Part II

Using Financial Statements to Assess Cash Health

"Sorry, Cedric the King cut my budget for additional fools. He said the project already had enough fools on it."

In this part . . .

The three chapters in this part of the book explain techniques and methods for getting the most cash-flow information from your basic financial statements. Chapter 5 explains how to read the balance sheet for "hidden" cash information — information that isn't always apparent and doesn't jump out at you. Chapter 6 offers a useful technique for analyzing cash flow from profit, which avoids the time-consuming task of reading a formal statement of cash flows. Chapter 7 clarifies the very important distinction between liquidity and available cash. Confusing these two critical aspects of cash flow when running a business is a major mistake we help you avoid.

Chapter 5

Mining the Balance Sheet for Cash

In This Chapter

- Understanding what the balance sheet does and doesn't tell you
- Going through the balance sheet with a fine-toothed comb
- Removing any white lies from the balance sheet
- Finding money you didn't know you had

In the good old days, before the financial crisis that started to engulf the world's capital markets and economies in 2007, business owners and managers tended to focus on the financial statement with the highest degree of perceived value: the income statement. With capital plentiful (whether it was debt or equity), the focus of most businesses was to drive top-line revenue and improve bottom-line profitability. This approach was far and away one of the easiest, most reliable (or so they thought), and most tried-and-proven methods for company owners and managers to evaluate the performance of their businesses (not to mention to assure their year-end bonuses). As for managing the balance sheet and statement of cash flows (the two forgotten financial statements), well, that's what bean counters were for, because the financial information provided from these reports was deemed simply too complicated or less important than sales and profitability. But over the past three years, business owners and managers learned very quickly and painfully that if their business wasn't liquid with readily available access to cash and capital, which at its heart is a strong balance sheet, life was going to be very difficult.

One of the best descriptions offered about the so-called "Great Recession" experienced in the United States was provided by a number of economists who simply stated the obvious. Past recessions were basically income-statement driven in that sales levels decreased, resulting in lower profits being earned and thus the need to reduce expenses, including eliminating employees where needed. What separated the recent recession from others, as noted by Richard Koo (of the Nomura Research Institute) among others, is that it was a *balance sheet* driven event, centered in the unavailability of capital, cash, and liquidity to businesses. To companies that had strong balance sheets with ample cash and liquidity, a once-in-a-lifetime opportunity was presented to capitalize on the marketplace turmoil by taking market share. And for the companies that didn't (like AIG and GM, which benefited enormously from the generosity of the government), unfortunately, weak balance sheets proved catastrophic.

The essence of a financially strong business resides not just in how much profit is generated but also, more importantly, in how much financial muscle and capital resources reside in the balance sheet. So this chapter is designed first to provide tools to assist you with understanding what the balance sheet is really saying and then to let you know how the balance sheet can be worked with, managed, and controlled to improve cash flows and financial strength.

Reading the Balance Sheet from a Cash-Flow Perspective

The balance sheet is most often viewed from a relatively simple perspective of assessing what assets a company owns compared to its obligations or liabilities. The difference between those numbers is the company's net equity (which hopefully is a positive number for most businesses). If you are evaluating the balance sheet from only this perspective, however, you miss a much larger and more important concept: understanding the balance sheet from a cash-flow point of view. This perspective is focused not on the stated value of a company's assets and liabilities but rather on how quickly assets can be converted into cash (that is, sources of cash) and how soon liabilities will consume cash (the uses of cash). The basic structure of almost all company balance sheets is centered on this one all-important concept: the proper ordering of assets and liabilities.

The balance sheet must balance! That is, total assets must equal total liabilities plus net equity. This concept is so simple, you may ask why we even bother to mention it, and the reason is simple. For non-accounting/financial types, this simplest of equations is often the most difficult to comprehend.

The standard balance sheet structure used by most businesses is very straightforward and is based on the following ordering concepts:

- **All company assets are listed on the left side of the balance sheet** (when the balance sheet is presented in a side-by-side format, as in Figure 5-1).
- **The assets are classified as either current or long term.**
  - A *current asset* classification assumes the asset will either be converted into cash within one year (as is the case with trade receivables) or, conversely, the asset will be consumed within one year (like a prepaid insurance policy).
  - *Long-term assets* represent assets that will convert into cash past a year period (like a note receivable due in three years) or will be consumed over an extended period of time (for example, equipment used to manufacture products).

- **All company liabilities are listed on the right side of the balance sheet** (when the balance sheet is presented in a side-by-side format, as in Figure 5-1).
- **The liabilities are classified as either current or long-term.**
  - A *current liability* classification assumes that the liability will either consume cash within one year (like trade payables) or will be worked off within one year (a customer deposit which turns into a sale, for example).
  - *Long-term liabilities* will consume cash past a year period (for instance, a note payable due in three years) or will be worked off over an extended period of time (like a settlement on a lawsuit that will be repaid over three years).
- **The company's equity accounts are presented on the right side of the balance sheet, after the liabilities and clearly segregated from them, with no distinction made between current and long term.** Equity is generally considered a long-term or permanent commitment to support business operations.

Figure 5-1 represents an example of a standard balance sheet for a distribution company that we use as an example throughout this chapter.

In the title of the balance sheet in Figure 5-1 is the word *Unaudited,* which is a clue to the reader to be aware of the chance of mistakes, omissions, or irregularities. As we address throughout this chapter, the difference between audited and unaudited financial information is as significant as the difference between night and day. Audited financial statements indicate that an independent and qualified third party (most commonly a certified public accountant) has examined, tested, reviewed, and evaluated the financial statements in accordance with GAAP (generally accepted accounting principles) and rendered an opinion on the quality of the financial statements (in an attached report). Unaudited financial statements generally are prepared internally by the company's management without any third-party verification, so obviously they carry higher levels of risk than audited financial statements in terms of assessing the financial health of a business and basing a decision on the assessment (such as extending credit to a customer).

How assets are listed in the balance sheet in relation to generating cash

Upon close review of the ordering of assets in the balance sheet in Figure 5-1, you can see that the flow is very logically based on the nearness of turning assets into cash (or being consumed internally). We take a look at each category of asset in this section.

ACME Distribution, Inc. — Unaudited Balance Sheet as of 12/31/2010			
Assets	**Amount**	**Liabilities**	**Amount**
Current Assets:		Current Liabilities:	
Cash and Equivalents	$265,000	Trade Payables	$385,000
Trade Receivables	$750,000	Accrued Liabilities	$150,000
Inventory	$500,000	Line of Credit Borrowings	$350,000
Prepaid Expenses	$75,000	Current Portion, Long-Term Debt	$0
Shareholder Advances	$150,000	Other Current Liabilities	$75,000
Total Current Assets	$1,740,000	Total Current Liabilities	$960,000
Long-Term Assets:		Long-Term Liabilities:	
Property, Plant, and Equipment	$2,240,000	Notes Payable, Less Current	$1,000,000
Less: Accumulated Depreciation	($900,000)	Capital Leases, Less Current	$150,000
Net Property, Plant, and Equipment	$1,340,000	Subordinated Debt	$250,000
Other Assets:		Total Long-Term Liabilities	$1,400,000
Affiliate Note Receivable	$285,000	Total Liabilities	$2,360,000
Intangible Assets, Net	$250,000	Equity:	
Deferred Income Taxes	$185,000	Common Equity	$100,000
Other Long-Term Assets	$50,000	Retained Earnings	$990,000
Total Long-Term and Other Assets	$2,110,000	Current Earnings	$400,000
		Net Equity	$1,490,000
Total Assets	$3,850,000	Total Liabilities and Equity	$3,850,000

Figure 5-1: Sample of an unaudited balance sheet showing assets, liabilities, and equity.

Trade accounts receivables

Trade accounts receivable represent the final stage of the selling cycle before the sale actually turns into cash. Generally, trade accounts receivable are listed right after cash because this asset class tends to turn over and convert to cash relatively quickly. Although the actual conversion time (that is, from the point of which credit is extended to the point cash is received) varies between different types of businesses, a range of 30 to 45 days is very commonplace for companies that extend credit terms to customers. This calculation is known as the *days sales outstanding* in receivables.

Inventory

Next up in the asset-ordering structure is inventory, which is usually comprised of three subcomponents including raw materials, WIP (work in process, or partially completed products), and finished goods. Inventory takes longer to turn into cash, because it first must be produced or purchased, and then sold (with a trade receivable generated), and finally turned into cash. No set standard tells you how much inventory a company should keep on hand to support ongoing operations because the numbers vary wildly by different industries. For companies that manufacture goods, the inventory levels tend to be higher as a result of having to support the three primary types of inventory (raw, WIP, and finished goods). For distribution companies that

generally only carry finished goods, the amount of inventory tends to be lower (in relation to the revenue level of the company), and for retail companies such as Walmart, the amount of inventory is even less (because the goal is to quickly turn over inventory.

Prepaid expenses

Prepaid expenses generally consist of insurance policies that cover a period of time (for instance, a general liability insurance policy that covers the company for a year), rents for facilities and equipment (which are usually paid in advance in the preceding month), advertising programs to reserve space in different media forms such as the Internet and magazines, and various other expenses paid for in advance.

Unlike trade accounts receivable and inventory, which a company strives to turn into cash, prepaid expenses are not likely to be turned into cash. These expenses are consumed over a period of time to support continued company operations. But this doesn't excuse management from properly controlling and monitoring these types of assets, as your vendors, whether it's your landlord or advertising agency, would like nothing more than for you to pay in advance so they can use your cash.

In order to proactively manage prepaid expenses to limit tying up cash, active negotiation is critical. If the landlord wants two months of rent on deposit, offer one (especially if it's a tenant's market). If a law firm or advertising agency wants a large retainer to start work, offer a hint that you need to obtain a competitive bid from another firm but would get started if the upfront cash requirement was reduced. If the insurance company wants your general liability policy for the year paid in advance, request quarterly installments. In most cases, the parties requesting the cash have the room to be flexible.

Other current assets

The final type of asset located in the current asset section of the balance sheet is generally reserved as a catchall for "other" current assets. These assets may include a temporary advance provided to an employee, a short-term deposit or retainer paid, other non-operational-based receivables such as an income tax refund expected to be received within one year, and so on. Some of these assets may in fact turn into cash, while others may not. But both demand the same level of management support, because, similar to prepaid expenses, other current assets can quickly consume cash.

Various strategies are available to help manage other current assets (in terms of consuming cash), such as establishing a clear company policy where employee advances are limited to 50 percent of an employee's monthly compensation and must be repaid within 30 days and making sure that estimated income tax payments are as accurate as possible (to avoid overpaying).

Some types of current assets lumped into "other" may be separately presented if they are deemed material or if multiple immaterial assets are grouped together. In the accounting world, the use of the words *material* and *immaterial* is very important to understand. If an asset is deemed to be immaterial in size, then it tends to get lumped together with other smaller assets and classified in the catchall "other current assets." If an asset is deemed material, then it's presented separately in the financial statements. Of course, the ultimate decision as to what is material or immaterial has led to more than a few lively discussions between management, auditors, and other external parties.

Property, plant, and equipment

Property, plant, and equipment is the primary category for long-term assets. This grouping of assets includes basically all types of production equipment, machinery, facility leasehold improvements, autos, buildings, land, furniture, fixtures, and so on — everything owned by the company and anticipated to be used/consumed in its regular operations over an extended period of time (ranging from at least 1 year to as long as 30 years). Similar to prepaid expenses, these assets aren't turned into cash directly but rather provide an investment basis for a business to deliver its products or services to the market in the most efficient and cost-effective manner possible. Furthermore, these assets are depreciated over the time period during which the asset is anticipated to be consumed. Some assets, such as computers, have a very short depreciation time period of just a few years. For other assets, such as a building, a time period of 25 years may be used to depreciate the asset. The accumulation of depreciation of all asset types is summed and reflected as a reduction to the original cost of this group of assets to produce a net asset value.

Other assets

All other assets owned by the company that are long term in nature (that is, their values will take more than a year to be realized) are the last items presented in the asset section of the balance sheet. Common types of other assets include company-owned intellectual property (such as patents, trademarks, and software development costs), deferred tax assets, permanent deposits, and notes receivable (greater than a year due). Similar to other current assets, some of these long-term types of assets may eventually turn into cash, such as a long-term note receivable, whereas others are consumed in the business, such as company intellectual property.

The long-term asset segment of the balance sheet is subject to the same concept of material versus immaterial as the current asset segment. As a company becomes older, grows larger, and undertakes more complex transactions, more long-term assets may be deemed material and disclosed separately on the balance sheet. You see more separate disclosures for other long-term assets than for other current assets.

How liabilities are listed in the balance sheet in relation to consuming cash

As with assets, the ordering of liabilities in Figure 5-1 is based on the relative closeness of when the liability has to be satisfied and consume or use cash.

Trade accounts payable

To start, the liability that will most likely consume company cash in the shortest time period is generally trade accounts payable. *Trade accounts payable* represents valid claims against the company for the purchases of goods or services that have been formally presented to and approved by the company. For most companies, trade accounts payable require payment anywhere from 15 to 60 days of the date of the balance sheet.

One of the most effective ways to generate extra cash for a company is to request that vendors and suppliers offer extended payment terms for paying invoicing. For example, a jewelry retailer that generates a large percentage of its annual sales during the Christmas holiday season needs to secure inventory well in advance of the actual selling season to make sure the proper type and amount of products are available. Requesting an additional 60 days of time to remit payment to manage seasonal cash-flow pressure is more than acceptable, and the inventory may be ordered and purchased in the summer but not paid for in cash until December. Countless other situations are utilized by companies to extend payment terms, but the point remains the same. Using the cash of other businesses to support your operation can be a very inexpensive source of capital.

Accrued liabilities

After trade accounts payable, accrued liabilities are generally the next item listed in the current liability section of the balance sheet. Accrued liabilities consist of obligations a company knows it has incurred but doesn't yet know a final amount or due date for. Obligations for future commissions, property taxes, product warranties, employee vacations, and so on all fall into this category and are quite often based on estimates (initially) to ensure that a reasonable calculation of the obligation due is reflected in the financial statements.

Most accrued liabilities eventually consume cash in one fashion or another but may take slightly longer than traditional trade accounts payable. For example, a vendor invoice provided from a supplier with net 30-day payment terms will consume cash in approximately 30 days. Commissions accrued for a sales representative that are due and payable based on when the sale is actually received in cash may not be paid out for 45 to 60 days.

Line of credit borrowings

Line of credit borrowings represent the amount of borrowings a company utilizes from a working capital lending agreement established with a bank or other lender. The working capital lending agreement is almost always collateralized by either a company's trade accounts receivable or inventory. For a more detailed understanding of how these agreements are structured, see Chapter 11. Generally, the term for most of these agreements is one year in length, indicating that a current liability is present.

One controversial way to improve the current ratio of a business is to make sure the working capital lending agreement has an expiration date greater than one year. For example, if your fiscal year ends on 12/31/10 and your working capital lending agreement expires on 6/30/12, then most auditors consider this a long-term liability because it expires 18 months after the year-end. By moving the liability from current to long-term, a business's current ratio calculation appears stronger. But at issue is the fact that the lending agreement, which may be considered long-term because of its expiration date, is secured by current assets that generally will turn into cash in well less than a year. Or looking at it from another perspective, if the assets securing the lending agreement, such as trade receivables, are substantially collected within four months, then the outstanding balance on the lending agreement needs to decrease to stay in compliance.

So is this really matching current assets with current liabilities? Well, we leave that discussion to the auditors. What's important to remember is that even though the lending agreement may be classified as long-term in the financial statements, an understanding of how that liability may consume short-term cash flows should be clear.

Current portion of long-term debt

Unlike line-of-credit borrowings, the current portion of long-term debt represents the portion of note-payable borrowings that's due within one year. For example, if you borrow $1 million to finance equipment purchases and the loan must be repaid in 60 equal principal payments of $16,666.67 each, then the $200,000 you pay in cash in the first 12 months is considered a current liability. This system of apportioning applies to all forms of long-term debt, including formal notes payable, capital lease obligations, issued bonds, and others.

Other current liabilities

As you may have guessed, *other current liabilities* are basically the opposite of other current assets. Other current liabilities may include deferred revenue (like an annual license fee billed to customers in one installment but earned over a 12-month period), customer deposits, and other miscellaneous current liabilities. Similar to prepaid expenses, certain other current liabilities tend to be earned back into the business and ultimately don't consume cash.

Guaranteed debt commitments

This group covers basically all long-term liabilities that have set payment terms and that are subordinated by a legally binding agreement such as notes payable, loans, capital lease obligations, and other forms of debt. As previously discussed, the portion of the debt commitments that is due within 12 months is classified as current liabilities, leaving the balance to be treated as long-term liabilities.

Other long-term liabilities

The classification of *other long-term liabilities* captures various other long-term business obligations including commitments, contingencies, deferred revenue earned past 12 months, and others. For most businesses, other long-term liabilities are generally fairly small in size. However, an example of a large long-term liability is an accrual for the restoration of a mining site to its original state by a mining operation after the mineral has been extracted. Over a period of time, the mine operator estimates how much restoring the property (after the mining activities are completed) will amount to, realizes an expense in the current financial statements to account for this cost, and then records the future long-term liability to properly disclose the anticipated obligation. Eventually, well out in the future, the mine is closed and money is then spent to reclaim the property.

What the balance sheet doesn't disclose about cash flows

Despite all the information the balance sheet does provide on cash flows, it only represents part of the cash-flow story. Valuable information must be harvested from other sources to truly understand a business's complete cash-flow picture. In this section, we give you an overview of the balance sheet's limitations.

Capturing only a moment in time

Remember that the balance sheet is based on a snapshot of a company's financial condition at a point in time. It's very different from the income statement and the cash-flow statement, which measure the performance of a business over a period of time (monthly, quarterly, or annually). The balance sheet is a great tool to help understand where cash has been invested/committed and what source provided the cash, but it doesn't offer an explanation of the entire cash-flow cycle.

Reflecting history more accurately than the present

The balance sheet provides a historical perspective on the cost or book value of the assets and the amount of liabilities or obligations owed by a

business. The balance sheet doesn't provide a proper picture of what the assets may actually be worth in the market if an asset needs to be liquidated outside the normal course of business. For example, if a company needs to raise cash relatively quickly, it may be forced to sell assets at a discount to cost or the net book value. In the same breath, a building or piece of land purchased decades ago may be grossly understated in value as a result of long-term appreciation in commercial real estate.

Any company that experienced pain during the Great Recession and had to pledge assets against a loan quickly became familiar with the acronym *FLV*. *FLV* stands for *forced liquidation value* and is a tool used by lenders that estimates the value of an asset in the worst possible scenario (that is, a forced or fire sale of the asset required in a hostile market). They use this figure to calculate the amount of a loan they're willing to extend to make sure that at any point in time, if the company can't repay the loan, then the asset offered as collateral for the loan can be liquidated and the lender will be covered. A mistake businesses often make is assuming that just because they paid X dollars for an asset means that the asset still has a reasonable value compared to the original cost and can borrow against this value. Management's somewhat overly optimistic perception of asset values may lead them to believe they have more assets available to pledge as collateral and thus can borrow higher amounts.

Failing to help with future plans

When analyzing a company's cash flow, a simple historical evaluation of the financial statements most likely doesn't suffice, especially for companies that are undergoing a significant change in the operating model or are new and anticipate rapid growth. As much as a business's historical financial information may support the "hows" of cash flow (that is, how much cash has been consumed by asset growth? how much cash was burned to support the launch of a business? and so on), it doesn't support management's future plans. If managers need to know what source of cash is available to support future operations or know when the company will run out of cash at its current growth rate, they need to be fully engaged in the company's strategic planning process and have access to and understand all critical reports, goals, or objectives.

Offering internal information

The balance sheet cannot tell a company how much cash may be available from external business sources to support its operations. Debt and equity markets are constantly changing. One year may provide more financing options than you can shake a stick at, and another year you may find that basically every available option has been eliminated. For an example, look no farther than the period of 2006, when capital was readily available, to 2009, when the debt and equity markets basically ceased to operate.

In order to gain a complete understanding of a business's cash-flow cycle and properly manage cash resources, you need to digest and understand all relevant

information, from additional internal financial statements, such as the income statement, to available external data on the state of capital markets.

Banks tend to have far more capital/cash to support your business when you least need it. And conversely, when your business is in greatest need of capital/cash, the banks seem to have little to offer. This drives home the importance of planning, planning, and more planning (covered in Chapters 8 and 9) and the need to always save for a rainy day.

Giving the Balance Sheet a More Thorough Examination

In the health industry, as a patient becomes older, his health risks tend to increase, and, as a result, more thorough examinations commonly are required. Well, the same logic holds for the balance sheet. When companies get older and begin to mature, their balance sheets tend to become more complex as, over time, the volume and diversity of transactions increase. As a result, the aging of the company and its financial statements often trigger the accumulation of excess baggage (from years of neglect) on the balance sheet, which, if left unchecked, can quickly mislead management as to the company's financial health and strength.

The goal of this section is to provide a clear understanding of how to perform a basic financial analysis on the balance sheet to help you identify where problems may reside, when assets are lying to you, and why your liabilities may not be telling the truth.

Just because an asset is stated at "cost" on the balance sheet doesn't mean that the value of the asset if sold or liquidated will match. Market value is often quite different from the original cost when you have a need to turn the asset into cash in a timely manner. More than a few business owners and managers have experienced reverse sticker shock when the need arises to liquidate an asset in a less-than-favorable economic climate. Unless your business is TBTF (too big to fail), don't expect freely operating capitalists to feel your pain.

Using key balance sheet performance-measurement tools

The best way to begin to evaluate and understand your balance sheet is by applying the most commonly used financial performance measurement tools utilized by accounting and financial professionals throughout the country.

Note that these measurement tools are focused on evaluating a company's financial strength at a point and time (for example, as of 12/31/10) rather than over a period of time (for the three-month period of 10/1/10 through 12/31/10). As such, these financial performance measurement tools are geared toward evaluating a company's strength as measured by its solvency and liquidity.

In addition to the financial performance measurement tools we discuss in this section, countless others are available and utilized by professionals operating in different industries, but they're beyond the scope of this chapter. However, the goal of applying all financial performance measurement tools remains the same: to complete an independent and objective evaluation on the company's financial statements to assess its financial health, strength, and stability.

Using the same sample company as presented in Figure 5-1 (the balance sheet), Figure 5-2 shows the six measurement tools we discuss in this section.

ACME Distribution, Inc. — Unaudited Business Performance Measurement Tools as of 12/31/2010

Net Working Capital:	Amount	Days Sales Outstanding in Trade Receivables:	Amount
Current Assets	$1,740,000	Annual Sales	$8,043,750
Current Liabilities	$960,000	Average Monthly Sales	$670,313
Net Working Capital	$780,000	Trade Accounts Receivable Balance	$750,000
Current Ratio:		**Average Months Outstanding in A/R**	1.12
Current Assets	$1,740,000	Average Days Outstanding in A/R	40.00
Current Liabilities	$960,000	Days Costs of Goods Sold Outstanding in Inventory:	
Current Ratio	1.81	Annual Costs of Goods Sold	$6,032,813
Quick Ratio:		Average Monthly Costs of Goods Sold	$502,734
Current Assets	$1,740,000	Inventory Balance	$500,000
Less: Inventory	($500,000)	Average Months Inventory O/S	.99
Less: Prepaid Expenses	($75,000)	Average Days Inventory O/S	29.84
Less: Other Current Assets	($150,000)	Debt-to-Equity Ratio:	
Adjusted Current Assets	$1,015,000	Total Debt or Liabilities	$2,360,000
Current Liabilities	$960,000	Net Equity	$1,490,000
Quick Ratio	1.06	Debt-to-Equity Ratio	1.58

Figure 5-2: Using measurement tools to assess business performance.

GIGO, or *garbage-in, garbage-out,* is a simple concept that's extremely important to understand. If the financial information you apply the financial performance measurement tools to is "garbage" (in other words, unreliable, inaccurate, incomplete, or otherwise bad), then the results produced from applying the measurement tools will also be "garbage" (and should not be relied on). Don't bother applying financial performance measurement tools to unreliable financial information.

Net working capital

To determine net working capital, total current liabilities are subtracted from total current assets. Generally speaking, a positive figure should be present for most businesses. If this ratio is negative, it implies that the business doesn't have enough short-term or liquid assets to cover its short-term liabilities.

Current ratio

Taking the company's total current assets and dividing them by its total current liabilities determines the current ratio. A current ratio of greater than one to one should be present, because a ratio below that level implies a possible liquidity problem.

Quick or acid-test ratio

This ratio represents an extension of the current ratio. It's calculated by taking the total current assets, less inventory and other current assets (such as prepaid expenses), and then dividing this adjusted figure by total current liabilities to produce the quick, or acid-test, ratio. The higher the ratio, the better. However, having a ratio of less than one to one is common, especially for companies with significant levels of inventory. The idea with this ratio is to evaluate just the company's most liquid assets (generally cash and trade accounts receivables) in relation to its current liabilities to drill down into another measurement of liquidity.

Days sales outstanding (DSO) in trade accounts receivable

Trade receivables divided by average monthly sales multiplied by 30 days produces the days sale outstanding in trade accounts receivable figure. Lower numbers with this calculation are usually positive, because they indicate a company is doing a good job of managing this asset and not consuming excess capital. Again, although the DSO will vary by industry, keeping receivable turnover rates lower than 30 days or one month is generally very positive.

If your company is growing rapidly or has significant seasonal sales, don't use average monthly sales for this calculation, because your numbers won't accurately reflect the state of affairs. Instead, use an average monthly sales figure that is more representative of more recent business activity. For example, if your business sells cold-weather gear such as snow shovels and snow blowers, you stock up on these items starting in the fall so your business probably has a peak selling period of August through December and then a falloff starting in the spring. So when applying this calculation, your days sales outstanding in trade accounts receivable balance is best measured against the seasonal sales peak versus average monthly sales for the year.

Days costs of goods sold outstanding in inventory

The *days costs of goods sold outstanding in inventory* figure is found by dividing inventory by average monthly cost of goods sold and multiplying by 30. You usually want a lower number with this calculation because it indicates that your company is doing a good job of managing this asset and not consuming excess capital.

Note: If your company is growing rapidly or has significant seasonal sales, average monthly costs of goods sold can be misleading. Instead, you want to use an average monthly costs of sales figure that is more representative of more recent business activity. For example, if your company has recently doubled the size of product offerings to the market by tapping new sales channels (such as selling products on QVC), the period of time the new products have been sold offers a better comparison to your inventory levels (as it is only logical that inventory levels are higher to support increased sales activity).

Debt-to-equity ratio

Total debt (current and long term) divided by the total equity of the company equals the debt-to-equity ratio. Higher ratios indicate that the company has more financial leverage (refer to "Unlocking Hidden Cash from the Balance Sheet," later in this chapter, for a discussion on financial leverage), which translates into more risk being present.

Evaluating your assets

In my (Tage Tracy's) 20 years of professional experience with financial statements, I've yet to see a balance sheet that isn't lying in one form or another. Most companies aren't intentionally committing fraud and/or the willful intent to deceive; the financial statements presented have simply not been properly evaluated and adjusted to make sure that all balance sheet accounts have been classified correctly and that the assets' net realizable value are, in fact, accurate.

The problem with properly accounting for and valuing assets isn't so much based in understanding what the stated value of the asset should be. If inventory was purchased for $100 per unit, then it should be valued at $100 per unit. Likewise, if a customer sale amounted to $750, then that amount should be the receivable due from the customer. Accounting for the original cost or value of a transaction is fairly straightforward and easy to understand, so you may be wondering what the problem is. The answer is simple: age and intent.

On the age front, as most assets get older, they naturally depreciate and lose value as the asset is consumed over the ordinary course of business. A perfect example is the purchase of machinery used to manufacture a product.

Over time, the machine slowly depreciates as it's worn out through repeated use or becomes outdated. This same concept also holds for just about every other type of asset, including trade accounts receivable, inventory, intangible assets, and others. As the assets get older, the risks of obsolescence and eventual recoverability increase, directly reducing the value of the asset. For most business assets, aging carries the greatest single risk to value impairment.

As for the intent issue, well, we'll just say that this is where business owners and managers can really start to get creative. It's not that they deliberately lie about the value of their intellectual property being intact or about their intentions to pay back the advance they provided themselves over the next 12 months. As George Costanza says in an episode of *Seinfeld* when Jerry asks him how to beat a lie detector test, it's not a lie if you believe it's the truth. Business owners truly believe that various assets do, in fact, hold the original value paid. However, believing it doesn't make it true on the balance sheet, as we explore in the following sections.

More times than not, those little white lies that business owners and managers start with innocently enough (to support asset value) can quickly turn into all-consuming black holes as the owners and managers really start to believe the horse you-know-what they're shoveling. Business owners and managers are not intentionally trying to inflate asset values and commit fraud, but over time they lose objectivity in making sure that all assets are properly valued.

Determining real cash availability

The balance sheet is not always clear about what assets are readily available to turn into cash. For the most part, cash is cash and can be utilized freely in the business. However, various types of cash need to be clearly segregated and classified when the cash is not freely available for use in normal company operations. Examples of cash that need to be properly classified as other current or long-term assets include certificates of deposits pledge as collateral (like for a facility lease), cash allocated to employees in deferred compensation programs (and generally invested in marketable securities), cash earmarked for the payments of specific obligations (such as deductibles on insurance programs), and so on. A simple rule of thumb is that if cash is restricted to its use, then it needs to be classified appropriately so that it isn't improperly factored into or assumed to be available for general business needs.

Considering whether trade accounts receivables are collectible

Are all receivables really collectible? This question can be answered very concisely: No! And not just for the obvious reason of receivables not being collectible because the customer can't pay. Clearly, bad debt represents one of the largest valuation impairments related to receivables, and most businesses have to deal with some level of it. Bad debt must be proactively managed to limit related losses and must be accounted for in the business's economic profitability model. But in addition to bad debt, the net realizable value of receivables can be impacted by numerous other factors, including the following two examples:

- **Allowance for returns and discounts:** In today's economy, sales channels have never been more aggressive in pushing back unsold merchandise to the supplier. So though sales may have taken place, the real question is what potential is present for the return of unsold merchandise after a set period. Making sure that a proper allowance has been established to account for expected sales returns represents a high-profile management task.

  Likewise, properly accounting for future discounts needs to be addressed. In certain industries, a sale may occur, but if a competitor offers the same product at a reduced price, your customer may look for a discount (in order to preserve the original sale). If providing discounts after the fact is relatively common practice, then in order to capture the real net value of trade receivables, the business needs to establish a reserve to account for potential or estimated customer discounts that will eventually be provided (after the sale).

- **Trade payable offsets:** Numerous businesses both sell products to and purchase material from the same party, creating both a customer and vendor relationship. Quite often, settlements on the accounts are addressed by offsetting the balances owed rather than by remitting payment. The net effect of the offset on the income statement is zero, but a balance sheet impact is present as a result of reducing both trade accounts receivables and trade accounts payable.

Accounting for the true value of inventory

Businesses are required to value inventory at cost based on generally accepted accounting principles (GAAP). However, the inventory's value must also be based on the concept of *lower of cost or market* (LCM). This concept states that any inventory for which the net market value is lower than cost must be recorded on the balance sheet as reflecting the lower net market value (where net market equals the anticipated selling pricing less any direct expenses incurred to support the sale).

The problem with valuing inventory isn't so much based in these two simple concepts but rather in management's ability and willingness to apply these two concepts in a timely and impartial manner. Businesses must be willing to develop and implement disciplined accounting policies and procedures to properly evaluate and account for obsolete, slow moving, lost, and/or market-price-impaired inventory. Inventory maintenance and management are expensive (keep reading to find out why), and, similar to bad debts realized on sales, periodic losses on inventory represent a normal and recurring expense that must be accounted for on a periodic basis to ensure that a business's profit and loss are properly reported.

Continuing to carry and stock obsolete and slow-moving inventory can be very expensive for a business because a number of added expenses are incurred to support the inventory (including leased space, utilities, insurance, taxes, personnel to manage the inventory, and so on). Although these expenses vary by business, a general rule of thumb is that for every dollar of inventory supported, the carrying costs may be as high as 10 percent. So if a business has $1 million in inventory, the annual maintenance and carrying costs are $100,000. By managing inventory appropriately, not only are carrying costs reduced, thus improving a businesses' profitability, but also, more important, cash is not tied up in excess inventory levels. Business owners and managers must not be fooled by a common pitfall based on the thinking, "This is what the inventory costs, so this is what it has to sell for in order to make a profit." For slow-moving, obsolete, and value-impaired inventory, liquidating the inventory in bulk is often more profitable than continuing to carry the inventory in the hopes that it will sell some day.

Providing for property pitfalls

The term *property* refers here to all equipment, machines, buildings, land, leasehold improvements, furniture, fixtures, and other fixed assets owned. Significant variations in property market values compared to the net book value are generally present for most companies and can work in both directions. For instance, most tangible personal property, such as machines, equipment, computers, furniture, and autos, tend to have a lower *fair-market value* (the value that could be obtained in the open market if liquidated) than the net book value stated on the balance sheet. This difference is due to the fact that when new equipment becomes used equipment on day one of ownership, a significant decrease in value is realized. And because most companies use the straight-line method of accounting to record depreciation expense, the fair-market value of the property is usually below the net book value of the property for the first 60 to 70 percent of the ownership life. Conversely, other types of real property, such as land and buildings, may actually increase in value, especially if held for an extended period of time.

Numerous opportunities are present to save money and properly manage risk with business property. For example, making sure that all tangible personal property such as computers, equipment, and machinery that are no longer in use are properly relieved from the accounting records can help reduce property taxes and insurance costs. Businesses often forget to remove the cost of property when filing property tax returns and completing insurance coverage applications, which drives taxes and premiums higher.

Dealing with other problem assets

The list of problems that can be encountered with other assets is about as long and varied as the Yellow Pages. So rather than attempt to list every

possible scenario, here are two real-life scenarios that illustrate how some business owners and managers can stretch the truth on their balance sheets:

- **Capitalized start-up costs:** A company incurs $250,000 in start-up expenses to start a new business unit. The company elects to capitalize the cost as an intangible asset rather than record it as a direct expense, because by recording the cost as an expense, the company would incur a net loss and thus violate the covenants established with its bank.
- **Owner advances:** One of the oldest and most common tricks used by businesses is to reduce owner compensation levels and instead allow the owners to take loans from the business which will eventually (yeah, right) be paid back during years of strong profitability. The loans are then treated as an asset on the balance sheet, giving the appearance of a stronger company. Be warned that everyone (from outside financing sources to auditors) looks right through this scheme and treats owner advances as an expense on the income statement and a reduction to net equity.

Taking a closer look at your liabilities

If your assets are lying to you, then it should come as no surprise that your liabilities may not be telling you the entire truth either. When businesses implement proper accounting procedures, liabilities tend to suffer from management neglect, poor understanding (of the core issue), and/or plausible deniability.

The following sections take a closer look at a business's liabilities to make sure they're coming clean with management. The overriding issues in whether liabilities are telling the truth are really completeness and accuracy. Have all liabilities of a business been accounted for and been accurately presented in the balance sheet? From an auditor's perspective, auditing what's there (assets) is much easier than auditing what's not there but should be (liabilities).

Examining payable and receivable relationships

Similar to cash, trade payables are just what they sound like (see the earlier section "Trade accounts payable" for an overview) and should be classified as a current liability. However, various trade accounts payable scenarios warrant further discussion:

- As noted with the discussion on trade accounts receivables, certain trade accounts payable owed may be offset against trade account receivables due if a business has a customer that is also a supplier.

- Vendor balances that are past due may indicate that a dispute is present between the company and its supplier (for example, concerning defective products that were returned). If material, the balance owed may need to be extracted from the trade accounts payable classification.
- If a large balance due has accumulated with a key supplier that is a related or affiliated party, a better understanding of the expected payment terms for the balance due should be obtained (and if needed, properly recorded).

Properly accounting and accruing for all liabilities

Businesses often struggle to make sure that all liabilities are properly accounted for and accrued at the end of each period. Most notably, businesses tend to have problems with accrued liabilities that arise from having to use estimates for calculating future obligations due (which are not necessarily invoiced to the business for payment). A perfect example of this uncertainty is businesses that provide warranties for products and/or services. Though a business doesn't know what sale will eventually result in a warranty claim, it should have enough information to estimate what future claims will arise based on sales levels. Other accrued liabilities are somewhat easier to calculate, such as interest expense on outstanding debt, property taxes on real and personal property, income tax obligations due (based on net profit levels), and employee commissions and bonuses, but the same accounting principle holds for all these problem areas: matching.

The accounting matching principle states that all revenue and expenses should be properly matched in the same period to ensure that a company's true financial performance is reported. A perfect example is employee commissions paid in arrears when cash is received. The commissions earned should be accrued and expensed in the period during which they were generated as opposed to when they're paid. Although paying commissions in arrears based on when the cash from the sale is received represents a solid cash-management strategy, if sales of $800,000 were realized in the third quarter and generated a commission of 10 percent, or $80,000, then the income statement for the third quarter should reflect an $80,000 commission expense.

Classifying debt as current or long term

Properly classifying liabilities between current and long term is extremely important. On the surface, this classification may appear straightforward to you (for example, the next 12 months of principal payments on a note payable get classified as current). But careful classification is often overlooked by businesses with areas that are not quite as clear cut, such as accrued liabilities that cover multiple years. You also need to keep in mind that a liability that was considered long-term a year ago may change based on economic

conditions or your company's financial performance and now need to be classified as a current liability for the current year. For example, if your business has a note payable extended from a bank with specific financial covenants attached that were met in a prior year, then the note is most likely accounted for with both a current portion and long-term portion. However, if the business violates the terms of the note-payable agreement by not meeting a covenant, then the note may be in default and become due and payable immediately (requiring 100 percent of the balance due to be classified as current).

Handling risks with other liabilities

The importance of properly accounting for and classifying other liabilities has been highlighted recently by the accounting community in relation to recognizing earned revenue. This issue has been centered in the technology industry as a result of how technology licensing agreements are structured and when revenue is actually earned. I won't go into the specifics because they can get very complicated, but the key issue is based in an agreement that is billed in advance and that covers a period of time (such as an annual license that provides the customer with free future updates and technical support). If for any reason a business is obligated to support a customer over a period of time and potentially incur future expenses to support the customer, then a portion of the revenue billed to the customer will need to be deferred and recognized appropriately — the matching principle.

Remembering off-balance-sheet obligations and transactions

Off-balance-sheet obligations result from transactions or events that are not required to be recorded in the financial statements per GAAP but carry risks to a business in one fashion or another. One simple example is the practice of providing a business guarantee, which has become more commonplace over the past three years. If a business, for any reason, guarantees the obligations of another entity, then an off-balance-sheet obligation is created. Though the other entity may be fully capable of supporting the repayment of the obligation that was guaranteed, if for any reason it can't, the impact on the business providing the guarantee may be significant.

Off-balance-sheet obligations and transactions have been one of the hottest topics with corporate America for the past ten years. From Enron's accounting fraud and eventual implosion in the early 2000s to the current uncertainties facing the banking and financial industry in accounting for exposures to derivatives, understanding a business's risks with these types of transactions is absolutely essential. For most small businesses, this issue may not seem to be all that important, but it can bite very hard and very fast for the unsuspecting.

Scrubbing the Balance Sheet Clean for Its Users

"Scrubbing" the balance sheet means exactly what it sounds like. Every balance sheet account, asset, liability, and equity, is "scrubbed" clean of all the financial and accounting dirt, garbage, grime, and grit (such as old inventory purchased 2 years ago at $10 per unit but which hasn't sold in 12 months) that tends to build up over time. The process of scrubbing the balance sheet is often completed at the end of a quarter or fiscal year end and involves applying strict internal policies and procedures to ensure that the financial information is as accurate and reliable as possible.

After walking you through a case study, we explain some of the reasons why scrubbing is important to both internal management and outside investors.

A case study: Scrubbing the balance sheet of ACME Distribution, Inc.

In this section, we walk you through a review of the assets and liabilities of a fictitious company called ACME Distribution, Inc.

Reviewing the assets

First, we scrub the company's assets as presented in its balance sheet to see if any are lying. Figure 5-3 shows the adjustments being made. This document is nothing more than the asset side of the balance sheet extracted into a separate management analysis tool (or Excel worksheet, in this case) for additional evaluation purposes.

Note: The *amount* column represents the original asset value presented in the company's balance sheet. The *adjustment* column indicates the reduction in the asset's value to properly account for the real value of the asset. The *adjusted amount* column is the new, correct asset value.

Here are some issues with this balance sheet that were adjusted:

- In *cash and equivalents,* a certificate of deposit for $35,000 is being used as security for a long-term company office/warehouse lease. Even though the certificate of deposit represents cash (and is an asset of the company, because if the terms of the lease are met, the cash would be returned to the company), it needs to be reclassified as a long-term asset given that its use is restricted. This is a simple asset-misclassification issue that needs to be corrected.

- In *trade receivables,* no allowance for potential bad debts has been accounted for. An estimate of 2 percent of outstanding trade receivables was determined based on historical data (so the adjustment here is 2 percent × $750,000, resulting in a $15,000 bad-debt reserve being required). In addition, a 3 percent reserve for sales returns was established based on the previously three months sales of $1,000,000 to account for historical return rates. (The adjustment here is 3 percent × $1,000,000 of sales over the past three months, resulting in a $30,000 reserve for sales returns.) The combination of these two reserves amounts to $45,000. The percentage reserve amounts for both bad debts and sales returns would primarily be based on evaluating the company's historical operating and sales trends by evaluating the number of adjustments to previously recorded sales that occur over a period of time after the sale.
- Under *current assets: inventory,* obsolete inventory of $50,000 is calculated and written off as being worthless.
- Shareowner advances provided in a past year were not supported by proper documentation and were determined at the time of the creation of the balance sheet to represent a dividend.
- Under *long-term assets: property, plant, and equipment* and *less: accumulated depreciation,* fully depreciated and disposed of equipment is removed from the accounting records.
- The note receivable from an affiliated operation wasn't properly reconciled for over two years, and the discrepancy wasn't supported. In the adjustment, management confirmed with the affiliated operation that a $100,000 reduction in the value should be realized based on support provided by affiliated operations, agreed to by all parties.
- Amortization of intellectual property wasn't recorded in the current year. The intellectual property's total value was $250,000, which management determined should be written off or amortized over a 60-month period (5 years). A full year's amortization expense amounts to one-fifth of the total, or $50,000.
- The *deferred income taxes* needed to be fully reserved for at the end of the year due to future uncertainty over profitability. Although the company properly calculated the value of a deferred income tax asset (which can be used to offset potential future profits and reduce taxable income), at the point and time the balance sheet was prepared, the future profitability of the company was in question, so if no future profits are generated, the deferred income tax asset has no value.

Reviewing the liabilities

Next, take a look at Figure 5-4, which lists the company's liabilities, to make sure they're all telling the truth.

ACME Distribution, Inc. — Scrubbing the Assets as of 12/31/2010			
Assets	**Amount**	**Adjustment**	**Adjusted Amount**
Current Assets:			
Cash and Equivalents	$265,000	$35,000	$230,000
Trade Receivables	$750,000	$45,000	$705,000
Inventory	$500,000	$50,000	$450,000
Prepaid Expenses	$75,000	$0	$75,000
Shareholder Advances	$150,000	$150,000	$0
Total Current Assets	$1,740,000	$280,000	$1,460,000
Long-Term Assets:			
Property, Plant, and Equipment	$2,240,000	$100,000	$2,140,000
Less: Accumulated Depreciation	($900,000)	($100,000)	($800,000)
Net Property, Plant, and Equipment	$1,340,000	$0	$1,340,000
Other Assets:			
Affiliate Note Receivable	$285,000	$100,000	$185,000
Intangible Assets, Net	$250,000	$50,000	$200,000
Deferred Income Taxes	$185,000	$185,000	$0
Other Long-Term Assets	$50,000	($35,000)	$85,000
Total Long-Term and Other Assets	$2,110,000	$300,000	$1,810,000
Total Assets	$3,850,000	$580,000	$3,270,000

Figure 5-3: Adjusting the assets of ACME Distribution, Inc., by "scrubbing."

The liabilities and equity in the balance sheet had these problems:

- The note payable requires $200,000 of principal be repaid each year. In addition, the amortization schedule for the capital lease obligation indicates that $50,000 of principal will be repaid over the next 12 months. So in total, $250,000 of short-term debt-repayment obligations are present and have been reclassified under the heading *current portion, long-term debt.* This term is generally used to capture all debt or loan principal payments due within the next 12 months (for loans that have been structured to be repaid over a longer period of time, such as 5 or 10 years). Although in total the liability amounts reflected in the balance sheet are correct, the classification between short-term and long-term liabilities is incorrect because readers need to understand what portion of debt is due within the coming 12 months.
- Accrued interest due in 90 days on the subordinated debt was not recorded during the year. The error was noted from evaluating two sources of information. First, the subordinated debt agreement stated

that interest of 10 percent per year was due, but it was noted in the income statement that this interest expense was never recorded. Second, when loans, notes payable, and/or other similar types of liabilities are recorded in the balance sheet as an obligation, associated interest expense should be present in the income statement. When the income statement was evaluated, the interest expense was deemed to be unusually low (resulting in further investigation and identification of the error) and needed to be increased to properly reflect the company's real interest expense (which decreased the company's profits).

- The company didn't record the limited warranty is offers for product replacements. An estimate of $40,000 for warranty repairs and service is determined based on an analysis of historical product returns and repairs (for defects and malfunctions), so when combined with the accrued interest adjustment of $25,000, the total increase in accrued liabilities is $65,000.

  Furthermore, both of these adjustments to accrued liabilities reduce the company's profits because interest expense was understated (as previously discussed), in addition to understated product warranty expense. According to the matching principle, if a warranty is provided, then the estimated costs associated with fulfilling the warranty must be matched in the same period as the product sales (even if the eventual cost incurred for the warranty repair occurs five months later).

Completing the scrubbing

Many small businesses (like the fictional ACME Distribution, Inc.) do not receive audited financial statements and subsequently have somewhat weak accounting policies and procedures. More times than not, our experiences in these cases have generally resulted in having an independent party, such as a CPA or financial consultant, perform rather intensive "scrubbings" of the balance sheets originally prepared by the company's internal management team or accounting firm retained to assist with basic accounting and taxation related matters.

The balance sheet in Figure 5-5 displays the final adjusted balance sheet (in the traditional format, with assets on the left side and liabilities and equity on the right side) for our fictitious company after the asset scrubbing in Figure 5-3 and liability scrubbing in Figure 5-4 are taken into consideration.

Now that the balance sheet shown in Figure 5-5 is scrubbed, you can revisit the balance sheet performance measurement tools (described in the earlier section "Using key balance sheet performance-measurement tools") to really evaluate the company's financial strength. Check out Figure 5-6 to take a look, paying particular attention to the company's financial measurements tools that changed significantly, including net working capital, the current ratio, and the debt-to-equity ratio.

ACME Distribution, Inc. — Scrubbing the Liabilities and Equity as of 12/31/2010			
Liabilities	**Amount**	**Adjustment**	**Adjusted Amount**
Current Liabilities:			
Trade Payables	$385,000	$0	$385,000
Accrued Liabilities	$150,000	($65,000)	$215,000
Line of Credit Borrowings	$350,000	$0	$350,000
Current Portion, Long-Term Debt	$0	($250,000)	$250,000
Other Current Liabilities	$75,000	$0	$75,000
Total Current Liabilities	$960,000	($315,000)	$1,275,000
Long-Term Liabilities:			
Notes Payable, Less Current	$1,000,000	$200,000	$800,000
Capital Leases, Less Current	$150,000	$50,000	$100,000
Subordinated Debt	$250,000	$0	$250,000
Total Long-Term Liabilities	$1,400,000	$250,000	$1,150,000
Total Liabilities	$2,360,000	($65,000)	$2,425,000
Equity:			
Common Equity	$100,000	$0	$100,000
Retained Earnings	$990,000	$435,000	$555,000
Current Earnings	$400,000	$210,000	$190,000
Net Equity	$1,490,000	$645,000	$845,000
Total Liabilities and Equity	$3,850,000	($105,000)	$3,270,000

Figure 5-4: Scrubbing the liabilities of ACME Distribution, Inc., to find the real story.

With this new and improved information (at least from a reliability standpoint), the scrubbed information really sheds new light on the company and its financial strength. On the unaudited performance analysis in Figure 5-2, the net working capital was $780,000, and in Figure 5-6 it's reduced to $185,000 with the current ratio also decreasing from a relatively healthy 1.81 to a very slim 1.15 (and the quick ratio decreasing to .73 from 1.06). All these measurements indicate that the company is not nearly as liquid and financially strong as first presented. Furthermore, the company's debt-to-equity ratio decreases from 1.58 to 1.00 all the way to 2.87 to 1.00, indicating a much higher degree of financial leverage (and associated operating risk).

ACME Distribution, Inc. — Scrubbed Balance Sheet as of 12/31/2010			
Assets	**Amount**	**Liabilities**	**Amount**
Current Assets:		Current Liabilities:	
Cash and Equivalents	$230,000	Trade Payables	$385,000
Trade Receivables	$705,000	Accrued Liabilities	$215,000
Inventory	$450,000	Line of Credit Borrowings	$350,000
Prepaid Expenses	$75,000	Current Portion, Long-Term Debt	$250,000
Shareholder Advances	$0	Other Current Liabilities	$75,000
Total Current Assets	$1,460,000	Total Current Liabilities	$1,275,000
Long-Term Assets:		Long-Term Liabilities:	
Property, Plant, and Equipment	$2,140,000	Notes Payable, Less Current	$800,000
Less: Accumulated Depreciation	($800,000)	Capital Leases, Less Current	$100,000
Net Property, Plant, and Equipment	$1,340,000	Subordinated Debt	$250,000
Other Assets:		Total Long-Term Liabilities	$1,150,000
Affiliate Note Receivable	$185,000	Total Liabilities	$2,425,000
Intangible Assets, Net	$200,000	Equity:	
Deferred Income Taxes	$0	Common Equity	$100,000
Other Long-Term Assets	$85,000	Retained Earnings	$555,000
Total Long-Term and Other Assets	$1,810,000	Current Earnings	$190,000
		Net Equity	$845,000
Total Assets	$3,270,000	Total Liabilities and Equity	$3,270,000

Figure 5-5: A scrubbed-clean balance sheet for ACME Distribution, Inc.

ACME Distribution, Inc. — Scrubbed Business Performance Measurement Tools as of 12/31/2010			
Net Working Capital:	Amount	Days Sales Outstanding in Trade Receivables:	Amount
Current Assets	$1,460,000	Annual Sales	$6,750,000
Current Liabilities	$1,275,000	Average Monthly Sales	$562,500
Net Working Capital	$185,000	Trade Accounts Receivable Balance	$705,000
Current Ratio:		Average Months Outstanding in A/R	1.25
Current Assets	$1,460,000	Average Days Outstanding in A/R	37.60
Current Liabilities	$1,275,000	Days Costs of Goods Sold Outstanding in Inventory:	
Current Ratio	1.15	Annual Costs of Goods Sold	$3,500,000
Quick Ratio:		Average Monthly Costs of Goods Sold	$291,667
Current Assets	$1,460,000	Inventory Balance	$450,000
Less: Inventory	($450,000)	Average Months Inventory O/S	1.54
Less: Prepaid Expenses	($75,000)	Average Days Inventory O/S	46.29
Less: Other Current Assets	$0	Debt-to-Equity Ratio:	
Adjusted Current Assets	$935,000	Total Debt or Liabilities	$2,425,000
Current Liabilities	$1,275,000	Net Equity	$845,000
Quick Ratio	0.73	Debt-to-Equity Ratio	2.87

Figure 5-6: More accurate performance measurement from a scrubbed balance sheet.

Aiding internal business management

The concept of CART is discussed in detail in Chapter 8, but it's also worth mentioning in this discussion of scrubbing. CART stands for complete, accurate, reliable, and timely financial information that's available to internal management and used to make business decisions. To operate a business effectively (not to mention profitably), all financial statements, including the balance sheet, *must* adhere to CART. The following real-world example highlights just how important having a CART-based balance sheet is:

Looking to avoid violating a debt covenant that required the company to remain profitable, a service company decided it would "capitalize" certain start-up costs associated with a new business unit and then amortize the costs over 60 months. (Management convinced themselves that this was appropriate accounting.) This maneuver had the effect of inflating the balance sheet with assets of limited value, which, in turn, helped the company achieve profitability (because expenditures that should have been recorded as expenses were in fact treated as assets). Of course, the bank questioned this transaction, and the company had to restate its financial statements. The outcome was not pleasant because not only did the company now show a loss and violate the lending covenant, but also the bank lost faith in management, reduced the lending facility (further restricting already tight cash availability), and basically demanded that the company find a new lending source.

Because they didn't have an accurate and reliable balance sheet, the company's internal managers had formalized growth plans assuming that financial resources would be available from the bank. When these resources were reduced and eventually eliminated, the company faced a number of very uncomfortable and unpopular decisions as damage control became the primary focal point (as opposed to being able to grow the business).

Providing confidence to outsiders

The concept of CART — making complete, accurate, reliable, and timely financial information available — applies not only to internal business management needs but also, more importantly, to outside parties. Outside parties come in all shapes, sizes, and forms and range from financing sources such as a bank, to the owners of a business undertaking estate planning and in need of a company valuation, to public and governmental agencies looking to obtain a vast range of info. The goal when providing info to outsiders, however, remains the same: Eliminate unnecessary questions and concerns by instilling confidence that financial information provided is accurate and reliable.

Most external users of business financial data are not consuming the information in an effort to help you run your business. Rather, they are reviewing it to help make a decision in their best interest (not yours). Did the company collect and remit the appropriate amount of sales and use tax? Does the company's performance warrant a loan to be extended that they'll make money on? The more confidence the outsiders have in the business financial information, the fewer questions and issues that will be raised, which translates into reduced management time and effort being expended on managing compliance-related matters.

In any economic environment, the importance of providing CART business information to external parties is essential. But since 2007, this issue has reached an entirely new level of importance based on one of the hottest terms used during this period — *transparency.* Business credibility is so critical in today's uncertain economic environment that any indication that a business is not being honest, forthright, open, and professional leads to almost-certain rejection from outsiders. When providing financial statements, reports, and forecasts to external parties, you have no room for error.

Unlocking Hidden Cash from the Balance Sheet

Data mining has become one of the most important tools and management functions businesses must perform today in order to remain competitive in the global economic marketplace. From knowing everything about your existing and target customer base to scheduling production from engineering design through final delivery to the warehouse, having access to your company's information and thoroughly understanding it is critical. This same concept applies to a company's balance sheet as well, because if business owners and managers understand the vast amount of data available, in plain sight, they can use it to unlock cash.

Though countless examples on how to use individual assets and liabilities to unlock cash from the balance sheet can be offered, we like the following four key strategies for improving cash flow: turning over current assets, investing in long-term assets, leveraging suppliers and vendors, and using notes payable, loans, and leases. In this section we explore all four methods.

Turning over current assets

The most important (and perhaps most obvious) method for improving cash flow is converting current assets into cash. This concept is related to what we discuss in "Using key balance sheet performance-measurement tools" about using business measurement tools to evaluate how quickly a company

can turn over current assets, including trade receivables and inventory. The quicker these assets can be turned over, the lower balances these assets retain on the balance sheet, which in turn drives cash balances higher. For example, if a company generates $10 million a year in revenue and has an average days sales outstanding of 45 days, a balance of $1,250,000 of trade receivables is outstanding. However, if the company can reduce the days sales in trade accounts receivable to 35 days, the trade receivables balance will amount to roughly $975,000 (which translates into increased cash of $275,000).

Investing in long-term assets

When cash is plentiful, you probably have no trouble making a decision to simply purchase long-term assets such as equipment, machinery, computers, furniture, and even buildings. (After all, why would a business borrow and pay interest when it has ample cash available to support the purchase?) Of course, when cash isn't plentiful, the question is, "Why did we purchase everything for cash when we need it to operate the business? Or simply put, why didn't we set aside some cash for a rainy day and just get a loan?" And to add insult to injury, if your business then needs to secure cash from these assets (by using them as collateral for a loan or selling the assets), you have to be prepared for sticker shock if the value has decreased.

Avoid the common pitfall of consuming cash needed for short-term operating needs in long-term, illiquid assets. When investing in long-term assets, consider the purchase in the context of your business plan and make a careful and thorough evaluation of financing options available (at the point of purchase). For example, a lease for equipment may be priced by using an 8 percent per annum interest rate when the equipment is new with 90 percent of the original cost available to be financed. Compare this to attempting to secure lease financing against the same equipment (but now used, even if it's just six months old), which may cost twice as much in terms of the interest rate charged with only 50 percent of the original purchase price available to be financed. What looked expensive at the point of purchase could quickly become the bargain of the century down the road.

Leveraging your current liability friends

The suppliers and vendors a business uses on a regular basis can quickly turn into cash-generating friends if managed properly. If you need a little extra credit or require extended time to make payments, looking to suppliers and vendors to offer better terms during a period of short-term cash-flow pressure is more than reasonable. Over time, if vendor and supplier payment terms (whether stated or accepted/assumed) can be pushed out an extra week to ten days, your cash resources can be increased.

Vendors and suppliers clearly understand the importance of customer relationships. The vendors and suppliers have worked hard to secure their customers and don't want to lose them to the competition. If they have to bend a little to provide more credit, most will be receptive to strong and long-lasting relationships. Chapter 15 discusses this strategy in more detail.

The concept of leveraging liabilities goes well past the more traditional trade payables. You can improve cash balances by lengthening the time period in which cash is remitted by using accrued liabilities, appropriately structured employee compensation programs, and other current liabilities (like requiring customer deposits or prepayments). And the final perk is that a number of these strategies can be implemented without incurring any type of interest, carrying costs, and/or related expenses (as long as the requests are kept reasonable).

Using notes payable, loans, and leases appropriately

When notes, loans, and leases are used and structured appropriately, they can offer a great and efficient source of cash. However, that tip comes with a caveat: When these methods aren't used appropriately, cash resources can quickly be consumed, weakening the business's financial strength.

Businesses must understand that using debt in the form of formally structured notes payable, loans, and leases should be done only when appropriate. Chapter 10 evaluates when this type of debt is most appropriately used, but the general rule of thumb is easy to follow: Structured debt is best used when a company has positive earnings and cash flow and the debt can be secured against an actual asset. Structured debt is not well suited to and generally should not be used to support continued operating losses or to support investments in relatively high-risk business assets (such as unproven technology, patents, developing new markets, and so on). An asset should be able to generate or "throw off" enough cash to support the associated debt principal and interest payments.

In addition, notes payable, loans, and leases should always be structured to make sure a proper balance is maintained between the current portion and the long-term portion. A common problem businesses can encounter is inappropriately structuring the liability section of the balance sheet by using too much short-term debt to finance long-term assets (or vice versa). For example, a line of credit loan or lending facility established to be used to finance increases in trade receivables should not be used to purchase fixed assets.

Chapter 6

Digging Deeper into Cash Flow

In This Chapter

- Reviewing cash flow through financial statements
- Analyzing cash flow from operating activities
- Being on guard for accounting high jinks

This chapter explains useful techniques and tricks for analyzing cash flow. If you recall that the statement of cash flows is one of the primary three financial statements, you may anticipate, therefore, that this chapter focuses on that statement. However, analyzing cash flows requires looking beyond the statement of cash flows to the other two financial statements: the income statement and the balance sheet.

The cash flows reported in the statement of cash flows depend on the profit-making activities reported in the income statement and the changes in the assets, liabilities, and owners' equity reported in the balance sheet. Trying to analyze cash flows without the income statement and balance sheet would be like watching a ballet without music: You could see the moves of the dancers (the amounts in the statement of cash flows), but you couldn't hear the music that energizes their movements (the related amounts in the other two financial statements).

This chapter starts with what you could call the basic training or boot camp for reviewing the cash flows of a business. Then we move on to more incisive cash-flow analytical techniques that managers, lenders, and investors can use for making their business decisions and evaluations.

Tying Up Cash Flow in a Neat Bundle

Money constantly flows into and out of a business. Cash flows, as we stress in virtually every chapter of this book, pose an unending challenge to business managers because they have to be carefully managed. Business managers need to clearly understand the dynamics of cash inflows and cash outflows. Savvy business lenders and investors, who are very concerned about how well managers are controlling the cash flows of the business, also need a

solid understanding of cash-flow dynamics. The trick is to connect the dots between the drivers of cash flow in the balance sheet and income statement with the cash-flow outcomes in the statement of cash flows.

Presenting financial statements for analyzing cash flows

In this book, we focus on businesses that make profit by selling products. Many businesses sell services rather than products; examples include utility companies, cellphone network providers, professional sports organizations, and financial institutions that make a profit by investing and lending. We don't have the space in this book to explore all the differences in financial statements between product-based, service-based, and other types of businesses. The variety is simply too large. But the financial statements of product-based businesses are a good example for all types of businesses.

Figures 6-1 and 6-2 introduce an example business's financial statements (borrowed from *How To Read A Financial Report* by John A. Tracy [John Wiley & Sons, Inc.]). Figure 6-1 presents the income statement for the company's most recent year, and Figure 6-2 presents its balance sheet at the end of the year. From Figure 6-1, you can tell that the business sells products. Note the relatively large cost of goods sold expense, which is the cost of products sold that's deducted from sales revenue to determine gross margin. Also, note the relatively large inventory asset account in the balance sheet. Most businesses provide services for the products they sell. The costs of these services are not in cost of goods sold expense; the costs are lodged in the broad category of selling, general, and administrative expenses.

Both financial statements are free of nuisance elements that would divert attention from analyzing cash flow. The income statement doesn't include extraordinary gains or losses, which are a dreadful distraction from the mainstream information. And, mercifully, the balance sheet doesn't include "other assets" (which can be almost anything) or long-term liability deferrals resulting from the recording of certain types of expenses. In short, the examples are financial statements that are free of distracting elements.

We don't include the statement of cash flows for the business. The company would, of course, include this statement in its financial report, but we don't need this statement for explaining and analyzing cash flows. As we mention at the start of the chapter, the cash flows of a business are driven by the sales and expense activities of a business and the changes in its assets, liabilities, and owners' equity.

Sales Revenue	$ 52,000
Cost of Goods Sold Expense	33,800
Gross Margin	$ 18,200
Selling, General, and Administrative Expenses	12,480
Depreciation Expense	785
Earnings before Interest and Income Tax	$ 4,935
Interest Expense	545
Earnings before Income Tax	$ 4,390
Income Tax Expense	1,748
Net Income	$ 2,642
Earnings Per Share	$3.30

Figure 6-1: Income statement for most recent year (amounts in thousands, except earnings per share).

Try to always keep the possibility of accounting and financial-reporting fraud in the back of your mind. In this case, you can assume that the business has not engaged in accounting or financial-reporting fraud in the preparation of its financial statements. The statements are presented according to generally accepted financial reporting standards. The company is private, so it doesn't have to report earnings per share, but the business decided to provide this vital statistic to save its shareowners the trouble of calculating it.

Cutting the balance sheet down to size

For analyzing cash flow, working with a formal, full-blown balance sheet is very clumsy. It has too many numbers to deal with, which compete for attention against the key metrics of the business. A useful technique is to condense and rearrange the balance sheet information.

The balance sheet in Figure 6-2 is in "formal dress" and conforms to generally accepted financial reporting standards. In contrast, Figure 6-3 presents the company's balance sheet in "work clothes," which is much easier to work with. Figure 6-3 also includes the two columns on the right side for reviewing the cash rules of a business. Increases in assets and decreases in liabilities and owners' equity result in a cash decrease. Conversely, decreases in assets and increases in liabilities and owners' equity result in a cash increase.

Assets		
Cash		$ 3,265
Accounts Receivable		5,000
Inventory		8,450
Prepaid Expenses		960
Current Assets		$ 17,675
Property, Plant, and Equipment	$ 16,500	
Accumulated Depreciation	(4,250)	12,250
Intangible Assets		5,575
Total Assets		$ 35,500

Liabilities & Owners' Equity		
Accounts Payable		$ 3,320
Accrued Expenses Payable		1,515
Income Tax Payable		165
Short-Term Notes Payable		3,125
Current Liabilities		$ 8,125
Long-Term Notes Payable		4,250
Total Liabilities		$ 12,375
Capital Stock (800,000 shares)	$ 8,125	
Retained Earnings	15,000	
Stockholders' Equity		$ 23,125
Total Liabilities & Stockholders' Equity		$ 35,500

Figure 6-2: Balance sheet at end of most recent year (amounts in thousands, except number of shares).

Figure 6-3 introduces a new item: The company's short-term operating liabilities are deducted from its short-term (current) noncash operating assets, which renders an amount called *net short-term operating position.* The acronym for this key financial metric is NSTOP, which doesn't exactly roll off the tongue, does it? But compared with other financial acronyms such as EBITDA (earnings before interest, tax, depreciation, and amortization), EPS (earnings per share), and GAAP (generally accepted accounting principles), NSTOP isn't that bad.

Assets		Cash Rules	
Cash	$3,265	–	+
Net Short-Term Operating Position*	$9,410	+	–
Property, Plant, and Equipment	$12,250	+	–
Intangible Assets	$5,575	+	–
Total Capital Deployed	$30,500		
Sources of Capital			
Debt (Short-Term and Long-Term)	$7,375	–	+
Capital Stock	$8,125	–	+
Retained Earnings	$15,000	–	+
Total Capital Available	$30,500		

Figure 6-3: Condensed balance sheet for analyzing cash flows (amounts in thousands).

* Equals [Accounts Receivable + Inventory + Prepaid Expenses] – [Accounts Payable + Accrued Expenses Payable + Income Tax Payable].

The three short-term operating liabilities (accounts payable, accrued expenses payable, and income tax payable) are deducted from the three noncash short-term operating assets (accounts receivable, inventory, and prepaid expenses). These six accounts are transformed into one net amount, which is on the asset side. Short-term operating liabilities of a business are almost never more than short-term operating assets. *Netting,* or offsetting short-term operating liabilities against their cousins on the asset side, helps you to better understand the common characteristics of these assets and liabilities and provides a clearer picture of the capitalization of the business. By netting, you can analyze the following aspects:

- **Behavior of accounts:** The short-term operating liabilities (accounts payable, accrued expenses payable, and income tax payable) tend to march in tandem with the short-term operating assets of a business. These liabilities are close working partners with the assets, though on different sides of the street. For example, a good fraction of the accounts payable liability balance is for recent purchases of products held in the inventory asset account. The cadence of the liabilities and assets are not in perfect unison, but by and large, the two sides dance together.
- **Non-interest nature of accounts:** The short-term operating liabilities are non-interest bearing liabilities that are distinct and substantially

different from the short-term debt of a business. They arise from the expense activities of the business, not from borrowing money on the basis of formal loan procedures and signing a negotiable instrument (such as a promissory note payable). Short-term noncash operating assets, accounts receivable and inventories being the prime examples, do not earn interest income. The business doesn't earn investment income from inventories, for example. Both the short-term operating assets and the short-term liabilities have high turnover of activity.

- **Capitalization structure:** The capitalization of a business usually refers to the mix of its debt (interest-bearing liabilities) and owners' equity. You can more easily focus on the capitalization structure of a business by deducting short-term operating liabilities from short-term operating assets. In the example in Figure 6-3, for instance, the company's largest source of capital is its retained earnings, and its capital stock is larger than its total indebtedness. At a glance, you can see that the business has a conservative (low debt/high equity) capitalization structure.

One key advantage of reducing the formal balance sheet into its condensed version is that you can more easily see and focus on where the business has invested its capital. The business has $30.5 million total capital to work with, which it deploys among the assets it needs to operate. The company is holding more than $3 million cash (deposited in banks or invested in very short-term marketable investments that can be immediately converted into cash). It has $9.4 million in net short-term operating position.

The business has invested $12.25 million over the years in fixed assets. Money invested in these long-term operating assets has to be recovered through future sales revenue or by disposing of the assets. As we explain in Chapter 4, a business should set its sales prices high enough to generate enough revenue to recoup the cost of its depreciable assets. In doing so, the business recovers part of the total cost of these assets year by year.

The business has invested almost $6 million in intangible assets. The cost of intangible assets may or may not be written down annually and charged to amortization expense. In the example, the business did not record any amortization expense in the year, which is permissible if the assets didn't suffer impairment in value during the year. (The writing-down of intangible assets and recording of amortization expense is a long story that we don't have space to go into here.)

The balance of the net short-term operating position, or NSTOP, is the net cash invested by the business in its high turnover short-term assets minus its high turnover short-term liabilities. Collapsing the assets and liabilities into one net amount and leaving the details to the day-to-day management of the business simplifies the balance sheet. This technique is particularly handy in analyzing the cash flow from profit (operating activities), which we discuss in the next section.

By the way, don't confuse NSTOP with a similar term in financial analysis that you may come across, net working capital. *Net working capital* equals all current assets, including cash, minus all current liabilities, including short-term notes payable. NSTOP does not include cash in the assets and does not include short-term debt in the liabilities.

Reviewing sources and uses of cash

Figure 6-3 has two columns titled *cash rules.* Most of the rules need just a quick comment: If debt had been higher, cash would be higher. That is, if the company had borrowed more from its lenders, then its cash would have been higher, *ceteris paribus* (all other factors being equal). If the capital stock source of owners' equity had been lower, cash would have been lower. In other words, if the shareholders had put less capital in the business, the company would have a lower amount of cash to work with, holding all other assets, liabilities, and retained earnings the same.

If the business had invested less over the years in its property, plant, and equipment or in its intangible assets, then its cash balance would be higher. However, investing a smaller amount may not have provided enough production or sales capacity to carry on its current level of activities. In the example, the business paid $750,000 cash dividends to its stockholders, which decreased its retained earnings. If it had not made any cash distributions from profit to shareowners, its cash balance would have been $750,000 higher (and retained earnings would be this much higher). The shareowners may have been very dissatisfied and restive if no dividends had been paid. They might have even gone after the scalps of the president or CEO.

Zeroing in on changes in financial condition from making profit

Now for a tough question. The business reports $2,642,000 bottom-line profit, or net income for the year just ended (refer to Figure 6-1). How did the company's financial condition change as the result of earning this profit? You can answer part of this question from the income statement, which reports bottom-line profit and depreciation expense for the year.

The company's profit of $2,642,000 increased the *net worth* of the business — its assets minus its liabilities — without any additional capital investment by shareowners. To be more specific, profit increases the owners' equity account *retained earnings,* which is one of the two types of owners' equity of a business. The shareowners are $2,642,000 better off from earning profit. What about the assets of the business? Its assets also increased $2,642,000. But which assets? Did cash increase this amount?

During the year, the company's fixed assets (property, plant, and equipment) decreased $785,000. This amount of depreciation expense is reported in the company's income statement (refer to Figure 6-1). The business didn't record any amortization expense during the year, so its intangible assets were not affected by profit for the year. Therefore, the decrease stems from the remaining two assets shown in Figure 6-3 — cash and net short-term operating position. The change in cash depends on the change in the net short-term operating position (NSTOP).

Figure 6-4 presents three scenarios for the change in NSTOP during the year. If by chance NSTOP did not change during the year (not too likely, of course), cash would increase by the amount of net income plus the amount of depreciation, as you see for Scenario A in Figure 6-4. In this scenario, cash increases $3,427,000. But in almost all situations, NSTOP increases or decreases during the year. In Scenario B, NSTOP increases $500,000 during the year, and in the Scenario C, it decreases $200,000 during the year.

Figure 6-4: Changes in financial condition from earning profit for three scenarios.

	Scenario		
Assets	A	B	C
Cash	$3,427	$2,927	$3,627
Net Short-Term Operating Position	$0	$500	($200)
Property, Plant, and Equipment	($785)	($785)	($785)
Change in Total Assets	$2,642	$2,642	$2,642
Sources of Capital			
Retained Earnings	$2,642	$2,642	$2,642
Change in Total Capital	$2,642	$2,642	$2,642

Figure 6-4 is a useful template for summarizing and analyzing cash flow from operating activities. However, it requires that several assets and liabilities be collapsed into one neat number: net short-term operating position (as we explain in "Cutting the balance sheet down to size"). Unfortunately, NSTOP is not reported in financial statements. The "outsiders" who read financial statements (lenders and shareowners) don't have the time or savvy to condense the balance sheet as shown in Figure 6-3. Perhaps stock analysts go to the trouble of condensing a company's balance sheet in this way. But calculating NSTOP doesn't appear to be a commonly used technique.

On the other hand, business managers can "order up" from their accountant the condensed version shown in Figures 6-3 and 6-4 for analyzing cash flow from operating activities (instead of plowing through the more detailed formal statement of cash flows). As long as the change in NSTOP is reasonably consistent with the change in sales revenue over last year, it probably isn't worth the time and attention of top-level managers to go into details. On the other hand, if the change in NSTOP were wildly out of step with the change in sales revenue, this discrepancy would serve as a red flag to top management to look into the reasons more closely. This approach illustrates the "management by exception" principle. Managers should assiduously allocate their time to the most important problems and issues, not waste their valuable time on the trivial and unimportant.

Developing Benchmarks for Cash Flow

A large number of ratios and other benchmarks are used in analyzing profit performance and financial condition, which are reported in the income statement and balance sheet. We explain many of these yardsticks in other chapters (see Chapters 5 and 7 in particular). You may be surprised to discover that ratios and benchmarks are used sparingly for analyzing the cash flows of a business. The statement of cash flows is in a kind of no man's land for financial analysts.

Nevertheless, you do see with some regularity certain ratios and other types of interpretation in the financial analysis literature. How widely they're actually used by financial analysts is hard to tell. The handful of cash-flow ratios is nothing like the manifold ratios and benchmarks used for analyzing profit performance and financial condition. But these cash-flow ratios and comparisons are useful for understanding cash flow, and business managers would be well advised to consider using these analytics.

Comparing cash flow with sales revenue momentum

To explore how sales revenue affects cash flow, in this section we rely on the business example introduced earlier in the chapter and illustrated with the income statement (Figure 6-1), condensed balance sheet (Figure 6-3), and the changes in financial condition from earning profit (Figure 6-4). These statements constitute the point of departure for looking ahead to the coming year.

Suppose sales revenue surges 25 percent in the coming year, which is a sizable rate of growth, to be sure. (We make the increase in sales revenue fairly dramatic in order to arrest your attention and to make the impact on cash flow from operating activities sizable.) Of course, the first thing most business managers, lenders, and investors would do is look at the growth in profit at the 25 percent–higher sales level.

Profit does not move in lock step with increases and decreases in sales revenue. Or putting it another way, expenses seldom change by the same exact percent as sales revenue. Therefore, profit probably would increase more or less than 25 percent. (You can read more about profit behavior in our books *How To Manage Profit and Cash Flow* and *Small Business Financial Management Kit For Dummies* [both published by John Wiley & Sons, Inc.].)

However, to keep the business example simple, assume that its net income also increases 25 percent, from $2,642,000 to $3,302,500 in the coming year. And assume depreciation expense in the coming year is $825,000, which is higher than for the most recent year. (The company increased its investment in property, plant, and equipment, causing depreciation expense to increase.) So far, you have two of the three critical factors you need to compute cash flow from profit (operating activities) in the coming year; that is, profit and depreciation. The missing factor is the change in NSTOP (net short-term operating position).

In general terms, NSTOP should move in close relationship with the change in sales revenue. Think about it: Accounts receivable should keep at about the same percent of annual sales revenue, so if sales increase 25 percent, accounts receivable should increase about 25 percent — unless the company makes substantial changes in its customer credit terms or customers begin paying sooner or later than normal. And inventory should change at about the same percent as sales, unless the business changes its inventory policies. Likewise for accounts payable and accrued expenses payable. These two short-term operating liabilities should march in close formation with the change in sales. Therefore, assume in the example that NSTOP increased 25 percent in the coming year:

> $9,410,000 NSTOP from Figure 6-3 × 25% = $2,352,500 increase in net short-term operating position

You now have all the information you need to determine cash flow from operating activities for the coming year. The projection for the next year's cash flow is shown in Figure 6-5. Cash flow from profit (operating activities) would be $1,775,000, just a little more than half the $3,302,500 net income for the year. The gain in profit from sales growth causes a serious reduction in cash flow for the year.

In a high-growth scenario such as this one, the net short-term operating position of a business tends to grow as fast as the growth in sales. This increase puts a big dent in cash flow, at least in the short-run, as you can see in Figure 6-5. The company needs a larger investment in its net short-term operating position to support the higher sales level, and this increase has a big impact on cash flow in the year of the increase. Business managers, lenders, and investors should clearly understand the cash-flow "price" of rapid growth.

Financial report readers should compare the change in NSTOP against the change in sales revenue. The two changes should be reasonably consistent with one another. This doesn't mean that a 10 percent drop in sales, for example, should lead to an exact 10 percent decrease in NSTOP. But NSTOP should follow sales downward by roughly the same percent. A lag in the decrease in NSTOP can indicate that management doesn't yet have the sales decline under full control. For example, the business may not have reduced its inventory down to the lower sales level, which means that too much money is tied up in excessive inventory.

Assets	
Cash	$1,775,000
Net Short-Term Operating Position	$2,352,500
Property, Plant, and Equipment	($825,000)
Change in Total Assets	$3,302,500
Sources of Capital	
Retained Earnings	$3,302,500
Change in Total Capital	$3,302,500

Figure 6-5: Projected cash flow for 25 percent sales revenue increase next year.

Deducing the business's true state of affairs from the statement of cash flows is difficult. Lenders and shareowners would appreciate if a business explained the change in its net short-term operating position so that they could make informed decisions about the creditworthiness and investment value of the business. However, in their financial reports, companies generally don't include commentary on their cash flow. Instead, only the statement of cash flows is presented.

Using other tools for cash-flow analysis

Cash flow from operating activities is money that the business generates itself without having to go to outside sources (lenders and shareowners). A business depends on its cash flow from profit (operating activities) for several absolutely critical purposes. Without adequate cash flow from profit, a business is severely restricted and may end up in a downward spiral that is hard to reverse.

Cash flow from profit provides the seed capital for growth. It provides cash for replacing long-term operating assets as they wear out over time. It provides cash for paying dividends to shareowners. It supplements the capital the business raises from debt and equity sources. As important as it is, however, analyzing cash-flow profit is not the whole of cash-flow analysis. Business managers, lenders, and investors can use other tools to help them in interpreting the cash flow of a business.

Putting cash flow on a per share basis — or not

For public companies, earnings per share (EPS) is an extraordinarily important number. For example, the current market value of the company's capital stock shares is divided by its EPS to determine the *price/earnings ratio.* Fundamentally, EPS equals total bottom-line net income, or earnings divided by the total number of capital stock shares outstanding (in the hands of shareowners). For many corporations, the calculation of EPS is anything but simple; they may have to report not one, but two EPS amounts — the second one being *diluted earnings per share* that takes into account additional shares that the company is committed to issue in the future. Anyway, the basic idea of EPS is to put profit on a per-share basis.

You may suppose that cash flow from profit (operating activities) is also put on a per-share basis. Suppose that NSTOP increased $322,000 during the year. For this scenario, suppose that $2,642,000 net income + $785,000 depreciation – $322,000 increase in NSTOP = $3,105,000 cash flow from operating activities. The computation of cash flow per share would be as follows:

> $3,105,000 cash flow ÷ 800,000 capital stock shares (from Figure 6-2) = $3.88 cash flow per share

However useful this calculation may seem, you won't find cash flow per share in financial reports. For one thing, the rule-making body of the accounting profession has decreed that this particular financial statistic should not be reported, at least not in the formal financial statements. The worry was that financial statement readers might think that cash flow per share is a better measure of profit than the measure of profit according to accrual-basis

accounting (which is in conformity with generally accepted practices and standards). The rule-making body doesn't want more than one profit measure to appear in the financial statements. Of course financial statement readers can compute cash flow per share, but they should understand that it's not a measure of profit.

Expressing cash flow as a ratio to net income, or operating income

Financial analysts track cash flow over time by measuring cash flow from operating activities as a ratio to bottom-line net income or, alternatively, to operating income before interest, income tax, and extraordinary gains and losses. The thought behind this ratio is that cash flow should be reasonably stable as a ratio to profit. An unusual dip or jump in the ratio may have a perfectly logical explanation. But abrupt changes in the ratio of cash flow to net income should be investigated.

A sudden drop in the ratio of cash flow to net income may be a red flag that raises questions about the company's accounting practices. For example, a business may be recording revenue or other income that's not being converted into cash inflow. The revenue or income may consist of a buildup in a noncash asset in the balance sheet. The actual cash conversion value of the asset compared with the value reported for the asset in the balance sheet may be contingent on future events that may or may not take place on time.

Comparing dividends to cash flow

Financial analysts measure dividends as a percent of net income to see what proportion of bottom-line profit is distributed to shareowners instead of being retained in the business. Alternatively, dividends can be expressed as a percent of cash flow from operating activities, which is logical because the payment of dividends in cash requires cash, of course. The decision about paying dividends is always "competing" with alternative demands on the cash flow of a business.

Cash flow from operating activities may be needed for building up the cash balance of a business, for increasing its net short-term operating position (NSTOP), for investing in its long-term operating assets, for reducing its debt, and for returning capital to its shareowners. The complement of the percent of cash dividends to cash flow tells you what percent was used for other purposes. If cash dividends were, say, 30 percent of its cash flow, then the business used the remaining 70 percent for the other uses. You can trace these uses of the cash flow from operating activities that was not paid out as cash dividends in the statement of cash flows. For example, the amount spent on capital expenditures for new fixed assets is in the investing activities section, and the amount used for redeeming capital stock shares is in the financing activities section.

Looking at free cash flow and other concepts and measures

Many financial analysis books, articles, and editorials discuss *free cash flow*. *Free cash flow* refers to cash flow from operating activities minus one or more "claims" against the cash flow. For example, free cash flow may be used to refer to cash flow from operating activities minus capital expenditures during the year. (Recall that capital expenditures are new investments to replace, expand, or modernize the long-term operating assets of a business.) The amount of cash flow remaining after deducting capital expenditures is thought to be "free" for any other use. Financial analysts sometimes also use other definitions of free cash flow, so you have to be careful to determine which particular meaning of free cash flow is being used.

All of a company's cash flow from operating activities is free in the sense that the business has broad discretion regarding what to do with it and is under no constraints or legal requirements (by and large) regarding how to use its cash flow. After all, the whole point of generating cash is having the freedom to do what you want to with it. So to us, frankly, free cash flow doesn't seem to be a terribly useful measure. In one scenario, however, a measure of free cash flow can be very helpful. A business may fall into dire financial straits and come under loan restrictions that kick into effect because it's in default on paying interest or principal on its loans. A major portion of its cash flow from operating activities may be controlled by the demands of its creditors. Only the remaining balance, if any, would be free for the business to use.

When a business is struggling through one or more periods of losses, especially large losses, very likely its cash flow is negative. This negative number simply means that the business's total cash outlays for expenses is more than its cash inflow from revenue. In these circumstances, carrying on operating activities burns up its cash. Financial analysts employ a rather drastic measure called the cash *burn rate* in these situations. The negative cash flow per month is calculated and divided into the company's cash balance. The result is a rough estimate of how long the business can survive before it uses up all its cash.

The struggling business may be able to raise additional capital and extend its survival time. Or the business may be able to break into the profit column without going bankrupt. Most start-up ventures go through an initial period of losses before they can move up to sustainable profit performance. During this period, the managers can use the burn rate to estimate how long they have to get the business in the black.

Another cash-flow based number gets a lot of press, though it doesn't have great importance. This number is not reported in financial reports. In fact, financial analysts have to go to some trouble to calculate it. It's called *EBITDA,* which is the acronym for *earnings before interest, tax, depreciation, and amortization.* Depreciation and amortization expenses are not deducted from revenue and income. Part of the reason is that these expenses are arbitrarily determined based on crude estimates that are under the control of the company's managers. Furthermore, neither expense involves a cash outlay during the period. Not deducting these two expenses may make some sense if the assets being depreciated and amortized did not in fact lose any value during the period. But in the large majority of cases, assets are depreciated and amortized because they do lose value over time.

By not recognizing several expenses, EBITDA is a dangerous and misleading "alter ego" of profit. In addition to ignoring real depreciation and amortization expenses when calculating profit, another problem with EBITDA is that interest and income tax are disregarded, despite certainly being expenses.

Frankly, the usefulness of EBITDA as a tool in financial analysis is of doubtful validity. However, it may have some value in special situations. But keep in mind that it's far off the beaten path of generally accepted accounting standards and practices for reporting profit performance. If you have a lot of money at stake in a particular business, this alternative profit measure may be worth calculating and comparing with the bottom-line net income in the income statement. You would then have two tracks of profit to follow over time. Divergences between the two may provide a tip-off to radical changes you should know about.

Massaging Cash-Flow Numbers

Managers of a business have certain control over the financial statements that the business's lenders and shareowners, who are on the outside looking in, do not. The president or CEO (and perhaps other managers as well) may override the regular accounting methods and practices of the business. The manager may order the company's accountant to make changes in how certain assets or liabilities are recorded instead of sticking to the company's established accounting procedures. Such intervention by managers is referred to as *massaging the numbers.* It's also described as *doctoring the numbers, management of earnings, accounting shenanigans, fiddling with the figures,* and, as authors' grandfather and father-in-law (a very successful business owner/manager in his day) used to call it, "fluffing the pillows."

However negative the connotation of the term, *massaging the numbers* should not be confused with *cooking the books,* which refers to the deliberate falsification of the company's accounting records. Cooking the books amounts to accounting fraud. Massaging the numbers can be compared to telling a white lie, whereas cooking the books is like committing perjury. Using terms from Catholicism, massaging the numbers is like committing a venial sin, whereas cooking the books is like a mortal sin. You can go to jail if convicted of cooking the books.

The main reasons for massaging the numbers are to make bottom-line profit look better and to smooth the trend of reported profits year to year. Also, a business may want to make its short-term liquidity look stronger by manipulating its reported profit. The income statement and balance sheet are not the only two financial statements subject to accounting manipulation. A business may massage some of the numbers reported in its statement of cash flows.

The statement of cash flows reports cash flow from operating activities, as we explain in Chapter 4 and in this chapter. Business lenders and investors watch this key number, so managers know the importance of this cash-flow metric. Unsurprisingly, then, many managers are tempted to manipulate cash flow to make it look better than it really was for the year.

Massaging the cash flow numbers can be done through a wee bit of *window dressing.* For example, the recording of cash receipts from customers in payment of their amounts owed to the business may be kept open for a few days after the actual close of the year. Suppose a company's year-end is December 31. But the business continues to record cash receipts for the first few days of January, as if the money had been received by December 31. This maneuver artificially inflates cash flow from operating activities for the year and decreases the accounts receivable balance reported at year-end.

You may assume that CPA auditors prevent the manipulation of its accounting numbers by a business. But keep in mind that although public corporations are legally required to have their annual financial reports regularly audited by an independent CPA firm, private businesses in general are not legally required to have audits (but many do). And although CPA auditors don't encourage or condone the practice, truth be told, auditors tolerate massaging of the numbers by a business — but only up to a certain extent. Unless the effect is judged to be material, such that it would cause substantially misleading interpretations by readers of the financial statements, the CPA auditor doesn't demand that the business correct the effects of massaging its numbers. The CPA auditor gives the business a clean opinion on its financial statements even though some numbers in the statements have been "manhandled" to some extent.

Our bottom-line advice to financial report readers is that they shouldn't simply assume that the numbers in financial statements, including the statement of cash flows, are the gospel truth. Management may have, as they say, "put a little lipstick on the pig."

Frankly, finding red flags in financial statements that may signal major massaging of the numbers is very difficult for the typical financial report reader. The only realistic option is to rely on the CPA auditor not to allow massaging of the numbers to get out of hand. In contrast, members of the company's board of directors, its lenders, and its major shareowners have closer contact with the business and they may have reasons to be suspicious about the business and its managers. They can hire a forensic accounting specialist to go in and do an investigation, but this is done only in extreme situations.

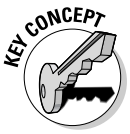
Chapter 7

Understanding Liquidity versus Available Cash

In This Chapter

- Differentiating between solvency and liquidity
- Figuring out how to measure liquidity and solvency
- Understanding how liquidity can get the best of your business
- Exploring ways to increase liquidity
- Reviewing the upside and downside of financial leverage

The life of a business owner is often fraught with so many pitfalls, roadblocks, speed bumps, detours, and just about any other obstacle one can (or can't) think of that it's no wonder that on average, approximately 80 percent of all small businesses fail within the first five years of operations. On top of the endless series of day-to-day business-management issues that must be addressed, ranging from internal staff to customers to the endless sea of government regulations (just to name a few), a business must constantly maintain and manage an appropriate level of available capital resources to ensure that ongoing operations don't miss a beat. That is, a business must always ensure that it has enough *liquidity* — access to cash or the ability to quickly turn assets into cash — to pay the bills, cover payroll, remit taxes, repay debt, and/or be ready to cough up cash to address whatever surprise may come down the road. Due to the Great Recession, being liquid has taken on an entirely new meaning and has become an extremely powerful and effective competitive tool and advantage.



Being liquid doesn't necessarily mean the same thing as being *solvent,* or able to pay all debts. Though the two concepts are closely related and tend to be highly correlated (as higher levels of solvency typically go hand in hand with increased levels of liquidity), one does not guarantee the other. Understanding both concepts is critical when managing a business's financial affairs.

When times are good, businesses tend to have enough capital available from both internal sources and external partners (such as a bank providing a loan) because everyone wants to jump on the bandwagon and share in the success. But when the times turn, profits suddenly become losses, and internal financial pressures mount, you find that your financial partners may begin to demand that you perform before they commit. It's the ultimate Catch-22, because before your business can perform, you need them to commit. So remember, implementing proper business-planning efforts is the foundation to ensuring that your business will always remain solvent and have ample liquidity to manage through both good times and bad.

In this chapter we explore the significance of two simple concepts that help you maintain necessary levels of cash:

- Solvency and liquidity are different and have different implications.
- Liquidity doesn't equal available cash (but rather, cash is a component of liquidity).

We've yet to see a small to medium-size business *not* have a major liquidity squeeze at some point. So in this chapter we also provide tools, insights, and strategies on how to manage and improve both liquidity and solvency.

Before you dive into the material in this chapter, we want to quote the late Ted Knight in his role as the ever-popular Judge Smealls in the movie *Caddyshack:* "It's easy to grin when your ship comes in and you have the stock market beat. But the man who's worthwhile is the man who can smile when his shorts are too tight in the seat." Trust us, remembering this simple quote when dealing with liquidity and solvency squeezes can be helpful.

Defining Business Solvency and Liquidity (Hint: Not the Same Thing)

On the surface, the concept of keeping a business solvent appears to be relatively simple if you only consider that the business needs enough capital available to meet current obligations and commitments. Though this notion isn't entirely untrue, the problem is that business solvency isn't so much based in managing short-term financial issues and obligations as in how a

business manages its long-term business plan in relation to ensuring that the appropriate amount and type of capital is readily available to protect its business interests.

To truly understand whether a business is solvent, the idea of liquidity must be addressed simultaneously. These two financial concepts are highly interdependent, though one doesn't guarantee the other. A business may appear to be solvent yet not have the necessary liquidity to operate another month. Or a business may appear to be insolvent yet have more than adequate resources available to support ongoing operations.

Examining a thorough explanation of each term can help your understanding:

- ***Solvency*** is best determined by evaluating the apparent (and we use this term with caution) financial strength of a business *at a point in time* to measure whether it has the ability to pay or cover all just debts. Are current assets greater than current liabilities? Are debt levels reasonable compared to equity levels? Are the most liquid assets, including cash and trade receivables, greater than trade payables? Answering yes to these questions suggests solvency, but it doesn't tell the complete solvency story (which can't fully be understood until available liquidity is addressed).
- ***Liquidity*** is best measured by evaluating all business financial information, data, facts, resources, and so on available to calculate how much total capital resources a company has, in order to determine if a business can continue to operate *over a period of time* (as opposed to just at a point in time). Has the company properly structured a lending facility to support ongoing operations? Have internal business policies, procedures, and/or strategies been changed to improve internal cash flow? Again, the desired answer to these questions is yes, but the liquidity question is dependent on far more information than just the current financial statements. Liquidity includes having access to all company plans, projections, financial disclosures, critical third party documentation and agreements, and so on.

A company's available cash does not — repeat, does not — equal a company's available liquidity. Cash represents just one component of a company's total available liquidity, which generally includes multiple other sources of, or access to, cash. For example, an unused line of credit lending may be available, which provides access to cash when needed (but with no current borrowings).

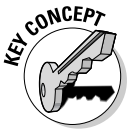
Although providing definitions of business solvency and liquidity is helpful, as the old saying goes, a picture is worth a thousand words. So to illustrate the concept of liquidity versus solvency, Figure 7-1 summarizes the financial results of a fictitious company, ACME Distribution, Inc., during the past three years.

ACME Distribution, Inc.			
Summary Balance Sheet	**Year-End 12/31/2008**	**Year-End 12/31/2009**	**Year-End 12/31/2010**
Current Assets:			
Cash and Equivalents	$16,674	$54,131	$230,000
Trade Receivables	$886,364	$635,870	$705,000
Inventory	$750,000	$400,000	$450,000
Other Current Assets	$100,000	$275,000	$75,000
Total Current Assets	$1,753,038	$1,365,001	$1,460,000
Long-Term Assets:			
Property, Plant, and Equipment, Net	$1,840,000	$1,590,000	$1,340,000
Other Assets	$535,000	$500,000	$470,000
Total Fixed and Other Assets	$2,375,000	$2,090,000	$1,810,000
Total Assets	$4,128,038	$3,455,001	$3,270,000
Current Liabilities:			
Trade Payables	$350,000	$500,000	$385,000
Accrued Liabilities	$225,000	$250,000	$215,000
Line of Credit Borrowings	$750,000	$300,000	$350,000
Current Portion of Long-Term Liabilities	$250,000	$250,000	$250,000
Other Current Liabilities	$90,000	$100,000	$75,000
Total Current Liabilities	$1,665,000	$1,400,000	$1,275,000
Long-Term Liabilities:			
Notes Payable, Less Current	$1,200,000	$1,000,000	$800,000
Capital Leases, Less Current	$200,000	$150,000	$100,000
Subordinated Debt	$0	$250,000	$250,000
Total Long-Term Liabilities	$1,400,000	$1,400,000	$1,150,000
Total Liabilities	$3,065,000	$2,800,000	$2,425,000
Equity:			
Common Equity	$100,000	$100,000	$100,000
Retained Earnings	$751,463	$963,038	$555,001
Current Earnings	$211,575	($408,038)	$190,000
Total Equity	$1,063,038	$655,001	$845,000
Total Liabilities and Equity	$4,128,038	$3,455,001	$3,270,000

Summary Income Statement	Year-End 12/31/2008	Year-End 12/31/2009	Year-End 12/31/2010
Revenue	$9,750,000	$7,312,500	$8,043,750
Costs of Goods Sold	$7,068,750	$5,630,625	$6,032,813
Gross Profit	$2,681,250	$1,681,875	$2,010,93 8
Gross Margin	27.50%	23.00%	25.00%
Selling, General, and Administrative Expenses	$1,950,000	$1,715,000	$1,445,000
Depreciation Expense	$250,000	$250,000	$250,000
Interest Expense	$140,000	$125,000	$125,938
Other (Income) Expenses	$0	$250,000	$0
Net Profit Before Tax	$341,250	($658,125)	$190,000
Income Tax Expense (Benefit — Carry-Back)	$129,675	($250,088)	$0
Net Profit (Loss)	$211,575	($408,038)	$190,000
Summary Cash Flow Statement	**Year-End 12/31/2008**	**Year-End 12/31/2009**	**Year-End 12/31/2010**
Operating Cash Flow:			
Net Income (Loss)	$211,575	($408,038)	$190,000
Depreciation Expense	$250,000	$250,000	$250,000
Net Operating Cash Flow	$461,575	($158,038)	$440,000
Working Capital:			
(Increase) Decrease in Trade Receivables	($110,000)	$250,494	($69,130)
(Increase) Decrease in Inventory	($75,000)	$350,000	($50,000)
(Increase) Decrease in Other Current Assets	$0	($175,000)	$200,000
Increase (Decrease) in Trade Payables	$50,000	$150,000	($115,000)
Increase (Decrease) in Accrued Liabilities	$25,000	$25,000	($35,000)
Increase (Decrease) in Current Debt	$100,000	($440,000)	$25,000
Net Working Capital Cash Flow	($10,000)	$160,494	($44,130)
Financing Capital:			
Equity Contributions	$0	$0	$0
Additions to Long-Term Debt	$0	$0	$0
Deletions to Long-Term Debt	($200,000)	($250,000)	($250,000)
Fixed Asset Additions	($2 50,000)	$0	$0
Change to Other Long-Term Assets	$0	$35,000	$30,000
Change to Other Long-Term Liabilities	$0	$250,000	$0
Net Financial Capital Cash Flow	($450,000)	$35,000	($220,000)
Beginning Cash	$15,099	$16,674	$54,131
Ending Cash	$16,674	$54,131	$230,000

Figure 7-1: A comparison of unaudited financial statements.

By applying business-solvency measurement tools (discussed in detail in the next section), you can easily come to the conclusion that ACME Distribution, Inc., is basically insolvent as of 12/31/09. The company's current ratio is less than one-to-one and stands at .98 with an even worse quick ratio of .49, only $54,131 in cash is available, the company realized a loss of roughly $408,000 during the year, and only $655,000 of equity remains — compared to total liabilities of $2,800,000. All relatively poor signs (no doubt) to an external party attempting to understand the financial performance of the company and evaluate if ACME has a chance to survive.



But this point in the evaluation is where business-solvency measurements stop and business-liquidity measurements start. Business liquidity not only looks at the current financial position of a company (which looks bleak for ACME) but also captures financial information and data that aren't clearly presented in the basic financial statements. For ACME, the following additional company information would be present in footnotes documenting all material and/or critical business relationships and agreements impacting the company's operations. This info needs to be evaluated to determine if enough liquidity is available to survive:

- ACME has structured a line of credit facility that allows the company to borrow up to 80 percent of eligible trade receivables and 50 percent of inventory. As of 12/31/09, the company can borrow a total of roughly $709,000 (80 percent of $636,000 of receivables plus 50 percent of $400,000 of inventory) compared to an outstanding balance of just $300,000 (the current balance outstanding on the line of credit borrowings). These calculations reveal an additional $409,000 of borrowing capacity left to support the company's operations.
- ACME has successfully secured extended payment terms with its vendors and suppliers. The primary shareowner of the company has provided a personal guarantee (see Chapter 11 for further information on PGs) to key vendors and suppliers, which has allowed the company to move its payment terms from net 30 days to net 90 days. Vendors and suppliers accepted the personal guarantee due to the shareowner's high personal net worth. These terms can be extended to 180 days and provided an additional $85,000 of extra liquidity as of 12/31/09.
- The financial performance of ACME in 2009 was negatively impacted by the company's decision to expand its product offerings into a high-volume, low-price/profitability product line at the exact same time a severe economic recession began. Both sales and gross profits decreased as a result of a drop in demand; gross margins suffered significantly as too much of the product was purchased and had to be sold at discounted prices (to move the inventory). In addition, the

company was not able to reduce its selling, general, and administrative expenses in relation to declining sales levels. By 12/31/09, the company's "sins" finally were addressed by management as the product line was discontinued. This step drove sales lower but allowed gross margin to recover from 23 to 25 percent in 2010 (as well as allowing selling, general, and administrative expenses to be reduced). However, the company had to take a one-time write-down of $250,000 (reflected in other expenses) for obsolete inventory with the product line that could not be sold. By cleaning house and refocusing the company's efforts in 2010, ACME had to sacrifice its current financial statements to position the company for future growth.

Although the company has struggled the last two years, negatively impacting its current business solvency, ACME secured additional capital to ensure that it has enough liquidity to survive and prosper in the coming years. Also, you may note that no income tax expense or benefit is present in 2010. The reason for this is that the company had net operating loss carry-forwards from previous years to offset tax liabilities.

Applying Business-Solvency and Liquidity Measurement Tools

The previous section jumped ahead a little bit in terms of presenting Figure 7-1 and applying both liquidity and business-solvency measurement tools so that you could see the big picture first. In this section, we delve into a more complete examination of standard business solvency and liquidity measurement tools.

Measuring and monitoring solvency

Business-solvency measurements tend to evaluate data as of a point in time (for instance, the fiscal year-end for ACME). This data is then subjected to numerous analyses to evaluate how well a company is performing and how strong it is financially (including measuring the businesses solvency). Figure 7-2 presents basic business-solvency measurement tools that all business executives should clearly understand.

ACME Distribution, Inc.			
Ratio	Year-End 12/31/2008	Year-End 12/31/2009	Year-End 12/31/2010
Net Working Capital:			
Total Current Assets	$1,753,038	$1,365,001	$1,460,000
Total Current Liabilities	$1,665,000	$1,400,000	$1,275,000
Net Working Capital	$88,038	($34,999)	$185,000
Current Ratio:			
Total Current Assets	$1,753,038	$1,365,001	$1,460,000
Total Current Liabilities	$1,665,000	$1,400,000	$1,275,000
Current Ratio	1.05	0.98	1.15
Quick or Acid-Test Ratio:			
Total Current Assets	$1,753,038	$1,365,001	$1,460,000
Less: Inventory and Other Current Assets	$850,000	$675,000	$525,000
Net Current Assets	$903,038	$690,001	$935,000
Current Liabilities	$1,665,000	$1,400,000	$1,275,000
Quick or Acid-Test Ratio	0.54	0.49	0.73
Debt-to-Equity Ratio:			
Total Liabilities	$3,065,000	$2,800,000	$2,425,000
Total Equity	$1,063,038	$655,001	$845,000
Debt-to-Equity Ratio	2.88	4.27	2.87
Days Sales O/S in Trade Receivables:			
Total Trade Receivables	$886,364	$635,870	$705,000
Average Monthly Sales	$812,500	$609,375	$670,313
Days Sales O/S in Trade Receivables	32.73	31.30	31.55
Days Costs of Goods Sold O/S in Inventory:			
Total Inventory	$750,000	$400,000	$450,000
Average Monthly Costs of Sales	$589,063	$469,219	$502,734
Days Costs of Goods Sold O/S in Inventory	38.20	25.57	26.85
Debt Service Coverage Ratio:			
Net Income (Loss)	$211,575	($408,038)	$190,000
Interest Expense	$140,000	$125,000	$125,938
Depreciation Expense	$250,000	$250,000	$250,000
Adjusted Debt Service Cash Flow	$601,575	($33,038)	$565,938
Interest Expense	$140,000	$125,000	$125,938
Note Payable Principal Payments Due, 1 Yr.	$250,000	$250,000	$250,000
Current Balance of Line of Credit, Due in 2 Yrs.	$375,000	$150,000	$175,000
Total Debt Service Payments, 1 Yr.	$765,000	$525,000	$550,938
Debt Service Coverage Ratio	0.79	(0.06)	1.03

Figure 7-2: Business-solvency ratio analysis.

The list of business solvency measurements presented in the figure is by no means complete, as the boys on Wall Street would attest (as they have a much larger arsenal of measurements available). However, the following measurements represent the basics in understanding business solvency:

- **Net working capital:** Total current assets less total current liabilities equals the *net working capital* of a business. Generally speaking, businesses want a positive figure.
- **Current ratio:** Total current assets divided by total current liabilities equals a company's *current ratio.* A ratio of greater than one-to-one is desirable.
- **Quick or acid-test ratio:** Total current assets is reduced by inventory and other current assets (such as prepaid expenses and deposits) and then divided by total current liabilities to produce the *quick* or *acid-test ratio.* The higher the ratio, the better, but having a ratio of less than one-to-one is common, especially for companies with significant levels of inventory.
- **Debt-to-equity ratio:** Total debt (current and long term) divided by the total equity of the company equals the *debt-to-equity ratio.* Higher ratios indicate that the company has more financial leverage, which translates into more risk being present. (Check out the final section of this chapter for a discussion on financial leverage.)
- **Days sales outstanding in trade accounts receivable:** Trade receivables divided by average monthly sales multiplied by 30 days produces the *days sale outstanding in trade accounts receivable* figure. Lower numbers with this calculation are usually positive because they indicate that a company is doing a good job of managing this asset and not consuming excess capital. ***Note:*** Companies that are growing rapidly or that have significant seasonal sales need to use an average monthly sales figure that's more representative of more recent business activity.
- **Days costs of goods sold outstanding in inventory:** Inventory divided by average monthly costs of goods sold multiplied by 30 days produces the *days costs of goods sold outstanding in inventory* figure. Lower numbers indicate a good job of managing this asset and not consuming excess capital. ***Note:*** Again, companies that are growing rapidly or that have significant seasonal sales need to use an average monthly costs of sales figure that's more representative of more recent business activity.
- **Debt service coverage ratio:** Interest and depreciation expense are added back to the net income (or loss) of a company, which is then divided by the current debt service (defined as interest expense plus the current portion of long-term debt plus any outstanding balance with a current line of credit facility) to produce the *debt service coverage ratio.* A ratio of greater than one-to-one is desirable because it indicates that a company generates enough free cash flow to cover its debt service.

Keeping tabs on liquidity

Unlike solvency measurements, which look at a certain point in time, business liquidity measurements are meant to evaluate a business's total liquidity by using both data as presented at a point in time as well as resources available to a business (but not necessarily presented in the basic financial statements) either today or in the future. The following three liquidity measurement tools are illustrated in Figure 7-3:

- **Available current working capital:** Add the current net working capital (defined in the preceding section) to available capital that can be accessed during the next 12 months. Then adjust the figure to account for any other factors that impact the company's liquidity (such as extended vendor terms), and the result is the *available current working capital*.

  In the example provided in Figure 7-3, two points are important. First, in 2008, the available borrowing capacity was reduced to account for $250,000 of obsolete inventory. In this example, the bank became concerned about the value of this inventory and decided to eliminate it from the company's ability to borrow. Second, in 2009, $85,000 was added back to account for the fact that the company was able to secure extended payment terms from vendors for the coming year. In effect, the company secured a "permanent" source of capital for the year from the vendors providing extended terms (and thus providing more capital to operate the business).

- **Cash burn rate:** This rate calculates the average negative cash flow (defined as net income or loss plus depreciation and other noncash expenses) the company is experiencing on a periodic basis (usually monthly). Burn rates represent key data points for investors attempting to understand how long it takes until a company becomes cash-flow positive. This indicator then drives how much capital is needed to support the company during the negative cash burn periods.

  For ACME, the company's cash burn rate was approximately $13,000 a month in 2009 (the worst performing year over the past three).

- **Liquidity availability analysis:** Calculating the potential available liquidity that can be tapped from company assets and comparing it to the total current outstanding debt (secured with the assets) lets you evaluate if any "untapped" sources of capital are available on the balance sheet.

  In the example provided for ACME in Figure 7-3, roughly $439,000 of potential and actual liquidity is available (even though the solvency measurements paint a much more difficult situation). (See the second highlighted line.)

ACME Distribution, Inc.

Ratio	Year -End 12/31/2008	Year -End 12/31/2009	Year -End 12/31/2010
Available Current Liquidity:			
Net Working Capital	$88,038	($34,999)	$185,000
Available Borrowing Capacity	$209,091	$408,696	$439, 000
Extended Vendor Terms Benefit	$0	$85,000	$85,000
Available Current Liquidity	$297,129	$458,696	$709,000
Cash Burn Rate:			
Net Income (Loss)	$211,575	($408,038)	$190,000
Depreciation Expense	$250,000	$250,000	$250,000
Monthly Cash Burn Rate	$38,465	($13,170)	$36,667
Liquidity Availability Analysis:			
Trade Receivables	$886,364	$635,870	$705,000
Borrowing Rate	80%	80%	80%
Available Liquidity	$709,091	$508,696	$564,000
Inventory, Net of Obsolete Items	$50 0,000	$400,000	$450,000
Borrowing Rate	50%	50%	50%
Available Liquidity	$250,000	$200,000	$225,000
Total Available Liquidity	$959,091	$708,696	$789,000
Current Borrowings — Line of Credit	$750,000	$300,000	$350,000
Net Available Liquidity	$209,091	$408,696	$439,000
Total Potential and Actual Available Liquidity	$959,091	$708,696	$789,000
Total Borrowings, Line of Credit	$750,000	$300,000	$350,000
Net Potential and Actual Available Liquidity	$209,091	$408,696	$439,000
Current Borrowing Utilization Rate	78%	42%	44%
Available Borrowing Capacity Rate	22%	58%	56%

Figure 7-3: Business liquidity ratio analysis.

These three liquidity measurement tools represent just a small sample of the entire list of potential liquidity measurements, tools, and analyses available. Unlike the business-solvency measurements noted in the preceding section, liquidity measurements tend to be customized for specific company and industry issues (in order to properly manage and understand liquidity at any point in time). The key concept, however, is the same for both types of measures: You must always have a clear understanding of what capital and liquidity is available to your company (at any time) in order to properly manage your business interests.

Looking at the actual results of ACME, the company's strongest year over the period (as measured by profitability) for the period of 2008 through 2010 was 2008, during which it earned a net pre-tax profit of $341,000, yet as of 12/31/08, the company had the least amount of liquidity ($297,000 compared to $709,000 at 12/31/10; see the first highlighted row). Now, this added liquidity didn't

come without a price — the $85,000 of extended vendor terms required a personal guarantee, and $250,000 of subordinated debt (from the owners) was secured to strengthen the balance sheet. But the important fact is that the company was able to secure ample amounts of liquidity in 2010 to operate the business and hopefully grow in future years.

Understanding both business-solvency and liquidity measurements concepts is important when managing your business. Solvency measurements by themselves don't often tell a company's entire story or indicate whether it has the ability to survive as a going concern.

The fictitious financial performance provided for ACME in Figures 7-1 through 7-3 presents a company that appears to be insolvent. But upon further review of the company's operations (information derived from analyzing the footnotes attached to the financial statements and from undertaking management inquiries), we find that the company has additional liquidity to operate the business and has implemented operational changes to support its return to profitability. Conversely, we could have just as easily presented a company that's highly profitable with strong solvency measurements but that, as a result of poor planning, has run out of cash (with no borrowing facilities structured to support continued growth) and has pushed its vendors and suppliers to the limit. Due to the lack of understanding of liquidity and poor planning, this company could even be at greater risk of failing (as the vendors and suppliers may cut off the flow of products to sell, thus causing a chain reaction of events causing the company to implode). This scenario is discussed in more detail in "Avoiding Liquidity Traps" later in this chapter.

Finding out where cash fits into liquidity equation

This book is focused on managing cash, but we haven't yet addressed where cash fits into the discussion on business solvency and liquidity. Well, the answer is easy — cash represents just one component of business-solvency measurements and liquidity calculations. As discussed in the previous sections, cash is one of the four primary components comprising working capital (the others are trade receivables, inventory, and other current assets), and working capital represents a critical element in measuring business solvency. Likewise, net working capital (including cash) represents a critical element of calculating available liquidity.

Unlike a company such as Apple, which sits on billions of dollars of cash with basically no liabilities and is constantly trying to figure out what to do with all its riches, the cash component of working capital is usually relatively small (20 percent or less of current assets) for most businesses. It's kept small by numerous factors, ranging from lack of access to anywhere near the capital markets large corporations have, to the need to constantly deploy cash in the business to finance growth. As such, simply focusing on only a company's available cash balance to evaluate its financial strength and ability to support continued operations is generally very misleading and can quickly lead to incorrect conclusions. Cash is king, no doubt about it, but having ample liquidity to support your business is, as they say, priceless.

Avoiding Liquidity Traps

After you know the basics of business liquidity and solvency, why it is important, and how to measure it (all discussed in the previous sections), your attention can turn to how businesses tend to get into trouble and unintentionally find themselves in liquidity traps. Liquidity traps come in a variety of shapes, sizes, and forms and to a certain extent result from business- or industry-specific factors. However, when the liquidity traps are viewed from a generalized perspective, the primary liquidity traps are typically in the following areas: tying up cash in company assets, using debt inappropriately, assuming that growth is always good, and assuming that shrinking is " always bad.

As we discuss in the following sections, the volume and complexity of liquidity traps are extensive and vary from business to business. You would be amazed at how many liquidity traps can occur and how quickly they can consume your business. One day everything is fine, and then 180 days later the market's turned, new product releases have been delayed, sales have softened, and the bank is all over you. (The words of Cousin Eddie in the movie *Vacation* come to mind: "The bank's been after me like flies on a rib roast.") To be quite honest, having to manage a liquidity trap is more a matter of *when* than *if,* so the better prepared you are to deal with liquidity traps (and understand the primary causes of the liquidity traps), the better you will be at managing a problem when it arises.

Having access to capital (whether debt or equity) represents one of the most important elements of executing a business plan, especially when a business is turning the corner and is ready to grow rapidly, because this is the point when the demand for capital is the greatest. As one of our business mentors says, "I don't need access to capital going into a recession or downturn, but I sure as heck need access to capital as I come out of a recession and begin to grow quickly again." Not managing the liquidity traps discussed in the following sections can prevent you from positioning a business to pursue new market opportunities. And this blunder often leads to one of the largest losses a company will ever realize (but never see): lost market opportunity.

Tying up cash in company assets

A company needs assets on which to execute its business plan and generate revenue. Some assets are highly liquid and represent attractive vehicles through which to secure financing (for example, trade accounts receivable that a bank may use as collateral to extend a loan or new equipment that a leasing company may use as collateral to provide a long-term lease).

Other assets, however, are not nearly as attractive to a lender, including certain inventory, prepaid expenses, intangible assets, and the like. The main reason for this lack of interest is the difficulty the lender will face when liquidating the asset (and repay the loan) in the event the company doesn't survive. The more liquidation value the asset has, the higher lenders' interest is in providing financing. The following list of asset-investment liquidity traps are examples of when "good assets go bad":

- **Trade receivables:** Trade receivables are usually very liquid assets that can be utilized to secure financing. Certain trade receivables, however, are not as attractive to financing sources. For example, trade receivables that are 90 days past due often are excluded by a lender from being able to borrow against because the age of the receivable indicates that the customers are having trouble paying their bills. Whether or not this is the case, the lender usually assumes the worst and excludes the trade receivable.

  In addition to old trade accounts receivable, other receivables that can create problems include receivables generated from foreign customers, governmental entities, and related parties/entities. Also (and as strange as this may sound), receivable concentration issues may produce problems if too many of your company's trade receivables are centered in too few accounts. In this case the lender gets nervous because if one big customer tanks, it may take the entire company down.

  Make sure that you have a complete understanding of what comprises your trade accounts receivable balance to have a clear understanding of what is available to borrow against at any point in time. Though the balance sheet may state that your company has $1,000,000 (of which the company can borrow 80 percent, or $800,000), you may find that $400,000 of the receivables are *ineligible* (meaning the company can't borrow against them). In this case, only $600,000 of good receivables are left to borrow against, meaning only $480,000 of financing is available.

- **Inventory:** You may think that inventory is a sound asset on which to secure financing because if a company's product has a readily available market, there should be no problem liquidating the products in case the worst should happen. Right? Nope. Financing sources tend to be very nervous and skittish about lending against inventory, because if the worst happens, taking possession of the inventory and attempting to sell or liquidate it lead to all kinds of problems. Financing sources are just not prepared to handle this function.

  When all potential liquidation factors are considered with inventory, including identifying and disposing of obsolete items, having to pay a liquidator to sell the inventory, watching the market hammer the value of the inventory as it becomes available (that is, the going-out-of-business sale), and so on, the lender will be lucky to receive 40 to 50 percent on

the dollar. Hence, lenders tend to shy away from extending loans against inventory, and when they do extend loans, lending rates are usually well below 50 percent.

Besides potentially draining a business's liquidity, tying up cash in excessive inventory can also create problems on numerous other fronts.

- For every dollar of inventory increase, a lending source may only provide 40 percent of the cash necessary to support the added investment (leaving 60 percent to be supported by internal resources). So cash that could be invested in other business operations, such as research and development, is left sitting in inventory.
- The risk of inventory obsolescence increases because the slower the inventory moves, the older it becomes, which generally forces the company into taking inventory write-off "hits" on the financial statements. As most business owners know, in today's rapidly changing market, inventory can become obsolete in as little as three months.
- Excessive inventory is expensive to maintain because it must be stored, insured, tracked, protected from theft, and so on. Quite often, inventory maintenance expenses can run up to 10 percent of the inventory's cost on an annual basis.

- **Property, equipment, and other fixed assets:** The concept of consuming liquidity in fixed assets is similar to purchasing a new car (but even worse). The day you purchase a new car and drive it off the lot, it may lose up to 25 percent of its value. For fixed assets such as new equipment, computers, furniture, and fixtures, within 90 days of purchase the value is based on a "used" status (and you will be lucky to get 50 percent on the dollar). Compounding this problem is that if you do need to secure financing against the fixed assets (which are now used), the financing will be expensive (that is, have higher interest rates) compared to acquiring the fixed assets when new.

The time to obtain financing with fixed assets is at the point of purchase. At this point, the asset value is the highest and the most financing sources are available to obtain competitive pricing and terms. When the equipment becomes used, the market for financing sources shrinks and becomes much more expensive.

Using debt inappropriately

The second major liquidity trap is at its core centered in not keeping your balance sheet in balance. The imbalance we're referring to comes from using short-term debt, such as a line of credit structured to support trade accounts

receivable, to finance a purchase of a long-term asset. The following example explains how this issue can create significant problems for a company.

A company had structured a line of credit financing agreement or loan where it could borrow up to 80 percent of eligible or qualified receivables. The company was growing quickly and had increased its trade accounts receivable to roughly $2 million in total, of which 90 percent were eligible to borrow against. Altogether, the company borrowed $1.4 million, which was within the financing-agreements limit ($2 million of total accounts receivable, of which $200,000 were ineligible to borrow against, leaving a net borrowing base balance of $1.8 million, producing a total borrowing capacity of $1.44 million). Of the $1.4 million, $400,000 was used to purchase fixed assets and $1 million was used to support the trade accounts receivable.

Within six months, the company's trade accounts receivable decreased to $1.5 million, while at the same time the ineligible percent increased to 20 percent (as a result of certain trade accounts receivable becoming 90 days past due). This change reduced the company's ability to borrow to $960,000 ($1.5 million of trade accounts receivable times 80 percent eligible times 80 percent advance rate). Unfortunately, the company used the cash generated from the $500,000 decrease in trade accounts receivable to reduce trade payables and cover operating losses (as well as pay down the loan). The company was only able to pay down the loan by $200,000, leaving an outstanding balance of $1.2 million against an available borrowing of $960,000. Needless to say, the financing source requested the company "cure" this over-advanced position, but the company could not (leading to a very interesting round of discussions and the financing source placing additional restrictions on the company). By not properly financing the fixed-asset purchase, the company fell into a very common and painful liquidity trap.

The exact opposite problem can happen as well, if, for instance, a loan payable with a repayment term of three years is used to support a current asset (such as trade accounts receivable). Although the asset (trade accounts receivable) may be growing as a result of increased sales, the debt is being reduced over a three-year period. Just when the company needs capital to finance growth, capital is flowing out of the organization to repay debt.

A proper balance of capital to asset type must be maintained to better manage the balance sheet. The following three very simple rules guide matching capital or financing sources with asset investments:

- **Finance current assets with current debt.** Current assets, such as trade accounts receivable or inventory, should be financed with current debt, such as trade vendors or suppliers and a properly structured lending facility.

- **Match the cash-flow stream to the financing stream.** The general concept here is that a fixed asset produces earnings or cash flow over a period of greater than one year. Therefore, fixed assets, such as equipment, furniture, computers, and technology, should be financed with longer-term debt, such as term notes payable (having, for example, a five-year repayment period) or operating or capital leases.
- **Use debt financing sources to provide capital for tangible assets and use equity financing for losses or "soft" assets.** Assets that are considered "soft" (including intangibles such as patents, trademarks, certain investments, and prepaid expenses) and company net losses need to be supported from equity capital sources, including the internal earnings of the company.

Assuming that business growth is always good

Now we come to one of the most common, but least understood, liquidity traps:

> **Congratulations on your business's rapid revenue growth, but remember: Growth does not always translate into business success!**

Remember that rapidly growing businesses require significant amounts of capital to support ongoing operations (because the balance sheet tends to expand relatively quickly). As revenue (and hopefully profitability) levels grow, so do assets and the need to finance the assets. Further compounding this event is the additional problem that rapidly growing companies run into with getting caught up in the seemingly endless new-market opportunities being presented and the need to "invest" earnings from profitable operations into the expansion of the new operations (which tend to lose money during the start-up phase). This strategy, if properly managed, can be very effective as long as management keeps a keen eye on the distribution of earnings between supporting new operations versus strengthening the balance sheet.

No set rule dictates how much of your earnings should be used to reinvest in new operations versus strengthening the balance sheet. The real key lies in the ability to keep your debt-to-equity ratio (refer to "Measuring and monitoring solvency," earlier in this chapter) manageable so that if the company hits a speed-bump or pothole, resources are available to see you through the difficult times. One thing is for sure, however: Pushing your company to the limit by leveraging every asset (with debt financing) and reinvesting internal

earnings in new operations (that lose money during start-up) is a recipe for failure. Businesses must constantly manage the growth versus available capital trade-off issue to ensure that its interests are not exposed to unnecessary risks that quite often carry extremely expensive outcomes.

In the business world, you may hear the saying that someone is "growing himself out of business." This expression means that rapidly growing businesses may fail as a result of running out of liquid assets (cash or access to cash) if a proper plan has not been developed to support the growth. Business assets such as trade receivables, inventory, and equipment can increase so quickly in a rapidly expanding business that before you know it, all the company's cash has been consumed and vendors and suppliers have begun to cut off credit (effectively killing the business).

Assuming that a shrinking business always represents trouble

Another very common but little-understood liquidity event represents the alter ego of a rapidly growing business.

> **Wow, your business revenue levels have decreased during the year, resulting in a small loss, so you must be in financial distress. Nope! Most businesses, at one point or another, experience losses that should not be interpreted as a failure.**

A rapidly growing business usually is accompanied by an expanding balance sheet because both assets and liabilities tend to increase (with assets generally increasing faster than liabilities, thus consuming cash). The opposite occurs when a business shrinks via decreasing revenue, closing a division, selling a business unit, closing stores, and/or undertaking similar types of transactions. When a company shrinks, it usually is the result of either a poor economic environment (case in point, the period from 2008 through 2010) or a management decision to exit underperforming markets and/or focus on the most profitable operations. The second scenario carries the following dual benefits:

- First, even though revenue levels may be decreasing, the company's operating performance generally improves as expenses are eliminated and management focuses on more lucrative opportunities with stronger profit potential. These changes have the effect of improving internal operating results, profits, and hopefully cash flows to improve liquidity and strengthen the balance sheet.

- Second, and of greater assistance to improving business liquidity, downsizing a business has the effect of contracting the balance sheet at both the asset and liability levels. So as long as the asset contraction is greater than the liability contraction, cash is freed up, which should (if properly managed) improve business liquidity levels.

Obviously, in a number of situations, shrinking revenue levels do represent a significant problem, especially if expenses can't be reduced fast enough in relation to lower revenue levels, resulting in accumulating losses that may eventually lead to severe financial distress. However, jumping to the conclusion that a decrease in a company's top line must mean financial troubles is inappropriate. Management may be very well ahead of the game and actually undertaking a plan to improve the financial strength of the business.

Discovering Untapped Sources of Liquidity

If you've read all the previous sections in this chapter, you now understand what liquidity is, why it's so valuable, how to measure it, and where the traps are. But you may be thinking, "Great, but to be quite honest, Authors, your chapter is a little too late. I've run out of cash, have no more ability to borrow, and my suppliers are breathing down my neck." Well, now the real fun begins. It's now up to the executive management team to identify sources of capital to work through the troubled times. The purpose of this section is to identify potential capital sources (to provide liquidity) that can assist your business in times of need.

Liquidating assets

The first option is relatively straightforward but easier said than done. Liquidating assets is often proposed by management as a quick and easy method to raise capital. This practice makes sense because if a company has unneeded or underutilized assets, selling them can help ease a cash crunch. Following are some examples of prime assets that can be liquidated:

- **Old trade accounts receivable:** Certain older, problematic trade accounts receivable can possibly be sold to collection companies to secure cash. Various companies specialize in this area, with some of the largest and most successful operations purchasing past-due consumer debt such as credit cards, auto loans, and so on (which, needless to say, has been very big business since 2008). But be prepared to take a significant discount when selling receivables, because these operations don't come cheap.

- **Slow-moving or obsolete inventory:** Slow-moving and obsolete inventory is often targeted for liquidation for two reasons. First, it's tying up cash that could be used for other business purposes. Second, managing and maintaining inventory (that is, paying rent to store it, providing insurance coverage, and other necessary measures) is expensive, reaching up to 10 percent or more of the inventory value on an annual basis. Bulk buyers of obsolete or slow-moving inventory have developed into a large industry (as evidenced by Overstock.com) over the past decade, with specialty business models developed for different types of products.
- **Property, equipment, furniture, and so on:** There's probably not a company operating that doesn't have some type of property, equipment, or furniture that's not being used and can possibly be turned into cash. The issue with this asset class is not supply or availability but rather price, demand, and obsolescence (ever try to sell a computer that's three years old?). That is, since 2007, supply has been excessive and demand limited, which has driven the value of this asset class very low. However, you may be surprised by what businesses are willing to purchase; an entire cottage industry has developed that does nothing but facilitate the liquidation of business fixed assets.
- **Other assets:** Depending on a company's operating situation, various other assets may be available for sale, including any intellectual property the company may own (such as patents or trademarks), cash value that has built in certain life insurance policies, securities or investments held, and others. The pros and cons of liquidating each asset should be weighed prior to determining the feasibility of selling the assets (especially related to intellectual property).

Liquidating assets does represent a viable alternative, but be careful of the following pitfalls with this strategy:

- **Values received:** If you plan on moving older, slow-moving inventory in bulk or selling some old equipment that's not being used, be prepared to take some significant value hits (well below cost). Although the cash received is great, the losses taken will have to be explained (to investors, lending sources, and others).
- **Collateral support:** Remember that certain assets represent collateral for loans extended to the company. If you liquidate the assets, not only may you be violating your loan agreement, but you may also be reducing your ability to borrow (as the asset base is reduced, so is the borrowing capacity).

- **Future growth:** Liquidating assets that may not be needed in the short term but will be needed to support longer-term growth objectives can be very expensive. This cost is especially high in the event crucial intellectual property is sold that represents a critical component of the business's ability to generate future sales and profit.
- **Management time:** Liquidating assets often takes much more time and effort than anticipated, which means that the parties responsible for this function are being distracted from their regular duties.

Leveraging assets

As an alternative to selling assets, another option is to leverage the inherent value in certain assets to generate cash. The biotechnology industry provides a classic example. Biotechnology companies in an early development stage often retain the rights to very promising research but lack the current capital and/or access to funds to continue to support the development through to selling the final product to consumers. These companies look to larger, well-established pharmaceutical organizations to structure a licensing agreement whereby in exchange for an upfront payment (and potentially future milestone payments), the pharmaceutical organization secures an exclusive right to market the drug per terms and conditions established (with future revenue split).

A company that leases prime real estate but doesn't currently use all the space (and tenant improvements associated with the space) can be another good example of leveraging an asset. In order to reduce overhead costs and free up cash, a portion of the space can be subleased to another company. An underutilized asset (unused space) then generates positive cash flow.

Countless other opportunities and situations exist to leverage assets. In most cases, the leveraged asset tends to be intangible in nature. And in almost any asset-leveraging transaction, multiple parties are involved, which makes execution more complicated and time consuming. Therefore, you must be creative and flexible and have the ability to think outside the box when structuring deals to leverage assets for cash.

When pursuing a strategy of leveraging assets, always remember to secure proper professional counsel and support to structure the agreements. This counsel normally includes both financial and legal experts in addition to subject-matter experts when needed. The damage associated with not structuring a deal correctly can be extremely expensive.

A company that designs, manufactures, and regionally retails fine jewelry is looking to structure a design agreement with a large product supplier to address the needs and resources of both parties. The product supplier gets access to a high-quality designer with ample resources to produce a private-label product for sale in non-overlapping and international markets (thus not having to invest capital in a design studio, which would take both substantial time and money). The jewelry designer generates an upfront fee to produce the initial designs by leveraging its previous investments made in the company's internal design studio capabilities and equipment (with no additional cost outlays) and tap years of jewelry design experience and knowledge (or trade secrets). Furthermore, the jewelry designer has the ability to generate future "evergreen" revenue streams from receiving a royalty on product sales it designed.

Relying on available lending sources

Your company's primary lending sources, such as banks, asset-based lenders, leasing companies, and the like, represent a potential source of quick capital if needed. The key in approaching these sources is to have solid information available for review and a clear action plan on how the additional capital will be repaid (in a reasonable time frame). But of course, as the old saying goes, "There's no such thing as a free lunch," so be prepared to pay when requesting changes to lending agreements.

In general, because these groups have a vested interest in seeing your business survive, you should be able to leverage the relationship. The following three examples show how capital can be squeezed from these sources to obtain added liquidity:

- **Loan advance rates:** Lenders base your borrowing capacity on the value of the asset the loan is secured with. For example, banks commonly advance 80 percent on eligible trade accounts receivable. During a particularly tight period (for example, your business is dealing with increased seasonal demand), you may be able to get the lender to advance 85 to 90 percent of the eligible receivables (to free up some capital). If your bank doesn't want to work with you, then an asset-based lender may be a better financial partner. As covered in Chapter 9, asset-based lenders offer more-aggressive loan facilities in exchange for higher rates and tighter reporting (to compensate for the higher risk present). Asset-based lenders understand the importance of having access to capital in relation to businesses operating in challenging times.
- **Asset sale lease-back:** Asset sales may represent a source of quick capital to your business but come with a number of potential problems. You may want to consider executing an asset sale lease-back in which you sell the asset to a leasing company that in turn immediately leases it back to you. You achieve your goal of freeing up short-term liquidity, and the leasing company doesn't have to worry about finding a new lessee for the asset.

Similar to working with an asset-based lender, leasing companies that support these types of transactions are more expensive.

- **Restructure notes payable:** You may want to consider restructuring any long-term notes payable with the lender to lengthen the repayment period (thus reducing the current monthly payment), move it to an interest-only note for a short period (like 12 months), stagger principal payments to be lower in early years and higher in later years, or request a reduction in the fees and interest rates being charged. The goal is to reduce the capital outflow with the note agreement to better match it with the ability for your company to generate internal cash flows (to service the debt).

If you find that your company has to work with financing sources that aren't traditional banks or low-risk leasing companies, you can expect to be charged higher interest rates and more fees. Although there are no set rules, on average you can expect to pay at least 3 to 6 percent more in overall interest costs. If the bank is charging prime rate plus 1 percent, then you can expect to pay at least prime rate plus 4 percent. In addition, be prepared to incur additional costs for asset appraisals, collateral examinations, and administrative fees, which can quickly increase your borrowing rate to the low teens (a range that is not uncommon for risk-based financing sources).

With that higher cost in mind, if the difference between your business making money and losing money is 4 percentage points, then you probably have deeper rooted problems present than just a short-term liquidity squeeze. Access to the capital is the key, so paying 4 percent more (on the capital) should be far cheaper than the alternative, which includes lost business growth opportunities or, worse yet, having the business fail.

Approaching creditors, customers, and other partners

Your vendors, suppliers, and yes, even your customers can be "tapped" from time to time to assist your business with managing potential liquidity issues. After all, these parties are already in bed with you and stand to lose the most if your company fails. In addition, vendors and suppliers stand to gain quite a bit if your business continues to grow and prosper (which means more business for everyone).

- **Customers:** Having customers step up with an advance payment, deposit on a large project, or similar payment can help ease a liquidity squeeze. Also, providing customers with incentives to pay quicker (for example, giving a 1 percent discount if paid within ten days) can also be used. If customers have ample cash resources available that are earning them a

measly 1 percent, why not offer an incentive that provides a chance to save three times that much? This type of strategy has some pitfalls, but in certain situations customers can be leveraged to accelerate payment delivery (thus providing capital to your business).

- **Vendors and suppliers:** If you haven't figured this out by now, vendors and suppliers offer a relatively cheap and easily accessible source of capital to your company. Various strategies are available and range from requesting extended payment terms during a high sales period to "terming out" a portion of the balance due the vendors to be repaid over a longer period (for instance, instead of paying the entire balance in 60 days, paying it over 12 months in equal installments with a nominal interest rate attached).
- **Internal employees:** When needed, your internal employees can be evaluated to determine if added liquidity can be secured. In tight times, you may ask your senior management team to defer a portion of their compensation, which will then be paid when the company hits certain milestones. If they are resistant to this suggestion, at least you know where they stand in terms of their commitment to the company. Also, if you pay commissions on sales when they're booked, you may want to restructure this program to pay commissions when the sales are actually received (in cash) to better match cash outflows with cash inflows.

You must remember to be careful when using customers, vendors, and suppliers to provide some additional capital resources. Pushing these sources within the normal course of business is acceptable, but be careful not to appear desperate. If you convey desperation, you may actually find that payment terms tighten up and customers get nervous (thus delaying orders), which then produces the exact opposite of what you were trying to achieve.

Using equity and off-balance-sheet sources of capital

The previous sections help you look for additional capital from internal relationships and sources — assets you can leverage or tap, relationships you can push, and so on, to free up capital. But remember that a number of external capital sources are also available to provide additional liquidity during a bind. Following are a few examples of outside options (but they really only scratch the surface of potential sources):

- **Owner personal financial strength:** Business owners and key executives are sometimes asked to step up and provide additional capital to support their business. If your lenders, vendors, suppliers, customers, and employees are all onboard, why not the owners of the business? Business owners with ample personal wealth are often asked to pledge

some of this wealth for the benefit of the company. Since the Great Recession that began in late 2007 to early 2008, this source of capital has become one of the most widely utilized, as credit availability contracted at near record rates.

- **FF&CBAs:** Chapter 10 identifies FF&CBAs (family, friends, and close business associates) as natural sources to secure capital for a business. During a liquidity squeeze, these sources may be able to provide a "bridge" loan to get the company through a tight period. Though nobody likes to have to ask family members for money, when your business life depends on it, you may have no other choice available.
- **Off-balance-sheet assets:** Your business may have various assets that aren't included in the balance sheet or are restricted in nature. For example, the building your company leases may actually be owned by a group of investors with close ties to the company (including the owners of the company). Over a period of time, the building may have appreciated in value and thus can be refinanced, with the proceeds then loaned to your company from the legal entity that owns the building. Conversely, if the legal entity that owns the building has the resources, the lease payments from your company can be reduced or deferred for a period of time to free up cash.

Business owners and key executive management team members have the most to gain if a business succeeds and the most to lose if it fails. Stepping up on the capital front provides for much more than simply helping with a liquidity squeeze. Rather, it displays creditability to other parties that the management team and business owners believe in the business and are willing to stand behind it (in good times and in bad).

Financial Leverage: The Good, the Bad, and the Downright Ugly

Financial leverage is best measured by a business-solvency measurement tool: the debt-to-equity ratio (as discussed earlier in "Measuring and monitoring solvency"). That is, the higher the amount of debt your company has in relation to your equity, the higher the ratio is, which indicates that your company is operating with a greater degree of financial risk. As such, financial leverage can be broken down into the good, the bad, and the downright ugly.

The good

If properly managed, financial leverage can enhance your company's profitability and improve earnings per share. These increases allow the company to secure less equity-based capital (because the appropriate amount and

type of debt-based capital is secured), providing the business owners with greater ownership control of the entity. In order to achieve the good, you must remember to keep the balance sheet in balance and avoid leveraging your assets too high. Companies always need to remember to keep a war chest available to manage both business problems and opportunities. The challenge is to find the ideal balance between equity and debt capital sources.

The bad

Financial leverage can often produce a certain amount of business and personal stress during the down times. The creditors of your company tend to be more interested in getting repaid during the down times than providing additional capital (to support a new growth opportunity). Companies that have strong equity levels can afford some missteps along the way and, therefore, have more leeway in pursuing new markets than companies operating under heavy debt loads. Although you may survive a down period and manage to get your company's debt under control, a stronger competitor may have seized the moment and captured new market opportunities that you didn't have the resources to pursue.

The downright ugly

Financial leverage gets downright ugly when it's so excessive (or high) that you've tapped out every asset and have nothing left to work with. In this scenario, your debt-financing sources may push the company into bankruptcy or, worse yet, into an involuntary liquidation (covered in our book *Small Business Financial Management Kit For Dummies* [John Wiley & Sons, Inc.]). Basically, you reach a point of no hope in terms of being able to repay the debt and turn around your operations. The remaining option is then to lose control of your company and watch others dismantle it to settle the obligations due.

So in order to avoid becoming the downright ugly poster child, adhere to three pieces of advice: Have a clear understanding of your company's financial condition at all times (translation: Understand your financial statements), always have a strong business plan and a clear understanding of where your business is headed, and always use debt and equity appropriately.