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Valuation & Litigation

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Plug the drain

How to detect financial statement fraud

In today's post-Sarbanes-Oxley environment, lawmakers, regulators and businesses are emphasizing anti-fraud controls like never before. Nevertheless, according to the Association of Certified Fraud Examiners (ACFE), U.S. organizations continue to lose about 7% of their annual revenues to fraudsters. The ACFE also has found that financial statement fraud is the costliest form.

Facts and figures

In its *2008 Report to the Nation on Occupational Fraud & Abuse*, the ACFE breaks down occupational fraud into three categories:

1. Asset misappropriation, such as skimming, false invoicing or payroll fraud,
2. Corruption, including bribery, extortion and conflicts of interest, and
3. Financial statement fraud, also known as “cooking the books.”

The study is based on 959 fraud cases investigated between January 2006 and February 2008.

Financial statement fraud is less common than the other two — accounting for only 10% of the fraud cases in the survey — but it's far more costly. The median loss caused by financial statement fraud was \$2 million, compared to \$375,000 for corruption and \$150,000 for asset misappropriation. More than 70% of financial statement frauds were perpetrated by someone either in upper management or in the accounting department.

Common schemes and red flags

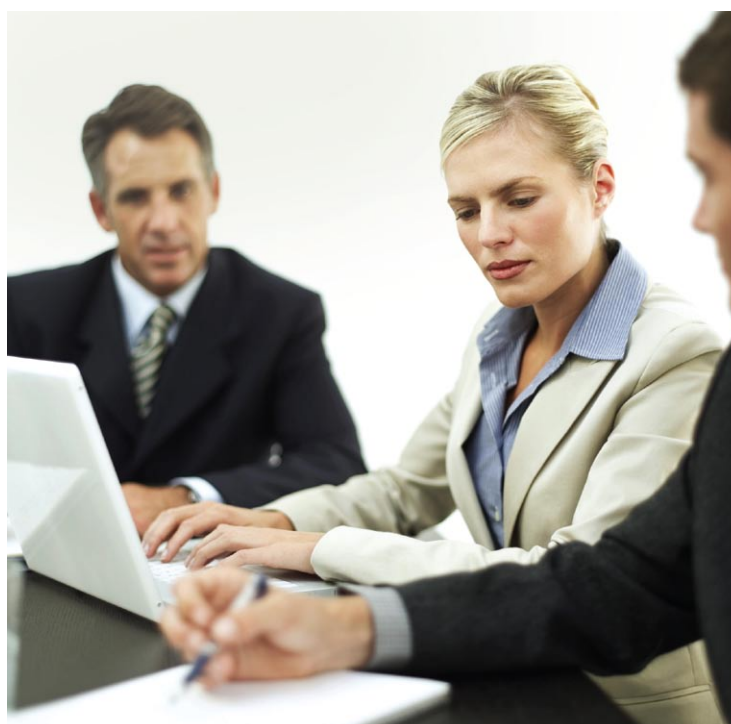
Fraudulent misstatements can occur on virtually any line of a financial statement, but the majority of frauds focus on:

Revenue overstatement. There are many ways to inflate a company's revenues, including

recording fictitious sales, recording future sales prematurely and recording consignment sales as revenue. Potential red flags include revenues that increase over time without a corresponding increase in cash flow, strong revenue growth in comparison to a company's peers, and suspicious increases in a company's number of days' sales in receivables.

Expense understatement. This may involve recording expenses in the wrong period, not recording expenses at all, improperly capitalizing costs rather than recording them as expenses or recording the cost of sales as a nonoperating expense. Red flags include unusual increases in income (particularly in comparison to a company's competitors), significant increases in fixed assets without a reasonable explanation, and earnings growth coupled with recurring negative cash flows.

Improper treatment of assets. Fraudsters can inflate a company's earnings by misclassifying assets (for



example, to take advantage of a shorter useful life or inappropriate depreciation method), manipulating valuation estimates or failing to write down an asset's value when required. Red flags include earnings growth coupled with recurring negative cash flows, economic and competitive pressures that are likely to impair the value of assets, and changes in the methods used to estimate asset values and other financial statement entries.

One reason detecting fraud is so challenging is that the perpetrators are in a position to cover their tracks.

One of the most effective ways to detect financial statement fraud is to review a company's financial ratios and other indicators for signs of earnings manipulation. (See "Running the numbers" at right.)

Behavioral red flags

One reason detecting fraud is so challenging is that the perpetrators are in a position to cover their tracks. So it's important to use *indirect* methods to detect fraud, such as looking at employee behavior or circumstances that may signal fraudulent activity. The ACFE's report indicated 16 behavioral red flags that are typically present during fraud schemes. Some of the most common red flags are employees who:

- ◆ Are living beyond their means (or are experiencing financial difficulties),
- ◆ Have a "wheeler-dealer attitude,"
- ◆ Exhibit control issues or unwillingness to share duties, or
- ◆ Are under excessive pressure to perform from within the company.

These and other circumstances can indicate either potential fraudulent activity or employees with a strong incentive to commit financial statement fraud.

RUNNING THE NUMBERS

Research by Indiana University economics and accounting professor Messod D. Beneish ("The Detection of Earnings Manipulation," *Financial Analysts Journal*, September/October 1999) points to several financial ratios and indicators that signal potential financial statement fraud. They include:

- ◆ **Days' sales in receivables index.** This is the ratio of days' sales in receivables (average receivables divided by average daily sales) in one period to the same figure in the previous period. A high number may indicate overstated revenues.
- ◆ **Sales growth index.** High-growth companies are more likely to commit financial statement fraud because of pressure to achieve earnings targets.
- ◆ **Asset quality index.** This index tracks the ratio of noncurrent assets (excluding property, plant and equipment) to total assets. Increases over time may reflect improper capitalization and deferral of expenses.

Changes in any of these ratios may have innocent explanations, but by combining them with several other ratios to arrive at an overall "score," it's possible to identify signs of potential fraud that warrant further investigation.

Bring in the cavalry

None of the red flags described above constitute a "smoking gun" that *proves* financial statement fraud has occurred. Rather, they indicate the need for further investigation by a forensic accountant or other financial expert. Forensic accountants combine accounting and industry experience with investigative expertise. They understand how to spot red flags and to ask the right questions to determine whether those red flags have innocent explanations.

If fraud is suspected, forensic accountants will sift through and analyze documents, interview staff and use fraud-detection technology to identify questionable transactions and uncover fraudulent activity. They're also trained to identify and preserve evidence so that it's admissible in court should litigation become necessary. ◆

Following the money trail in divorce cases

Missing income is a common problem in divorce cases. If one spouse owns a business, the other spouse may allege that the business earns more than its financial records suggest. This requires a forensic expert to look behind the numbers and use forensic accounting techniques to search for unreported income.

All roads lead to value

Many valuation approaches and methods exist. But regardless of the road a valuator takes to arrive at a value, the destination is the same: a business's value, based on its ability to generate income. But what if a business conceals assets or fails to report all its earnings on its financial statements and tax returns?

Forensic experts use two basic approaches to uncover missing income. One is to search for hidden cash. The other is to identify concealed sources of income.

4 methods for finding cash

Business owners with unreported income almost always receive it in the form of cash. To avoid detection, the business doesn't record the income in its books or deposit the cash in its bank account. Experts typically rely on four forensic accounting techniques to prove that cash is missing and estimate how much the owner isn't reporting:

1. Bank deposits method. The valuator reconstructs income by analyzing bank deposits, canceled checks and currency transactions, accounting for cash payments made from *undeposited* currency receipts as well as nonincome sources of cash — such as loans, gifts, inheritances or insurance proceeds.

2. Source and funds application method. The valuator analyzes the business owner's personal sources and uses of cash. This method is effective in addressing the question: Where did income and other funds come from, and what were they used for? If the



owner is spending more than he or she is taking in, the excess represents unreported income.

3. Net worth method. This method is based on the assumption that an unsubstantiated increase in a business owner's net worth is attributable to unreported income. The valuator estimates net worth using documents such as bank and brokerage statements, real estate records, and loan or credit card applications. The expert starts with the amount of gain in net worth, subtracts reported income and adjusts this amount to reflect nondeductible expenditures — such as capital asset acquisitions — and nonincome sources of funds.

4. Percentage mark-up method. The valuator estimates net income by applying a benchmark profit percentage to sales or some other base amount. Valuators usually use this method to corroborate results of other methods.

Reconstructing unreported income

Even if missing cash is undetectable, experts can use forensic accounting techniques to reconstruct unreported income by examining potential sources of that income.

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For example, Oliver and Harriet are getting a divorce. Harriet suspects that Oliver is underreporting income from his manufacturing business, Widgets-R-Us. Harriet's valuation consultant discovers that just two

distributors supply all the widgets Widgets-R-Us uses in its operations.

Harriet's lawyer subpoenas the distributors' records, which show how many widgets the company purchased during the last three years. The valuator uses this information to reconstruct Widgets-R-Us sales, which turn out to be 15% higher than the company reported.

Digging for treasure

Unreported income can be difficult to prove, especially when a business owner is taking active steps to conceal it. But an expert who knows where to look can dig beneath the surface of a company's financial records and uncover its true value. The techniques described here are just a few examples of the many ways forensic accounting techniques can produce more accurate valuations. ♦

IP valuation using the relief from royalty method

In today's business environment, the valuation of intellectual property (IP) is critical. Accounting rules governing fair value measurements and the treatment of acquired goodwill and other intangible assets make it more important than ever to obtain accurate IP valuations.

Several methods can be used to value IP. One of the most effective can be the relief from royalty (RFR) method.

Reasons for valuing IP

There are four general types of IP: patents, copyrights, trademarks and trade secrets. IP also may include unpatented proprietary technology, trade names, trade dress, brands, computer software, customer lists and other assets that fall within, or are closely related to, the four categories listed above.

There are many potential reasons for valuing IP, including:

- ◆ Financial reporting (fair value measurements, annual impairment tests),
- ◆ Tax compliance (gift and estate taxes, charitable contributions),
- ◆ Litigation (damage calculations, shareholder disputes, divorce, bankruptcy), and
- ◆ Sale or licensing transactions (business sales, IP sales/licenses).

The value of IP is particularly relevant to Statement of Financial Accounting Standards (SFAS) No. 141, *Business Combinations*, and SFAS 142, *Goodwill and Other Intangible Assets*. Under those standards,

companies are required to 1) allocate the purchase price of an acquired company among the tangible and intangible assets being acquired, and 2) test acquired goodwill and other intangibles annually for impairment and write them down if their fair values drop below their carrying amounts.

Testing goodwill for impairment is a complex process, but, in general, the value of goodwill depends on the value of a company's tangible and *identifiable* intangible assets, including IP.

Not all valuation methods will do

Like most assets, IP assets can be valued using one or more methods within the three basic valuation approaches: the market approach, the income approach and the cost approach.

Testing goodwill for impairment is a complex process, but, in general, the value of goodwill depends on the value of a company's tangible and identifiable intangible assets, including IP.

When applied to IP assets, however, the cost and market approaches can be a challenge. That's because it can be difficult to identify and quantify all the costs involved in creating an IP asset. Moreover, the cost of creation may have nothing to do with the IP's value. And the market approach may not be workable because comparable transactional data for IP and other intangible assets can be difficult to obtain.

Some assets — such as trademarks, trade names or brands — are rarely bought and sold in the marketplace. And even for assets that are sold, such as copyrights and patents, transactional data may not be published.

RFR — a fitting alternative

In light of these limitations, the RFR method is often an effective alternative. Generally, RFR is categorized



as an income-based method (somewhat similar to the discounted cash flow method), although it may also share some attributes of the market and cost approaches. The RFR method estimates the portion of a company's earnings attributable to an IP asset based on the royalty rate the company would have paid for the use of the asset if it didn't own it.

In other words, the value of the IP asset is equal to the value of the royalty payments from which the company is *relieved* by virtue of its ownership of the asset. The RFR method projects cost savings to the company.

To apply the RFR method, the valuator begins by selecting a royalty rate based on available market data for licenses involving similar assets, industries, territories and other characteristics. Next, the valuator selects an appropriate, risk-adjusted discount rate to determine the present value of the royalty payments.

Typically, this hypothetical license is treated as a perpetual license. To estimate the value, the valuator calculates the present value of projected royalty payments over a certain period (10 or 15 years, for example) and then calculates the present value of the residual at the end of that period.

How do you spell relief?

Accurate valuations of IP are important in a variety of business and litigation contexts. The RFR method is a straightforward IP valuation method that avoids many of the shortcomings of traditional valuation approaches. ♦

Punitive damages: The financial expert's role

Enormous punitive damage awards may be a thing of the past, but they can still make up a significant portion of a plaintiff's recovery. Over the last few years, the U.S. Supreme Court has suggested that there may be constitutional limits on the size of a punitive damage award in relation to compensatory damages. Apart from any constitutionally imposed caps on punitive damages, an appropriate award depends on the defendant's financial condition.

When is it excessive?

Financial experts can assess a defendant's financial condition by analyzing financial statements and explaining to the judge or jury how factors other than net worth — such as cash flow and liquidity — can affect a defendant's ability to pay. Even if a defendant appears financially robust on paper, a punitive damage award that would put it out of business would likely be considered excessive.

Suppose, for example, that the bulk of a company's net worth is tied up in fixed assets. A substantial punitive damage award based on net worth alone — without considering the form of the company's assets — might result in a punishment that's unduly severe. That's because fixed assets may be difficult to convert into cash in order to satisfy the damage award or they may be essential to the company's continued operation. The same scenario would apply for a company that has large amounts of other types of nonliquid assets that are difficult to sell or that don't have much residual value.

Financial experts can also analyze differences between the current fair market value of assets and their book value. Particularly in tough economic times, book value may be an

inappropriate measure of a defendant's financial condition.

Quantifying gains

If the plaintiff is pointing to the defendant's "ill-gotten gains" as an appropriate gauge of punitive damages, financial experts can help quantify those gains by examining not only the revenues the defendant derived from its wrongful conduct, but also the defendant's related expenses.

In a recent, unpublished opinion, the California Court of Appeals reversed a \$1 million punitive damage award because the plaintiff failed to introduce "meaningful evidence of the defendant's financial condition." The court pointed out that "evidence of earnings or profit alone without evidence of expenses is insufficient to establish a defendant's ability to pay punitive damages."

Don't go it alone

Whether you're representing the plaintiff or the defendant, financial experts can play a key role in demonstrating the defendant's financial condition and, therefore, in supporting or challenging punitive damages. ♦

