CHAPTER 9

Controlling and Analyzing Cash Flow

CONTROL CASH BEFORE IT'S TOO LATE.

Cash flow analysis is less frequently done than profit analysis, cost analysis, budgeting analysis, capital investment analysis, and various other analyses. Among the reasons may be that:

- Cash flow has only relatively recently become accepted as a specific element to be measured and recorded in the financial statements and as a significant criterion of corporate financial success or failure.
- Analytical techniques for cash flow are not yet part of the standardized package of accounting tools.

Cash flow analysis refers to the tools and techniques that assist in understanding the company's present and future cash position. In this chapter, we will first take a brief look at the basic elements of FASB 95, Statement of Cash Flows. Then we will discuss the following cash flow analysis tools:

- Cash flow projections as they relate to FASB 95
- Cash flow reporting and control
- Interpretation and analysis of cash flow

BRIEF LOOK AT FASB 95

FASB 95 ESTABLISHES THE FORMAT FOR EXTERNAL DOCUMENTS; THE COMPANY NEEDS TO ESTABLISH THE FORMAT FOR INTERNAL DOCUMENTS.

Statement of Financial Accounting Standards No. 95, Statement of Cash Flows (more commonly referred to as SFAS 95 or FASB 95) was released in November 1987 to be effective for fiscal years ending after July 15, 1988. It requires the presentation of a statement of cash flows instead of the previously used statement of changes in financial position that focused on funds flows rather than on cash flows. While not one of the more complex pronouncements, FASB 95 contains a number of specific technical requirements regarding cash flow presentation that need to be understood by any company preparing a package of generally accepted financial statements. Some highlights of FASB 95 include the following, which includes a summary of the three classifications of cash flow (Operating, Investing, or Financing) that represent the heart of the FASB:

Purpose of a Statement of Cash Flows

- To provide relevant information about cash receipts and payments of an enterprise during a time period
- To help investors, creditors, and others to assess:
  - The enterprise's ability to generate future net cash flows
  - The enterprise's ability to generate positive future net cash flows, meet obligations, and pay dividends
  - The enterprise's needs for external financing
  - The effects on the enterprise's financial position of both cash and noncash investing and financing transactions.

Focus on Cash and Cash Equivalents

Explain the change during the period in cash and cash equivalents rather than the previously used ambiguous terms such as funds.

Classifications of Cash Flows

1. Cash Flows from (for) Investing Activities
   - Making and collecting loans
   - Acquiring and disposing of debt or equity instruments
   - Acquiring and disposing of property, plant and equipment and other productive assets (excluding inventory)

2. Cash Flows from (for) Financing Activities
   - Obtaining resources from owners and providing them with a return on and of their investments (proceeds from issuing equity instruments, bonds, mortgages, or other borrowing; paying dividends or other distributions to owners)

- Borrowing money and repaying principal amounts borrowed
- Obtaining and paying for other resources obtained from creditors on long-term credit

3. Cash Flows from (for) Operating Activities
   - All transactions not defined as investing or financing activities
   - Generally involving the production and delivery of goods and provision of services
   - Cash effects of transactions and events that enter into the determination of net income (including taxes, interest on borrowing, contributions, refunds, etc.)

Content and Form of the Statement of Cash Flows

The content and form of the statement of cash flows must conform to the following:

- Report must reconcile beginning and ending cash and cash equivalents.
- The direct method shows major classes of gross cash receipts and gross cash payments (i.e., cash collected from customers, paid to employees and other suppliers of goods and services, interest and dividends received, interest paid, taxes paid, etc.).
- If the direct method is used, reconciliation of net income to cash flow from operating activities is to be provided in a separate schedule
- The indirect method adjusts net income to reconcile it to net cash flows from operating activities by removing noncash transactions included in net income (i.e., depreciation, deferred taxes, changes in working capital, etc.)
- Inflows and outflows from investing and financing activities should be reported separately
- Cash flow per share is *not* to be reported in the financial statements.

CASH FLOW PROJECTIONS: METHODOLOGY

THE CASH FLOW PROJECTION SHOULD BE AN OPERATIONAL RATHER THAN AN ACCOUNTING DOCUMENT.

As we have previously noted in Chapter 8, cash flow planning is essentially no different than planning for sales, expenses, profits, capital investments, or any

other financial component of the business. It requires a good understanding of the business and detailed knowledge of the timing of events such as:

- Cash sales
- Accounts receivable collections
- Cash disbursements
  - Payment of accounts payable
  - Payment of payroll obligations

Additionally, periodic obligations such as loan repayments, dividend disbursements, tax filings, property tax and insurance due dates, special equipment or building purchases, new product development, or plans for new ventures, have to be considered.

It is also necessary to determine frequency of cash flow forecasts and a cash flow planning method that can be used for replication of future planning statements, for controlling cash flows actually incurred, and for documenting calculations and assumptions used in the preparation of the projections. Frequency of preparation (i.e., quarterly, monthly, weekly) is based on the specific needs of the organization. If the company has steady and reliable cash flows without cash problems, it might prepare forecasts and reports on only a quarterly basis. Most organizations, however, prepare at least monthly projections and reports. The greater the volatility of the cash flow, the more frequent should be the preparation of projections and reports.

It may also be necessary at times to prepare informal projections on a weekly or daily basis, particularly if the company keeps its cash balances at minimum levels or is having cash flow problems. Weekly operating cash planning allows the company to make extra payments (or invest excess cash) if it receives more cash than expected and hold back payments if receipts fall behind or disbursements exceed expectations. Even companies with good overall positive cash flow may wish to plan weekly as a supplement to their longer-term projections in case of short-term cash crunches or windfalls that will occur from time to time.

In developing its cash flow projections, the company should identify and prepare a format for the major cash flow items to be recorded and tracked. The format may follow the basic outline of the cash flow requirements under FASB 95, but can be adapted to individual company requirements as appropriate. A cash flow plan is normally an internal document and therefore does not have to adhere to FASB 95 standards. The primary format to be used internally is the Receipts and Disbursements (Direct) method previously illustrated in Exhibit 8.5 (which uses the example illustrated in FASB 95) or a variation thereof. That method has more of a cash flow focus giving it enhanced operational usefulness. The Adjusted Net Income (Indirect) method shown in Exhibit 8.6 is also acceptable, though harder for nonfinancial managers to understand.

The Adjusted Net Income method generally is used by and satisfies the requirements of financial institutions, and it has the advantage of tying the cash flow directly to the company's financial statements. For historical financial statement presentation purposes, using the Receipts and Disbursements method requires that a reconciliation of the company's net income to its operating cash flow be prepared on a separate schedule. Since this means that using the Direct method necessitates everything already required by the Indirect method as well as additional information, it is usually simpler for the company to use the Indirect method for its financial statement presentations.

THE DIRECT METHOD IS EASIER FOR THE OPERATIONAL MANAGER TO UNDERSTAND.

For internal management purposes, however, the Direct method usually provides a more effective and easily understood format for the company. It focuses on the direct sources and uses of cash and is thereby more generally useful for internal planning, control, and management purposes. For planning the company may want to open up the format to allow presentation of more detailed information. An example of a more detailed format is shown in Exhibit 9.1 for the Receipts and Disbursements (Direct) method. The planning format shows monthly projections with classifications that are likely to be useful for a manufacturing organization's operational planning, controlling, and reporting requirements. A service, financial services, retail, or not-for-profit organization's format will necessarily have to be adapted to meet its particular requirements, but the overall structure will likely be similar. The descriptors will be different.

Despite the need for each company to adopt its own formats, there needs to be an awareness of the reasons for certain line items on the receipts and disbursements forecasting method as shown in Exhibit 9.1. For instance, note that payroll projections for weekly, biweekly, monthly, and special payroll periods are shown separately. This is because accrual accounting procedures can adjust different payroll periods to monthly amounts, but for cash flow purposes it is necessary to know in exactly what time period the cash will be needed to meet the particular payrolls. Months with extra pay periods (a third biweekly or fifth weekly payroll) can cause cash flow difficulties if they are not taken into account. Separating them makes the projections easier and more accurate.

Also note that the "change in accounts payable" figure adjusts for the timing differences resulting from paying suppliers at a later time than the incurrence of the obligations. If the company has a purchase journal which records all the commitments obligated within a month, this is a logical basis for the cash flow requirements for those items despite the fact that they will not be paid until some time later. For planning and control purposes the company wants to know when the

	Month 1	Month 2	…	Month n	TOTAL
CASH FLOW FROM OPERATING ACTIVITIES					
Cash Receipts from Operating Activities					
Cash sales	$ 100	$ 100			
Accounts receivable collections	1,200	1,250		e	
Other operating receipts	5	5			
Total Receipts from Operating Activities	1,305	1,355			
Cash Disbursements from Operating Activities					
Material purchases	450	470			
Weekly payroll	125	155			
Bi-weekly payroll	100	100		t	
Monthly payroll	150	150			
Special payroll—vacation/holiday/bonus	0	0			
Payroll taxes/insurance/benefits	55	60			
Manufacturing expenses	60	65			
Selling expenses	35	50			
Administrative expenses	45	45		c	
Interest obligations	15	15			
Property taxes/insurance	50	0			
Income taxes	0	65			
Change in accounts payable	0	0			
Other operating disbursements	25	25			
Total Disbursements from Operations	1,110	1,200		e	
NET CASH FLOW FROM OPERATING ACTIVITIES	195	155			
CASH FLOW FROM INVESTMENT ACTIVITIES					
Cash Receipts from Investment Activities					
Interest/dividend receipts					
Cash from asset sales	10				

Other receipts from investment activities			t
Total Receipts from Investing Activities	10	0	
Cash Disbursements from Investment Activities			
Fixed-asset purchases	(150)	(25)	
Other investment purchases	(5)	(5)	
Total Disbursements from Investing Activities	(155)	(30)	
NET CASH FLOW FROM (FOR) INVESTING ACTIVITIES	(145)	(30)	e
CASH FLOW FROM FINANCING ACTIVITIES			
Cash Receipts from Financing Activities			
Loan receipts			
Other financing activity receipts			
Total Receipts from Financing Activities	0	0	
Cash Disbursements from Financing Activities			r
Debt repayment	(10)	(10)	
Dividend payments	(55)	0	
Other financing activity disbursements		(25)	
Total Disbursements from Financing Activities	(65)	(35)	
NET CASH FLOW FROM (FOR) FINANCING ACTIVITIES	(65)	(35)	
NET CASH FLOW—current month	(15)	90	a
NET CASH FLOW—cumulative	(15)	75	
Cash Available—beginning balance	1,665	1,650	
ENDING CASH BALANCE	$1,650	$1,740	

Exhibit 9.1 The Typical Manufacturing Company: Receipts and Disbursements Cash Flow Forecasting Method

cause of the cash outflow has been incurred. The fact that last month's expenses are paid for this month and this month's expenses paid next month can most easily be dealt with by calculating and recording the amount of the change in accounts payable. For planning purposes, it often makes sense to project a zero change in accounts payable on the assumption that the accounts payable pipeline will be reasonably constant over time, and trying to project its monthly changes becomes pure speculation.

The "other" categories that appear throughout the example shown in Exhibit 9.1 are intended to make the company think about any other significant categories of cash flow receipts or disbursements that may occur. These will vary from company to company, but operations must be reviewed carefully to accurately identify and account for special requirements, or cash projections may be seriously wrong. Additionally it is useful to include a general miscellaneous category to cover all those small items of cash flow that do not justify a separate line on the cash flow report but constitute an amount that in total should be recorded. A review of a year of actual cash flow history is typically all that is needed to determine an appropriate amount for this catch-all item.

Another example of a cash flow projection showing a completed 12 month cash flow forecast is shown in Exhibit 9.2. While this particular format does not meet FASB 95 standards (principally because of no separation of operating, investing, and financing activities), it lists the significant sources of and requirements for funds for this particular organization. It is this kind of adaptation to meet the specific requirements of the company that will make the cash flow projection meaningful and useful to the company.

THE CASH FLOW PROJECTION IS ONLY AS GOOD AS THE UNDERLYING ASSUMPTIONS.

The second part of Exhibit 9.2 is a listing of the assumptions used to develop the line items of the forecast. Wherever there are references to estimates or supporting schedules, these will normally be part of the cash flow forecast package. Recognize also that the assumptions listed in this exhibit are applicable only to this distinct projection. Any assumptions that the company prepares will, of course, have to apply to that specific forecast. The preparation of assumptions is a good idea for every line item in any projection. There are two basic reasons for this:

1. If anyone asks the basis for a number in the projection, the assumptions will readily supply that information.
2. In preparing the next projection, having the basis for the prior calculation makes the preparation of the new projection much simpler. Rather than

having to reinvent the projection methodology, the company has merely to look at the prior method of calculation of any line item, review it to ensure that it still makes sense, and apply the same process to the new forecast. If there is a better way to prepare the calculation, that should be done and an adjustment made to the assumptions for the next round.

CASH FLOW REPORTING AND CONTROLS

Once a relevant and effective system of cash flow planning has been developed, the reporting of the actual cash flows should follow naturally. The actual results come from the accounting system. There is no magic or particular difficulty to this process. It is only a matter of recording actual cash flows, summarizing them in a format consistent with the planning system, and reporting them accordingly. The same format should be used to report actual cash flows as is used for the projections so that appropriate comparisons of actual to projections can be made. These actual reports should be prepared at least as frequently as the projections—in some cases more frequently.

Cash Flow Reporting

While it is not always necessary to formally compare weekly actual figures to plan, monthly reports of actual cash flows are desirable. If projections are made on a quarterly basis, the monthly actual results can be compared to one third of the projections to get an idea of the accuracy of the projections. If projections are made on a monthly basis, the actual cash flows can, of course, be compared directly. Either way, the comparison should include a calculation of the differences between projections and actuals, and significant variances need to be investigated and explained. At this point it will be too late to do anything about the variance already incurred, but understanding why and how it occurred can be useful in improving future projections and bringing unacceptable practices under control.

CASH FLOW CONTROL:
1. SET THE STANDARD.
2. MEASURE PERFORMANCE.
3. EVALUATE PERFORMANCE.
4. REACT APPROPRIATELY.

	20xx			20xy									
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
# payroll weeks	5	4	5	4	4	5	4	4	5	4	4	5	53
NET SALES													
FORECAST	550	560	560	490	520	550	550	560	570	580	550	590	6,630
Ending A/Rec Balance	915	925	930	875	840	890	915	925	940	955	940	950	950
CASH RECEIPTS													
A/Rec collections	520	550	555	545	555	500	525	550	555	565	565	580	6,565
Other receipts	120	10	10	10	10	10	10	10	10	10	10	10	230
Total Cash Receipts	640	560	565	555	565	510	535	560	565	575	575	590	6,795
CASH DISBURSEMENTS													
Inventory purchases —Subsid. #A	59	60	62	55	58	58	58	58	58	58	58	58	700
Inventory purchases—other	95	95	75	90	95	95	95	100	100	95	105	100	1,140
Factory payroll	218	175	218	175	180	225	180	180	225	180	185	231	2,374
Salary payroll	52	41	52	42	42	53	44	44	55	44	44	55	564
Vacation/bonus payroll				65					110				175
FICA deposits	21	17	21	22	17	21	17	17	30	17	17	22	238
Unempl/workers comp. premiums	15			12			20			15			62

Exhibit 9.2a The Example Company
Cash Flow Forecast—October 20xx to September 20xy
($$ in 000s)

	20xx			20xy									
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
# payroll weeks	5	4	5	4	4	5	4	4	5	4	4	5	53
Medical/life/disability insur. prem.	9	9	9	10	10	10	10	10	10	10	10	10	117
Factory expenses	35	32	33	33	33	33	33	33	33	33	33	33	397
Administrative expenses	30	28	29	28	28	28	28	28	28	28	28	28	339
Property taxes/ insurance	9		15	9			10		27	10			80
Fixed assets			17		22		5		5		5		54
Income taxes				55			70		50			50	225
Advances— Subsidiary #B	25		25		20		20		15		15		120
Other	5	5	5	5	5	5	5	5	5	5	5	5	60
Total Cash Disbursements	573	461	561	600	510	528	595	475	751	495	505	591	6,645
CASH FLOW FROM OPER'NS	67	99	4	-45	55	-18	-60	85	-186	80	70	-1	150
Borrowing - principal			15			15			15			15	60
- interest			5			5			5			4	19
- total	0	0	20	0	0	20	0	0	20	0	0	19	79
NET CASH FLOW - month	67	99	-16	-45	55	-38	-60	85	-206	80	70	-20	71
- cumulative	67	166	150	105	160	122	62	147	-59	21	91	71	

Exhibit 9.2a The Example Company
Cash Flow Forecast—October 20xx to September 20xy
($$ in 000s) (continued)

	20xx			20xy									
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
# payroll weeks	5	4	5	4	4	5	4	4	5	4	4	5	53
CASH AVAILABLE													
-checking - beginning balance	127	144	118	102	107	112	74	114	99	93	98	93	127
- ending balance	144	118	102	107	112	74	114	99	93	98	93	73	73
transfer to (from)													
cash mgt. account	50	125		-50	50		-100	100	-200	75	75		125
-cash mgt													
- beginning balance	150	200	325	325	275	325	325	225	325	125	200	275	150
- ending balance	200	325	325	275	325	325	225	325	125	200	275	275	275
TOTAL ENDING CASH	344	443	427	382	437	399	339	424	218	298	368	348	348

Exhibit 9.2a The Example Company
Cash Flow Forecast—October 20xx to September 20xy
($$ in 000s) (continued)

1. SALES—estimates with earlier months based on shipment/backlog schedule
2. A/REC COLLECTIONS—calculated to maintain collection period under 50 days
3. OTHER RECEIPTS—October includes tax refund; other months are nominal receipts
4. PURCHASES—estimates based on historical data
5. FACTORY LABOR—October to January – 5,600 hrs/wk × 7.80/hr × # payroll weeks
   —February to July – 5,600 hrs/wk × 8.05/hr × # payroll weeks
   —August to September – 5,600 hrs/wk × 8.25/hr × # payroll weeks
6. SALARIES—October to December – $10,300/wk × # payroll weeks
   —January to March – $10,500/wk × # payroll weeks
   —April to September – $10,900/wk × # payroll weeks
7. VACATION/BONUS – estimates
8. FICA – 7.65% of payroll
9. UNEMPLOYMENT—October – $15,000; January – $12,000; April – $20,000;
   July – $15,000; – all estimates
   WORKERS COMP. – October to November and February to September
   @ $2,000/month; December @ 0
10. MEDICAL ... INSURANCE PREMIUMS—estimates
11. FACTORY EXPENSES—estimates based on historical data

Exhibit 9.2b Cash Flow Forecast Assumptions—
October 20xx to September 20xy

12. ADMINISTRATIVE EXPENSES—estimates based on historical data
13. PROPERTY TAXES/INSURANCE—per schedule of premium and tax due dates
14. FIXED ASSETS—estimates plus known expenditures
15. INCOME TAXES—per separate schedule of tax calculations
16. ADVANCES TO SUBSIDIARY #B—estimates
17. OTHER—contingency
18. BORROWING—per separate repayment schedule

Exhibit 9.2b Cash Flow Forecast Assumptions—
October 20xx to September 20xy (continued)

Cash Flow Controls

The control process consists of the following basic activities:

- Establishing expectations or standards
- Measuring actual performance
- Evaluating that performance
- Taking necessary corrective or other appropriate action.

These four elements are common to all control activities and can be justifiably applied to profits, production output, quality, rejects, customer service, personnel evaluation, or cash flow. Cash flow expectations or standards of performance derive from the cash flow planning process. As is the case in any budgeting/planning activity, the outcome of the planning effort represents the target against which actual results should be measured.

The measuring of actual performance is handled by the reporting of actual cash flows as discussed earlier. Evaluation presents an opportunity for creativity and flexibility for the financial manager. Measures for evaluating cash flow are not as standardized or as precisely defined as other measures of financial performance. Cost center variance analyses, return on investment benchmarks, and related profitability evaluation measures are highly developed and generally accepted by most financial analysts. Cash flow measures are less so, which leaves fewer road maps to follow, but allows a greater degree of freedom for the analyst to be creative and develop new and directly relevant evaluation techniques.

The ultimate test, however, and the most important aspect of the entire control process is the follow-up action taken by the organization to rectify problems or replicate successes. The actual cash flows provide the basis for decision-making as to what should be done next. Any significant differences from plan, whether over or under, need to be investigated so that the company can learn as accurately as possible just what has caused the discrepancies.

CONTROLLING CASH FLOW REQUIRES RELENTLESS FOLLOW-UP.

If cash turns out to be short, it may necessitate instant action to preserve company liquidity. At an extreme, emergency measures such as the immediate discontinuance of discretionary purchases, major delays of payments to vendors, panicky attention to collections, desperation borrowing, or other related action to instantaneously increase the flow and/or supply of cash may be called for. In less dire circumstances when the company has adequate cash reserves to get through a cash shortfall, it may only be necessary to rectify any problems identified so they do not happen again or to learn from the circumstances and do a better planning

job for the next cycle. Regardless of the outcome or the cause, a good cash management system requires consistent, persistent, and insistent monitoring and control. Examples of control sheets that can be used or adapted by a company for its own cash flow management are shown in Exhibits 9.3 through 9.10 as follows:

- *Exhibit 9.3.* Daily Activity Summary that shows the pieces that make up the cash and accounts receivable balances. It is useful as a daily control over cash balances and to compare actual activities to plans generated for the month.
- *Exhibit 9.4.* Daily Accounts Receivable Collections that shows receivable collections spread in an aging format so the company can see whether the older balances are being paid off.
- *Exhibit 9.5.* Cash Receipts Detail showing the summary of receipts for the full month. It is useful to help identify the sources of any significant receipts in addition to collections of receivables.
- *Exhibit 9.6.* Daily Cash Disbursements Summary showing disbursements by day and by major categories.
- *Exhibit 9.7.* Cash Disbursements Detail, which summarizes disbursements for the month in total. It is useful for estimating future disbursements requirements.
- *Exhibit 9.8.* Daily Cash Sheet is the source sheet for entering information on cash receipts and disbursements each day.
- *Exhibit 9.9.* Daily Invoicing Summary tracks the invoices issued during the month. It is useful for determining if sales are meeting plan throughout the month. The daily invoice amounts also are used to keep the accounts receivable balance up to date.
- *Exhibit 9.10.* Weekly Cash Planning Sheet shows a simple format that can be used for short-term weekly cash planning. It can be used to show the major anticipated sources of receipts and principal cash requirements for the week. It is best prepared at the beginning of the week when opening cash balances are known. It shows whether sufficient cash will be available to meet the week's obligations. The contingency amount ($25,000 in this example) is intended to allow for payments that may arise unexpectedly. The format allows for actual amounts to be entered as a tool to ensure that the projecting process is reasonably accurate.

INTERPRETATION AND ANALYSIS OF CASH FLOW

CASH FLOW ANALYSIS IS AS NECESSARY AS PROFIT ANALYSIS.

Date	A/Rec Collections	Other Receipts	Total Receipts	Total Disbursed	Cash Balance	Net Invoicing	A/Rec Balance
Opening bal.					146,674.03		855,520.45
9/2/xx	97,388.17	-74.52	97,313.65	0.00	243,987.68	0.00	758,132.28
9/3/xx	24,336.92	-242.71	24,094.21	76,318.26	191,763.63	43,741.69	777,537.05
9/4/xx	1,144.90	0.00	1,144.90	0.00	192,908.53	14,820.56	791,212.71
9/5/xx	0.00	43.64	43.64	46,823.01		22,436.70	
Cumulative	122,869.99	-273.59	122,596.40	123,141.27	146,129.16	80,998.95	813,649.41
9/8/xx	59,227.36	86,020.30	145,247.66	0.00	291,376.82	13,647.39	768,069.44
9/9/xx	9,215.26		9,215.26	30,099.73	270,492.35	22,834.61	781,688.79
9/10/xx	0.00	-39.30	-39.30	62,759.90	207,693.15	10,818.74	792,507.53
9/11/xx	0.00		0.00	3,075.00	204,618.15	13,396.22	805,903.75
9/12/xx	333.69	101,987.02	102,320.71	155,856.16		24,250.46	
Cumulative	191,646.30	187,694.43	379,340.73	374,932.06	151,082.70	165,946.37	829,820.52
9/15/xx	70,096.00	8,605.03	78,701.03	0.00	229,783.73	22,600.43	782,324.95
9/16/xx	3,477.89	-15.00	3,462.89	69,359.94	163,886.68	11,601.53	790,448.59
9/17/xx	0.00		0.00	67,039.58	96,847.10	118,441.79	908,890.38
9/18/xx	6,583.95	-65.64	6,518.31	50.00	103,315.41	16,954.71	919,261.14
9/19/xx	80,953.64	-51.38	80,902.26	10,505.00		24,876.90	
Cumulative	352,757.78	196,167.44	548,925.22	521,886.58	173,712.67	360,421.73	863,184.40

Exhibit 9.3 The Example Company
Daily Activity Summary—September 20xx

Date	A/Rec Collections	Other Receipts	Total Receipts	Total Disbursed	Cash Balance	Net Invoicing	A/Rec Balance
9/22/xx	80,313.31	9.90	80,323.21	0.00	254,035.88	20,170.12	803,041.21
9/23/xx	15,507.14	-98.70	15,408.44	40,938.34	228,505.98	53,875.67	841,409.74
9/24/xx	22,714.28	-114.40	22,599.88	64,101.92	187,003.94	17,800.22	836,495.68
9/25/xx	0.00	14.78	14.78	17,778.83	169,239.89	28,302.70	864,798.38
9/26/xx	1,420.00		1,420.00	612.24		25,400.00	
Cumulative	472,712.51	195,979.02	668,691.53	645,317.91	170,047.65	505,970.44	888,778.38
9/29/xx	28,214.72	-153.00	28,061.72	14,496.43	183,612.94	15,778.92	876,342.58
9/30/xx	17,892.74	-14.90	17,877.84	50,494.59		26,967.86	
Cumulative	518,819.97	195,811.12	714,631.09	710,308.93	150,996.19	548,717.22	885,417.70
Adjustments							
Sept. 20xx	518,819.97	195,811.12	714,631.09	710,308.93	150,996.19	548,717.22	885,417.70

Exhibit 9.3 The Example Company
Daily Activity Summary—September 20xx (continued)

Date	Total Collections	0-30 days Aug/Sep	30-60 Jul	60-90 Jun	>90 Prior	Discounts Taken
9/2/xx	97,388.17	7,519.80	5,842.52	50,364.15	33,661.70	-74.52
9/3/xx	24,336.92	22,640.62			1,696.30	-242.71
9/4/xx	1,144.90	125.00		1,019.90		
9/5/xx	0.00					
Cumulative	122,869.99	30,285.42	5,842.52	51,384.05	35,358.00	-317.23
9/8/xx	59,227.36	12,421.29	23,626.84	18,408.94	4,770.29	-123.42
9/9/xx	9,215.26	4,776.37		4,438.89		-47.68
9/10/xx	0.00					
9/11/xx	0.00					
9/12/xx	333.69	333.69				
Cumulative	191,646.30	47,816.77	29,469.36	74,231.88	40,128.29	-488.33
9/15/xx	70,096.00	27,737.90	31,272.59	11,085.51		-259.94
9/16/xx	3,477.89	1,727.64	1,500.25		250.00	-15.00
9/17/xx	0.00					
9/18/xx	6,583.95	6,583.95				
9/19/xx	80,953.64	36,739.56	61,719.08	-19,140.00	1,635.00	-51.38
Cumulative	352,757.78	120,605.82	123,961.28	66,177.39	42,013.29	-814.65

Exhibit 9.4 The Example Company
Daily Accounts Receivable Collections—September 20xx

Date	Total Collections	0-30 days Aug/Sep	30-60 Jul	60-90 Jun	>90 Prior	Discounts Taken
9/22/xx	80,313.31	22,907.50	47,893.05	9,512.76		
9/23/xx	15,507.14	11,725.24	3,781.90			-98.70
9/24/xx	22,714.28	19,499.83		3,214.45		-114.40
9/25/xx	0.00					
9/26/xx	1,420.00				1,420.00	
Cumulative	472,712.51	174,738.39	175,636.23	78,904.60	43,433.29	-1,027.75
9/29/xx	28,214.72	21,947.32	2,315.88	3,951.52		-153.00
9/30/xx	17,892.74	1,490.00	16,402.74			-14.90
Cumulative	518,819.97	198,175.71	194,354.85	82,856.12	43,433.29	-1,195.65
Adjustments						
Sept. 20xx	518,819.97	198,175.71	194,354.85	82,856.12	43,433.29	-1,195.65

Exhibit 9.4 The Example Company
Daily Accounts Receivable Collections—September 20xx (continued)

	Receipts	Total
A/Rec. Collections	$518,819.97	$518,819.97
Misc. Other Receipts		
Cash discounts allowed	(1,195.65)	
Interest income	1,658.69	
Rental income	1,685.00	
Other receipts	93,663.08	
Subtotal Other Receipts		95,811.12
Borrowing Proceeds		
Savings/Investments Cashed		100,000.00
TOTAL CASH RECEIPTS		$714,631.09

Exhibit 9.5 The Example Company
Cash Receipts Detail—September 20XX

Interpretation of the Statement of Cash Flows

One of the most important factors to remember when reviewing any financial statements is that one period or one point in time is not sufficient to make an evaluation. This is particularly true when reviewing the Statement of Cash Flows. As mentioned previously, cash flow is an erratic activity. Month-to-month variations are typically quite significant and an expected part of normal operations. A single period can have aberrations or unusual occurrences that are not representative of the business activities as a whole. Therefore, multiple time periods must be reviewed before making any judgments about the cash flow performance of the business.

For example, it is possible that the company had to meet a major balloon payment obligation on a loan during a year, and decided to forego any substantial capital investment to have the funds available for that payment. A look at just that year would indicate low reinvestment and high debt repayment that, over the long run, is not a desirable combination. But if it occurred only in one year, and all other years showed lesser loan activities and more substantial reinvestment, the logical conclusion would have to be that the year under review was an aberration and not an indication of a long-term problem. This type of analysis is possible only if multiple years are reviewed, trends are examined, and conclusions drawn from the entire time span, not just a single period.

Three to five years of history generally provides enough information to allow appropriate conclusions about the financial performance of a business, be it profitability, liquidity, return on investment, or cash flow. Less than three years does not provide enough data to permit a legitimate trend analysis; six to ten

Date	Total Disbursed	Payroll & P/R Taxes	Accounts payable	Discounts	Subsid. #B Advances	Other	Special
9/2/xx	0.00						
9/3/xx	76,318.26	65,671.30			10,000.00	646.96	
9/4/xx	0.00						
9/5/xx	46,823.01		34,140.04	-168.85		12,851.82	
Cumulative	123,141.27	65,671.30	34,140.04	-168.85	10,000.00	13,498.78	0.00
9/8/xx	0.00						
9/9/xx	30,099.73		24,693.40	-21.38		5,427.71	
9/10/xx	62,759.90	62,098.40				661.50	
9/11/xx	3,075.00					3,075.00	
9/12/xx	155,856.16					5,856.16	150,000.00
Cumulative	374,932.06	127,769.70	58,833.44	-190.23	10,000.00	28,519.15	150,000.00
9/15/xx	0.00						
9/16/xx	69,359.94		69,452.26	-236.32		144.00	
9/17/xx	67,039.58	63,889.58				3,150.00	
9/18/xx	50.00					50.00	
9/19/xx	10,505.00					10,505.00	
Cumulative	521,886.58	191,659.28	128,285.70	-426.55	10,000.00	42,368.15	150,000.00
9/22/xx	0.00						
9/23/xx	40,938.34		41,066.30	-127.96			
9/24/xx	64,101.92	64,014.30				87.62	
9/25/xx	17,778.83				15,000.00	2,778.83	
9/26/xx	612.24					612.24	
Cumulative	645,317.91	255,673.58	169,352.00	-554.51	25,000.00	45,846.84	150,000.00
9/29/xx	14,496.43					14,496.43	
9/30/xx	50,494.59		49,849.13	-198.40		843.86	
Cumulative	710,308.93	255,673.58	219,201.13	-752.91	25,000.00	61,187.13	150,000.00
Adjustments							
Sept. 20xx	710,308.93	255,673.58	219,201.13	-752.91	25,000.00	61,187.13	150,000.00

Exhibit 9.6 The Example Company
Daily Cash Disbursements Summary—September 20xx

	Purchases	Cash Disb.	Total
Purchases - Subsidiary #A	$61,605.05		$61,605.05
Purchases - other			
Co. X	172.33		
Components	72,220.34	18,002.74	
Metal parts	17,278.30		
Heat treating	892.62		
Tooling	465.00		
Miscellaneous	144.01	$18.41	
Discounts	2.92	(752.91)	
Freight	4,506.68	47.64	
Total Other Purchases	95,682.20	17,315.88	112,998.08
Payroll Costs			
Payroll		230,515.11	
FICA, FIT, State w/h		0.00	
Local tax w/h		2,604.11	
FICA expense		13,470.16	
Unemployment/workers comp.	2,014.00	11,974.42	
Medical/life insurance	11,304.24	(2,890.22)	
Total Payroll Costs	13,318.24	255,673.58	268,991.82
Factory Expenses			
Supplies - cleaning	7,969.87	206.25	
-factory	4,690.59	3,866.31	
-processing	(1,136.28)		
-packing/shipping	1,873.82		
-production	4,065.71		
-machine shop	4,113.65		
Maintenance/repairs	2,043.72	5,143.00	
Utilities - power/heat	5,285.01		
Water/sewer	1,590.28		
Other	1,937.38	103.18	
Total Factory Expenses	32,433.75	9,318.74	41,752.49

Exhibit 9.7a The Example Company
Cash Disbursements Detail—September 20XX

years is acceptable if the company wants to process that additional data; but anything beyond ten years is usually too outdated to be of any real analytical value.

Organization of the Statement of Cash Flows

The Statement of Cash Flows, as discussed earlier, is separated into three distinct segments—operating cash flows, investing cash flows, and financing cash flows. In the analysis of the Statement of Cash Flows, each of the three principal

	Purchases	Cash Disb.	Total
Administrative Expenses			
Advertising	2,420.00		
Automobile	915.19	34.27	
Consulting		2,350.00	
Contributions		41.50	
Data processing		702.90	
Employee relations	360.00	54.85	
Insurance	8,701.00		
Office expenses	566.67	8,310.00	
Professional fees	5,829.97		
Real estate taxes			
Telephone	1,380.02		
Travel/entertainment	6,316.09	720.31	
Other	168.83	486.24	
Total Admin. Expenses	26,657.77	12,700.07	39,357.84
Fixed Assets			
Income taxes - state		865.00	
-federal			
Total Income Taxes		865.00	865.00
Advances - Subsidiary #B		25,000.00	25,000.00
Borrowing - principal		15,000.00	
-interest		5,234.53	
Total Borrowing Expenditures		20,234.53	20,234.53
Savings/Investments		150,000.00	150,000.00
Other			
Accounts Payable	$229,697.01	219,201.13	
Accounts Payable Change			(10,495.88)
TOTAL DISBURSEMENTS		$710,308.93	$710,308.93

Exhibit 9.7b Cash Disbursements Detail—September 20XX

segments should be reviewed separately since each focuses on a distinct part of business activities.

Cash Flows from (for) Operating Activities

The most significant element to examine is the operating cash flows, since these represent what should be the major source of funds to the business over the long term. Generally speaking, if the business does not receive the bulk of its cash from operational activities, it will not be able to sustain itself. Clearly, the most important source of cash is that gained from the profitability of the company—that is a major reason why the company is in business and it represents essentially "free" money. Lack of profitability will eventually result in the termination

		Date: /30/xx
I. CASH RECEIPTS		
A. Accounts receivable collections		
1. Current	$ 1490.00	
2. 30 - 60 days	16,402.74	
3. 60 - 90 days		
4. Over 90 days		
Total A/Rec Collections		$ 17,892.74
B. Cash discounts		(14.90)
C. Miscellaneous cash receipts		0.00
TOTAL DEPOSITS		$ 17,877.84
II. CASH DISBURSEMENTS		
A. Payroll and payroll taxes		$ 0.00
B. Accounts payable		49,849.13
C. Discounts earned		(198.40)
D. Subsidiary #B advances		0.00
E. Other disbursements		843.86
TOTAL CASH DISBURSEMENTS		$ 50,494.59
III. CASH BALANCE		
A. Checking account		$ 30,996.19
B. Cash management account		120,000.00
TOTAL CASH		$150,996.19

Exhibit 9.8 Daily Cash Sheet

of the business activity except in highly unusual situations. Other sources of cash—borrowing, equity investments, or sales of assets—all should be supplemental to operations. There is nothing wrong with any of these as means of bringing money into the coffers, but they should not be the principal sources of funds over the long term.

Part of the profit from operations is, of course, the noncash adjustments to net income—depreciation, deferred taxes, amortization, changes in working capital, and so on. These must be added back to net income to determine the totality of cash generated from operations. Other adjustments to net income (e.g., undistributed earnings of affiliated companies, casualty gains or losses, special charges or credits, lawsuit settlements, or the like) should be evaluated individually to determine if they are part of cash from ongoing activities or

Date	Invoice # Control	# of Invoices	# of CMs	Gross Product	Shipments Special	Credit Memos	Freight	Net Invoicing
9/2/xx	7510							
9/3/xx	7527	16	1	43,932.05		-339.84	149.48	43,741.69
9/4/xx	7539	12		13,530.40	1,200.00		90.16	14,820.56
9/5/xx	7551	11	1	28,741.45		-6,404.60	99.85	22,436.70
Cumulative		39	2	86,203.90	1,200.00	-6,744.44	339.49	80,998.95
9/8/xx	7561	10		13,574.40			72.99	13,647.39
9/9/xx	7575	14		22,723.30			111.31	22,834.61
9/10/xx	7583	8		10,750.00			68.74	10,818.74
9/11/xx	7590	7		13,311.50			84.72	13,396.22
9/12/xx	7605	15		24,184.00			66.46	24,250.46
Cumulative		93	2	170,747.10	1,200.00	-6,744.44	743.71	165,946.37
9/15/xx	7619	13	1	22,522.50		-18.00	95.93	22,600.43
9/16/xx	7623	4		11,557.50			44.03	11,601.53
9/17/xx	7642	19		17,499.50	100,888.50		53.79	118,441.79
9/18/xx	7654	12		16,889.90			64.81	16,954.71
9/19/xx	7670	15	1	25,928.15		-1,152.00	100.75	24,876.90
Cumulative		156	4	265,144.65	102,088.50	-7,914.44	1,103.02	360,421.73

Exhibit 9.9 The Example Company
Daily Invoicing Summary—September 20xx

Date	Invoice # Control	# of Invoices	# of CMs	Gross Product	Shipments Special	Credit Memos	Freight	Net Invoicing
9/22/xx	7684	11	3	20,927.10		-838.39	81.41	20,170.12
9/23/xx	7692	8		53,842.25			33.42	53,875.67
9/24/xx	7708	15	1	17,966.82		-188.20	21.60	17,800.22
9/25/xx	7732	22	2	29,250.77		-1,047.50	99.43	28,302.70
9/26/xx	7759	27		25,312.88			87.12	25,400.00
Cumulative		239	10	412,444.47	102,088.50	-9,988.53	1,426.00	505,970.44
9/29/xx	7773	10	4	16,264.40		-507.68	22.20	15,778.92
9/30/xx	7791	18		26,850.43			117.43	26,967.86
Cumulative		267	14	455,559.30	102,088.50	-10,496.21	1,565.63	548,717.22
Adjustments								
Sept. 20xx				455,559.30	102,088.50	-10,496.21	1,565.63	548,717.22

Exhibit 9.9 The Example Company
Daily Invoicing Summary—September 20xx (continued)

	Date (week of): 9/22/xx	
	Forecast	Actual
CASH AVAILABLE		
Beg. checking a/c balance at 9/22/xx	$30,000	$30,000
Cash mgt. a/c balance	144,000	143,713
Estimated receipts		
-A/Rec. collections	115,000	119,955
-certificate of deposit maturities	0	0
-other cash receipts	0	(188)
TOTAL EST. CASH AVAILABLE	$289,000	$293,480
CASH REQUIREMENTS		
-A/Pay per requirements report	$45,000	$40,938
-additional payables	10,000	3,479
-payroll and payroll taxes	65,000	64,014
-Subsidiary #B advances	15,000	15,000
-other requirements		
-contingency	25,000	0
-certificate of deposit purchases	0	0
-income taxes	0	0
-other special payments	0	0
TOTAL EST. CASH REQUIREMENTS	$160,000	$123,431
CASH BALANCE AT WEEK END		
-checking account	$30,000	$30,000
-cash mgt. account	99,000	140,049
TOTAL ESTIMATED CASH AVAILABLE	$129,000	$170,049

Exhibit 9.10 Weekly Cash Planning Sheet

separate items not to be included in the evaluation of current operations. Each company needs to make this determination and apply it consistently over the years to ensure comparable evaluations and appropriate review conclusions. Changes in the elements of working capital (i.e., current assets and current liabilities), included as part of operating cash flows, tend to move up and down within reasonable ranges and do not generally constitute a major consideration in overall operating cash flows. There are plenty of exceptions to this, however, and it should not just be assumed that working capital elements are under control. They need to be examined and tracked to verify that they are indeed adequately controlled.

CASH SHOULD COME FROM OPERATIONS AND SHOULD BE USED FOR INVESTING, WITH FINANCING AS THE BALANCING NUMBER.

Cash Flows from (for) Investing Activities

Investing activities are the next part of the Statement of Cash Flows that needs to be examined. These, in most cases, will represent the major uses of the cash flow of the business. Outlays for property, plant and equipment or new business acquisitions represent the company's investment in its own future, and most of the company's cash outflow over time should be in this area. A rule of thumb for the company to consider is that it should reinvest at least the amount of its real, straight-line depreciation in new property, plant and equipment so as to preserve its investment base. Because of inflationary pressures over time, reinvestment by only the amount of depreciation is unlikely to be sufficient, but it can be considered a minimum. Even higher levels of investment may be necessary for certain types of business and generally will be an indication of growth and improvement, but this also needs to be examined carefully. Reinvestment for the sake of reinvestment is wasted cash. The amount of reinvestment should be logical, planned, and appropriate for the circumstances of the company. Too much reinvestment uses up cash indiscriminately—an unwise action on the part of the company managers.

Cash Flows from (for) Financing Activities

Cash from or for financing activities can be considered as a balancing number, and as such is generally subordinate in operating significance to the other two classifications. This is not to say that the financing section can or should be overlooked. It needs to be reviewed carefully to determine how the company is handling its debt obligations and related financing transactions. Too much borrowing over too long a period of time will eventually cause trouble for the company. Too little borrowing may be an indication of overly cautious management and eliminates the possibility of gaining the benefits of leverage. Changes in the capital structure of the company will, from time to time, have to be made and can significantly affect the overall financial position and cash flow of the company. But these kinds of major changes tend to be relatively infrequent and do not have the more immediate impact of cash flow generated by operating and investing activities.

From an interpretation standpoint, it should be obvious that over time the company's main cash flow should be generated by operations and used for investing activities, with financing cash flows as a fluctuating balancing number between the other two. This should be the basis for initially determining the appropriateness of company cash flow. The logical follow-up questions are "How much from operations?" and "How much for investing?" Unfortunately, there are

no readily available sources of information that will answer these questions for the company. It will be necessary for each enterprise to develop its own criteria about how much cash it should be generating from operating cash flows, and how much it should be using for investing cash flows. At present, the best source of such internal information is company history. An examination of the last 5 to 10 years of actual cash flows is likely to generate some standards that can be used to develop future expectations.

Operational Analysis of the Cash Flow Statement

While the cash flow statement is usually considered to be a financial document and is generally used, if at all, as part of the financial review of the organization, it can be used for operational analysis purposes as well. To be most useful operationally, focus should be on a direct method–type presentation, with particular emphasis on key parts of the Cash Flows from Operating Activities and Cash Flows from Investing Activities. See Exhibit 8.5 for the source of the line items we will discuss, but do recognize that this particular format is intended to be illustrative only, and the company form of presentation may be different to suit its particular needs.

Cash Flows from Operating Activities
This is the principal source and use of cash for the organization arising from company operations. These are the proceeds from sales of products and services and the expenditures for the operating needs such as material, labor, salaries, and other expenses necessary to keep the business running. Areas subject to operational review include:

- *Cash received from customers.* This, of course, represents the amounts paid by customers during the period for products or services they received. It is the cash paid by these customers, not the sales to them, that is recorded. Examples of analytical approaches to consider could include:
  - Amount of cash received versus expected (planned) receipts
    - By product or product line
    - By customer or class of customer
    - By type of sale (e.g. <$500, >$50,000 or other appropriate breakdown; sales from stock on hand versus special order; sales from product versus spare parts versus service repair; etc.)
  - Percentage of payments received beyond payment terms (e.g., 30 days) versus payments received within terms
  - Percentage of discounts taken versus discounts offered

- *Cash paid to suppliers and employees*. This represents the principal cash outflows for the organization, including cash paid out for material, purchased parts, payroll, manufacturing or service expenses, and marketing

and administrative expenses (for sales activity, marketing, finance, accounting, executive, legal and related administrative support costs). Analytical approaches to consider in this area include:

- Payments made versus planned by category (purchased parts, raw materials, supplies, utilities, insurance, property taxes, etc.)
- Payroll paid versus plan—weekly, biweekly, monthly payrolls, overtime, vacation, payroll taxes
- Vendor analysis—payments versus plan, versus prior year, versus last five years, and so on. This can be done by vendor, by class of vendor, in total or any other way that makes sense for the organization.
- Percentage of payments made within 30 day terms, greater than 90 days, and so on.
- Percentage of discounts taken versus discounts offered by vendors and suppliers.

- *Other cash flows from operating activities*. These are likely to be largely financially oriented and outside the area of operational concerns, but they should at least be reviewed for possible operational impact.

Cash Flows from Investing Activities

The principal uses, over time, of the positive cash flows generated by operating activities. The future growth and viability of the company will be determined in large measure by the amount and the effectiveness of the company's investments in its future. Significant areas for operational review include:

- *Proceeds from sales of property, plant and equipment*. The amount of this cash inflow line item is likely to vary significantly from year to year, but the items sold should be reviewed to justify the validity of the dispositions and to see if they trigger ideas for other items that can legitimately be sold and converted into cash. Some sales of property, plant and equipment are a normal part of a company's ongoing process of replacing obsolete, worn out, or otherwise unusable assets. But a consideration also to be aware of is that an unusual amount of sales of these fixed assets may be an indication of excess capacity that has existed within the company. Looking at whether the items sold were needed in the first place could be a useful exercise to try and avoid repetition in the future.
- *Capital expenditures*. These are usually the largest of the investing cash outflows, and this category is used to record purchases of property, plant and equipment. Here again, the amounts will vary from year to year, but the specific expenditures should be reviewed for appropriateness and effectiveness. They should also be looked at from the point of view of whether the items acquired are really necessary for the business or were just "nice to have." Finally, the total amount expended needs to be reviewed to ensure that the company is not spending itself into a cash crisis.

- *Acquisitions of new businesses.* These are likely to appear sporadically and in widely divergent amounts for most businesses. The same review process should be applied as for capital expenditures.
- *Other investing activities.* These are most likely to be financially oriented transactions, subject more to financial than to operational analysis.

Cash Flows from Financing Activities

This is the balancing number between operating and investing cash flows made up of borrowing repayments, new borrowings, company equity sales and repurchases, dividends, and like financial transactions. As such this area is subject more to a financial than an operating review. However, the operational manager needs to be aware that company borrowing may be caused by operating activities that are executed with insufficient attention to their cash flow impacts. The financial and operating functional managers need to communicate with each other to avoid imbalances in the cash flow of the company. Borrowing is an expensive proposition that, if it can be avoided or delayed, saves cash for the company in the form of interest payments that do not have to be made and principal amounts that do not have to be repaid.

CASH FLOW IS DRIVEN BY OPERATIONAL ACTIVITIES AND NEEDS TO BE EVALUATED ACCORDINGLY.

Cash Management Operating Indicators

Each company must determine its own reasons for being in existence, its basic business principles, and its own operating principles. Based on these factors, it develops its strategic long- and short-term plans and budgets. Operating indicators and ratios can then be identified and developed to analyze the progress being made toward realizing these plans. Sometimes, such indicators are related to the total category (e.g., sales or accounts receivable), but sometimes it is also significant to relate them to an individual customer or sales order. Many times, analyzing each customer or sales order as a profit center can be helpful in determining specific corrective action to be taken. It is the use of such operating indicators and ratios that enables the company to identify ongoing areas for improvement, performance gaps between actual results and plans, and benchmarks for best practices. Although each company must develop its own operating indicators and ratios to address its own criteria for successful operations, the following are examples that could be considered.

- *Sales*
  - Types and amount of sale
    - To the right customer
    - Of the right product
    - At the right time
  - Type of customer
    - Major customers (20 percent of customer base producing 80 percent of sales)
    - Repeat customers
    - New customers
    - Cash customers
  - Relationship to sales forecast
    - Real customer orders recorded in original sales forecast
    - Real customer orders forecasted
    - Addition to original sales forecast
    - Sales forecast not realized
  - Type of sale
    - Repetitive
    - One time
    - Special order
    - Original product
    - Replacement parts
    - Product service
  - Sales processing
    - Directly into production
    - Backlogged
    - Shipped from inventory
  - Payment criteria
    - Cash sale (e.g., sale amount less than processing cost and other cash sales)
    - Payment upon delivery
    - Credit terms

- *Accounts receivable*
  - Payment with discount (e.g., 1%/10 days)
    - Considered in pricing?
    - Paid within discount period
    - Discounts taken but paid after discount period
  - Payments relative to terms period (e.g., 30 days of invoice date)
    - Between 10 and 20 days
    - Between 20 and 30 days
    - Beyond 30 days, 60 days, 90 days
    - Collection procedures employed

- Change in accounts receivable
  - Increase or decrease in total
  - Payment practices (i.e., quicker, slower)
  - Cash sales versus accounts receivable sales

- *Costs and pricing*
  - Product costs
    - Direct labor: Change in set up and processing time and dollar costs of rejects and rework
    - Material costs: Changes in quantities, amount put into production, cost of scrap and rework
  - Functional costs
    - Manufacturing related: Changes in quality control, receiving, packing and shipping, supervision, and so on.
    - Support departments: Engineering, purchasing, production scheduling, production control, inventory control, accounting, and so on.
  - Customer costs
    - Sales support prior to and during sale
    - Customer service—type and level
    - Type of distribution (one shipment, drop shipment, numerous locations)
    - After sales support
  - Differential pricing
    - Related to product, functional and customer costs
    - Based on method of payment (e.g., cash on delivery [COD], discounts, terms)
    - Profit center concept (e.g., each sale, total sales)

- *Vendors and accounts payable*
  - Vendor analysis
    - Right price
    - Right time
    - Right quality
  - Vendor negotiations
    - Price
    - Delivery
    - Quality
    - Service
    - Payment terms
  - Accounts payable
    - Cash payment if invoice amount less than processing cost
    - Cash payment as part of vendor price negotiations
    - Changes in accounts payable
    - Payment indicators (e.g., discount taken, payment within terms, payment beyond terms)

- *Inventory*
  - Raw materials
    - Decreases by item and product line
    - Just-in-time deliveries
    - Stockouts
  - Work in process
    - Real orders/total mix
    - On-time moves and completions
    - Under/overcapacity
  - Finished goods
    - Just-in-time deliveries
    - Decrease in inventory
    - Availability

Cash Flow Ratios: Operational and Financial

There are basically five major sources of cash and a corresponding five major uses of cash. These are as follows:

Sources of Cash	*Uses of Cash*
1. Profits from operations	1. Losses from operations
2. Borrowing	2. Repayment of debt
3. Sale of equity	3. Payment of dividends
4. Sale of assets	4. Investments/acquisitions of assets
5. Decrease in working capital (except cash)	5. Increase in working capital (except cash)

We have already discussed that acquiring cash from profits and expending cash for investment and acquisitions are the preferable sources and uses—at least over the long term. Profits represent a major reason why companies are in business—they are a principal goal of many organizations. While borrowing and sale of equity are a necessary part of business financing, they are less desirable sources of cash than profits. New borrowing will have to be repaid—with interest. New equity is expensive—and often unwanted or unavailable, especially to smaller businesses. Sale of assets as a source of funds is obviously self-limiting. And working capital reduction as a source of cash is also generally restricted because of its inherent operational limitations.

On the other side of the ledger, the company certainly hopes to avoid operating losses. Repayment of debt, while legally necessary, does little to directly benefit the organization. Dividend payments benefit stockholders, but do nothing directly to help the company; and an increase in working capital ties up cash, which is something management wants to avoid. Reinvestment in assets, however, indicates a commitment to the future—assuming the investment is done in a

manner that is intelligent and consistent with the company's strategic planning. It shows the company's interest in future survival and growth and can be seen as a positive statement about progress and advancement.

CASH FLOW RATIOS—AN OPPORTUNITY FOR CREATIVE THINKING.

With these basics in mind, the company's Statement of Cash Flows can be analyzed with ratios. A generally accepted set of cash flow ratios does not yet exist, so the company must look at its own operational and financial position and needs in devising analytical techniques to evaluate its cash flow. Acceptable and unacceptable results will vary from company to company, but norms will emerge for the organization based on its specific uses of cash over a three to five year period. The ratios illustrated below, or modifications of them, can be used to develop a working cash flow evaluation process for the organization. Most of the ratios focus on the impact of various measures relative to cash flow from operations, which is the most significant cash flow element.

There are any number of additional possibilities that could be considered as well. The major problem is not to come up with additional ratios, but to determine which of the myriad possibilities make sense for the company. The ratios below are intended to be idea generators only and should not be construed as a generally accepted set of ratios. Such a set has yet to be developed.

Ratio	*Method of Calculation*
Cash flow from continuing operations to sales. The amount of operating cash flows generated by sales—a cash efficiency measure.	$\frac{\text{Operating cash flows}}{\text{Net sales}}$
Cash to income ratio. Percentage of operating income that has been converted into cash—a measure of cash conversion	$\frac{\text{Operating cash flows}}{\text{Operating income}}$
Cash sales to total sales. The amount of sales immediately converted into cash—a cash efficiency measure	$\frac{\text{Cash sales}}{\text{Total sales}}$
Reinvestment ratio. The amount of operating cash flows used for capital expenditures—a measure of the degree of capital reinvestment	$\frac{\text{Purchase of property, plant \& equipment}}{\text{Operating cash flows}}$

Ratio	*Method of Calculation*
Reinvestment adequacy. The amount of reinvestment relative to depreciation—a measure of the adequacy of capital reinvestment	$\frac{\text{Purchase of assets}}{\text{Depreciation}}$
Operating cash reinvestment ratio. How much of operating cash flows is being reinvested in the business—a measure of the degree of capital reinvestment	$\frac{\text{Investing cash flows}}{\text{Operating cash flows}}$
Reinvestment to sales. The percentage of sales reinvested – a capital reinvestment measure	$\frac{\text{Investing cash flows}}{\text{Net sales}}$
Financing ratio. The percentage of sales used for financing the business	$\frac{\text{Financing cash flows}}{\text{Net sales}}$
Debt payoff. The amount of operating cash flows used to pay off debt	$\frac{\text{Debt payments}}{\text{Operating cash flows}}$
Cash return on assets. The amount of cash generated from total asset investment in the business—a cash return on investment (ROI) measure	$\frac{\text{Operating cash flows}}{\text{Total assets}}$
Cash return on equity. An ROI measure of cash return on stockholder's equity	$\frac{\text{Operating cash flows}}{\text{Stockholders equity}}$
Cash return on capital employed. An ROI measure of cash return on capital employed in the business	$\frac{\text{Operating cash flows}}{\text{Capital Employed}}$
Cash flow current ratio. Ability of cash generated from operations to cover currrent liabilities	$\frac{\text{Operating cash flows}}{\text{Current liabilities}}$
Cash flow fixed charge coverage. Ability of operating cash flows to meet company fixed charge obligations	$\frac{\text{Operating cash flows + fixed charges*}}{\text{Fixed charges}}$ *(interest paid + taxes paid + other fixed charges paid [rent, debt principal, leases, etc.])
Debt repayment from operating cash flows. Number of years of operating cash flows required to cover debt obligations	$\frac{\text{Total debt}}{\text{Operating cash flows}}$

To be of maximum value, any ratios used should be measured over a three to five year period so that trends can be evaluated rather than just absolutes. Without a set of norms, absolutes have virtually no significance, and those norms will have to be developed individually for each company. Finally, any evaluation should always revert back to the basics of cash flow discussed earlier—cash over the long run should come primarily from profitability (operating cash flows) and should be used primarily for reinvestment in the business (investing cash flows), with financing cash flows serving as the balancing number between the other two.

It is reasonable to presume that accounting practitioners and analysts will eventually develop a workable set of cash ratios that form the basis of a generally accepted set of cash flow ratios comparable to the financial ratios now being used for income statement and balance sheet analyses. In the meantime, the company will have to identify the information it needs to manage the company's cash. The absence of an acceptable set of already developed ratios does mean more work for the analyst, but it also means fewer restrictions and the chance to be creative and innovative in analyzing the company's results. That is an opportunity not to be wasted.

CONCLUSION

Analyzing the cash management process within an organization is an effective tool for determining the economy, efficiency, and effectiveness of the company's use of its cash flow. It forces management to move away from strictly accounting data and look at operations from a cash flow viewpoint, eliminating the perplexity of financial statements that are produced on the accrual (rather than cash) basis and contain numerous noncash accounting treatments. By taking the cash approach to analyzing operations, the analysis strips the business down to those ongoing operations that either add or deduct cash from the company's activities. This enables management to get to the essence of the company's operations and gain greater insight as to what is actually happening operationally within the organization.

CASH FLOW ANALYSIS IS OPERATIONS ANALYSIS.