# Cash Flow Analysis

# **Financial Skills**

Team FME

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ISBN 978-1-62620-956-5

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ISBN 978-1-62620-956-5

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# **Preface**

This eBook will help you to understand how cash flows are generated and what factors affect them. This knowledge is an integral part of making financial decisions that increase a firm's economic value or the capabilities of a nonprofit organization.

#### You will learn

- How working capital is generated and why it needs to be actively managed
- The purpose of a cash flow statement and how it complements the other key financial reports
- The counter-intuitive way that the 'cash account' is used in published accounts
- How to analyze an indirect format cash flow statement to see the true financial status of an organization
- How to compare accounts that have been prepared using different accounting methods

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## Introduction

Cash flow is simply the flow of cash through the organization over time. In the case of businesses that are run for profit, cash is paid out in return for the labor and materials that are used to provide goods and services that can be sold. The revenues received provide cash that can then be used to finance further production and sales as well as increasing the organization's economic value.

Cash flows are also essential for nonprofit organizations such as charities, schools, and hospitals that need to meet the various ongoing expenses associated with providing their services.

As a manager, you need to understand how cash flows are generated and what factors impact those flows. This knowledge is an integral part of making financial decisions that increase a firm's economic value or the capabilities of a nonprofit organization.

The management of cash flow is one part of a larger management responsibility known as the management of working capital, which refers to the operating liquidity available to an organization.



An organization can have assets and profitability, but find itself short of liquidity if its assets cannot readily be converted into cash.

Working capital is required to ensure that the organization is able to continue its operations and that it has sufficient funds to satisfy operational expenses and any maturing short-term debt. The management of working capital involves managing the four following aspects of an organization's operations:

- Inventories (stock, work-in-progress and finished goods)
- Accounts receivable (debts that are owed to the organization)
- Accounts payable (money the organization owes to its suppliers)
- Cash

Effective management of working capital will increase the profitability of the organization. It also enables managers to concentrate on their jobs without worrying too much about the potential for insolvency.



It can also reduce the amount of capital needed to run the enterprise, so even if you work in the nonprofit sector it is still an important consideration.

## **KEY POINTS**

- Cash flow is simply the flow of cash through the organization over time.
- Working capital is required to ensure that the organization is able to continue its day-to-day operations.
- ✓ The management of working capital involves actively controlling inventories, accounts receivable, accounts payable, and cash.
- ✓ The effective management of working capital can increase profitability in the private sector and reduce the amount of capital required by nonprofit organizations.

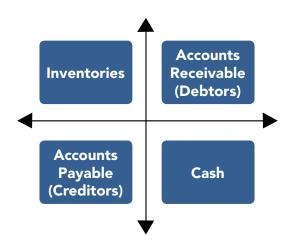
# Importance of Managing Working Capital

Many organizations that fail are profitable at the time, and their demise often comes as a surprise to managers and staff who can see that there is a full order book and plenty of satisfied customers. In these circumstances, the reason for the failure is usually down to a shortage of working capital.



This shortage in working capital can cause a company to not be able to pay its workers or suppliers even though there are sufficient sales and profits. Even in cases where these short-term liabilities can be met, the deterioration of cash flow critically undermines a company's ability to reinvest in the business and, ultimately, to survive.

The four factors that affect the amount of working capital available within an organization are:



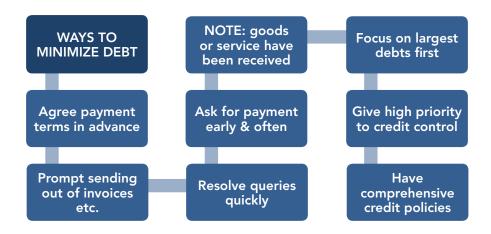
The management role that you perform may only influence one of these areas directly, but having a clear understanding of them all will give you an insight into how well your organization controls its working capital, and by extension how well it is managed financially.

#### **Debtors**

These are entities that owe your organization money. Many organizations have problems caused by the slow payment of invoices and this in turn affects working capital and, in particular, liquidity.

Chasing up unpaid invoices can be very time consuming and there is a fine line between maintaining a good working relationship with your customers and upsetting them by demanding payment too aggressively.

Whatever your organization's policy is in the area of debt collection you will need to set expectations appropriately with customers and be polite but assertive in following through with requests for payment. This is a key area you need to monitor closely to ensure problem payers are identified as soon as possible.



There are some things you as a manager may be able do to help:

- Make sure that the payment terms are agreed in advance
- Send out invoices and statements promptly
- Deal with queries quickly and efficiently
- Ask early and ask often, preferably by telephone
- Remember you are only asking for something that has been previously agreed

- Give credit control highest status and priority
- Have comprehensive credit policies
- Concentrate on the biggest debts first

## Inventory/Stock

Your aim should always be to keep stock as low as realistically possible and to achieve a high rate of stock turnover. In this way you are minimizing the impact on your organization's working capital. In theory this is an ideal to work towards, but in practice it is more difficult to achieve because you have to meet the commitments you have given to customers.



There are three components to what accountants refer to as inventory:

- **Raw materials**—these are the materials required to produce goods.
- **Work in process (WIP)**—includes partly finished goods and those raw materials and components already committed to production.
- Finished goods—are all those goods ready to be sold.

Many large and successful manufacturing companies use the just-in-time technique of arranging deliveries from suppliers frequently and in small quantities. This is not easy to achieve and can cause problems if just one vital component is missing when it is required.

Many organizations have sophisticated stock control systems, which keep track of stock levels. Once a pre-determined level of stock is reached, an order is automatically generated so that items are never entirely out of stock. In this way minimum levels of stocks are held and supply is replenished often overnight.

#### Creditors

Many organizations adopt a policy of delaying the payment of suppliers as long as possible. There is an obvious advantage in adopting such a policy as the purchaser is effectively getting an interest-free loan from the supplier.



If your organization adopts this policy then your cash balance will be higher than would otherwise be the case even though slow payments do not affect the net balance of working capital. However, there are also some disadvantages in a policy of slow payment:

- Suppliers will be reluctant to give discounts
- They may treat you as a problem customer and make all of your requests the lowest priority
- If you are always a slow payer there will be less scope for taking longer to pay in response to a crisis
- Within your industry you will quickly gain a reputation as a poor payer and many suppliers may refuse to work with you, making it hard to change suppliers if the need arises.

For these reasons, it is often unwise to adopt a consistent policy of slow payment, at least with important suppliers. It is often better to take only a few days longer than the deadline stipulated in the contract and to ensure that this is rewarded with keen prices, timely service, and prompt payment discounts.



If your organization is relatively small you may be able to obtain the same price as your larger competitors by agreeing an immediate payment plan with the supplier. This is because many large corporations use their extensive purchasing power to justify paying suppliers after an unreasonably long time.

This sort of policy can leave many manufacturers and suppliers with serious cash flow problems. In these circumstances, many suppliers are prepared to offer the maximum possible discount in exchange for guaranteed quick payments, irrespective of the size of the order.

#### Cash

It is quite common for an organization to be profitable but short of cash.



There are several reasons why this can happen:

 An expanding organization will have to spend money on materials (items for sale and salaries) before it completes sales and gets paid. It is a fact of business life that purchases and expenses usually come before sales and profits.

- Capital expenditure, in the form of buying equipment, has an immediate impact on the cash available. Even if the equipment is bought on credit, the monthly payments may exceed the monthly depreciation figure.
- Sales taxes and taxes on profit can both take cash out of an organization and cannot normally be deferred without incurring a penalty of some sort.
- Money may be collected from customers more slowly than expected. This often happens when sales people are motivated to bring in revenue but have no responsibility for, or interest in, enforcing the payment terms.

To avoid your organization becoming 'cash insolvent,' it is essential that you and all the company's managers accurately forecast and monitor their area's cash receipts and payments.

As a manager you need to plan for the known costs and to allow some contingency for unanticipated problems, e.g. late payment by a customer or a supplier withholding raw materials until payment has been processed.

This type of planning is usually referred to as a cash flow forecast and should be part of your overall budgeting management process.



As you plan and prepare your cash flow forecast it will highlight areas where improvements or savings can be made. It also has the additional benefit of identifying potential problem areas.

For example,

The figures for cash payments from trade debtors will be based on an estimate of the average number of days' credit that will be taken.

This will pose the question of whether or not payments can be speeded up.

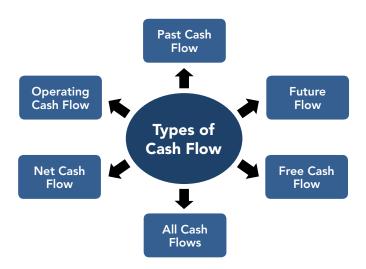
Your contingency plans could involve deferring an investment for a few weeks or negotiating an additional overdraft with the bank. Either way a well-planned cash flow forecast document helps you to be proactive and to avoid the crises that usually result from running out of cash.

#### **KEY POINTS**

- ✓ Many organizations fail because of a shortage of working capital.
- ✓ The four factors that affect the amount of working capital available within an organization are: inventories, accounts receivable, accounts payable, and cash.
- ✓ With regard to payment times, set expectations appropriately with customers and be polite but assertive when asking for invoices to be paid.
- ✓ Your aim should always be to keep stock as low as realistically possible and to achieve a high rate of stock turnover.
- ✓ The benefit to you of having a policy of slow payment can be more than offset by the damage done to your relationship with the supplier.
- ✓ Instead of flaunting payment terms, negotiate better prices, delivery speed, and discounts.
- ✓ To avoid your organization becoming 'cash insolvent,' it is essential that you and all the company's managers accurately forecast and monitor their area's cash receipts and payments.

## **How is Cash Flow Defined?**

Cash flow is a generic term that can be used differently depending on the context. It can refer to actual past flows or projected future flows. It can refer to the total of all flows involved or a subset of them—for example, net cash flow, operating cash flow, and free cash flow.



These terms will be defined later, but for now we will concern ourselves only with actual cash flows for a period of time in the past. It is important to define what is meant by 'cash':

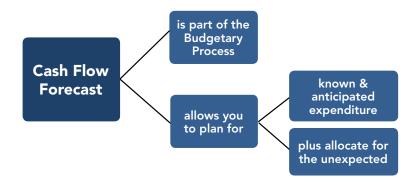
Cash includes all of the money that the organization has in bank accounts and short-term investments that can quickly be turned into available cash.

It is common for a balance sheet to show only a tiny amount for cash because businesses often operate with an overdraft and only petty cash is included.

#### A Cash Flow Forecast

There are two completely different accounting documents that have the words 'cash flow' in the title and it is important to avoid confusing the two of them. These documents are a 'cash flow forecast' and a 'cash flow statement.' A cash flow forecast, which has already been mentioned, is an internal document produced on an ad hoc basis to help with budgeting. In contrast, a cash flow statement is one of the principal financial reports that an organization publishes each year in accordance with international accounting standards.

As a manager, you may be asked to produce a cash flow forecast to show your known and anticipated cash expenditure for some future period of time, usually the next budgetary period or the remainder of the current one. You will usually be expected to add an element of contingency into your cash flow forecast to cater for any unexpected costs that may arise.



This forecast is an important aspect of your planning and is an essential part of budgeting as it helps you to identify potential areas where a lack of cash may become an issue. It also offers you the opportunity to review and where necessary amend your planned expenditure.

Regular monitoring and reviewing of your cash flow forecast is essential because you never know when your budget may be threatened or cut. You will be able to protect your original budget better if you already have arguments for why your budget should not be affected and exactly what the consequences will be if it is.

The better prepared you are, the more protected your budget will be in such circumstances. It also enables you to communicate accurately and objectively to senior management the consequences of any budgetary changes.

#### A Cash Flow Statement

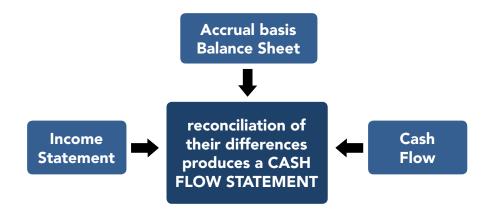
In order for a set of financial statements to be complete the accounting profession includes a cash flow statement. Like all other financial statements it has to adhere to accepted accounting principles.

The cash flow statement goes beyond what you include in your regular reports showing what cash has come in and what cash went out. One of the best definitions for what a cash flow statement is can be found in the McGraw-Hill course, *Finance for Non-financial Managers*:

#### A Cash Flow statement is a reconciliation of the differences between the:

- Accrual basis balance sheet and
- Income statement and
- Cash flow.

This statement uses historic data and is usually dated at the end of an organization's financial year. In simple terms it shows how the final cash balance occurred, how much money flowed in and from where, and how much went out and why.



The cash flow statement reflects a firm's liquidity. It includes only inflows and outflows of cash and excludes transactions that do not directly affect cash receipts and payments. Being a cash basis report, this financial statement details three types of financial activities: operating activities, investing activities, and financing activities.



This statement is extremely valuable to management and investors because it is intended to:

- Provide information on an organization's liquidity and solvency and its ability to change cash flows in future circumstances.
- Provide additional information for evaluating changes in assets, liabilities, and equity.
- Improve the comparability of different organizations' operating performance by eliminating the effects of different accounting methods.
- Indicate the amount, timing, and probability of future cash flows.

The valuable information and data a cash flow statement provides ensure it plays a key role in an organization's decision making. This is why it is essential for managers to have an appreciation of how it is compiled and how to interpret it.

The cash flow statement has been adopted as a standard financial report because it eliminates some of the problems that occur when trying to compare accounts that have been prepared using different accounting methods, such as various timeframes for depreciating fixed assets.



It is this compilation and integration of facts that draw savvy managers and investors to utilize this often overlooked financial statement. It is important to remember that all the figures in a cash flow statement can be found somewhere in the income statement, balance sheet, statement of shareholders equity, or any one of the financial statement notes provided.

If you looked at an income statement prepared using the accrual basis of accounting you could see a figure for reported revenues, but you would not know if they have been collected yet. Similarly, the expenses reported on the income statement might or might not have been paid.

Alternatively, you could review the balance sheet changes to determine the facts, but the cash flow statement has already integrated all that information.

There are many ways you can utilize the information a cash flow statement presents. For example, if an organization's cash generated from operations is consistently above its net income or earnings they are referred to as 'high quality.' In circumstances where the opposite is true then the organization's earnings have a 'red flag' raised against them. This informs anyone looking into the organization that they need to investigate further why its reported earnings are not turning into cash.

Where an organization consistently generates cash in excess of what it needs on a day-to-day basis, it has the ability to offer its investors a higher dividend or buy back some of its own shares. Such an organization is considered to have 'good stockholder value' by investors. This is not the only option and they may choose to use this excess cash to reduce debt or acquire another organization. In the case of nonprofit organizations, a positive cash flow allows them to expand their operations and offer additional or improved services.

#### **KEY POINTS**

- Cash flow can refer to actual past flows or projected future flows.
- Cash includes all of the money that the organization has in bank accounts and short-term investments that can quickly be turned into available cash.
- ✓ A cash flow forecast is an internal document produced on an ad hoc basis to help with budgeting.
- ✓ A cash flow statement shows how the final cash balance occurred, how much money flowed in and where it came from, and how much went out and why.
- ✓ A cash flow statement provides information on an organization's liquidity and solvency and its ability to change cash flows in future circumstances.

- It provides additional information for evaluating changes in assets, liabilities, and equity.
- ✓ It improves the comparability of different organizations' operating performance by eliminating the effects of different accounting methods.
- ✓ It indicates the amount, timing, and probability of future cash flows.

## Understanding the Changes in Cash

The way in which the 'cash account' is used in published accounts is to some extent counter-intuitive. To help you understand it we will use as an example a fictitious company that you will be familiar with if you have read any of our other free eBooks in this skills area. These can be downloaded from our website <a href="https://www.free-management-ebooks.com">www.free-management-ebooks.com</a>.

The following is a statement showing the balance of the cash account for Gary's Garden Furniture business in the first two months of trading.

| Gary's Garden Furniture<br>Cash Account<br>January and February |                    |        |       |         |
|---|--------------------|--------|-------|---------|
| Date  | Description        | Credit | Debit | Balance |
| Jan 7   | Investment         | 5,000  |       | 5,000   |
| Jan 9   | Rent & Deposit     |        | 1,000 | 4,000   |
| Jan 9   | Insurance          |        | 1,000 | 3,000   |
| Jan 10  | Inventory Purchase |        | 2,000 | 1,000   |
| Jan 15  | Sale on Credit     | N/A    | N/A   | 1,000   |
| Feb 15  | Payment for Sale   | 1,500  |       | 2,500   |

From this table you can see that for a change in:

- Assets (other than cash)—the change in the cash account is in the opposite direction.
- Liabilities and owner's equity—the change in the cash account is in the same direction.

The following table provided an explanation for each of the above items and reflects the change that occurs in the column of each key financial area.

| Date   | Explanation   | Account Changes                       |   |  |
|--------|---|---------------------------------------|---|--|
| Jan 7  | Gary, the owner, first invests \$5,000 of his own money into his new organization.                                    | Cash account increases                | Owner's Equity account also increases.  |  |
| Jan 9  | The organization pays out \$500 for the first month's rent, plus a \$500 deposit to the landlord.                     | Cash account decreases (\$1,000)      | Asset account Prepaid increases (\$500) |  |
| Jan 9  | The organization prepays a \$1,000 annual insurance premium.  | Cash account decreases                | Asset account Prepaid increases.        |  |
| Jan 10 | The organization purchases \$2,000 worth of inventory for resale.   | Cash account decreases                | Asset account Inventory increases.      |  |
| Jan 15 | The organization sells \$1,500 worth of merchandise on 30-day payment terms. (This does not affect the cash account.) | Accounts Receivable account increases | Inventory account decreases             |  |
| Feb 15 | The organization receives a payment of \$1,500 for the sale.  | Cash account increases                | Accounts Receivable account decreases   |  |

#### This can be summarized as follows:

- When owner's equity increases, the cash account increases
- When an asset (other than cash) increases, the cash account decreases
- When a liability increases, the cash account increases

#### Conversely:

- When owner's equity decreases, the cash account decreases.
- When an asset (other than cash) decreases, the cash account increases.
- When a liability decreases, the cash account decreases.

## **KEY POINTS**

- ✓ The way in which the 'cash account' is used in published accounts is to some extent counter-intuitive.
- ✓ When owner's equity increases, the cash account increases.
- ✓ When an asset (other than cash) increases, the cash account decreases.
- ✓ When a liability increases, the cash account increases.

#### A Direct Format Cash Flow Statement

It would be possible for you to create a report that listed all of the individual cash transactions as shown in Gary's cash account for January and February. But it does not really add to what you can already see on the bank statement because it doesn't show inflows and outflows in any meaningful way.

Grouping cash payments together and showing a total movement in cash over a particular period is much more useful. The report below shows Gary's Garden Furniture cash receipts and disbursements for July.

| Gary's Garden Furniture<br>Cash Account<br>July |          |
|---|----------|
| CASH RECEIPTS                                   | \$       |
| Amount Collected from Customers                 | 28,000   |
| Sale of Short-Term Investments                  | 2,000    |
| Total Cash Receipts                             | 30,000   |
| CASH DISBURSEMENTS                              |          |
| Paid to Creditors                               | 16,000   |
| Payroll   | 4,000    |
| Payroll Taxes                                   | 1,000    |
| Purchase of equipment                           | 3,000    |
| Total Cash Disbursements                        | (24,000) |
| Net Cash Flow (Drain)                           | 6,000    |
| Add Balance of Cash at Beginning of Period      | 8,000    |
| Balance of Cash at End of Period                | 14,000   |

By applying the resulting net cash flow (\$6,000) to the balance of cash at the beginning of the period (\$8,000), it is possible to obtain the cash balance for the end of the month (\$14,000).

Showing the flow of cash into and out of the organization in this way provides a summary of the cash account. Unfortunately, it does not show net income or make any attempt to explain the difference between any net income and net cash flow.

As well as these shortcomings, it is difficult to analyze these figures in any meaningful way. Consequently, published accounts always use what is known as the indirect method of presentation.

This is the format that appears in all published financial reports of public companies and is the same format as the report produced by most accounting software. This is discussed in the next section.

#### **KEY POINT**

Presenting cash flow using the 'direct' method is straightforward but not very useful.

#### An Indirect Format Cash Flow Statement

This statement begins with net income and adjusts for changes in account balances that affect available cash. It is slightly more difficult to understand initially but has far more potential for analysis.

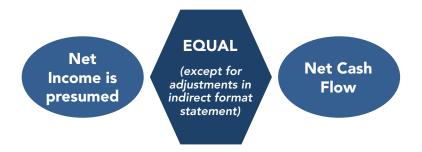


It also serves to answer the important question, what is the difference between net profit and net cash flow? A statement prepared using this method has four distinct sections:

- Operations
- Investing
- Financing
- Supplemental information

#### **Operations**

When you look at the example below of Gary's Garden Furniture you will see that the first entry is net income. This figure has been taken from the Income Statement for the period. The idea is that net income is presumed to be equal to net cash flow except for the adjustments that make up the details of this statement.



Operations is the process of running the organization with all of the related cash flows such as buying and selling goods, services, manufacturing, and paying employees. The entries under this title effectively convert the items reported on the income statement from the accrual basis of accounting to cash.

#### Investing

This reports the purchase and sale of long-term investments and property, plant, and equipment.

#### Financing

This reports the issuance and repurchase of the organization's own bonds and stock and the payment of dividends.

#### **Supplemental information**

This reports the exchange of significant items that did not involve cash and reports the amount of income taxes paid and interest paid.

The report below is an indirect format cash flow statement for Gary's Garden Furniture.

| Gary's Garden Furniture<br>Cash Account<br>July |         |         |  |
|---|---------|---------|--|
| <b>Operations</b>                               |         |         |  |
| NET INCOME                                      |         | 36,000  |  |
| Adjustments                                     |         |         |  |
| Depreciation                                    | 2,000   |         |  |
| Accounts Receivable                             | 3,000   |         |  |
| Decrease in Prepaid Expenses                    | 1,000   |         |  |
| Decrease in Inventory                           | 3,000   |         |  |
| Increase in Accounts Payable                    | 3,000   |         |  |
| Cash Provided By (Used For) Operations          |         | 12,000  |  |
| INVESTING                                       |         |         |  |
| Capital Expenditures                            | (3,000) |         |  |
| Short Term Investments Sold                     | 2,000   |         |  |
| Cash Provided By (Used For) Investments         |         | (1,000) |  |
| FINANCING                                       |         |         |  |
| Bank Debt                                       | 1,000   |         |  |
| Dividends Paid                                  | (6,000) |         |  |
| Cash Provided By (Used For) Financing           |         | (5,000) |  |
| Net Cash Flow (Drain)                           |         | 6,000   |  |
| Add Balance of Cash at Beginning of Period      |         | 8,000   |  |
| Balance of Cash at End of Period                |         | 14,000  |  |

To appreciate the information this indirect format statement provides you with, you need to work through the line descriptions, one line at a time. The explanations below will help you to understand exactly what the above cash flow statement tells you.

The first line under the Operations title is Net Income because the prime objective of this report is to show the differences between net income and net cash flow. This Net Income figure should be the same as that shown on the income statement for the same period.

#### **Adjustments**



Then you need to work through the meaning of each of the items listed under the heading 'Adjustments.' These are all the operating items that had an impact on cash that were not included in the income statement.

- Depreciation
- Accounts Receivable
- Prepaid Expenses
- Inventory
- Accounts Payable

#### **Depreciation**

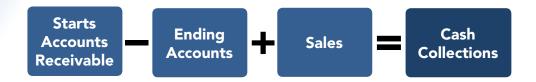
Because the cash was all paid out when Gary's bought the asset, the monthly charge for depreciation expense must be removed from reported net income. In other words, it should be added back in to increase the net income.

Remember, depreciation is the gradual charging of the cost to expense over the useful life of the item. It is recorded each month after the asset is put into use yet no cash changes hands as a result of these depreciation entries.

#### **Accounts Receivable**

At the beginning of the period, Gary's Garden Furniture was owed money by customers who had bought on credit. Some of this would have been collected during the month, which would increase the cash figure but decrease the accounts receivable figure.

However, Gary's would also make additional credit sales during the period, some of which would remain unpaid. These must also be allowed for. This can be done using the following formula:



This calculation effectively converts sales to cash collections by comparing the balances of Accounts Receivable from the beginning of the month and the end of the month. The following examples will help ensure that you understand this aspect of the statement.

#### **Example 1**

An organization makes sales of \$1,000; because there has been no change in the accounts receivable, the cash account must have increased by \$1,000.



- Accounts receivable at the beginning of the month = \$2,000
- Accounts receivable at the end of the month = \$2,000
- Sales = \$1,000

#### Example 2

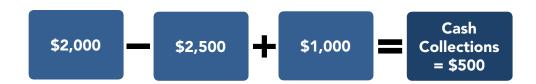
An organization has made \$1,000 worth of sales and accounts receivable has decreased by \$1,000. Therefore, the cash account must have increased by \$2,000.



- Accounts receivable at the beginning of the month = \$2,000
- Accounts receivable at the end of the month = \$1,000
- Sales = \$1,000

#### Example 3

An organization has made \$1,000 worth of sales and accounts receivable has increased by \$500, to a total of \$2,500. Therefore, the cash account must have decreased by \$500. (The negative cash figure of \$500 would appear in brackets on the cash flow statement.)



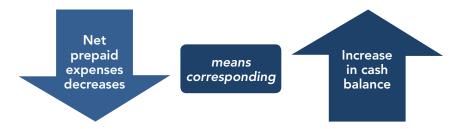
- Accounts receivable at the beginning of the month = \$2,000
- Accounts receivable at the end of the month = \$2,500
- Sales = \$1,000

This means that the organization has sold more to its customers during the month that it has collected. It has effectively loaned its customers \$500.

This may be acceptable if sales are growing but this situation has the potential to cause a liquidity problem if it is not addressed.

#### **Prepaid Expenses**

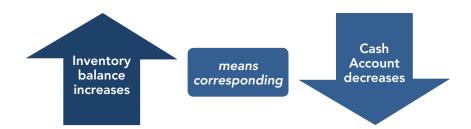
Prepaid Expenses represent an upfront cost for things like insurance. As with accounts receivable, the net change in the balance of prepaid expenses on the balance sheet from the beginning to the end of the period is a quick way to calculate the net effect of this adjustment on cash flow.



Basically, if the net figure of prepaid expenses has decreased over the month, there will be a corresponding increase in the cash balance and vice versa.

#### **Inventory**

Most companies need some inventory on hand and the change in inventory balances works on the cash account in the same way as Accounts Receivable.



Remember that the income statement includes the cost of all inventory sold in the month. The cash flow statement must deduct the cash cost of any inventory added during the period. This can be done using the following formula:



Conversely, the cash flow statement must add the cash cost of any inventory deducted during the period.

#### **Example 1**

An organization has purchased \$1,000 worth of inventory, which it has not sold.

This means that the cash flow adjustment must deduct the cash cost of any inventory added.

In this case the cash adjustment would be minus \$1,000 and the figure would be shown in brackets.

- Inventory at the beginning of the month = \$2,000
- Inventory at the end of the month = \$3,000



In this case the cash adjustment would be minus \$1,000.

#### Example 2

An organization has \$1,000 less of inventory than it had at the beginning of the period.

This indicates that the organization has sold \$1,000 worth of goods out of inventory and has not had to spend any cash to replace it.

This results in the cash adjustment being plus \$1,000.

- Inventory at the beginning of the month = \$2,000
- Inventory at the end of the month = \$1,000



In this case the cash adjustment would be plus \$1,000.

#### **Accounts Payable**

The Accounts Payable figure represents those amounts owed to creditors. The cash flow statement must add the cash cost of any increase in accounts payable during the period as this represents money effectively borrowed from creditors.

This can be done using the following formula:



#### Example 1

The accounts payable figure has increased by \$1,000. This means that the organization has effectively borrowed an additional \$1,000 from its suppliers this month.

In this case the cash adjustment would be plus \$1,000.

**Accounts Payable at the:** 

- Beginning of the month = \$2,000
- End of the month = \$3,000



#### Example 2

The accounts payable figure has decreased by \$1,000. This means that the organization has effectively paid back \$1,000 to its suppliers this month.

In this case the cash adjustment would be minus \$1,000.

#### **Accounts Payable at the:**

- Beginning of the month = \$2,000
- End of the month = \$1,000



#### Cash for Investing

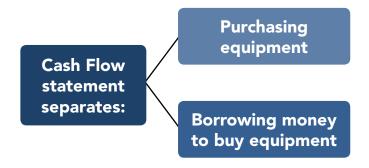
This reports the purchase and sale of long-term investments and property, plant, and equipment. This includes:

- Capital expenditures
- Short-term investments sold



#### **Capital Expenditures**

This describes the amount spent for all fixed assets that are not charged to expense when purchased but are recorded on the organization's balance sheet. That is, they are capitalized and then depreciated over the amount of time they are used for.

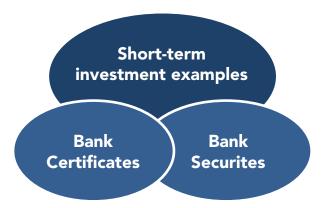


The cash flow statement considers the purchasing of equipment and borrowing the money for the purchase as two separate things.

Although the organization might have recovered the purchase cost by borrowing the money, the decision to purchase the equipment represents a commitment of cash and appears as a deduction on the cash flow statement. If the organization financed the purchase, an offsetting item would appear in the financing section of the cash flow statement.

#### Short-Term Investments Sold

An organization can invest excess cash so that the money is gaining interest until it is needed for operations. This type of investment is usually short term and uses vehicles like bank certificates or securities, which the organization sells when it needs the cash.



When such an investment is purchased it appears as a cash expenditure that would be shown in this section as a reduction in cash. When investment is sold the net proceeds of the sale, except for the gain or loss on sale (which appears in the income statement), become an additional source of cash.

Companies that have undergone a successful IPO (Initial Public Offering) often raise a lot of cash before they are ready to use it. Short-term investments are a way to earn income from these otherwise idle cash balances.

#### Cash from Financing

Financing activities include the inflow of cash from investors such as banks and share-holders, as well as the outflow of cash to shareholders as dividends as the organization generates income.



Other activities that impact the long-term liabilities and equity of the organization are also listed in this section. These include:

- **Bank Debt**—The net amount of any increases or decreases in monies borrowed from the bank.
- Dividends—a profitable organization may elect to pay a distribution of profits to its owners. This is usually done in the form of a dividend on the shares held by its stockholders.

These distributions are almost always in cash and the cash flow statement is the only place such payments can appear.

#### Net Cash Flow

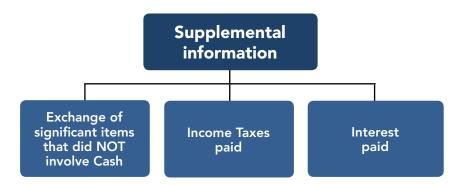
This is the sum of all the entries preceding it and should be equal to the actual change in cash balances from the beginning to the end of the period of the report.

The final step in this statement is to add to this line the beginning balance of cash that appeared in the prior month's balance sheet. This will give the new ending balance of cash.

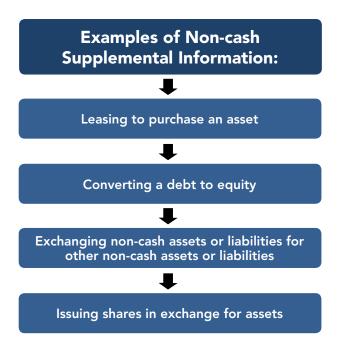
In this way the statement of cash flow is tied into the income statement (first line of cash flow statement) and the balance sheet (last line).

#### Supplemental Information

This information does not actually appear on the report itself but is usually appended to it.



It reports the exchange of significant items that did not involve cash and details the amount of income taxes paid and interest paid.



Non-cash activities may be disclosed here including:

- Leasing to purchase an asset
- Converting debt to equity
- Exchanging non-cash assets or liabilities for other non-cash assets or liabilities
- Issuing shares in exchange for assets

#### **KEY POINTS**

- ✓ An indirect format cash flow statement begins with net income and adjusts for changes in account balances that affect available cash.
- It is slightly more difficult to understand initially but has far more potential for analysis.
- ✓ A statement prepared using this method has four distinct sections: operations, investing, financing, and supplemental information.

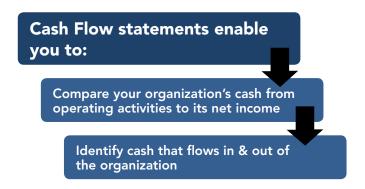
# **Summary**

The importance of being familiar with a cash flow statement has been explained. The compilation and integration of facts provided in this type of statement make it an excellent analysis tool. This tool allows you to compare accounts that have been prepared using different accounting methods, such as various timeframes for depreciating fixed assets.



All the figures that you read in a cash flow statement can be found within the other key financial statements. There are a variety of ways you can utilize the information a cash flow statement presents. This statement also offers those who know how to interpret its contents the opportunity for further investigation into an organization.

Some of the most common uses of a cash flow statement are shown in the diagram below:



There are two methods of presenting a cash flow statement: the direct and indirect method. The principal advantage of the indirect method is that it focuses on the differences between an organization's net income and its net cash flow from operating activities. This means that it presents a useful link between the statement of cash flows and the income statement and balance sheet.

Because it shows the data contained in an income statement information on a cash rather than an accrual basis, the direct method may lead to the incorrect conclusion that net cash flow from operating activities is equally able to measure an organization's performance as its net income.

To learn more about the other key financial statements and to become more familiar with accounting terminology so that you communicate confidently with the financial people in your organization, visit our website <a href="www.free-management-ebooks.com">www.free-management-ebooks.com</a> and download our other financial skills eBooks:

- Understanding Income Statements
- Reading a Balance Sheet
- Basic Accounting Concepts
- Assessing Financial Performance

## Other Free Resources

The Free Management eBooks website offers you over 100 free resources for your own professional development. Our eBooks, Checklists, and Templates are designed to help you with the management issues you face every day. They can be downloaded in PDF, Kindle, ePub, or Doc formats for use on your iPhone, iPad, laptop or desktop.

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**Checklists**—When you are working under pressure or doing a task for the first time, it is easy to overlook something or forget to ask a key question. These management checklists will help you to break down complex management tasks into small controllable steps.

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# References

Mason, Roger (2012), Finance for Non-Financial Managers in a Week, Hodder Education & The McGraw-Hill Companies Inc.

Shoffner G.H., Shelly S., and Cooke R.A. (2011). *The McGraw-Hill 36-hour Course Finance for Non-financial Managers*, 3rd edn, The McGraw-Hill Companies Inc.

Siciliano, Gene (2003), Finance for Non-Financial Managers, The McGraw-Hill Companies Inc.