It is hard to overstate the importance of operating cash flow and its closely-related, carefully-watched, and loosely-defined metric, free cash flow, to fundamental measures of debt-service capacity and firm valuation. Such cash flow measures are viewed as being sustainable, providing management with discretionary resources that can be used for investment, reductions in principal on outstanding debt, stock buybacks and dividends. In addition, analysts, investors and creditors, burned by the trust they have placed in reported earnings in an era of fraud and deceit in financial reporting, have turned their attention to cash flow as a directional beacon guiding them through the uncharted and risky waters of modern financial analysis. The logic is that, while earnings can be manipulated, both within and outside the parameters we know of as generally accepted accounting principles (GAAP), cash flow is more real and less subject to the vagaries of GAAP or the whims of the accountants.

The following quotes, made by respected financial professionals, demonstrate this point quite well:

It's a lot harder to manipulate cash flow from operations than it is earnings per share.\(^2\)

Cash is fact and accounting profit is opinion."\(^3\)

But unlike some items that can be clouded with financial reporting issues, cash is real, finite, and measurable. Cash is cash.\(^4\)
Dividends are tangible cash, and are therefore impossible to fake.\(^5\) In an environment where reported earnings are viewed with some degree of skepticism, cash dividends will provide a very strong signal to investors of true financial strength and of the credibility of earnings reports.\(^6\)

Financial statement readers can generally accept the balance in cash as reported on the balance sheet and the total change in cash as reported on the statement of cash flows as reliable amounts. The balance in cash is so easily verified by a reporting company's auditors through bank confirmation that most companies would not even think of purposefully misreporting it. There are, of course, exceptions. Consider, for example, HPL Technologies, Inc.

The company, a Silicon Valley-based software firm, was caught allegedly reporting $11 million in fictitious sales out of a total of $13.7 million in the quarter ended March 31, 20X2. While such a misstatement is bad enough, the company went further and allegedly reported $10 million in fictitious cash, which according to a spokesperson for the company was, "…not now and may never have been in the company's possession."\(^7\) Such transgressions in reporting cash are rare. Indeed, the exception proves the rule as the error was readily discovered. When asked about the misreported cash, accounting experts were in agreement as to the brazen nature of the company's acts. Various phrases like, "a scheme that couldn't possibly succeed," "you'd have to wonder what anyone could be thinking of," and "outrageous bravado" were used to describe the scheme.\(^8\)

Consider also the example of Parmalat SpA, Italy’s largest food company. As this chapter is being written we find ourselves scratching our heads in amazement at the mystery of the $4.8 billion in cash and securities supposedly belonging to a subsidiary of Parmalat that turned up “missing.” Allegedly, the company’s auditors were able to confirm with Bank of America Corp. the amount reported to be on deposit. It was later determined, however, that the bank never
received the confirmation. It was, in fact, intercepted and forged by someone other than a bank officer and returned to the auditors. The money did not exist.\(^9\)

At present we do not know how individuals involved in an apparent fraud at Parmalat were able to intercept a bank balance confirmation from the company’s auditors and make it appear as though it was being returned in the affirmative from the bank itself. We hasten to stress, however, that an intercepted and forged bank confirmation – a truly exceptional and seldom-occurring event - was required for such a misstatement of cash to occur. While we empathize with the plight of investors and creditors who were misled by financial statements that reported fictitious cash, it remains our position that cash is typically not an asset that is subject to such deceit.

While the ending balance in cash and the change in cash from one period to the next are not readily subject to manipulation, the components of total cash flow, the operating, investing and financing amounts, are more susceptible to management. Such steps, collectively referred to here as creative cash flow reporting, may be taken both within and beyond the boundaries of GAAP. Moreover, when financial professionals speak of cash flow and the difficulty of managing or misreporting cash flow they are typically referring to some measure of operating cash flow or closely related free cash flow. Free cash flow is generally defined as operating cash flow minus capital expenditures and, for companies who pay them, preferred dividends. Thus, while analysts, investors and creditors might be led to believe that operating cash flow and free cash flow are somehow above the creative accounting fray, that belief is unfounded. Operating cash flow and free cash flow are subject to manipulation, which, unfortunately, occurs often.

Of course we would not go as far as the opening quote to this chapter and title of the once popular song by the Steve Miller Band from the 1970s and categorically state, "Your cash ain't
nothin' but trash." Indeed, even the final line of that song announces, "but I sure better get me some more." Our point is that cash flow, in particular operating cash flow, may not be what it seems. As a result it can give an incorrect impression of a company's sustainable cash-generating capacity.

**AN ARTIFICIAL BOOST TO OPERATING CASH FLOW**

Two examples are provided for consideration. In the first, Mim Corp. used flexibility found in GAAP for cash flow reporting to boost its operating cash flow. In the second, Dynegy, Inc. went beyond the boundaries of GAAP to provide a near-term increase to operating cash flow. The steps taken by both companies provided only a temporary boost to operating cash flow.

**Employing Book Overdrafts**

As part of their cash management practices, some companies may maintain minimal checking account balances. Through a prearranged agreement their bank automatically provides any funding needed to cover checks presented for payment. At the end of an accounting period the bank-reported cash balance will be approximately zero. However, due to outstanding checks that have not been presented for payment, the book balance in cash, which consists of the bank balance less any outstanding checks, will be a negative amount. Generally accepted accounting principles are clear in calling for negative book balances in cash to be reclassified as liabilities. That is, the book balance in the overdrawn cash account is marked up from a negative amount to zero, reflecting more cash on hand, and is offset by an increase in a current liability. That liability represents the company's obligation to the bank for financing to cover the company's outstanding checks as they are presented for payment.
During its first quarter ended March 31, 20X2, Mim Corp. generated $12.9 million in operating cash flow. That amount was up substantially from the $3.9 million generated during the same period in the previous year. A closer look at the company's cash flow statement, however, indicated that an increase in overdrafts provided $9.7 million of the operating cash flow generated in 2002. Thus, approximately seventy-five percent of its operating cash flow was not really generated by the company but was instead due to a reclassification of overdrafts.

Generally accepted accounting principles are not definitive in the cash-flow classification of overdrafts. Mim has used this lack of direction to its advantage, boosting operating cash flow in the process. Whether one agrees with the company's approach or not, the nonsustainable nature of cash flow generated by increasing overdrafts should be clear.

**A Complex Long-Term Contract**

In the year ended December 31, 20X2, Dynegy, Inc. reported cash provided by operating activities of $811 million. That was up from $438 million in 20X1 and $9 million in 20X0. The improvement in operating cash flow appeared to lend credence to the company's growing earnings. Earnings, defined as income from continuing operations, grew to $648 million in 20X2, up from $501 million in 20X1 and $152 million in 20X0. The company's earnings and cash flow results for the years 20X0, 20X1 and 20X2 are summarized in Exhibit 1.1.

**Exhibit 1.1**  Dynegy, Inc., Selected Financial Results, As Originally Reported, Years Ending December 31, 20X0, 20X1 and 20X2 (millions of dollars)

<table>
<thead>
<tr>
<th></th>
<th>20X0</th>
<th>20X1</th>
<th>20X2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from continuing operations</td>
<td>$152</td>
<td>$501</td>
<td>$648</td>
</tr>
<tr>
<td>Cash provided by operating activities</td>
<td>$ 9</td>
<td>$438</td>
<td>$811</td>
</tr>
</tbody>
</table>

Proud of his company's performance in a difficult operating environment, Chuck Watson, Dynegy's CEO noted,

Despite the extraordinary circumstances, Dynegy generated a 47 percent increase in recurring earnings per share … If our results could be summarized in one word, it is execution. In 20X2, the bar was raised on our company more than once and, collectively, our employees cleared it again and again.\textsuperscript{11}

Commenting further on his company's reported financial results, Mr. Watson stated,

We remain committed to providing comprehensive and transparent financial disclosures so that our stakeholders have a clear understanding of our operating results and financial position.\textsuperscript{12}

These comments were made on March 22, 20X3. However, within only a few weeks the company was backtracking on its published results as it announced a Securities and Exchange Commission investigation and a planned restatement. In an 8-K Current Report filing, dated April 25, 20X3, the company announced that it was going to restate its statement of cash flows, reclassifying amounts reported as operating cash flows to the financing section.

**Dynegy's Gas Contract**

During April 20X2, Dynegy entered into a five-year contract to purchase natural gas from an unconsolidated special purpose entity (SPE), ABG Gas Supply, LLC. The five-year contract was dubbed "Project Alpha." It was unique in that during its first nine months, which ended with Dynegy's 20X2 reporting year, Dynegy would be able to purchase natural gas for below-market rates. In turn, Dynegy would sell this gas at market, reaping gains. Across that nine-month time
frame those gains amounted to approximately $300 million and were offset with losses on the books of ABG Gas Supply. ABG financed its losses with a $300 million loan from Citigroup, Inc. Following that nine-month period and commencing in early 20X3, the contract held that for fifty-one months Dynegy would be required to buy gas from ABG Gas Supply at rates that were above market. During this term of the contract Dynegy would incur losses while ABG Gas Supply would enjoy gains. During this fifty-one month period, Dynegy's losses and ABG Gas Supply's gains would accumulate to approximately $300 million. At the end of the five-year contract's life, both parties would be whole.  

On the surface this gas supply contract looked like an old-fashioned earnings management tool. It appeared that Dynegy was able to use the agreement to boost profits during 20X2 and then offset them with losses in 20X3 and beyond. However, that was not the design. This was strictly an operating cash flow management tool.

Like other energy companies, Dynegy's contract with ABG Gas Supply was only one contract in its open book of derivatives. All such contracts were carried at fair value under mark-to-market rules. Gains and losses resulting from mark-to-market adjustments were included in reported net income.

When it was signed, the ABG Gas Supply agreement had no market value. That is, it was a contract to buy gas at market. It just happened to include below-market purchase prices early that were offset with above-market purchase prices later. While in the early going Dynegy purchased gas below market and recognized gains, the company recognized losses during the remaining months of the contract. If the entire contract netted to no gain or loss, then any gain recognized early must have been offset with accompanying losses on the contract's remaining
term. These losses were recognized in income as the open gas contract was marked to market. Thus, the contract had no net effect on net income. Gains were offset with losses.

The creativity of the transaction, and in this context creativity does not have a positive connotation, was that while the transaction did not increase net income it did increase operating cash flow. That is, the purchase of natural gas at below market rates and its accompanying sale at market resulted in profits that were backed by operating cash flow. However, the losses reported as a result of marking the natural gas contract to market were non-cash. As a result, operating cash flow was boosted even as net income was unaffected. Of course operating cash flow would be reduced during the later months of the contract when the company began purchasing gas at above-market rates. But such a drain on operating cash flow would occur in subsequent fiscal years. Further, the losses associated with sales of gas purchased at above market rates would be offset by gains on marking the natural gas contract to market.

The SEC found that Dynegy's agreement with ABG Gas Supply was effectively a financing transaction. Dynegy effectively borrowed $300 million from Citigroup and used ABG Gas Supply as a conduit to handle loan proceeds and repayment. What was unique about the restatement was that it required Dynegy to change the classification of its cash flow statement without materially altering the total change in cash. The SEC was sufficiently concerned about the proper classification of cash flow to enforce reclassification.

After restatement for this item and other, less material items, Dynegy's operating cash flow was reduced to $535 million in 20X2 from the $811 million originally reported. Earnings were also restated, though for other reasons. In contrasting Exhibit 1.1 with the revised financial results presented in Exhibit 1.2 it is clear that the company's apparent ability to generate cash and earnings was reduced significantly.
Exhibit 1.2 Dynegy, Inc., Selected Financial Results, As Restated, Years Ending December 31, 20X0, 20X1 and 20X2 (millions of dollars)

<table>
<thead>
<tr>
<th></th>
<th>20X0</th>
<th>20X1</th>
<th>20X2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from continuing operations</td>
<td>$118</td>
<td>$494</td>
<td>$419</td>
</tr>
<tr>
<td>Cash provided by operating activities</td>
<td>$ 40</td>
<td>$410</td>
<td>$535</td>
</tr>
</tbody>
</table>

Source: Dynegy, Inc., Form 10-K/A annual report to the Securities and Exchange Commission.

CLASSIFYING CASH FLOW

Generally accepted accounting principles require that the change in cash between two accounting periods be classified into three broad categories: cash provided or used by operating activities, by investing activities and by financing activities. The three categories represent three very different sources and uses of cash.

Cash provided by operating activities, or more simply operating cash flow, generally reflects the cash effects of transactions that enter into the determination of net income. Included is cash collected from customers for sales made or services provided. Cash payments to employees and suppliers are also included in the calculation of operating cash flow as are all income taxes paid. Cash flows from investing activities include the making and collecting of loans and the acquiring and disposing of debt and equity investments and property, plant and equipment. Thus, the purchase of inventory by a jeweler is reported as an operating use of cash. However, the payment for a showcase in which the jewelry inventory is displayed is reported as an investing use of cash. Cash flows from financing activities include principal amounts borrowed from and repaid to lenders as well as cash received from the issuance and cash paid for the repurchase of equity. Only debt arising from actual borrowing transactions is reported as
financing cash flow. Thus, the use of vendor financing, e.g., accounts payable, by the jeweler to postpone payment for inventory purchases, would be classified as an operating source of cash.

A helpful way to look at the structure of the cash flow statement is to categorize cash amounts paid to make investments, including purchases of property, plant and equipment, or cash received from the sale of investments, as investing activities. Any income generated by those investments, such as cash revenue less cash expenses on investments in property, plant and equipment, interest income on investments in debt securities or dividend income on investments in equity securities, is included in the calculation of operating cash flow. While the sale of investments will generate gains and losses, those gains and losses are not reported in the operating section of the cash flow statement. Rather the proceeds from sale, which include recovery of an investment's book value plus a gain on sale or less a loss, are reported in the investing section.

While proceeds from new borrowings or cash paid to retire debt are reported as financing activities, interest paid on debt is classified as an operating item. In the same way that net income is considered to be earnings available for shareholders, operating cash flow is measured from a shareholder's point of view. That is, net income is measured after interest expense but before dividends. Similarly, operating cash flow is measured after interest is paid but before dividends, which are reported as a financing activity. Exhibit 1.3 provides a summary of the classification of cash flow into operating, investing and financing activities. The topic is dealt with at greater length in Chapter 2.
Exhibit 1.3 Classifying Cash Flow into Operating, Investing and Financing Activities

<table>
<thead>
<tr>
<th>Cash provided or used by operating activities</th>
<th>Cash collected from customers for sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash provided or used by investing activities</td>
<td>Cash disbursements and collections from making and collecting loans</td>
</tr>
<tr>
<td>Cash provided or used by financing activities</td>
<td>Investments made and proceeds from sales of investments in debt and equity instruments</td>
</tr>
<tr>
<td></td>
<td>Cash disbursements from the purchase and cash proceeds from the sale of property, plant and equipment</td>
</tr>
<tr>
<td></td>
<td>Principal amounts borrowed and repaid on debt</td>
</tr>
<tr>
<td></td>
<td>Proceeds from the issuance and cash disbursed in the repurchase of equity securities</td>
</tr>
<tr>
<td></td>
<td>Dividends paid</td>
</tr>
</tbody>
</table>

The Importance of Operating Cash Flow

Cash provided by operating activities is the primary source of sustainable cash flow. It is this source of cash that provides management with money to meet discretionary needs, including reinvestment, debt reduction, stock buybacks and dividends. Unlike cash provided by investing or financing activities, operating cash flow comes from a renewable source, operations. Though the sustainability of operating cash flow depends on a company's ability to maintain profitable operations and its success in converting those profits into cash.

Consider cash provided by the sale of equipment or the sale of an investment in stock. Such actions represent common sources of cash provided by investing activities. They are, however, one-time events. The cash generated by their sale cannot be expected to recur as the assets sold are no longer available for resale. Also consider cash provided by a borrowing transaction. To gain new access to borrowed cash a company's management must meet with its
lenders, hat in hand. Worse, borrowed cash comes with strings attached - a scheduled maturity date and the need to pay interest. Similarly, financing cash provided by an equity offering is not a sustainable source of cash as investors must be asked to contribute anew. They can always say no.

A company that generates positive operating cash flow might be viewed as employing a legal cash printing press. Each morning as the firm's lights are illuminated and the wheels of commerce begin to turn, the cash printing presses are switched on and the flow of cash begins for another day. Note that the presses turn and generate cash as long as the company continues to operate. Cash flow is being generated by a renewable source. In addition, because cash is being generated by operations it need not be repaid to creditors for amounts borrowed outside of operations or returned to investors, unless by design.

The printing press analogy and reference to operating cash as flowing from a renewable source fits Microsoft Corp. well. The company generates prodigious amounts of operating cash flow. In 20X3, the amount was $15,797 million, which is over $43 million per day, 365 days per year. That was up from $14,509 million in 20X2 and $13,422 million in 20X1. In 20X3, the company used $7,213 million of its operating cash flow primarily for the purchase of investments. Another $5,223 million was used in the repurchase of common stock and the payment of dividends.

Measured across 20X3, Microsoft's cash balance increased by $3,361 million. That was the first year in several that cash on hand did not decline. Of course, as seen in Exhibit 1.4, overall declines in cash during 20X1 and 20X2 were not representative of the company's cash flow performance. Rather, it was its generation of positive operating cash flow, or if one were to
subtract capital expenditures, its free cash flow, that were more representative of Microsoft's cash flow performance in each of those years.

**Exhibit 1.4** Microsoft Corp., Cash Flow Data, Years Ending June 30, 20X1, 20X2 and 20X3 (millions of dollars)

<table>
<thead>
<tr>
<th></th>
<th>20X1</th>
<th>20X2</th>
<th>20X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash provided by operating activities</td>
<td>$13,422</td>
<td>$14,509</td>
<td>$15,797</td>
</tr>
<tr>
<td>Cash used by investing activities</td>
<td>(8,734)</td>
<td>(10,845)</td>
<td>(7,213)</td>
</tr>
<tr>
<td>Cash used by financing activities</td>
<td>(5,586)</td>
<td>(4,572)</td>
<td>(5,223)</td>
</tr>
<tr>
<td>Net change in cash</td>
<td>$(898)</td>
<td>$(908)</td>
<td>$3,361</td>
</tr>
</tbody>
</table>


Contrast Microsoft's recent cash flow performance with that of Lucent Technologies, Inc. presented in Exhibit 1.5. In 20X3, Lucent used $948 million in cash from continuing operations. However, while the company consumed operating cash flow in 20X3, investing activities, primarily from the disposition of manufacturing operations, provided $758 million in cash flow. Financing activities also provided cash, $1,117 million, primarily from the issuance of convertible preferred shares and from borrowings. For the year 20X3, after factoring in the effect of exchange rate changes on cash, Lucent's cash balance actually increased by $927 million as a result of continuing operations. In fact, the balance in cash related to continuing operations has increased for all three years, 20X1, 20X2 and 20X3.

During 20X3, Lucent’s operating performance was showing signs of improvement. While on its income statement the company reported a loss from continuing operations of $770 million, that was much better than a loss of nearly $12 billion in 20X2 and over $14 billion in 20X1. Reflecting expectations of continued improved performance, during 20X3 the company’s share price began to show signs of life. However, unless the company can demonstrate an ability
to generate positive operating cash flow and not simply a growing balance in cash resulting from asset dispositions, preferred stock offerings and borrowed amounts, that incipient improvement in its share price may be short lived.

**Exhibit 1.5** Lucent Technologies, Inc., Cash Flow Data - Continuing Operations, Years Ending September 30, 20X1, 20X2 and 20X3 (millions of dollars)

<table>
<thead>
<tr>
<th></th>
<th>20X1</th>
<th>20X2</th>
<th>20X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash used by operating activities of continuing operations</td>
<td>$(3,421)</td>
<td>$(756)</td>
<td>$(948)</td>
</tr>
<tr>
<td>Cash provided by investing activities of continuing operations</td>
<td>1,951</td>
<td>757</td>
<td>758</td>
</tr>
<tr>
<td>Cash provided by financing activities of continuing operations</td>
<td>2,629</td>
<td>503</td>
<td>1,117</td>
</tr>
<tr>
<td>Net change in cash from continuing operations</td>
<td>$ 1,159</td>
<td>$ 504</td>
<td>$ 927</td>
</tr>
</tbody>
</table>


*Sustainable Cash Flow*

In the subtitle of this book we speak of uncovering sustainable financial performance. In particular, our interest, which is shared by both equity investors and creditors, is in uncovering sustainable sources of cash flow. Equity investors make projections of such cash flow and assign an appropriate risk-adjusted discount rate in computing their present value. This present value provides an estimate of a company's current fair or intrinsic value. Lenders, interested in having interest and principal on loans repaid, seek sustainable cash as a source of repayment.

Sustainable cash flow is recurring cash and is derived from a company’s profitable operations, which is a renewable source. Positive operating cash flow can be generated in the
near term, and on occasion over extended periods, even in the absence of profitable operations. However, to produce sustainable cash flow, profitable operations are a must.

Witness the extended demise of Eastern Airlines, Inc. through the late 1980s. Before it was liquidated the company thrashed about for several years losing money on a regular basis. It stayed in business and at times actually generated positive operating cash flow even as it reported losses. The operating cash it generated was the result of significant non-cash expenses, such as depreciation on its equipment, the liquidation of working capital accounts, and its ability to convince certain employee groups to accept equity claims, typically preferred stock, in return for services. An end to operations was ultimately necessary as the company's inability to generate any meaningful profits finally eliminated any prospect it had of meeting its obligations.

Even operating cash flow supported by profitable operations may not be sustainable. For example, operating cash derived from an outsized decline in accounts receivable or a wholesale liquidation of inventory cannot be maintained. Similarly, extending the time period taken to pay vendors will provide an increase in operating cash flow. However, that increase in cash flow is not derived from a recurring source as vendors will ultimately balk at ever-increasing payment periods and demand more timely payment.

Potential problems notwithstanding, among the three classifications on the statement of cash flows (operating, investing and financing), operating cash flow is derived from a more sustainable source. Moreover, operating cash flow is clearly disclosed and readily accessible in financial statements. Accordingly, operating cash flow is our starting point for identifying sustainable cash flow. It must be stressed, however, that operating cash flow is only our starting point. Numerous adjustments for misclassifications and nonrecurring cash flow items are needed as discussed in the paragraphs and chapters that follow.
Equity Investors and Cash Flow

Equity investors are naturally interested in sustainable cash flow that might be distributed to them. As a residual interest holder, common shareholders have the last claim on cash flow. Lenders and preferred shareholders come before them.

As a starting point in computing cash available for common shareholders, operating cash flow is a useful metric because it is calculated after interest payments have been deducted. Such disbursements represent required cash payments to lenders. However, equity investors are typically interested in making other subtractions from operating cash flow as well. A deduction for capital expenditures is common. As discussed at length in Chapter 10, there is no general agreement on the measure of capital expenditures to be deducted. For example, some investors would argue that gross capital expenditures, which exclude any proceeds from capital equipment disposals, should be used. Others would argue that net capital expenditures is the more realistic measure.

There is also disagreement concerning whether replacement capital expenditures or capital expenditures needed to support expected growth should be used. Replacement capital expenditures are amounts needed to replace productive capacity consumed during a reporting period. That is, before cash can be paid to shareholders a company needs to maintain its productive capacity. Failure to do so would mean an eventual end to operations. Replacement capital expenditures are designed to reflect just such a charge. Of course, estimating replacement capital expenditures is not straightforward. Depreciation is often used as an approximation. However, because it is based on older equipment costs, it tends to understate replacement capital expenditures.
Because replacement capital expenditures permit only the maintenance of current productive capacity, capital expenditures needed to grow the business are not taken into account. Many would argue that if a certain rate of growth is assumed in valuing a company's shares then capital expenditures adjusted for growth are more meaningful than replacement capital expenditures.

Estimating capital expenditures needed to maintain growth is also a challenging endeavor. Many would use actual capital expenditures for this purpose or possibly a normalized measure of actual capital expenditures, for example, an average of actual capital expenditures made over the most recent two or three year period.

As an example, consider Lowe's Companies, Inc. During the company's fiscal year ended January 31, 20X3 Lowe's generated $2,696 million in operating cash flow. Using depreciation as an estimate, replacement capital expenditures that year totaled $626 million, yielding free cash flow of $2,070 million. However, if net new capital expenditures made during the year, $2,318 million, were used to represent replacement and growth-related capital expenditures, free cash flow would only be $378 million. These calculations, together with amounts for 20X1 and 20X2, are presented in Exhibit 1.6.
As can be seen in Exhibit 1.6, measures of free cash flow are very dependent on the definition of capital expenditures employed. Using replacement capital expenditures, Lowe's’ free cash flow has been positive for all three years presented. However, using actual capital expenditures as an estimate of replacement and growth-related capital expenditures, free cash flow turned positive, but only marginally, in 20X3.

At this point, we are not arguing for or against either measure of free cash flow. That will come later in Chapter 10. We simply want to stress that operating cash flow is a useful starting point for computing free cash flow.

Besides capital expenditures, any claim on cash flow that is superior to the claims of common shareholders and that has not been previously deducted in arriving at net income should be subtracted from operating cash flow in computing free cash flow. In particular, dividends on preferred stock are such a claim. Just as preferred dividends are subtracted from net income in...
computing earnings available for common shareholders, preferred dividends paid, which are reported in the financing section of the cash flow statement, also should be subtracted from operating cash flow in computing free cash flow. Lowe's did not have preferred stock outstanding and accordingly, paid no preferred dividends.

**Lenders and Cash Flow**

Lenders' claims on cash flow precede those of equity investors. Because it is tax deductible, interest is paid with operating cash flow computed before interest and before income taxes are subtracted. EBITDA, earnings before interest, taxes, depreciation and amortization, is a crude approximation of such pre-interest, pre-tax operating cash flow.\textsuperscript{15} It is referred to as a crude measure of cash flow because while it is calculated before two key non-cash expenses, depreciation and amortization, it does not adjust for other non-cash items, especially changes in working capital accounts. As such, it is really more a measure of working capital, current assets minus current liabilities, generated by operations before interest and taxes.

Working capital generated by operations is not cash generated by operations. Increases in sales that go uncollected contribute to EBITDA by the associated increase in earnings. However, such sales would not increase operating cash flow. Similarly, cash paid to purchase inventory, which remains on hand, would not reduce EBITDA but would reduce operating cash flow. Thus, unless a lender is actually willing to accept accounts receivable or inventory in payment of interest and principal on a loan, EBITDA does not provide an accurate measure of debt-service capacity. Of course, in order to get access to cash, a lender might be able to force a borrower to liquidate its receivables and inventory. However, there is a risk of loss in such a liquidation process.
Returning to the Lowe's example, in its year ended January 31, 20X3 the company reported net earnings of $1,471 million. Adding back interest expensed during the year of $195 million, income taxes of $888 million, and depreciation and amortization of $645 million, EBITDA of $3,199 million is obtained. This amount is significantly higher than amounts reported earlier for operating cash flow of $2,696 million or free cash flow, depending on its calculation, of $2,070 million or $378 million. As noted, the primary reasons for the difference are that EBITDA is calculated before interest expense and income taxes while operating cash flow and free cash flow are computed after interest and income taxes. Plus, EBITDA excludes changes in working capital accounts, such as accounts receivable, inventory and accounts payable which, when growing, collectively reduce operating and free cash flow. The details of the calculations of EBITDA for Lowe's for 20X1, 20X2 and 20X3 are presented in Exhibit 1.7. A closer look at EBITDA is provided in Chapter 2.

**Exhibit 1.7** Lowe's Companies, Inc., Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA), Years Ending February 2, 20X1, February 1, 20X2 and January 31, 20X3 (millions of dollars).

<table>
<thead>
<tr>
<th></th>
<th>20X1</th>
<th>20X2</th>
<th>20X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net earnings</td>
<td>$ 810</td>
<td>$1,023</td>
<td>$1,471</td>
</tr>
<tr>
<td>Plus interest expense</td>
<td>198</td>
<td>203</td>
<td>195</td>
</tr>
<tr>
<td>Plus income taxes</td>
<td>472</td>
<td>601</td>
<td>888</td>
</tr>
<tr>
<td>Plus depreciation and amortization</td>
<td>410</td>
<td>534</td>
<td>645</td>
</tr>
<tr>
<td>Earnings before interest, taxes depreciation and amortization (EBITDA)</td>
<td>$1,890</td>
<td>$2,361</td>
<td>$3,199</td>
</tr>
</tbody>
</table>


*aExcludes interest income and is net of interest capitalized.*
Equity Investors and EBITDA

During the 1990s, many equity investors became enamored with EBITDA. Companies reporting their results were all too happy to oblige and began reporting pro-forma earnings measures that were based on EBITDA. These moves were understandable as valuations appeared to be less rich when earnings were calculated before interest, taxes, depreciation and amortization. However, any shareholder who believes the value of a share of stock is a function of EBITDA is misleading himself. Earnings before interest, taxes, depreciation and amortization are not earnings that are available for shareholders. There are key expenses that must be paid before EBITDA-based earnings can be distributed to shareholders. If EBITDA were useful for equity valuation it would stem from a positive correlation it may have with reported earnings and to a lesser extent with operating cash flow.

EBITDA is an earnings-based, modified cash flow metric. It is not a true measure of cash flow. We include it in our discussion because it is used in analysis by lenders and equity investors. However, our focus here is in uncovering sustainable sources of cash flow. Accordingly our discussion of EBITDA will not be as extensive as the attention we afford other cash flow measures.

An Unexpected Problem with EBITDA

Because it is an earnings-based measure, EBITDA suffers from many of the same kinds of creative accounting problems that plague net income. These include premature or fictitious revenue recognition, aggressive cost capitalization and understated accruals, among others. However, Global Crossing, Inc. employed an accounting tactic that lowered earnings even as it
raised EBITDA. Moreover, on the surface the company's accounting move actually sounded conservative because it raised reported debt levels.

In 20X1, without a change in its underlying lease or credit agreements, Global Crossing modified its accounting for certain of its outstanding operating leases to capital-lease treatment. What the change meant was that operating lease commitments that were heretofore carried off-balance sheet were brought onto the balance sheet along with associated leased assets. Because liabilities were increased with no accompanying increase in shareholders' equity, balance sheet measures of financial leverage were raised as well.

On the income statement, rent expense on operating leases was replaced with interest expense and amortization on capital leases. In the early years of the company's outstanding lease terms such a step would reduce net income. However, because EBITDA is measured before interest and amortization, that measure was actually increased. The company's motive was to avoid violation of certain debt agreements that carried covenants based on EBITDA. Even though the accounting move altered EBITDA by little more than one percent, that was enough to avoid important covenant violations.

Lease classification is supposed to be established when a lease is signed. It is not subject to unilateral change later without alterations to the terms of the underlying lease. That rule did not stop the company, however. Commenting on the tactic, one forensic accountant noted, "It immediately smacks of an attempted manipulation of the financial results."17

**Lenders and the Uniform Credit Analysis Approach**

Rather than using EBITDA exclusively in their analysis, many lenders use what is referred to as the Uniform Credit Analysis (UCA) approach to cash flow analysis.18 Unlike EBITDA, which is
an earnings-based, modified cash flow metric, UCA-defined cash flow is a stricter definition of cash flow. The UCA format cash flow statement begins with collections resulting from sales made and services provided. From that opening amount, labeled cash from sales, disbursements are deducted based on their importance to operations and priority of cash flow claim. As each disbursement is subtracted from cash collected, a subtotal is calculated that communicates whether cash collections were sufficient to cover that particular disbursement.

For example, disbursements subtracted first from cash from sales are payments for purchases and production of inventory, referred to as cash production costs. Service firms would include payments for services provided in this caption. The remaining subtotal, gross cash profit, measures cash available after all payments for inventory sold or held for sale and services provided are covered. Subtracted from gross cash profit is cash operating expense, which includes sales and marketing, general and administrative, and research and development expenditures. The remaining subtotal, cash after operations, indicates whether a company's pre-tax core operations are generating positive operating cash flow.

Cash after operations is adjusted for other cash income or disbursements and income taxes to yield net cash after operations, which for lenders is a key measure of cash-flow performance. This subtotal, reported before interest paid, represents operating cash flow that is available for debt service, including interest and principal. A summarized version of the UCA cash flow statement format through net cash after operations is provided in Exhibit 1.8.
**Exhibit 1.8** Uniform Credit Analysis (UCA) Cash Flow Statement Format, Summarized Version with Balance Sheet Changes, Presented through Net cash after Operations

<table>
<thead>
<tr>
<th>Sales</th>
<th>+/- Change in receivables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash from sales</td>
<td></td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>+/- Change in inventory</td>
</tr>
<tr>
<td></td>
<td>+/- Change in payables</td>
</tr>
<tr>
<td>Cash production costs</td>
<td></td>
</tr>
<tr>
<td>Gross cash profit</td>
<td></td>
</tr>
<tr>
<td>SG&amp;A expenses</td>
<td>+/- Change in prepaids</td>
</tr>
<tr>
<td></td>
<td>+/- Change in accruals</td>
</tr>
<tr>
<td>Cash operating expense</td>
<td></td>
</tr>
<tr>
<td>Cash after operations</td>
<td></td>
</tr>
<tr>
<td>+/- Other cash income (expense)</td>
<td></td>
</tr>
<tr>
<td>- Income taxes paid</td>
<td></td>
</tr>
<tr>
<td>Net cash after operations</td>
<td></td>
</tr>
</tbody>
</table>

Net cash after operations, the key subtotal indicating debt service capacity as reported on the UCA cash flow statement, is calculated very much like cash provided by operating activities as disclosed in GAAP-format cash flow statements. The only material difference is that net cash after operations (per Exhibit 1.8) is reported before interest paid but cash provided by operating activities (i.e., GAAP format), more commonly referred to as operating cash flow, is after interest paid.

A variation on the UCA format cash flow, a statement we will refer to as a cash flow analysis statement, is a useful analysis tool for equity investors as well as lenders. This point will be developed more thoroughly in Chapter 9.

**Other Measures of "Cash Flow"**

There are numerous other measures that are referred to as cash flow. Like EBITDA, many of them are not actual cash flow measures but rather earnings-based amounts that have some of the
features of actual cash-flow measures. For example, net income plus depreciation has been referred to by some as "traditional" cash flow. Net income plus depreciation, which also typically includes amortization, is cash flow only to the extent that it is calculated before certain important non-cash expenses. However, there are other non-cash expenses that are not accounted for, including deferred tax expense for example. In addition, net income plus depreciation does not include changes in working capital accounts in its calculations.

A popular measure of cash flow in the real estate industry, especially for real estate investment trusts (REITs), is funds from operations (FFO). The National Association of Real Estate Investment Trusts defines FFO as net income or loss computed in accordance with generally accepted accounting principles excluding gains or losses from debt restructuring and sales of property, plus depreciation and amortization of real estate assets. Thus, FFO, like EBITDA, is not a comprehensive cash flow measure. In fact, BRE Properties, Inc. a real estate investment trust specializing in apartment properties, notes,

"FFO does not represent cash generated from operating activities . . . and therefore should not be considered a substitute for . . . cash flow from operations as a measure of liquidity."

Funds from operations is effectively a measure of net income plus depreciation and accordingly, is more of a measure of earnings than of cash flow. Alluding to this point and to measurement problems with FFO, R. Scott Sellers, Chairman and CEO of Archstone-Smith Trust, another apartment REIT, notes,

"Our industry is finally moving to the use of an audited performance measurement, earnings per share. This is a tremendous improvement of the substantially flawed funds from operations (FFO). I believe that a performance metric that ignores depreciation -
like FFO does - encourages management to make sub-optimal investment decisions and diminishes credibility with investors.\textsuperscript{20}

While Mr. Sellers is focusing his attention on earnings and not cash flow, his comments do raise an important point for cash-flow measurement. Though depreciation is a non-cash expense, there is a cash disbursement associated with the use of fixed assets in operations. That disbursement, capital expenditures, is reported as an investing item on the cash flow statement and is not a deduction in computing operating cash flow. If he were speaking in terms of cash flow, Mr. Sellers would be referring to free cash flow, which is reported net of capital expenditures. It is because of observations like Mr. Sellers' that we have devoted a chapter to free cash flow.

A variation on net income plus depreciation that captured investors' attention during the stock market bubble was cash earnings, computed by adding goodwill amortization to net income. This calculation dated to a time, before Statement of Financial Accounting Standards (SFAS) No. 142, \textit{Goodwill and Other Intangible Assets}, when goodwill was still amortized.\textsuperscript{21} SFAS No. 142, which was effective in 2002, discontinued the amortization of goodwill and other intangible assets with indefinite lives.

During the 1990s many firms had grown rapidly through acquisition. As a result, their balance sheets carried significant amounts of goodwill, the amortization of which provided a significant earnings drag. That amortization was added back to net income because it was a non-cash expense and was not a recurring cost of operations. The resulting cash earnings, however, was not a measure of cash flow but rather net income excluding one particular expense amount. Accordingly, cash earnings was really more a measure of earnings and not cash flow.
The attraction of cash earnings, especially during a time when share prices generally were richly priced, can be seen in the following passage describing the acquisition of Hannaford Brothers Co. in 1999 by Food Lion, Inc:

The rich price tag and the accounting treatment being used would reduce Food Lion's earnings per share about 19% in 20X0 and about 4% in 20X1 . . . The company forecast that cash earnings per share -- excluding goodwill amortization from purchase accounting -- will grow 15% in the second year after closing.22

EBITDA, net income plus depreciation, funds from operations, and cash earnings are all earnings-based measures that have been referred to as cash flow at one time or another. As noted, none of them are truly cash flow measures. Accordingly, their use in analysis will not be a focus for this book. However, because of their continuing though declining use in practice and in an effort to provide more perspective on the subject of cash flow reporting we turn to them again in Chapter 2.

Using Sustainable Cash Flow As An Early-Warnings Indicator

In summarizing his firm's concerns about earnings at Sysco Corp., Eni Tan, an analyst at the Center for Financial Research and Analysis (CFRA) noted, "Whenever you see a deterioration in cash flow [in conjunction with rising net income] it raises a question about the quality of the earnings."23 The analyst listed many reasons to be concerned about earnings at Sysco for the six months ended December 28, 20X2. However, the point being made about cash flow was that rising earnings in the absence of rising cash flow suggests the firm may be taking aggressive steps to boost earnings artificially. Such earnings are the result of accrual accounting techniques and do not increase cash flow. Instead, other balance sheet accounts get boosted. If those accounts are not ultimately realized, write-offs may be necessary.
It is important to note that operating cash flow reported by Sysco actually increased faster than earnings for the interim period in question. However, according to the analyst, nonrecurring tax deferrals added significantly to operating cash flow. In the absence of those temporary deferrals, operating cash flow would have declined.

As another example, reported operating cash flow at Xerox Corp. grew from $479 million in 20X4 to $1,224 million in 20X9, an increase of 156 percent. During that same time period reported income from continuing operations grew from $794 million to $1,424 million, an increase of 79 percent. Evidence of the company's record of earnings and cash flow growth, using amounts as originally reported, is presented in Exhibit 1.9.

**Exhibit 1.9** Xerox Corp., Earnings from Continuing Operations and Cash Provided by Operating Activities, As Originally Reported, Years Ended December 31, 20X4 – 20X9 (millions of dollars).

<table>
<thead>
<tr>
<th>Year</th>
<th>20X4</th>
<th>20X5</th>
<th>20X6</th>
<th>20X7</th>
<th>20X8</th>
<th>20X9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from continuing operations</td>
<td>$794</td>
<td>$1,174</td>
<td>$1,206</td>
<td>$1,452</td>
<td>$585</td>
<td>$1,424</td>
</tr>
<tr>
<td>Cash provided by operating activities</td>
<td>$479</td>
<td>599</td>
<td>324</td>
<td>472</td>
<td>$(1,165)</td>
<td>$1,224</td>
</tr>
</tbody>
</table>

Source: Xerox Corp., Form 10-K annual reports to the Securities and Exchange Commission.

We now know that Xerox improperly overstated its earnings in several of the years presented here. Once restated, income from continuing operations in 20X9 was reduced to $844 million. Potential problems with the company's earnings would not have been apparent if one were to compare the growth in reported earnings with the growth in reported operating cash flow. A drop in cash provided by operating activities in 20X8 notwithstanding, through 20X9 reported operating cash flow was growing faster than reported earnings. Using the reasoning applied by the CFRA analyst, high operating cash flow growth would imply that earnings at Xerox were of high quality.
However, reported cash flow in 20X9 included the proceeds from a securitization of finance receivables in the amount of $1,495 million. While such a sale of receivables is properly included with operating cash flow in accordance with generally accepted accounting principles, sale proceeds represent cash that would have been collected in subsequent years. The company was effectively borrowing operating cash flow from future reporting periods. Subtracting securitization proceeds of $1,495 million from reported operating cash flow of $1,224 million yields an adjusted operating cash flow figure of negative $271 million.26

Operating cash flow at Xerox really was not growing faster than income from continuing operations. In fact, adjusted operating cash flow was declining even as earnings were registering notable growth. Such a disconnect between earnings growth and sustainable cash flow growth is an early-warning indicator of problems with reported earnings. However, the warning would not have been sounded if reported operating cash flow had been used in analysis.

As explained more carefully in Chapter 8, operating cash flow can be a useful early-warning indicator for future earnings problems. However, before operating cash flow can be used in this manner it must be adjusted to remove nonrecurring items providing a sustainable measure of cash flow. Such an adjustment was employed by the CFRA analyst to remove nonrecurring tax deferrals from operating cash flow. Such a step would also be needed before operating cash flow could be used in effectively evaluating Xerox's earnings performance.

**The Focus: Operating Cash Flow**

While many definitions of cash flow from an operating source exist in practice, only one is defined by generally accepted accounting principles. That measure, cash provided by operating activities, often referred to as operating cash flow or cash provided by operations, is carefully
defined and clearly disclosed in corporate financial statements. Accordingly, throughout this book, GAAP-defined operating cash flow will be our starting point in deriving sustainable cash flow.

However, the focus in this book will not be on operating cash flow to the total exclusion of all other performance measures. In particular, free cash flow is a useful tool and it will be examined at length. However, most calculations of free cash flow begin with operating cash flow. Accordingly, the usefulness of free cash flow is dependent on the quality and sustainability of operating cash flow, giving us reason to sharpen our focus on that measure even further.

**CREATIVE CASH FLOW REPORTING**

Creative cash flow reporting refers to any and all steps used to create an altered impression of operating cash flow and, in the process, provide a misleading signal of a firm’s sustainable cash-generating ability. Steps employed to misrepresent a firm's sustainable cash-generating ability may employ reporting flexibility within the boundaries of GAAP. Alternatively, steps may be taken that extend beyond the boundaries of GAAP. Finally, amounts may be reported properly as operating cash flow but do not have the sustainable qualities normally expected of operating cash flow. Clearly the adjective *creative* is used here in a pejorative sense. Some selected examples of how cash flow reported in a creative manner misrepresents sustainable cash flow are provided in the paragraphs that follow.
Employing GAAP Flexibility

Generally accepted accounting principles are reasonably clear in their definition of operating cash flow. There is, however, considerable flexibility permitted in their calculation. Some firms have demonstrated a willingness to ply this flexibility in an effort to boost amounts reported as operating cash flow. While such steps raise operating cash flow they do not increase sustainable cash flow.

Consider the Mim Corp. overdraft example presented earlier. The company included an increase in overdrafts in operating cash flow. Those overdrafts provided approximately seventy-five percent of the company's operating cash flow during the first quarter of 20X2. That cash flow, however, was not generated by a sustainable source. Amounts borrowed in that manner would ultimately need to be repaid.

There are many other examples of cash flow classification decisions that artificially boost operating cash flow. Some involve investing items that get reclassified to the operating section. Others, like the Mim Corp. overdraft example, involve financing items that get reported as operating cash flow.

GAAP Flexibility: Is It Operating or Investing Cash Flow?

Examples of cash flow classified as investing activities include both capital expenditures made to boost future operating cash flows as well as cash parked in debt and equity securities awaiting future needs. Unless capital expenditures are included in the calculation of free cash flow, cash provided or used in investing activities is not considered to have the same recurring quality as operating cash flow. Accordingly, to the extent that creative steps can be taken to boost operating cash inflows by increasing investing cash outflows, an appearance can be
communicated of a strengthened cash generating capability. Two areas for such a cash-flow misclassification that are representative of the opportunities afforded by the flexibility found in generally accepted accounting principles are investments classified as trading securities and capitalized operating costs. A third area, acquisitions, can also use investing activities to creatively boost operating cash flow.

*Investments Classified as Trading Securities*

Investments in debt and equity securities may be classified as held for trading purposes or as available-for-sale. In addition, because they have fixed maturity dates, a third classification, held-to-maturity, can also apply to debt securities.

As the title suggests, trading securities are held to take advantage of very short-term price swings. Holding periods are very short, at times possibly even less than a day. Debt securities that are classified as held-to-maturity are investments for which a firm has the intent and ability to hold until maturity. The plan is to collect the debt instrument's principal amount at maturity. All other investments are classified as available-for-sale, a default classification that can include both short-term and long-term investment positions.

The classification of investments as trading, held-to-maturity or available-for-sale directly affects the classification of cash flows associated with their purchase or sale. When investments are classified as held-to-maturity or available-for-sale the use of cash in their purchase or the proceeds generated by their sale are classified as cash flow from investing activities. In contrast, cash used to purchase or cash provided by the sale of investments classified as trading securities is reported as operating cash flow.
Rules for classifying investments as trading, held-to-maturity or available-for-sale are malleable. This flexibility provides an opportunity for companies to alter reported operating cash flow. For example, cash flows associated with investments in short-term debt instruments classified as held-to-maturity would be reported as investing cash flow. However, changing their classification to trading would result in the same cash flows being classified as operating cash flow.

Financial institutions, companies such as banks, insurance companies and brokerage firms, routinely trade financial instruments. It is part of what they do. Cash flows associated with this activity are properly included with operating cash flow. However, when non-financial companies classify investments as trading securities, cash used to purchase the investments or cash provided by their sale do not fit the operating designation. At a minimum, such cash flows are not sustainable and will stop when an investment portfolio has been liquidated.

Consider the effects of investments on the cash flow performance of Natuica Enterprises, Inc. In its fiscal years ended February 28, 20X0 and February 27, 20X1, the company added a total of $55.1 million to its short-term investment portfolio. That amount was reported as short-term investments on the company's balance sheet at fiscal year end, February, 20X1. At the time, these investments were classified as available-for-sale. Accordingly, on the company's cash flow statement disbursements made to build the portfolio were reported as investing uses of cash.

During its fiscal year ended March 4, 20X2 Nautica began liquidating its investment portfolio. Proceeds from these sales of short-term investments generated $21.1 million. These proceeds were reported as a source of cash in the investing section of its cash flow statement for the year ended March 4, 20X2.
In its fiscal year ended March 3, 20X3 Nautica changed the classification of its short-term investments to a trading designation. Now any proceeds generated by liquidating its short-term investments would be reported as an operating source of cash. In fact, during that year a significant liquidation of its trading portfolio added $28.4 million to operating cash flow, increasing it by 57%.

In the company's March 20X3 annual report, Nautica reclassified its cash flow statement for the year ended March 4, 20X2. Proceeds from the sale of securities from its short-term investment portfolio were moved to the operating section from the investing section where they had been reported originally. The cash flow statement for that year as it appeared originally and as it appeared on a restated basis is quite instructive. As seen in Exhibit 1.10 it demonstrates the significant effect that the classification of investments can have on the operating and investing sections of the cash flow statement.
**Exhibit 1.10** Nautica Enterprises, Inc., Cash Flow Data, Year Ending March 4, 20X2, As Reported in March 4, 20X2 Annual Report and As Reclassified in March 3, 20X3 Annual Report (thousands of dollars)

<table>
<thead>
<tr>
<th></th>
<th>As Reported</th>
<th>As Reclassified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash provided by operating activities</td>
<td>$62,685</td>
<td>$83,801</td>
</tr>
<tr>
<td>Cash used by investing activities</td>
<td>(12,450)</td>
<td>(33,566)</td>
</tr>
<tr>
<td>Cash used by financing activities</td>
<td>(38,590)</td>
<td>(38,590)</td>
</tr>
<tr>
<td>Net change in cash</td>
<td>$11,645</td>
<td>$11,645</td>
</tr>
<tr>
<td>Difference between operating and investing cash flow</td>
<td>$21,116</td>
<td>$21,116</td>
</tr>
</tbody>
</table>


As seen in Exhibit 1.10, the change in classification of the company's short-term investments to a trading designation from an available-for-sale classification boosted reclassified operating cash flow by $21.1 million. A continued liquidation of the portfolio added $28.4 million to operating cash flow in the fiscal year ended March 3, 20X3.

It is impossible to know the true motivation for the company's change in its investment classification. Whatever the reason, it provided a significant short-term boost to operating cash flow. Cash flow generated in this manner is not sustainable. In fact, by the end of the company's March 20X3 fiscal year, its short-term investment portfolio was reduced to $5.5 million from $55.1 million in 19X1. There were few investments remaining to add to operating cash flow. That was clear from the company's cash flow statement for the year ended March 2, 20X4 where an increase in the short-term investments portfolio actually reduced operating cash flow by $804,000.

**Capitalized Operating Costs**

Generally accepted accounting principles offer flexibility in deciding whether certain operating costs are capitalized or expensed. A common example is software development costs.
Capitalization of additional costs is required once technological feasibility is reached. However, because of the use of judgment in deciding when that benchmark is attained, there is a high degree of variation across companies in the amounts of software costs being capitalized.

When expensed, software development costs reduce net income and operating cash flow. However, capitalized software development costs are reported as disbursements in the investing section of the cash flow statement and do not reduce operating cash flow. Both earnings and operating cash flow are increased.

When a software company reaches a steady state, where the amortization of software development costs capitalized in prior periods is approximately equal to new costs capitalized in the current period, the earnings effect of capitalization approaches zero. At this point analysts need not be as concerned about the effects on earnings of the company's capitalization policy. However, even then amounts capitalized continue to be reported as investing uses of cash. Thus, even when there is no earnings effect, capitalization has a cash-flow effect, boosting operating cash flow for new amounts capitalized.

The effects of capitalization on operating cash flow are especially apparent when a company changes its capitalization policy. Consider the software capitalization statistics and cash flow data for American Software, Inc. provided in Exhibit 1.11.

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20X0</td>
</tr>
<tr>
<td>Software development costs capitalized</td>
<td>$10,902</td>
</tr>
<tr>
<td>Software development costs incurred</td>
<td>$22,413</td>
</tr>
<tr>
<td>Capitalization percentage</td>
<td>48.6%</td>
</tr>
<tr>
<td>(Costs capitalized divided by costs incurred)</td>
<td></td>
</tr>
<tr>
<td>Cash provided by operating activities</td>
<td>$14,179</td>
</tr>
</tbody>
</table>
During 20X2 American Software cut in half the percentage of software costs capitalized from approximately 50% in 1999 and 2000 to approximately 25%. As a result, a larger proportion of software costs incurred were accounted for as direct reductions in operating cash flow, contributing to its decline, even as software development costs incurred were reduced.

**Acquisitions and Operating Cash Flow**

When one company acquires another, operating results for the acquired company from the date of acquisition are included with reported amounts for the acquiring company. Thus, an acquisition can serve to boost both reported earnings and operating cash flow. However, beyond these more obvious effects of an acquisition on operating results, there is a lesser-known impact that provides a nonrecurring boost to operating cash flow.

The accumulation through operations of working capital accounts such as accounts receivable, inventory, and prepaid expenses, less accounts payable and accrued expenses payable, serves to reduce operating cash flow. Operating cash flow is increased when these working capital accounts are liquidated.

When working capital is acquired in an acquisition its cost is reported as an investing and not as an operating use of cash. However, the subsequent liquidation of working capital, even when acquired through an earlier business acquisition, is reported as an operating source of cash. In effect, through an acquisition a company can "acquire" operating cash flow.

During the years ended December 31, 20X0 and 20X1, AutoNation, Inc. expended a cumulative $1.2 billion on acquisitions. In the process the company acquired approximately
$500 million in inventory that was reported as an investing use of cash. Then during 20X2 the company liquidated a substantial portion of its inventory. That liquidation was reported as an operating source of cash and provided $544.7 million.

Note the mismatch. Inventory picked up through acquisition is reported as an investing use of cash. The liquidation of that inventory, however, is reported as an operating source of cash.

During 20X2 AutoNation also changed the classification of its floor-plan notes payable to an operating designation from a financing one. Those notes, the principal on which was reduced along with the reduction inventory, consumed $514.4 million in operating cash flow during 20X2, offsetting much of the positive cash impact of the inventory liquidation undertaken that year. The change would, however, benefit the operating cash flow of future years, when balances in inventory and floor-plan notes payable began growing again.

Investing activities that can be used to boost operating cash flow within the boundaries of GAAP include short-term investments classified as trading activities, capitalized operating costs and acquisitions. More details of these and other ways that investing activities can be used to boost operating cash flow are provided in Chapter 3.

**GAAP Flexibility: Is it Operating or Financing Cash Flow?**

Financing cash flow includes amounts borrowed and raised through the issuance of capital stock as well as debt repayments, stock buybacks and dividends. Like cash flow reported in investing activities, financing cash flow is not considered to have the same sustainable qualities as operating cash flow. Flexibility in GAAP can be used to boost operating cash flow that is offset by uses of cash in the financing section.
A case in point is the book overdraft example at Mim Corp. The company classified an increase in current liabilities resulting from its use of overdrafts as an operating and not as a financing source of cash.

Xerox's use of transactions to securitize its finance receivables is another example where cash flow that is ostensibly related to financing transactions is reported as operating cash flow. According to generally accepted accounting principles, proceeds from an outright sale of receivables are reported as operating cash flow. However, when receivables are pledged as security for a loan any proceeds received are reported as financing activities. The substance of the difference between securitization and pledging transactions is not that great. Indeed, the chief financial officer of Lear Corp., a company that has securitized receivables, noted,

"Sales of receivables and operating cash flow are entirely separate events . . . We see sales of receivables as a low-cost financing method; it shouldn't generate operating cash flow."27

Increased Vendor Financing

Vendor financing is a form of financing that, in accordance with GAAP, is properly reported as operating cash flow. Consider the cash flow results for Home Depot, Inc. During the company’s fiscal year ended February 3, 20X2, operating cash flow increased to $6.0 billion from $2.8 billion during the previous year. Then during its fiscal year ended February 2, 20X3, reported operating cash flow remained strong at $4.8 billion. However, contributing significantly to operating cash flow during both years was an outsized increase in accounts payable.

Increases in the length of time taken to settle accounts payable, a vendor financing of sorts, can be an effective corporate finance tool for managing working capital. However, sources of cash generated in this manner are not sustainable.
During the year ended February 3, 20X2, Home Depot increased the length of time taken to settle accounts payable to approximately 34 days from 22 days in 20X1. That 12-day increase added approximately $1.1 billion to operating cash flow in the year ended February 3, 20X2. Then during the year ended February 2, 20X3, the company increased the length of time taken to settle accounts payable another seven days to 41 days, adding an additional $800 million to operating cash flow. Such operating cash flow cannot be duplicated without adding yet again to the settlement period for accounts payable.

Overdrafts classified as operating cash flow, securitized accounts receivable and extended vendor payment terms are three examples of financing-related activities that ply the flexibility of GAAP to boost operating cash flow. More details of these and other similar actions are provided in Chapter 4.

**Beyond the Boundaries of GAAP**

Some companies move beyond the boundaries of GAAP, reporting as operating cash flow amounts that are clearly non-operating in nature. In the case of Dynegy, Inc. mentioned earlier, a complex long-term purchase contract for natural gas was used to gain access to $300 million in financing from Citigroup, Inc. The proceeds from that financing, which were borrowed across nine months and were to be repaid over 51 months, were reported as operating cash flow.

There are many other examples of steps taken by companies beyond the boundaries of GAAP that artificially boost cash flow. Some involve a misclassification between the operating and investing sections of the cash flow statement. Others, like Dynegy, Inc., involve a financing cash flow reported as cash provided by operating activities.
Beyond GAAP: Is it Operating or Investing Cash Flow?

When taken to extremes, many of the same actions that might be viewed as plying the flexibility of generally accepted accounting principles in the classification of cash flow are considered to have moved beyond the boundaries of GAAP. A restatement made to correct prior-period errors in cash-flow classification is compelling evidence of a GAAP-boundary violation. Such a restatement may or may not be in response to alleged fraudulent conduct.

A Misclassified Investment

Consider Enron Corp. and Project Nahanni, a transaction entered into with Citigroup, Inc. A court-appointed examiner in Enron's bankruptcy filing charges that Project Nahanni was,

". . .designed solely to permit Enron to record $500 million in cash flow from operating activities for the year. Through Nahanni, Enron borrowed $500 million, bought Treasury securities with it, sold them, recognized $500 million of operating cash flow, and repaid the loan."\(^{28}\)

The Nahanni transaction involved a misclassification of investing proceeds as cash provided by operations. According to the examiner it was one of Enron's "clearest violations of GAAP."\(^{29}\)

Capitalized Operating Costs

There are numerous examples of companies breaking GAAP rules through their over-zealous capitalization of operating costs. In these instances, firms not only boost reported income incorrectly, but operating cash flow is also increased in error. The increase in operating cash flow occurs because amounts expended are reported as investing and not operating uses of cash.
There are some notorious names on the list of companies making this infraction. Chambers Development Co., Inc, Comptronix, Inc., and WorldCom, Inc. would all fit into this category.

The practices at WorldCom Corp. were arguably the most egregious of the group. The company capitalized billions of operating lease costs and reported amounts expended as part of its capital expenditures. As capitalized operating costs were increased, management cut back on normal capital expenditures so that reported amounts would be consistent with analyst expectations.

**Beyond GAAP: Is it Operating or Financing Cash Flow?**

Dynegy's use of loan proceeds to boost operating cash flow through its long-term natural gas supply contract with a special purpose entity is an excellent example of misreporting financing cash flow as cash provided by operating activities. Enron Corp. entered into similar transactions, also with Citigroup, Inc., and used financing proceeds to boost operating cash flow. The Securities and Exchange Commission forced Dynegy to restate its cash flow statement. At the time of this writing, a restatement of Enron's financial statements is pending.

**Nonrecurring Operating Cash Flow**

Even when companies maintain their financial statements within the boundaries of GAAP and do not employ flexibility in the rules to boost operating cash flow, amounts may be reported as operating cash flow that are nonrecurring. In such instances operating sources of cash do not provide the sustainable supply of cash that is normally expected of operations.
For example, a cash collection resulting from a one-time litigation settlement may be included with operating cash flow. Similarly, operating cash payments associated with restructuring events are, in most instances, a nonrecurring use of cash. There are many other examples of nonrecurring operating cash flow.

Consider General Electric Co. For the nine months ended September 30, 20X2, the company reported that cash flow from operations declined to $5.7 billion, a drop of 51% from the same period in the previous year. The precipitous drop in operating cash flow during 20X2 was more a function of outsized collections made during the previous year than any real change in the company's operating performance.

As another example, consider Tyco International, Ltd. Normally during its first quarter the company paid executive bonuses related to the most recently-completed fiscal year. However, a delay in the payment of bonuses during the first quarter ended December 31, 20X2 helped to boost operating cash flow during that period. According to the company, $200 million in bonuses that would normally have been paid during the first quarter ended December 31, 20X2 were delayed, boosting operating cash flow.\textsuperscript{30} Nonetheless, operating cash flow excluding the effects of discontinued operations declined to $828 million for the quarter ended December 31, 20X2 from $939 million during the same period of the previous year.\textsuperscript{31}

**Misleading Cash Flow Classifications Under GAAP**

Collectively, all steps taken to misrepresent the sustainable nature of operating cash flow are referred to here as creative cash flow reporting. Those steps may be taken within the boundaries of GAAP, beyond those boundaries, or may be the result of nonrecurring sources of operating cash flow. Each of them results in operating cash flow that is not sustainable.
Beyond what is referred to as creative cash flow reporting there are specific items, especially in the cash flow classification of income taxes, where GAAP state clearly that non-operating items should be included in operating cash flow. Such items may add to or subtract from operating cash flow and create misleading amounts.

_Taxes and Operating Cash Flow_

All transactions that result in income or expense, gains or losses, have income tax implications. According to generally accepted accounting principles, except for one proposed exception, the cash disbursements or receipts related to all such taxes are reported with operating cash flow. An operating designation was chosen because of the complexity and arbitrary nature of allocating taxes to operating, investing and financing classifications depending on the nature of the underlying item.

When taxes relate to income or expense items included in operations those taxes should be included in the calculation of operating cash flow. It is a proper grouping of like items. However, when taxes relate to investing or financing items their inclusion in operating cash flow clouds that measure.

_Taxes and Investment-Related Gains and Losses_

For example, on November 15, 20X1 Bristol-Myers Squibb Co. sold its Clairol business to Procter & Gamble Co. for approximately $5.0 billion in cash. As a result of the sale the company recorded a pretax gain of $4.2 billion. Taxes due on the sale totaled $1.7 billion. Bristol-Myers reported the full pre-tax proceeds from sale, $5.0 billion, in the investing section of its cash flow statement. Taxes due on the sale were deducted from operating cash flow when paid in early
20X2. In fact, due primarily to a cash drain resulting from the payment of taxes on the Clairol gain, the company reported negative operating cash flow of $1.1 billion in the first quarter of 20X2. That was down considerably from the positive operating cash flow of $900 million generated during the same period of the previous year.

*Tax Benefits from Stock Options*

The exercise of stock options generates a financing source of cash equal to the exercise price on the underlying options. Option holders pay the company an amount equal to the exercise price times the number of options being exercised. This is cash paid for the purchase of stock. It is a financing activity and is reported as such on the cash flow statement.

When the holders of nonqualified options, typically company officers and employees, exercise their options, the company receives a tax deduction equal to the difference between each option's exercise price and the market price of the underlying stock times the number of options exercised. The option-related tax deduction can be quite substantial and provide tax benefits, a source of cash, which can run into the hundreds of millions or even billions of dollars.

Consistent with the treatment of taxes generally, tax benefits from stock options are reported as operating cash flow. However, because the purchase of stock that gave rise to the tax benefits is a financing event, its related tax benefits are not truly part of operations.

Historically, Microsoft Corp. reported tax benefits from stock options as a financing source of cash. However, Emerging Issues Task Force (EITF) Statement No. 00-15 clarified the cash flow classification of tax benefits from stock options forcing the company to restate its cash flow statements. In the restatement, tax benefits from stock options were reclassified to the operating section.
Exhibit 1.12 provides summarized versions of Microsoft's cash flow statement for the two years ended June 30, 20X1 as originally reported and as restated. The original cash flow statements report tax benefits from stock options in the financing section. The restated cash flow statements move those tax benefits to the operating section. Note the increase in operating cash flow on the restated cash flow statements for each of the two years. Reclassifying tax benefits from stock options to operating cash flow boosted that measure by $1.553 billion or 23% in 20X0 and $3.107 billion or 31% in 20X1.
**Exhibit 1.12** Microsoft Corp., Summarized Statements of Cash Flows, As Reported and As Restated, Years Ending June 30, 20X0 and 20X1. As Reported Includes Tax Benefits from Stock Options in Financing Activities, As Restated Includes Tax Benefits from Stock Options in Operating Activities, (millions of dollars).

<table>
<thead>
<tr>
<th></th>
<th>As Reported</th>
<th>As Restated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20X0</td>
<td>20X1</td>
</tr>
<tr>
<td>Cash provided by operating activities</td>
<td>$6,880</td>
<td>$10,030</td>
</tr>
<tr>
<td>Cash (used) by investing activities</td>
<td>(7,272)</td>
<td>(11,191)</td>
</tr>
<tr>
<td>Cash provided (used) by financing activities</td>
<td>554</td>
<td>2,245</td>
</tr>
<tr>
<td>Net change in cash</td>
<td>$162</td>
<td>$1,084</td>
</tr>
<tr>
<td>Tax benefits from stock options</td>
<td>$1,553</td>
<td>$3,107</td>
</tr>
</tbody>
</table>


*a* Includes tax benefits from stock options in financing activities.

*b* Includes tax benefits from stock options in operating activities.

One may consider tax benefits from stock options as being properly included with operating cash flow. They are, after all, the result of a form of incentive compensation, an operating cost. However, whether tax benefits from stock options are classified as operating or financing cash flow, there is no question as to their lack of sustainability. Tax benefits from stock options are directly linked to the excess of the market price of a company's stock over the exercise price of its options on the date of exercise. As stock prices have declined since 2000 so have tax benefits from stock options. As an example, after peaking at over $5 billion in 2000, the tax benefits from stock options at Microsoft declined to $2.1 billion in 20X3, $1.6 billion in 20X4 and $1.4 billion in 20X5.

Recently, the FASB proposed that tax benefits received arising from tax deductions related to the exercise of nonqualified stock options that exceed the amount of option-related compensation expense reported on the income statement should be classified as financing cash flow. Such a change in classification would be more in keeping with the financing nature of such tax benefits.34
The Motivation

Managers are well aware of the importance placed by analysts, investors and creditors on operating cash flow. Cash flow is the life-blood of any organization. A boost in operating cash flow, even as total cash flow remains unchanged, communicates enhanced financial performance. Consider, for example, the hypothetical cash flow statements presented in Exhibit 1.13.

<table>
<thead>
<tr>
<th>Statement 1</th>
<th>Statement 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash provided (used) by operating activities</td>
<td>$(14,000)</td>
</tr>
<tr>
<td>Cash (used) by investing activities</td>
<td>(36,000)</td>
</tr>
<tr>
<td>Cash provided by financing activities</td>
<td>60,000</td>
</tr>
<tr>
<td>Increase in cash</td>
<td>$ 10,000</td>
</tr>
</tbody>
</table>

As reported in both statements, cash on hand increased $10 million. However, in Statement 1, the company consumed $14 million in cash from operations. Those operating cash needs together with cash needs for investing activities of $36 million were covered with new financing cash flow in the amount of $60 million.

In Statement 2, the company generated positive operating cash flow of $44 million. The company invested $66 million in the business and used $32 million in new financing to help meet its cash flow needs.

The company represented by Statement 2 is doing a better job of generating what would appear to be sustainable cash flow. That company is apparently investing more heavily and relying less on new financing to support its operating and investing activities.

What we now know, however, is that the company represented by Statement 2 may be no different than the company represented by Statement 1. For example, proceeds from the sale of investments may have been used to boost operating cash flow. Similarly, proceeds from new
borrowings may also have been reported as operating cash flow. The net result is the appearance of improved financial performance. In the absence of careful scrutiny, this apparent improvement in financial performance might have a positive impact on a firm's share price, its borrowing costs and the incentive compensation paid its executives.

Share Price Effects
As expectations for sustainable cash flow are increased so is the present value of that cash flow stream, boosting share-price prospects. Share prices can be influenced to the extent that managers can increase the perception, and not the reality, that their firm is generating more sustainable cash flow. This point was not lost on the executives at companies such as Dynegy, Inc. and Enron Corp. Their managers went to extraordinary lengths to boost operating cash flow in an effort to increase or maintain their share prices.

Executives may also have an incentive to report less volatile cash flows, imparting an impression of lower firm risk. The perception of lower risk could move investors to lower their risk-adjusted discount rates. Lower discount rates would boost the present value of future cash flows and potentially raise share prices.

Borrowing Cost Effects
Interest and principal on loans are repaid with cash flow. Increases in operating cash flow may translate into perceived improvements in debt-service capacity. The net effect may translate into higher borrowing capacity, lower interest costs, less onerous loan covenants, fewer guarantees or possibly, less loan collateral. Returning to the Enron Corp. example, lenders may have been less
willing to keep funding the company's operations had they known that the company was not, in fact, generating positive operating cash flow.

**Incentive Compensation Effects**

To the extent that steps taken to boost operating cash flow translate into higher share prices, managers compensated with stock options will enjoy increased compensation. Beyond such equity-based arrangements, however, some managers may be paid cash bonuses linked directly to improvements in earnings or in operating cash flow. Consider Tyco International, Ltd., a company that has been accused of artificially boosting operating cash flow.\(^3^5\) As described below the company's bonus plan was based, at least in part, on improvements made in operating cash flow,

The cash bonus for the Chief Executive Officer and the Chief Financial Officer has two performance based criteria: (i) increase in earnings before non-recurring items and taxes and (ii) improvement in operating cash flow.\(^3^6\)

**Adjustments for Sustainable Cash Flow**

All of factors highlighted in this section can and do lead to misleading operating cash flow amounts. These factors consist of the following:

- Using GAAP flexibility in cash-flow classification,
- Taking actions that extend beyond the boundaries of GAAP,
- Benefiting from nonrecurring sources of operating cash flow, and
- Reporting taxes related to non-operating items as operating cash flow.

Reported operating cash flow should be adjusted for all of these items in determining sustainable cash flow.
IGNORING THE STATEMENT OF CASH FLOWS

It is not unusual for analysts to calculate their own measures of sustainable cash flow without using a company-provided cash flow statement. In such an approach, income statement results are adjusted for non-cash expenses, such as depreciation and amortization, and for changes in working capital accounts taken from the beginning and ending balance sheets. Additional adjustments are made for changes in property, plant and equipment accounts if a measure of free cash flow were desired.

Consider the following quote, "Cash flow -- revenue less operating expenses excluding depreciation and amortization, less investment in working and fixed capital -- is a much better measure of a company's worth." In substance, there is nothing wrong with this calculation of free cash flow made without use of the cash flow statement. However, it works better in theory than in practice.

On the surface, such a direct calculation of sustainable cash flow, whether operating cash flow or free cash flow, would appear to avoid the many problems of cash flow statements described here. That is, why worry about classification issues that affect the statement of cash flows when one can avoid them altogether by not using the cash flow statement? Why not steer clear of potential cash flow problems like a misclassification of overdrafts or investments reported as trading securities? Why not sidestep borrowed amounts reported as operating cash flow or nonsustainable contributions from securitized accounts receivable by just skipping the statement of cash flows altogether? Because these same problems plague the balance sheet and must be taken into account when one calculates cash flow using net income adjusted for non-cash expenses and selected balance sheet changes.
Consider the overdraft item. Our research, as discussed more in Chapter 4, indicates that most companies who employ overdraft financing include cash overdraft amounts in accounts payable. Accounts payable is a current liability and fulfills GAAP requirements stipulating only that overdrafts on the balance sheet should be reported as current liabilities. Yet, by including overdrafts in accounts payable any cash flow calculation that includes the change in accounts payable in operating cash flow will automatically include overdraft financing there. Thus, an income-statement and balance-sheet-change approach, a method for calculating cash flow that uses net income adjusted for non-cash expenses and changes in balance sheet accounts, does not bypass the problem.

Similarly, changes in investment positions classified as trading securities are included with operating cash flow. Such sources or uses of cash, derived from liquidating or adding to an investment position, are not sustainable. When using an income-statement and balance-sheet-change approach, care must be taken to exclude changes in trading positions, properly reported as a working capital account, from calculations of sustainable cash flow.

Early in the chapter an example of Dynegy's misclassification of operating cash flow was provided. The company included borrowings from Citigroup, Inc. in operating cash flow. The company used a long-term purchase contract for natural gas as its vehicle for misclassifying borrowed amounts as operating cash flow. Recall that because the company was purchasing natural gas at below-market rates it was able to report operating profits and cash flow. However, those profits were offset by losses on the remaining term of the contract. Those losses appeared in the company's open book of derivatives contracts and because they had not been settled, were non-cash losses. Accordingly, they were reported on Dynegy's balance sheet as an operations-related liability. As the losses grew, so did the liability account. If the balance sheet were used
to calculate cash flow, increases in this derivatives-related liability would appear as an operating source of cash.

Finally, consider the case of securitized receivables. As noted, Xerox Corp. boosted its operating cash flow in 20X9 by $1.495 billion through the sale of financing receivables. Generally accepted accounting principles stipulate that sales of receivables, which include properly structured securitization transactions, are to be included in operating cash flow. However, increases in cash flow derived in this manner are not sustainable. When sold or securitized the balance in receivables declines. Thus, using the change in receivables from the balance sheet to calculate cash flow would improperly include this nonrecurring source.

While there are problems with using an income-statement and balance-sheet-change approach to calculate sustainable cash flow, such an approach has its place. Indeed, the Uniform Credit Analysis (UCA) approach discussed earlier also uses changes in the balance sheet in its calculations. However, just as reported operating cash flow must be adjusted to reclassify certain operating items and remove nonrecurring items before being used in analysis, misclassifications on the balance sheet must also be considered if an income-statement and balance-sheet-change approach to cash flow calculation is employed.

CASH FLOW ANALYSIS

Cash flow analysis entails a search for the fundamental drivers that underlie a company's cash flow stream. The preparation of what we refer to as a cash flow analysis statement, a variation of the Uniform Credit Analysis (UCA) format referred to earlier, is a very useful starting point. The cash flow analysis statement is an income-statement and balance-sheet change approach to
preparing a cash flow statement. Exhibit 1.14 presents the cash flow analysis statement up to the
line item referred to as adjusted cash flow from operations.
**Exhibit 1.14** Cash Flow Analysis Statement, through Adjusted Cash Flow from Operations

<table>
<thead>
<tr>
<th>Revenue</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in operating receivables</td>
<td></td>
</tr>
<tr>
<td>Change in deferred revenue</td>
<td></td>
</tr>
<tr>
<td>Cash from revenue</td>
<td></td>
</tr>
<tr>
<td>Cost of goods sold (excluding dep. &amp; amortiz.)</td>
<td></td>
</tr>
<tr>
<td>Change in inventory</td>
<td></td>
</tr>
<tr>
<td>Change in operating payables</td>
<td></td>
</tr>
<tr>
<td>Cash cost of revenue</td>
<td></td>
</tr>
<tr>
<td>Cash gross profit</td>
<td></td>
</tr>
<tr>
<td>Selling, general and admin. expense (excluding dep. &amp; amortiz.)</td>
<td></td>
</tr>
<tr>
<td>Research and development expense (excluding dep. &amp; amortiz.)</td>
<td></td>
</tr>
<tr>
<td>Capitalized operating expense</td>
<td></td>
</tr>
<tr>
<td>Other core operating expense (excluding dep. &amp; amortiz.)</td>
<td></td>
</tr>
<tr>
<td>Change in prepaid</td>
<td></td>
</tr>
<tr>
<td>Change in accruals</td>
<td></td>
</tr>
<tr>
<td>Cash operating expense</td>
<td></td>
</tr>
<tr>
<td>Core operating cash flow</td>
<td></td>
</tr>
<tr>
<td>Other cash income</td>
<td></td>
</tr>
<tr>
<td>Income taxes paid</td>
<td></td>
</tr>
<tr>
<td>Cash flow available for debt service</td>
<td></td>
</tr>
<tr>
<td>Total interest paid</td>
<td></td>
</tr>
<tr>
<td>Adjusted cash flow from operations</td>
<td></td>
</tr>
</tbody>
</table>

The cash flow analysis statement is useful in clarifying sustainable sources and uses of cash. However, before completing the statement, it is important to carefully review the financial statements and footnotes to identify misclassified and nonrecurring items, discussed earlier, that may lead to misguided cash flow calculations. Where needed, adjustments and reclassifications should be made to the items presented on the cash flow analysis statement to ensure that the statement format highlights sustainable and nonsustainable sources and uses of cash. Preparation and use of the cash flow analysis statement is discussed in chapter 9.
Cash Flow Drivers

The next step is to identify the fundamental drivers that underlie a company's operating cash flow. In particular, our interest is in determining the sustainability of the factors comprising net cash after operations.

The sustainability of these drivers or factors comprising net cash after operations is a function of a company's growth and changes in its underlying profitability and efficiency. For example, a better understanding of whether an increase in cash from trading activities will be sustained can be gained by determining whether changes in items such as cost of goods sold or inventory are due to growth, a change in gross margin or a change in the number of days inventory is carried before sale. The cash effects of growth are sustainable provided a company's growth rate is maintained. However, there are inherent limits to the cash effects of changes in profitability and efficiency. For example, one cannot expect gross margin to increase beyond 100 percent. Similarly, the number of days inventory is carried for sale cannot be reduced below zero.

At this point we will not identify all of the factors that should be considered in analyzing operating cash flow. Rather, we direct the reader's attention to Chapter 9 where the topic of cash flow analysis is developed more carefully.

THE PLAN OF THIS BOOK

We opened with a series of quotations from some respected financial professionals. By now the reader should be well aware that reported cash flow is not necessarily what it seems. Like earnings, cash flow can be managed in an effort to put a more positive spin on operating results. Even investors who think that dividends are a sign of real profitability should note that Enron
Corp. paid out over half of its reported earnings in dividends. We now know that those earnings were in fact, fabricated. The company actually borrowed the cash it needed to pay its dividends while reporting those borrowed amounts as operating cash flow.

The objective of this book is to help the analyst, investor and creditor uncover sustainable sources of cash flow. This objective is achieved with the chapters detailed below.

In Chapter 2, "Structure of the Statement of Cash Flows," we give some historical perspective on cash flow reporting. We present different cash flow formats used in the U.S. and abroad and identify some of the advantages and disadvantages of each. We also take a closer look at different definitions of cash, including EBITDA, FFO and cash earnings, and highlight their strengths and weaknesses.

Chapters 3 and 4 address the topic of creative cash flow reporting. In Chapter 3, "Is it Operating or Investing Cash Flow?" we look at items that are misclassified between the operating and investing sections of the cash flow statement. Chapter 4, "Is it Operating or Financing Cash Flow?" focuses on misclassifications between the operating and financing sections. Both chapters include flexibility in generally accepted accounting principles and steps that are taken beyond the boundaries of GAAP as reasons for misreported cash flow.

In Chapter 5, "Income Taxes and the Statement of Cash Flows," the focus turns to the reporting of the cash effects of income taxes. Here we look at the effects on operating cash flow of the requirement in GAAP that all taxes must be reported in the operating section.

Chapter 6, "Nonrecurring Sources and Uses of Operating Cash Flow," seeks to identify cash flow items that are properly reported but that are derived from nonrecurring sources. In Chapter 7, "Measuring Sustainable Operating Cash Flow," we provide selected cases that demonstrate the adjustment techniques for calculating sustainable cash flow advocated here.
In Chapter 8, "Using Operating Cash Flow to Detect Earnings Problems," we demonstrate how to use calculated sustainable cash flow in identifying companies that may have been aggressive in their reporting of earnings. Chapter 9, "Analyzing Operating Cash Flow," provides guidance for uncovering the underlying drivers of sustainable cash flow. The book concludes with Chapter 10, "Understanding Free Cash Flow." Because of the focus placed by analysts, investors and creditors on free cash flow, it was important to afford that topic special attention.

**SUMMARY**

The current chapter establishes an organization for the entire book. Key points raised include the following:

1. Like earnings, cash flow can be managed, creating a misleading signal of sustainable financial performance.
2. Among the three cash flow classifications, operating, investing and financing, operating cash flow is the primary source of sustainable cash flow.
3. Sustainable cash flow is important to both equity investors and lenders.
4. Because it is carefully defined and readily available, cash provided by operating activities or operating cash flow is a useful starting point for deriving sustainable cash flow. However, adjustments to reclassify operating items and to remove nonrecurring items are often needed.
5. Free cash flow can be calculated from operating cash flow.
6. Popular alternative measures of cash flow, including earnings before interest, taxes, depreciation and amortization (EBITDA), funds from operations (FFO) and cash earnings
are actually earnings-based, modified cash flow metrics and are not true measures of cash flow.

7. Creative cash flow reporting refers to any and all steps used to misrepresent the sustainability of operating cash flow. Creative cash flow reporting is effected by plying reporting flexibility in generally accepted accounting principles or by employing steps that extend beyond the boundaries of GAAP.

8. Misleading classifications under GAAP, especially in the reporting of income taxes, may also misrepresent sustainable cash flow as will the inclusion of other nonrecurring sources and uses of cash.

9. Motivations to manage operating cash flow are provided by share price effects, borrowing cost effects and incentive compensation effects.

10 An income-statement and balance-sheet-change approach to calculating sustainable cash flow is a useful complement to computing it using a company's reported operating cash flow.

11. An analysis of operating cash flow entails identifying the fundamental drivers underlying operating cash flow.

NOTES


3 L. Wei, "This Manager Isn't Rushing to Buy." The Wall Street Journal, August 28, 2002, p. D11. Quote is by Scott Brayman, manager of the Sentinel Small Company Fund. Several variations on this "cash is fact, profit is opinion" quote were found.


8 Ibid.
10 A bank overdraft occurs when checks are presented for payment that exceed a company's cash balance held by its bank. A book overdraft becomes a bank overdraft when outstanding checks are presented for payment.
11 Dynegy, Inc., annual report.
12 Ibid.
13 As described, the transaction excludes a cost of funds. Presumably, provisions for interest were included in the agreement.
14 One exception has been proposed for income tax benefits related to nonqualified stock options. Refer to Financial Accounting Standards Board Exposure Draft, Share-Based Payment, an Amendment of FASB Statements No. 123 and 95, (Norwalk, CT: Financial Accounting Standards Board, March 2004).
15 A popular variation on EBITDA is EBITDAR, which is EBITDA measured before rent expense.
16 There are many others. Refer to C. Mulford and E. Comiskey, The Financial Numbers Game: Detecting Creative Accounting Practice (NY: John Wiley & Sons, 2002).
Moody's Investors Services has a financial analysis software product that is used by lenders known as Moody's Financial Advisor (MFA). MFA generates a UCA format cash flow statement with slightly different line item titles than those presented here.
19 BRE Properties, Inc., annual report.
20 Archstone-Smith Trust, annual report.
24 Refer to Xerox Corp., Form 10-K/A amended annual report to the Securities and Exchange Commission.
25 Ibid., p. 50.
26 In its restatement of results, Xerox also restated cash provided by operating activities to $551 million. That amount included proceeds from the sale of accounts receivable and finance receivables of $576 million. Once adjusted for the sale of receivables, restated cash provided by operating activities was a use of cash of $25 million.
29 Ibid.
31 Ibid., p. 3.
32 The one exception is for income tax benefits related to nonqualified stock options.
33 Emerging Issues Task Force Statement No. 00-15, Classification in the Statement of Cash Flows of the Income Tax Benefit Received by a Company upon Exercise of a Nonqualified Employee Stock Option (Norwalk, CT: Emerging Issues Task Force, July 2000).
35 M. Maremont, "How Is Tyco Accounting for Its Cash Flow?"