

A closely held manufacturing company with 100 employees and more than \$30 million in revenues that we'll call "Wapello Manufacturing, Inc.," was having unusually high monthly overhead variances. The CEO hired an outside consulting accountant to investigate the problem, which resulted in the arrest of the company's controller for embezzling nearly \$1 million from the company over three years.

## C A U T I O N :

# *Fraud Overhead*

*Overhead accounts are a breeding ground for fraud.*

*What to do?*

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## Table 1: *Selected Fraud Symptoms*

### *Analytical Symptoms*

*Ending inventory balances appear too high or are increasing too fast.*

*Reported cost of goods manufactured/sold (COGS) balances appear too high.*

*Overhead variances increase in frequency and/or size.*

*Increasing ratio of ending inventory account balances to ending inventory physical counts.*

### *Accounting/Documentary Symptoms*

*Inventory and/or COGS transactions aren't recorded in a complete or timely manner.*

*End-of-period inventory and/or COGS adjustments are high or increasing in frequency.*

### *Control Symptoms*

*Management overrides internal controls related to inventory or COGS.*

*Overhead application rates are raised or lowered by management throughout the year.*

### *Behavioral/Verbal Symptoms*

*Management or employees give inconsistent or vague responses to inventory and/or COGS inquiries.*

*Unusual delays occur in providing requested inventory and/or COGS information.*

*The behavior or responses of management are suspicious when management is asked about inventory and/or COGS transactions, vendors, or accounts.*

### *Lifestyle Symptoms*

*Loan covenants benefiting officers have a collateral relationship to reported/physical inventory levels.*

*Managers or employees have significant personal financial pressures.*

### *Tips/Complaints*

*Complaints from vendors/customers that relate to inventory.*

*Complaints from employees and other stakeholders about noninventory cash transactions. Often, a fraud in the overhead accounts can be traced to inappropriate overhead charges deliberately misdirected from operating expense and other accounts.*

Source: Adapted from W. Steven Albrecht and Chad Albrecht, *Fraud Examination and Prevention*, Thomson South-Western, Mason, Ohio, 2003, pp. 272-273.

## **\$1 MILLION FOUND**

The forensic accountant/consultant investigated Wapello's accounting records, including the executive payroll, and discovered that the controller had been fraudulently issuing additional paychecks to himself. In addition to the payroll discrepancies, the consultant discovered that the controller had destroyed many of the accounting records from prior years. There were missing purchase invoices, which made it necessary for the consultant and Wapello people to reconstruct the payables accounts, especially the company's freight bills.

The consultant also found that the controller was embezzling money through the loans payable account. All the

fraudulent transactions were charged to the manufacturing overhead account, mainly as fictitious tool purchases.

How could this fraud have occurred?

## **"BLACK BOX" OVERHEAD ACCOUNTS**

First, any company is likely to be more vulnerable to fraud if it has grown from microsize to midsize. A small company with a single or small group of owners tends to centralize all decision making at the executive management level, with little or no control policies in place. As the company's operations grow, there's a need to implement formal internal control procedures, but the legacy of "small firm" management style may linger through the growth period.

And that usually means that putting adequate internal controls in place often gets overlooked or deferred because available resources are used to support more “front-line” activities.

Moreover, the potential of fraud is exacerbated at midsize companies when the following types of conditions exist:

- ◆ Few—if any—controls over upper management, such as requiring duplicate signatures on payroll checks.
- ◆ Accounting record keeping is concentrated in a few hands, with little separation of duties.
- ◆ There’s a culture of implicit employee trust, especially in long-standing employees and professional accountants.
- ◆ There’s no external audit.
- ◆ Owners have little or no accounting knowledge.
- ◆ The company has relatively large overhead accounts where fraudulent expenses can be hidden.

Furthermore, overhead costing in midsize manufacturing companies is particularly susceptible to fraud because the costing is complex, the accounts have relatively large dollar values, and nonaccounting managers don’t understand how they work.

To nonaccountants, overhead accounts are a confus-

ing “black box” because accumulating and applying overhead is one of the least understood activities of the costing process. The manufacturing overhead account and associated subsidiary records such as the tooling account are some of the most exploitable accounting records. The manufacturing overhead account is a particularly large “sink” for all the various overhead

items, such as plant depreciation, indirect salaries, plant supplies, and plant insurance. Fraudulent expenses can be hidden among the many journal entries that are made to this account that likely won’t rise to the audit materiality threshold individually. Also, predetermined overhead rates are typically applied to production, and overhead variances for underapplied and overapplied overhead are to be expected. These overhead variances could include fraudulent expenses that can be explained as part of the estimating errors.

Because of this, nonaccountant owners/managers may find the whole costing process in general opaque and highly technical, with cost variances in particular difficult to understand. Consequently, they’ll often leave the details to a controller or other trusted employee. But

**Table 2: Occupational Fraud by Company Size**

<i>Firm Type</i>	<i>Median Loss Per Fraud Scheme</i>	<i>Firm Characteristics</i>
<i>Micro/Small</i>	<i>\$127,500</i>	<i>1-99 employees. Executive management is owner concentrated. Has few or no formal accounting controls.</i>
<i>Midsize</i>	<i>\$135,000</i>	<i>100-999 employees. Specialized nonowner executive management. Has minimal separation of accounting duties.</i>
<i>Large</i>	<i>\$53,000</i>	<i>1,000-9,999 employees. Nonowner executive management. Has formal internal controls and external audit.</i>
<i>Global</i>	<i>\$97,000</i>	<i>10,000 or more employees. Executive management reports to formal board of directors. Has an internal audit department and structured controls.</i>

Adapted from: The Association of Certified Fraud Examiners, 2002 Report to the Nation: Occupational Fraud and Abuse, pp. 17-18.

sometimes that employee can't be trusted.

## A SETTING FOR FRAUD

At Wapello Manufacturing, the outside consulting accountant identified a number of accounting system issues and inadequacies after completing his three-month investigation. Among them were the following:

**The use of a predetermined plant-wide overhead allocation method.** The company had growing overhead variances because this allocation method tends to result in less accurate overhead cost assignments to products as the number and variety of products expand.

**The accounting system lacked adequate separation of duties.** The controller had sole control of both the product costing system and payroll preparation. The controller was authorized to prepare journal entries, sign payroll checks, and reconcile bank statements. Because no formal CFO had ever been hired, the controller effectively performed the duties of both positions.

**The social characteristics of top management.** The executive management displayed social attributes that concerned the consultant. First, the owner/CEO tried to keep executive payroll secret by delegating preparation of it to the controller, facilitating the fraudulent executive-payroll transactions. Next, the controller was uncooperative and resistant, refusing to speak with the consultant unless the president of the firm was present. Finally, both the CEO and president mistakenly trusted the skill level and honesty of the controller unconditionally.

## INTERNAL CONTROLS

Robust internal controls of overhead accounts can help prevent fraud.

Wapello's consultant recommended strengthening the company's internal controls over its manufacturing overhead transactions by taking the following measures:

- ◆ All adjusting entries to manufacturing overhead and inventory accounts should be reviewed by an independent member of management.
- ◆ Significant manufacturing overhead variances should be analyzed both within and across time periods to identify anomalies.
- ◆ Nonaccounting management should be told about complaints concerning high product costs.
- ◆ The roles of product costing and payroll preparation should be separated.
- ◆ An improved overhead allocation system, such as departmental or activity-based costing, should be implemented if it is cost beneficial.

Other recommendations from the consultant included establishing an internal audit function and developing a formal system whereby the outside auditor would report control weaknesses separately to both accounting and nonaccounting management.

To that list, we recommend adding close monitoring of fluctuating cost of goods manufactured, cost of goods sold, inventory balances, and looking out for other symptoms of potential fraud, as shown in Table 1.

## MORE MEASURES

Paradoxically, more money is fraudulently stolen from smaller companies, which have less elaborate accounting control systems, than is stolen from large ones, as shown in Table 2.

As companies grow in size and complexity, it's important to review and revise their internal controls to make sure they are adequate to deter fraudulent activity. In particular, as companies grow from micro/small to mid-size businesses, owner/managers can no longer monitor all activities by physical observation alone, nor can they trust all new, nonfamily-member employees to be honest.

Among the lessons Wapello's CEO learned from this ordeal is to separate accounting duties; closely monitor accounts that are obvious places to hide fraudulent transactions, such as manufacturing overhead; and make sure proper internal controls are in place. ■

The authors thank University of North Florida graduate students Jamie D. Collis, Harry I. Eloranta, Melissa J. Gruebel, Aaron Kendrick III, Betty J. Saunders, and Christopher M. Shetzline for their work on the "Wapello" case.

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