Chapter 9: Balance Sheet Issues

So far as my coin would stretch; and where it would not, I have used my credit.

William Shakespeare  (1564 - 1616)

Too caustic? To hell with cost; we'll make the picture anyway.

Samuel Goldwyn  (1882-1974)

There are several cashflow reengineering concerns which are primarily balance sheet issues rather than timeline issues. That is, an asset account is created by a collection activity, either before or after a customer transaction, which must be converted to cash. Cash is then spent on payables, payroll and other disbursements, depleting that asset account. Aggressive balance sheet management is now considered as an important cashflow responsibility, with the presence of underproductive assets and a sub-optimal capital structure as indications of managerial failure. We will first examine capital structure issues, and then review working capital management.

The Financial Structure
The balance sheet is the "structure" in which the assets, liabilities and capital of an organization reside. Any reengineering effort must assure that the structure is properly organized to maximize cashflow efficiency. In the 1980s, financial "players" often did damage to the balance sheet structure and to shareholder value through aggressively using the borrowing power of assets to buy and sell companies, whole or in pieces. This technique is known as financial leverage, which is the use of debt to finance a business activity on the expectation that the resulting profits will exceed the debt cost.\(^1\) It was a time when interest rates were falling, and the idea of overpaying did not seem to matter as the cost of money was less at the time of the transaction than when deals were planned. Furthermore, equity values were rising, so when the pieces of a company were sold they fetched more than the entity's value. The financial game largely ended by 1990, and cashflow today is a critical element in the development of the financial structure of a business.

In Chapter 5 we first discussed cost of capital issues, focusing on the use of the MCC (marginal cost of capital) in investment decisions (sometimes called capital budgeting). A related tool is the ACC, the average cost of capital, which is basic to the management of the balance sheet structure. The ACC is the dividend, interest and retained earnings or expected stock price appreciation cost of

\(^1\)Financial leverage is generally defined as debt divided by net worth or capitalization, depending the organization providing the data. The financial leverage ratios compiled by Dun & Bradstreet and Robert Morris Associates use the net worth relationship, which more narrowly limits the denominator to the owner's equity portion of the balance sheet. Forbes Magazine uses capitalization, a broader concept which includes long-term debt, equity and certain other balance sheet accounts; see Table 9-2.
financing the business, weighted by the amount of debt (borrowings) and equity (stock) on the balance sheet. Consider a company with a $50 million of assets, funded half by debt and half by equity capital. The average cost of the company's debt capital is taken directly from its contractual interest payments for bank loans, bonds or other sources of long-term borrowings. We calculate the cost on an after-tax basis, using the maximum corporate tax rate of 34%. Assuming a debt cost of 7½%, the average cost of debt capital is about 5% ([1-34%] times 7½%).

Short-term borrowings (that is, less than one year) would also be included in the calculation of the average cost of debt capital. However, that rate is often variable (unlike long-term debt), in that it is pegged to such market rates as the Prime Rate or "Prime" (the rate banks charge their preferred customers), which changes periodically, or LIBOR (the London Interbank Borrowing Rate) or Federal Funds ("Fed Funds") (the borrowing/lending rate charged between commercial banks) which change every day. For the sake of the simplicity of discussion, we will ignore the cost of short-term debt.

The average cost of equity capital is more difficult to determine, in that it is the sum of the cost of dividend payments and the expected growth in the retained earnings of the business or in the value of the company's stock (normally measured over one year). A New York Stock Exchange company may pay a 4% dividend to shareholders, who also expect a 10% increase in the price of their stock. The cost of equity capital in this example is 14% (4% for dividends + 10% for expected growth). (No adjustment is made for taxes as dividends are not deductible expenses.) The ACC is 9½%, calculated
James Sagner, *Cashflow Reengineering*, AMACOM, 1997

Is 50% Debt/50% Equity the optimal balance sheet structure for the company? Marketplace receptivity to the mix of financing will vary by industry, maturity of company management, competitive position within the industry, and other factors. However, the most important element often is the amount of debt on the balance sheet, because the existence of debt reduces the certainty of repayment of new debt. In other words, a business encumbered by interest and principal payments on borrowings is less likely to repay new debt than a business which is not so burdened. Because the credit markets dislike any existing fixed obligation, the average cost of capital will be lower with a
0% debt/100% equity mix, and considerably higher as the amount of debt increases.

Based on this relationship, we can build in Table 9-1 an estimated cost for each capital component at varying balance sheet percentage assumptions (at 25% increments in debt).

Table 9-1
Estimated Average Costs of Capital at Varying Balance Sheet Component Percentages

<table>
<thead>
<tr>
<th>Before-Tax Cost</th>
<th>% of Capital</th>
<th>After-Tax Cost*</th>
<th>Cost for Each Mix of Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>6% Debt</td>
<td>0%</td>
<td>.000</td>
<td>= .125</td>
</tr>
<tr>
<td>12½% Equity</td>
<td>100%</td>
<td>+ .125</td>
<td>= .125</td>
</tr>
<tr>
<td>6⅔% Debt</td>
<td>25%</td>
<td>.016</td>
<td>= .117</td>
</tr>
<tr>
<td>13⅔% Equity</td>
<td>75%</td>
<td>+ .101</td>
<td>= .117</td>
</tr>
<tr>
<td>7½% Debt</td>
<td>50%</td>
<td>.025</td>
<td>= .095</td>
</tr>
<tr>
<td>14% Equity</td>
<td>50%</td>
<td>+ .070</td>
<td>= .095</td>
</tr>
</tbody>
</table>
James Sagner, *Cashflow Reengineering*, AMACOM, 1997

<table>
<thead>
<tr>
<th>9½%</th>
<th>Debt</th>
<th>75%</th>
<th>.071</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>Equity</td>
<td>25%</td>
<td>+ .050</td>
</tr>
</tbody>
</table>

*The average cost of debt capital is based on the marginal corporate tax rate (1-34%) times the debt cost. The after-tax cost is calculated as the before-tax cost times the percentage of capital for each balance sheet component.

The 50% debt/50% equity ratio does yield the lowest ACC for this company, even though the 0% debt/100% equity scenario might appear, before the analysis, to be the least expensive choice, given that it has the lowest individual cost of capital components. Knowing this, the financial manager can attempt to calibrate the debt/equity ratio to exactly the spot preferred by the marketplace, perhaps 40% debt/60% equity, or 45% debt/55% equity, or even 55% debt/45% equity, depending on the cost of adding another "chunk" of either method of financing for his/her particular company. Although 0% debt/100% equity can reduce explicit debt and equity costs and develop a very high credit rating for the business, the goal of a financial structure should be to optimize the debt/equity mix.²

²Standard & Poor's reports that only 1% of all companies rated in 1995 received a Triple A rating, the highest available, down from 2% in 1994. Only 22% of all companies rated received an A or higher in 1995.
Table 9-2 shows financial leverage (debt-to-capital) ratios compiled by *Forbes Magazine* indicating median experience by industry, with the all industry median at 33.1%. In other words, in the typical balance sheet (at least among larger companies), debt represents one-third and equity (including retained earnings) represents two-thirds of all financing. The heavy users of debt are capital intensive industries, such as aerospace, transport, financial services and energy, while the lighter users are either regulated to a prudence level higher than industry in general (e.g., insurance) or are highly profitable and not in a frequent borrowing mode (e.g., computers and communication).

Table 9-2

Financial Leverage Ratios by Industry

<table>
<thead>
<tr>
<th>Industry (and no. of companies)</th>
<th>Debt/Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food distributors (53)</td>
<td>47.3 %</td>
</tr>
</tbody>
</table>

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Issue of January 1, 1996, pages 234, 237. The Forbes definition of financial leverage is long-term debt including leases ÷ total capitalization (long-term debt, common and preferred equity, deferred taxes, investment tax credits and minority interests in consolidated subsidiaries); page 79.
<table>
<thead>
<tr>
<th>Industry</th>
<th>Cashflow Reengineering</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aeorspace and defense (28)</td>
<td></td>
<td>42.0%</td>
</tr>
<tr>
<td>Travel and transport (49)</td>
<td></td>
<td>41.6%</td>
</tr>
<tr>
<td>Financial services (84)</td>
<td></td>
<td>39.6%</td>
</tr>
<tr>
<td>Energy companies (82)</td>
<td></td>
<td>38.7%</td>
</tr>
<tr>
<td>Construction (45)</td>
<td></td>
<td>37.6%</td>
</tr>
<tr>
<td>Forest products and packaging (40)</td>
<td></td>
<td>37.2%</td>
</tr>
<tr>
<td>Electric utilities (67)</td>
<td></td>
<td>37.1%</td>
</tr>
<tr>
<td>Food drink and tobacco (61)</td>
<td></td>
<td>35.3%</td>
</tr>
<tr>
<td>Metals (48)</td>
<td></td>
<td>35.0%</td>
</tr>
<tr>
<td>Consumer nondurables (55)</td>
<td></td>
<td>33.4%</td>
</tr>
<tr>
<td>Industry</td>
<td>Cashflow Percentage</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>Retailing (125)</td>
<td>32.8 %</td>
<td></td>
</tr>
<tr>
<td>Consumer durables (82)</td>
<td>30.8 %</td>
<td></td>
</tr>
<tr>
<td>Electrical and heavy equipment (13)</td>
<td>30.0 %</td>
<td></td>
</tr>
<tr>
<td>Entertainment and information (48)</td>
<td>29.1 %</td>
<td></td>
</tr>
<tr>
<td>Chemicals (57)</td>
<td>28.9 %</td>
<td></td>
</tr>
<tr>
<td>Healthcare and drugs (82)</td>
<td>26.3 %</td>
<td></td>
</tr>
<tr>
<td>Business and industrial services (66)</td>
<td>24.3 %</td>
<td></td>
</tr>
<tr>
<td>Computers and communications (103)</td>
<td>18.4 %</td>
<td></td>
</tr>
<tr>
<td>Insurance (75)</td>
<td>18.4 %</td>
<td></td>
</tr>
</tbody>
</table>
Our 50% debt/50% equity company does exist, in such sectors of financial services as brokerage and commodity firms, and leasing and finance, and in such other sectors as airlines, supermarkets (due to land, building and equipment costs), and textiles. Financial leverage ratios should clearly not be considered as optimal for any given company, as a variety of factors determines market receptivity for each new financing. However, financial managers should attempt to find that mix where the ACC is minimized and access to capital markets is assured at the lower end of "investment grade" investors, those willing to accept A or Triple B ratings. The market for "junk grade" debt, below Triple B, is much smaller and more expensive, and is avoided by most financial managers when they have that option.4

There are clearly significant cashflow implications in properly managing the balance sheet to minimize financing costs. Each one percentage point of additional cost is equivalent to an annual expense of $500,000 for our $50 million company, or over $1 million/year if the mix were 25% debt/75% equity instead of 50% debt/50% equity. There are also survival issues if the business were to become over-leveraged with debt that cannot be serviced in a business downturn, and shareholder issues if the business fails to operate at maximum financial efficiency by being under-leveraged.

4This discussion assumes that the business is sufficiently large that it would be concerned with rating agency opinion for its issuance of debt or equity. However, a business of any size will have a rating from one or more of the credit rating agencies.
Management of Working Capital

Our discussion of the balance sheet structure has focused so far on capital structure issues. The current portion of the balance sheet, called working capital, potentially has as great an impact on the organization and on cashflow reengineering. Working capital, the difference between current asset and current liabilities, historically has been considered as a positive component of the balance sheet. Measurement of working capital using ratio analysis has been by the Current Ratio, measured as Current Assets divided by Current Liabilities, and the Quick or Acid Test Ratio, measured as Current Assets less Inventory divided by Current Liabilities. Good performance for the Current Ratio has been considered as a result well in excess of 1:1, with the higher the better; similar results hold for the Quick Ratio.

For example, $2 million of assets compared to $1 million of liabilities is a Current Ratio of 2:1. If assets were $3 million, the Current Ratio would be 3:1, supposedly a preferable result. This thinking has been driven by the attitude of lenders that working capital constitutes a store of value to repay debts and lines of bank credit, as required. Bankers are trained to look at financial ratios and demand numbers which exceed pre-set standards.\(^5\) Often this demand is to enable the bank to force a

\(^5\)Dun & Bradstreet ratios show the first quartile, median and third quartile results. Supposedly, any company with a ratio lying outside of the interquartile range (the first through third quartiles) is considered as potentially unsatisfactory and worthy of additional investigation.
company to borrow to put more cash on the balance sheet, thereby growing the bank’s loan portfolio.

The newer view is that working capital is undesirable, in that it constitutes a drag on financial performance. Current assets which do not contribute to return-on-assets or return-on-equity hinder the performance of the company, and may hide obsolete inventory which may not be saleable and receivables which may not be collectible. The emphasis is now on reducing current asset accounts to the point that current liabilities can be funded from the on-going operations of the business. That is, cash collected from sales is used to pay for payables and payroll, with the minimum in idle Current Asset accounts.

We will examine opportunities for each of the Current Asset accounts. We will review the reengineering of underperforming assets through internal improvements (e.g., asset-based lending to finance Current Assets, and cash and anticipation discounts to incent earlier receivables payments), and outsourcing (e.g., factoring and receivables collateralization to transfer the collection of receivables, and automated credit and collection systems to pursue late and non-payors).

Working Capital Issues: Standard Receivables

Cash may result from the normal action of an invoice (a receivable) being paid, or from actions by the organization to proactively convert the asset to cash. Accounts receivable normally convert to
cash as customers pay based on established credit terms. Strategies to proactively convert receivables to cash include factoring, receivables collateralization and asset-based lending.

- **Factoring.** The credit and collection process, no matter how aggressive, inevitably results in some uncollectible amounts. When faced with the cost of the credit review process, bad debt expenses, and the cost of credit and collections, some small and medium-sized businesses outsource their entire collection process to a factor. Factors buy accounts receivable and assume the risk of collection. The factor reviews the creditworthiness of prospective buyers and determines whether there is a sufficient likelihood that payment will be made.

Money is provided to the selling company up to a discounted amount from the sale amount, usually about 3-4%. Typically the debtor (the buying company) is instructed to pay the factor directly rather than the selling company. That is, the factor will receive the entire sales amount, the selling company having received 96-97% at the time that the buyer was accepted by the factor. If the monies are advanced prior to the receipt of payment, an interest rate is charged to the selling company, similar to a loan. Therefore, it is prudent for the selling company to draw only those funds absolutely necessary to operate the business.

Because the credit decision is made by the factor, his/her expertise has been confined to specific industries, typically with many buyers and sellers. These include apparel, furniture, and general retailing, although recent users include start-up companies, exporters and
companies in turn-around situations. The review of buyers will include payment history, current financial statements, experience of the management and general industry conditions. Should default occur, the factor will be at risk, as the financing is usually extended on a non-recourse basis. This means that the factor assumes the loss with no expectation of compensation from the seller. Selling companies usually follow the decision of the factor on the credit status of a buyer, but may decide to accept a particular customer which the factor has refused and assume the risk of collection.

Assuming the cost of factoring at 4% and average monthly receivables of $50,000, annual fees would be $24,000. Borrowing an equivalent amount at 12% would cost $6,000, in addition to which there would be some bank fees for the cost of the credit line. Thus, factoring can cost about four times as much as a bank loan. However, certain expenses would be avoided in a factoring arrangement, primarily maintenance of a credit and collection staff and bad debt expenses from uncollectible accounts.

■ Receivables Collaterization. In a receivables collaterization program, a package of receivables is sold through a public securities offering or privately to a group of investors. The critical element in the attraction of investors is a regular, predictable flow of cash in payment of acknowledged debts. Although originally dominated by credit card and automobile loan receivables, virtually any receivable can now be collateralized; some examples include equipment leases, health care receivables, health club fees, home water
purification contracts, airline ticket receivables and even distressed (non-performing) consumer loans.

The package of receivables is transferred as a sale of a set of assets. Those assets can be rated by a rating agency should investors require an opinion,\(^6\) usually on more favorable terms than the company would receive on its own merits. In assigning ratings, investors and rating agencies examine the receivables history, particularly with regard to patterns of delinquencies and defaults. Many collateralizations have been privately placed to protect confidential information, such as customer lists and other competitive data, and in certain of those cases no ratings are required. Furthermore, private deals can be as small as $25 million, whereas a public sale as a security normally requires $100 million in the receivables package to be efficient.

With the market for public issues at about $200 billion, the required interest return to investors has become competitive with standard bank lending arrangements. However, initial costs are higher than bank lending, because the services of several professionals are required: attorneys to prepare the public offering or private placement agreement; commercial and/or investment bankers to arrange the transaction; accountants to book the cash receipts and

\(^6\)The majority of investors in collaterized receivables are insurance companies, which require a rating to enable the assessment of their capital reserves against each category of investment.
prepare financial statements; rating agencies when ratings are required; and income servicers to collect payments and remit to investors. However, the advantages of receivables collateralization are substantial: the transformation of a non-performing asset into cash, as well as the diversification of sources of financing.

- **Asset-Based Lending.** Rather than collateralizing receivables through a sale to investors, medium to larger-sized companies can borrow against these assets. The business pledges an asset as collateral for a loan, usually receivables but possibly real estate, machinery and equipment, or inventory. Typical pricing is Prime plus 1-3% with various additional loan servicing fees totalling perhaps 1½% to 2½%. As in a factoring arrangement, the borrower assigns expected cash inflows to the lender.

**Working Capital Issues: Distressed Receivables**

Inevitably there are inevitably certain receivables which are not paid when due. Traditional collection of these accounts has been through aggressive pursuit of slow payers, through telephone, letter, fax and personal contact. The management of the credit and collection function requires the establishment of a coordinated program to make appropriate credit decisions. Successful programs include elements of customer and invoice information, incentives for payment, and systematic pursuit.
Customer Information. Good credit decisions begin with the obtaining of accurate information on the prospective buying company. Important sources of data include the financial statements of the buyer and credit bureau reports. The major credit bureau organizations include Equifax, Dun & Bradstreet, TRW Information Services, and Trans Union Credit. Each bureau provides receivables management services, including debt management, collection of slow and non-payors, check guarantee and verification, and risk assessment.

Invoice Information. The lockbox is an important credit and collection mechanism, in that it speeds the receipt of information that remittances contain for faster feedback on uncollected receivables. Earlier access to payment information allows earlier initiation of the credit and collection process, and resolution of issues related to shipping to slow-pay customers. The potential time saved is as much as five business days, or one week, given the much slower delivery of mail to businesses than bank lockboxes experience, and the time required to open and process mail and apply cash to open receivables in many offices.

As discussed in Chapter 6, the posting of invoice payments to an open receivables involves

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8 See IMAGE CAPTURE LOCKBOX TECHNOLOGIES.
matching each receipt based on such unique identifiers as account, order or transaction numbers. The receivable is considered cleared when matches occur of identifiers and amounts paid. This process, whether it occurs in the lockbox or at the company, speeds the recognition of payments received and not received, allowing efficient follow-up of overdue amounts.

- **Payment Incentives.** A cash discount may be offered to customers to encourage prompt payment. Although finance texts continue to discuss cash discounting for early payment, the fact is that relatively few industries today offer such terms. A sample of a manufacturing company consulting client with 100 major vendors showed only fifteen companies offering any terms other than net (no cash discount offered): 1/10, net 30 and 2/10, net 30 (one offered 2/20, net 30). For a listing of the cash discount practices of four consulting clients, see Table 9-1.

Terms of "1/10, net 30" means that the vendor expects to be paid by the 30th day from the receipt of invoice, and if payment is made within 10 days a 1% discount will be allowed. The annualized value of the discount to the buying company is calculated as the number of "full payment periods" in a year (18, calculated as 360 ÷[30-10]) times the discount (1%), or 18%\(^9\). Most financial managers would be relatively indifferent to taking this discount by

\[^9\]The value of a cash discount is frequently miscalculated in financial writing; this is the
early payment, as the relevant average cost of capital would be nearly that amount. A 2/10 discount appears much more attractive, having an annualized value of 36%.

However, recent ratio analysis of payment practices of American industry indicate that the average time to payment is about 45 days. Thus, the valuation method would show far less attractive results: $360 \div (45-10) \times 1\% = \text{about a 10\% value, with a } 2/10 \text{ discount valued at about } 20\%$. Furthermore, it is difficult to enforce terms should a customer pay late. For example, a payment mailed on day 11 or after on 2/10, net 30 terms is not entitled to the 2% discount, yet very few companies will demand that the 2% be remitted as not having been properly earned.

An additional problem with the cash discount is a concern by the customer that should a pattern of taking the discount be established, any subsequent failure to continue that behavior may be considered as a sign of financial distress by the seller. Such a sign of "weakness" could affect the vendor-buyer relationship, in terms of the price and terms offered and the priority for vendor service. Because of the marginal value to customers, the problems of enforcement, and the perception of possible financial weakness, the cash discount has declined in relative importance.

...correct procedure to analyze the equivalent value.
Systematic Pursuit. Efforts to collect have been automated in recent years through computer software enabling the prioritization of contacts, beginning with broken promises to pay and large overdue balances; automated telephone dialing and letter writing; automated recording of debtor responses; and callback plans. The use of these procedures allows the contacting of more customers on an as-due basis, resulting in improved DSO by an estimated 10%.

These systems are not economical to install except for very large companies. Consequently, this work is being outsourced to commercial collection agencies, whose systems can provide the appearance of an internal operation to customers due to the need for sensitivity in communications. Personalized scripts are used for accounts which are late by a specified number of days, even the date due. Daily data transmissions between the company and the collection agency allows each party to determine the precise status of each account. Automation permits the pursuit of low-balance accounts and other overdues often deemed too unlikely to pay to contact. Costs vary by collection agency, and are often based on activity per contact rather than as a percentage of monies collected.

The most effective methods to assure prompt collection is to maintain current credit information on customers, carefully monitor the receipt of payments, and contact customers as soon as there is slippage in payment.
Fixed Asset Leasing

The managing down of balance sheet assets includes the use of leasing arrangements for fixed assets. Companies have traditionally owned critical plant and equipment in order to control manufacturing and distribution processes. However, the useful lives of these assets have dramatically shortened due to advances in the technology of later generation equipment, including improved productivity and quality control processes. Collateral "soft costs", such as installation, software and training, are becoming more significant. The competitive environment has forced many companies to acquire the new technology even though partially depreciated equipment is still on the accounting ledgers, resulting in book losses from the distressed sale or scrapping of an aging asset.

The pressure to manage down underproductive balance sheet assets, with the shortened life of technology, has encouraged financial managers to consider leasing instead of ownership. In a leasing arrangement, the asset is off the balance sheet, little or no cash is used to initiate the transaction (or liability created such as a note payable), and the duration can be negotiated to the satisfaction of each party.

There may be further advantages to leasing, including the use of the applicable depreciation by the lessor, if the lessee is in an Alternative Minimum Tax status.\textsuperscript{10} This could cause the economic cost of

\textsuperscript{10}The Alternative Minimum Tax (AMT) affects companies by limiting the use of tax
the lease to actually be less than a purchase. In evaluating a lease vs. buy decision, companies should analyze the after-tax lease payment cashflows and the after-tax benefit of depreciation, using present value to discount the cashflows. When this amount is compared to the present value of the purchase price and collateral costs, leasing is frequently a lower after-tax cost than a purchase.

The competition to write leases has driven lessors to become both price competitive and as creative as bankers in structuring leases. Because the leased asset reverts to the lessor at the close of the lease (or the lease is extended), interest rate charges can be substantially below normal borrowing rates. Floating rate leases pegged to standard rates (e.g., LIBOR, Prime, Fed Funds) are now widely available, as are lease plans which allow flexibility in payments should the lessee expect seasonal cashflows.

Trading Partner Relationships

Inventory is not turned into cash until finished goods are sold, product is invoiced and monies preference items (e.g., accelerated depreciation) to reduce taxable income below a defined level as set by IRS regulation, now 20%. A company in an AMT status must use straight-line depreciation, which would seriously impact a capital purchase decision for any company considering significant spending on plant and equipment.

This analysis would use the marginal cost of capital. Most corporate finance texts discuss discounted cashflow analysis.
collected. This has traditionally been the one Current Asset which has not easily lent itself to aggressive management techniques, other than such measures as the "just-in-time" (JIT) technologies noted in Chapter 5\textsuperscript{12}. JIT involves having the necessary materials, parts and products in the right place at the right time, on the theory that excess inventory means waste and cost. JIT is now being extended to the point of requesting/requiring suppliers to own inventory while it is on the manufacturing site and awaiting fabrication, and transferring title as it enters the manufacturing process. The concept is that suppliers and their customers can work closely together to make the production process efficient for both parties, including the entire ordering, delivery, invoicing and payment cycle.

With few exceptions, businesses have traditionally viewed this type of vendor and customer relationships as adversarial, or in economic terms, as a zero-sum game where one party can only advance by an equivalent setback to his/her competitor. A major shift in thinking has been developing, whereby the optimal management of working capital is being considered as a partnership situation, a positive-sum game where buyers and sellers cooperate for the greater gain of all. Synergies are sought in information exchange and cost reduction, largely through the elimination of redundant data entry, float, payment delays and paperwork requirements. In our inventory example, savings develop from reduced warehouse space, and fewer trucks and rail facilities, as well as a reduction in the exchange of paper.

\textsuperscript{12}Beginning at page 5-6.
In a typical partnering effort, teams from participating companies meet to explore the problems each encounters in managing the sales/production/payment process, including the order process, product delivery, inventory management, production scheduling and the remittance of cash. The impetus is often from success in attaining internal operating efficiencies, perhaps driven by a reengineering process. When it becomes apparent that savings from electronics and automation far exceed the preservation of float or payment delays, the concept often jumps to such natural business partners as major vendors and customers.

Cashflow partnerships would affect balance sheet management by the minimization of the financing costs of each party, by shifting such costs to the party with the lowest ACC. For example, a vendor with a high ACC sells to a customer with a lower ACC. That high ACC is a cost which must be included in the price of the product, either as an explicit price or in lessened product quality. In any event, the buyer pays a higher price or receives a lesser product.

If the customer can transfer his/her lower ACC to the vendor, both parties gain. Such a transfer can occur by an earlier payment than the normal credit cycle terms (e.g., net 30), in exchange for a cash or anticipation discount\textsuperscript{13}. Any cash or anticipation discount offered to a buyer must be provided to

\textsuperscript{13}The cash discount was previously discussed in this chapter at "Payment Incentives", page 9-7. An anticipation discount is a payment before the net date, e.g., 30 days, but not part of the cash discount period. An example would be a $25,000 invoice paid on day 20
all customers purchasing on equivalent terms.\(^{14}\)

**Summary**

Much of the cashflow reengineering discussion of this chapter has focused on the use of procedures to manage the balance sheet to drive underperforming assets to a minimum. Businesses have begun to recognize the importance of optimizing the structure of the balance sheet and of driving down underperforming assets. Outsourcing techniques include factoring and receivables collateralization to transfer the collection of receivables, lockboxing to speed invoice information, automated credit and collection systems to pursue late and non-payors, and fixed asset leasing to avoid investment in plant and equipment. Internal improvement opportunities include the use of credit bureaus to provide customer information and other credit services, asset-based lending to finance Current Assets, cash and anticipation discounts to incent earlier receivables payments, and trading partner relationships to provide greater operating efficiencies to vendors and customers.

\(^{14}\)The Robinson-Patman Act of 1936 (amending the Clayton Act of 1914) prohibits price discrimination and regulates price discounts and allowances. Prices and pricing (cash) discounts must be equivalent on goods of "like grade and quality" unless there is cost justification.