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Tracing cash to uncover fraud

White-collar crime continues to endanger businesses, and technology is easing the way for perpetrators to cover their tracks. If you have a client that's been victimized (or suspects that it has), a forensic expert can help you detect fraud and trace misappropriated cash. Several common schemes are particularly susceptible to detection.

Fictitious payable schemes

In these schemes, a perpetrator creates a payable to a fictitious vendor for a nonexistent debt. By following a payment to a vendor whose name is similar to an employee's name (the employee's initials, for example), a forensic expert might expose an employee who has opened a bank account for a business under that name.

Electronic bank statements also can reveal unfamiliar payees and suspicious transactions.

To trace missing assets, a forensic expert begins by examining cash receipt and disbursement journals, ledger accounts, purchase orders and invoices for unusual activity. Accounts with no tangible deliverables — for consultants, commissions or advertising, for instance — receive extra scrutiny. Electronic bank statements also can reveal unfamiliar payees and suspicious transactions.

The expert might sort the company's vendors according to payable size. An unfamiliar but highly ranked vendor could well be a shell company created by an accounting department employee.

Multiple vendors with the same mailing address and vendors with the same address as an employee also throw up red flags. Likewise, a forensic expert will note vendors that use post office boxes and invoices whose numbers advance by a single digit each month, indicating a "vendor" has no other customers.

Ghost employee schemes

Assets also can be traced to spook out ghost employees to whom paychecks are issued, despite their nonexistence. To ensure the validity of the payroll, a forensic accountant will review several items, including:

- ☑ Payroll lists and current and former employee lists (including start and termination dates and Social Security numbers),
- ☑ Personnel files and employment applications, and
- ☑ Withholding and authorized deductions, such as for insurance premiums or 401(k) contributions.

Typically, ghost employees don't appear in company records and personnel files, and often their paychecks exclude common deductions and withholding amounts.

Overbilling schemes

By tracing assets that move through third parties, a forensic expert can uncover a variety of schemes. An employee might overpay a vendor, for example, in exchange for a kickback.

One red flag that may indicate the need for further investigation is inconsistent pricing on invoices.

Studying suspicious payments

Processed checks and payments associated with suspected fraud can yield a wealth of information. In

ghost employee situations, for example, a forensic expert may examine actual payroll checks to verify that the payee matches the endorser. If the names don't match, the endorser may turn out to be a perpetrator's friend or relative. If a company uses direct deposits, an expert may compare employee account numbers for duplicate accounts, indicating a single person is receiving payments for multiple employees.

A third-party endorsement to an individual by a "business payee" should raise concerns. Similarly, a business payee that cashes its checks rather than depositing them is worth further study.

Finally, a deposited check, whether issued as payroll or to a vendor, should be stamped by a bank, which may provide clues to a perpetrator's identity.

Suspicion isn't enough

Clients that believe fraud has occurred should not take disciplinary action against employees based on suspicion alone. Instead, they should contact an attorney or forensic accountant to investigate the matter and look for evidence of wrongdoing. But once they have solid evidence, they should proceed quickly: Misappropriated funds can move from jurisdiction to jurisdiction in a matter of seconds. ✧

Antitrust litigation demands sophisticated economic analysis

Almost 100 years ago, the Sherman Act was used to break up oil and tobacco monopolies. In the 21st century, courts continue to hear antitrust cases, from claims against corporate behemoths like Microsoft to those against trade associations and privately held companies. The complaints allege monopolization, tying arrangements, collusion and predatory pricing, among other violations.

With its complicated liability and damages issues, antitrust litigation requires comprehensive economic analysis.

Building an antitrust case

A financial expert can assist with the liability phase of an antitrust case, providing in-depth analysis of:

- ☑ Relevant markets,
- ☑ Industry conditions,
- ☑ Market definition,
- ☑ The defendant's market power,
- ☑ Barriers to entry in the relevant market,
- ☑ Misconduct of others in the industry,
- ☑ Potential business justifications, and
- ☑ Causation.

Parties on both sides of the litigation will require this type of analysis to prevail. The complexity of antitrust issues is evidenced by a discussion in the Federal Judicial Center's (FJC's) *Reference Manual on Scientific Evidence*. The manual emphasizes the vital role of expert economic testimony in antitrust litigation.

For example, let's look at causation, which is "a particular challenge," according to the FJC. The plaintiff must show more than a positive correlation between the defendant's misconduct and its claimed injury. An expert might compare market conditions in the period affected by the misconduct with conditions in unaffected periods and use the price differential as the measure of the resulting price elevation.

The defendant may counter that its misconduct was not the only difference between the two periods, citing factors such as increased costs or demand, general economic indicators (national price level and GDP, for instance) and industry-specific variables. As the manual notes, financial experts can perform regression analysis to adjust for factors other than misconduct, including a company's accounting policies.

Assessing the damage

The FJC manual describes two types of antitrust damages. When the plaintiff is the defendant's competitor

and claims injury caused by the defendant's misconduct, the appropriate measure of damages generally is lost profits. If the plaintiff is the defendant's customer or purchased goods in a market where the defendant's misconduct elevated prices, damages generally are measured by the excess charges. These damages can exceed the plaintiff's lost profits if the plaintiff passed on some or all of the price increase to its own customers.

The FJC manual identifies several damages issues that can arise in antitrust cases and call for expert testimony:

Scope of damages. A plaintiff may calculate damages based on all of its business activities, while the defendant will generally consider only the markets likely to be affected adversely by its alleged misconduct. The manual stresses that applicable law may limit the scope of antitrust damages even if it's possible for economic analysis to measure price elevation in all markets.

But-for conditions. Plaintiffs sometimes calculate antitrust damages based on the assumption that prices in the relevant market would have remained steady but for the defendant's misconduct. The defendant will likely argue that activities of the plaintiff and other competitors would have driven prices down regardless of its conduct, so that the plaintiff's damages are overstated. Perhaps the market would have lost some barriers to entry, allowing new competitors to claim a share of the profit pie and decrease the plaintiff's share.

Tying arrangements. The manual specifically addresses these arrangements, in which the purchaser of a "tying good" also must buy the "tied good." Purchasers of a manufacturer's camera, for example, may be forced to use the manufacturer's photo processing services. A purchaser-plaintiff would calculate its damages based on the price paid for the tied product. A competitor-plaintiff might assert that its sales would have been higher without the tie.

In either situation, the defendant might respond that, absent the tie, the price for the tying good would have been higher. The price for the tied good would drop because elimination of the tie would encourage entry into its market. As the FJC manual notes, a full and factual analysis is needed to determine pricing in the absence of a tie.

The sooner, the better

Given the impact expert economic testimony can have on both the liability and damages components of antitrust litigation, you should engage an expert as early as possible. An expert can help steer discovery and frame the legal issues to correspond with your damages theories. ✧

Proving predatory pricing

Economic experts are particularly valuable in predatory pricing cases, in which liability typically rests on a finding that the defendant's price has sunk below its average variable cost.

A common starting point is to identify the fixed and variable components of a mixed cost using the "high-low" method. The expert determines the highest and lowest costs, as well as related activity levels for those costs, and uses differentials to reach an estimated variable cost per unit. The expert plugs those figures into an overall cost formula to determine the fixed cost component of the defendant's price.

The method is straightforward, but it carries some potential pitfalls. Using only two costs makes the method vulnerable to aberrant outliers, which can lead to distorted figures. For example, natural disasters, strikes and equipment breakdowns can skew the results. The method, therefore, is perhaps best applied during the initial stages when only limited data is available. It can provide a roadmap for identifying relevant documents and data and estimating potential damages.

When greater information is gathered, an expert can perform in-depth regression or correlation analyses of the defendant's costs, including general trends, the nature of its costs, its cost behaviors and the relationships between costs.

Weighing the options

IRS, SEC offer guidance on stock option valuation

In late 2004, the Financial Accounting Standards Board (FASB) issued its controversial Statement No. 123(R), *Share-Based Payment,* which requires companies to expense stock options at fair value. In response, the Securities and Exchange Commission (SEC) released an SEC staff bulletin offering interpretive guidance on the statement's application. The IRS also has provided guidance on the subject.

Pricing models

The SEC guidance states that fair value estimates and assumptions made in good faith will not subsequently be challenged, regardless of the degree of discrepancy between estimates and actual outcomes.

The guidance approves the use of any valid option-pricing model, including the Black-Scholes-Merton model and "lattice" models, as long as it:

1. Is consistent with the fair value measurement objective,
2. Is based on established principles of financial economic theory, and
3. Reflects all substantive characteristics of the award, such as market conditions and postvesting restrictions.

The SEC staff supports the use of different valuation methods for stock option awards with different characteristics. It also permits companies to change their methods, without being deemed to have changed accounting principles, as long as they don't change methods frequently.

Valuation assumptions

FAS 123(R) requires companies to incorporate certain assumptions when valuing stock options, including the following:

Expected volatility. The SEC guidance provides insight on estimating volatility, especially "historical" and "implied" volatility. It also explains when a company may rely solely on one over the other.

For example, generally when using lattice models, companies should measure historical volatility on an unweighted basis over a period equal to or longer than the expected option term, based on daily, weekly or monthly stock price observations. Future events are considered only if other participants in the marketplace would consider them.

The guidance advises companies with actively traded options or similar financial instruments to consider implied volatility — that is, estimated volatility based on current market conditions rather than historical returns. Implied volatility is based on the market prices of the company's publicly traded options or similar financial instruments, determined by inserting the market price of traded options into a closed-form model.

The SEC staff lays out several factors that must be present before a company can rely solely on historical volatility or implied volatility in estimating its expected volatility.

Expected option term. FAS 123(R) requires companies to value options based on their expected terms rather than their contractual terms. According to the SEC, companies can estimate expected terms using historical stock option exercise experience if

it represents the best evidence of future exercise trends. Generally, the term should be at least as long as the vesting period but no longer than the contractual term. A company should not consider additional term reductions for an inability to hedge or sell.

IRS valuation requirements

Companies that offer stock options also must comply with IRS valuation guidance. Proposed regulations under Internal Revenue Code Section 409A impose significant tax consequences on the recipients of certain kinds of deferred compensation, including nonqualified stock options issued at less than fair market value (FMV). To avoid these consequences, companies need to conduct periodic valuations of their stock.

The proposed regulations allow companies to use "any reasonable valuation method" for purposes of Sec. 409A, but they outline three valuation methods that are presumed reasonable, including independent appraisals.

At the end of 2005, the IRS issued a notice providing relief from the requirements of the proposed regulations for certain options issued before Jan. 1, 2005. These options will be deemed granted at FMV for purposes of Sec. 409A so long as the company made a good-faith attempt to set an FMV exercise price.

Heading off challenges

The new rules dealing with the valuation of stock options are daunting but navigable. By establishing the proper valuation framework now, companies can avoid headaches down the road. ✧

Why comprehensive valuations are critical to ESOPs

According to the ESOP Association, the United States is home to about 11,000 employee stock ownership plans (ESOPs), covering 10 million employees or 10% of the private sector workforce.

Federal law requires ESOPs to conduct annual stock valuations on a specific date, typically the last day of the plan year. In addition, plan fiduciaries must ensure that ESOPs don't pay more than fair market value (FMV) for the shares of their associated companies. Failure to do so could lead to lawsuits and substantial excise taxes.

Factors in ESOP valuation

There's no shortcut for determining the FMV of an ESOP's shares. FMV cannot be derived, for example, solely from the company's value in a forced sale, the price a competitor would pay, or a predetermined formula in a shareholder agreement. Rather, valuation requires a comprehensive analysis of the company and its industry, on-site visits, interviews with key employees, and a review of the company's financial statements.

Valuators consider a variety of factors in valuing ESOP shares, including:

- The nature of the business and the company's history,
- The company's financial strength,
- The economic outlook in general and for the industry,
- The company's historical earnings and projected future earnings capacity,
- The company's dividend-paying capacity,

- ☑ Any goodwill and other intangible value,
- ☑ Recent stock sales,
- ☑ The market price of publicly traded companies in the same or similar business,
- ☑ The book value of the shares, and
- ☑ The amount of the company's debt.

Depending on the company and industry, other factors also may be relevant.

3 valuation methods

Valuators commonly turn to three methods when valuing an ESOP's shares:

1. Market multiples. Using this method, a valuator establishes representative levels of company revenues and earnings and applies an appropriate multiple. To avoid distortions caused by unusual or one-time occurrences, valuators typically look beyond the most recent financial statements, perhaps going back as far as five years. The multiple is usually based on a comparison of companies with similar expected growth rates and other characteristics.

2. Comparable transactions. This method is similar to the market multiples method in that the valuator capitalizes representative revenue or earnings levels using appropriate multiples. The multiples, however, come from publicly announced merger-and-acquisition transactions involving comparable companies.

3. Discounted cash flow. With this method, the valuator calculates the present value of the company's expected future net cash flows by applying a discount rate that reflects risk.

The role of discounts

Discounts for lack of marketability and lack of control can have a dramatic impact on the value of ESOP stock. The lack-of-marketability discount may be necessary if no ready market exists for the ESOP's shares. The discount can be reduced if the employer has set aside assets or otherwise planned to guarantee that sufficient funding is available to cover future repurchase obligations.

"Put options" may also decrease marketability discounts. Private companies must grant put options to create a market for the shares during specified periods by allowing participants to sell their stock back to the company at the current FMV. But put options may be subject to a deferral of 15 years or more, leading to discounts of at least 5% to 15%.

> **ESOPs with as little as 34% of the employer's stock, however, can sometimes block certain decisions.**

A discount for lack of control is usually applied to minority interests that don't provide control over the direction of the company. ESOPs with as little as 34% of the employer's stock, however, can sometimes block certain decisions, which would reduce the discount. And some shareholders may be contractually obligated to sell additional shares to an ESOP to shift it to a position of control, also reducing or eliminating the discount.

Comprehensive is best

The rules surrounding ESOPs are complex, and myriad issues could arise related to ESOP valuations. A qualified independent valuator can help ensure that valuations of ESOP-owned stock withstand scrutiny by taking the time to consider all of the relevant factors and applicable discounts. ✧

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