in reported revenues, when invoices not yet printed or electronically sent to customers. Some dot.com companies labelled these charges as revenue despite customers’ right to terminate contracts at any time with no penalty. Covance and Parexel International used this strategy in 2001.
- Boosting earnings by deferring critical costs because of weak revenues. Eastman Kodak cut research and development in 1998 to increase reported profits by over 30%.
- Taking a large, current write-off to inflate earnings in subsequent periods. Cisco used this technique to make future years’ results appear significantly improved.
- Smoothing earnings by dipping into reserves. Reserve accounts are special balance sheet accounts established for possible future requirements of the business. High tech companies have been known to establish reserves to be used in future periods of slowing revenues.
- Labelling expenses as marketing costs rather than as cost of goods sold, to improve the gross profit performance (defined as sales less the cost of goods sold). Various Internet retailers have mislabeled certain expenses to improve their results.

Exhibit 4. Financial Leverage

- Extending the depreciated lives of assets to alter the net (after accumulated depreciation) asset value. This deception has the effect of increasing total net assets, which reduces the debt-to-total asset ratio used in many loan covenants. (This scheme was employed by Waste Management in the mid-1990s.)
- Reducing commercial paper or line of credit borrowing near the end of a reporting period to reduce financial leverage.
- Share repurchasing (placing the shares in treasury stock) to distort year-to-year comparison of debt-to-total assets, as a larger equity account reduces the proportion of financial leverage.
- Misclassifying leases: capital leases are recorded as a liability, while operating leases are not required to be so reported.[17]
- Not recording accrued expenses. A failure to record accrued expenses results in income being overstated and liabilities being understated.

[17] *The entire topic of lease classification, currently FASB FAS 13, is being redrafted to clarify the criteria and accounting for leases, with final determination likely by early 2015.* ***The new standard, formerly FASB 840, has been given the designation as FASB 842.*** *For further information, see www.fasb.org.*

- Concealing liabilities in the accounts of unconsolidated subsidiaries. In the case of Enron (as previously noted), special purpose vehicles (SPVs) were created with the intention of removing liabilities from Enron and placing them in the shell companies.
- Understating contingent liabilities, obligations that are dependent on future events to confirm the existence of an obligation, the amount owed, the payee or the date payable. For example, warranty obligations or anticipated litigation loss may be considered as contingent liabilities.
- Avoiding consolidation of a highly leveraged subsidiary by keeping the parent's ownership interest below 50 percent. The parent then uses the equity method of recognizing these subsidiaries' operating results, which keeps their assets and their debt off its own books.[18]
- Understating pension obligations (a liability), as companies can make themselves appear in a stronger financial position by changing a few assumptions to reduce the amount owed. Because this obligation is the present value of future payments earned by employees, these accounts can be effectively controlled via the discount rate.

Exhibit 5. Liquidity

- Understating allowance for doubtful accounts (in accounts receivable), resulting in the overstatement of receivables and the current ratio.
- Depositing checks in multiple bank accounts just before the end of the reporting period in order to appear to have double or even triple the amount of cash actually owned. This manipulation, called "kiting", was used by E.F. Hutton (a stock brokerage firm) in the early 1980s.
- Not writing down stale, spoiled or otherwise unsaleable inventory to its market value, and continuing to carry it at cost.
- Delaying purchases near the end of the reporting period to artificially reduce liabilities (accounts payable).
- Manipulating the current ratio by artificial, equal increases (or decreases) in current assets and current liabilities. For example, if current assets of a company are $20,000 and current liabilities are $10,000, the current ratio would be 2:1, computed as $20,000 ÷ $10,000 = 2.00:1. If both current assets and current liabilities are reduced by $2,000, the ratio would be increased to 2.25:1, computed as $18,000 ÷ $8,000 = 2.25:1.
- Easing credit standards to customers to increase accounts receivable (and sales), and improve the current ratio.

Exhibit 6. Typical Loan Agreement Covenants

** = suggested mandatory covenants*

- Representations and warranties.*This group of covenants includes the legal status of the business, its legitimacy to enter into a contract to borrow, and other matters that might affect the lender's position should a future dispute occur.
- Litigation and/or regulatory proceedings.* Is the borrower a party to any litigation or regulatory actions?
- Default of a lending agreement covenant.* The bank must be informed as soon as possible and certainly within a specified number of days of any event of default that has occurred in respect to the borrower's obligations.
- Changes in status of the borrower.* Loan covenants typically require a borrower to notify its lender if any circumstances were to develop that could materially impact its legal obligations.

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[18]Corporate purchases of separate businesses or entities can either be accounted for using the consolidation method or the equity method, depending on the extent of the control the subsidiary. Under the equity method, the investment is recorded at cost and is subsequently adjusted to reflect the share of net profit or loss and dividends received. In consolidated accounting, the parent company essentially treats the subsidiary company as if it does not exist. All of the subsidiary's assets and liabilities appear on the parent company's balance sheet, and all of the subsidiary company's revenue, expenses, gains and losses appear on the parent company's income statement.

- Financial forecasts.* These include projected (pro forma) income statements, balance sheets and cash flow statements, which should be for the following fiscal year by month, with forecasts out from two to five years.
- Dividend or other distributions.* The payment of dividends or other distributions should be restricted by either a set dollar amount or tied to a percentage of annual profits.
- Capital Expenditures.* Lenders may restrict borrowers from overspending on capital expenditures after allowing for depreciation expense.
- Acquisitions, Mergers and Sale of Assets.* A covenant to prohibit the borrower and its subsidiaries from being a party to any merger or consolidation, from selling all or substantially all their assets, and from buying the assets of another business.
- Net Worth. A minimum net worth requirement* or minimum *tangible* net worth requirement covenant provides that the borrower maintain at all times a net worth of not less than a stated minimum.
- Working Capital. These metrics include the current ratio, the quick ratio or the ratio of total receipts-to-cash flow,* to measure a firm's ability to pay operating expenses.
- Debt. These metrics include Debt-to-Tangible Net Worth, Debt-to-Total Assets,* Long-Term Debt-to-Invested Capital, Debt-to-EBITDA (earnings before interest, taxes, depreciation and amortization), and Debt-to-Tangible Net Worth.
- Earnings. EBIT Coverage (earnings before interest and taxes)-to-interest expense (also known as times interest earned or TIE),* EBIT-to-Debt Service, EBITDA-to-Interest Expense, EBIRT (earnings before taxes and interest, adding back operating lease expense or "rent" [RT]), and EBITDAR (earnings before taxes, interest, rent expense and depreciation).

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