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Working Capital Management

Abstract

Is a financial metric which represents the amount of day-by-day operating liquidity available to a business. Along with fixed assets such as plant and equipment, working capital is considered a part of operating capital. It is calculated as current assets minus current liabilities. A company can be endowed with assets and profitability, but short of liquidity, if these assets cannot readily be converted into cash.

When current assets are less than current liabilities, an entity has a **working capital deficiency** also called a **working capital deficit**.

Current assets and current liabilities include three accounts which are of special importance. These accounts represent the areas of the business where managers have the most direct impact:

accounts receivable (current asset)

inventory (current assets), and

accounts payable (current liability)

The current portion of debt (payable within 12 months) is critical, because it represents a short-term claim to current assets and is often secured by long term assets. Common types of short-term debt are bank loans and lines of credit.

An increase in working capital indicates that the business has either increased current assets (that is received cash, or other current assets) or has decreased current liabilities, **for example** has paid off some short-term creditors.

Implications on M&A: The common commercial definition of working capital for the purpose of a working capital adjustment in an M&A transaction (ie for a working capital adjustment mechanism in a sale and purchase agreement) is equal to:

Current Assets - Current Liabilities excluding deferred tax assets/liabilities, excess cash, surplus assets and/or deposit balances.

Cash balance items often attract a one-for-one purchase price adjustment.

Keywords: Business, capital, management.



Working capital management

Decisions relating to **working capital** and short term financing are referred to as *working capital management*. These involve managing the relationship between a firm's short-term assets and its short-term liabilities. The goal of Working capital management is to ensure that the firm is able to continue its operations and that it has sufficient cash flow to satisfy both maturing short-term debt and upcoming operational expenses.

Decision criteria

By definition, Working capital management entails short term decisions - generally, relating to the next one year period - which are "reversible". These decisions are therefore not taken on the same basis as Capital Investment Decisions (NPV or related, as above) rather they will be based on cash flows and / or profitability.

- One measure of cash flow is provided by the cash conversion cycle - the net number of days from the outlay of cash for raw material to receiving payment from the customer. As a management tool, this metric makes explicit the inter-relatedness of decisions relating to inventories, accounts receivable and payable, and cash. Because this number effectively corresponds to the time that the firm's cash is tied up in operations and unavailable for other activities, management generally aims at a low net count.
- In this context, the most useful measure of profitability is Return on capital (ROC). The result is shown as a percentage, determined by dividing relevant income for the 12 months by capital employed; Return on equity (ROE) shows this result for the firm's shareholders. Firm value is enhanced when, and if, the return on capital, which results from working capital management, exceeds the cost of capital, which results from capital investment decisions as above. ROC measures are therefore useful as a management tool, in that they link short-term policy with long-term decision making. See

Management of working capital

Guided by the above criteria, management will use a combination of policies and techniques for the management of working capital. These policies aim at managing the current assets (generally cash and cash equivalents, inventories and debtors) and the short term financing, such that cash flows and returns are acceptable.

- **Cash management.** Identify the cash balance which allows for the business to meet day to day expenses, but reduces cash holding costs.
- **Inventory management.** Identify the level of inventory which allows for uninterrupted production but reduces the investment in raw materials - and minimizes reordering costs - and hence increases cash flow; see Supply chain management; Just In Time (JIT); Economic order quantity (EOQ); Economic production quantity (EPQ).
- **Debtors management.** Identify the appropriate credit policy, i.e. credit terms which will attract customers, such that any impact on cash flows and the cash conversion cycle will be offset by increased revenue and hence Return on Capital (or *vice versa*); see Discounts and allowances.
- **Short term financing.** Identify the appropriate source of financing, given the cash conversion cycle: the inventory is ideally financed by credit granted by the supplier; however, it may be necessary to utilize a bank loan (or overdraft), or to "convert debtors to cash" through "factoring".

See also

- [Working capital management](#)

Working Capital Calculation Working capital is the single best method of determining the position of a company, or how well that company may be doing. When all is said and done, the company's working capital is what makes it profitable or not profitable. The more working capital a company has the better that company is doing, financially. Many potential investors and others in the public sphere will scrutinize a balance sheet to find the working capital calculation of a company.

According to many sources, the working capital calculation is the simplest to perform. Simply subtract the short-term liabilities of a company from the current assets. What you are left with is the working capital of the company in question. You have just performed a working capital calculation. It is not always so easy, though. All short-term liabilities must be accounted for, as well as all current assets. This is not as simple as just counting the available cash on hand. The working capital of a company is a requires a vast working capital calculation to find the exact amount of working capital. That said why is a working capital calculation so important?

Knowing the amount of working capital a company has is vital to many aspects. The working capital calculation will tell the company, as well as the investors, exactly how well the company is doing. In addition, the company's working capital constitutes the monies used for purchasing new equipment, new stock lines and much more. Working capital is the single most important aspect of a company, whether you are judging performance or speculating on expanding the company. Without the required working capital and knowledge of how to perform a working capital calculation, it may be impossible for a business to grow and prosper. Having the right amount of working capital is the only way in which a company can advance

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Managing Working Capital

Page Contents

[Working Capital Cycle](#)

[Sources of Additional Working Capital](#)

[Handling Receivables \(Debtors\)](#)

[Managing Payables \(Creditors\)](#)

[Inventory Management](#)

[Key Working Capital Ratios](#)

[Introducing PlanWare](#)

[Copyright & Legal Stuff](#)

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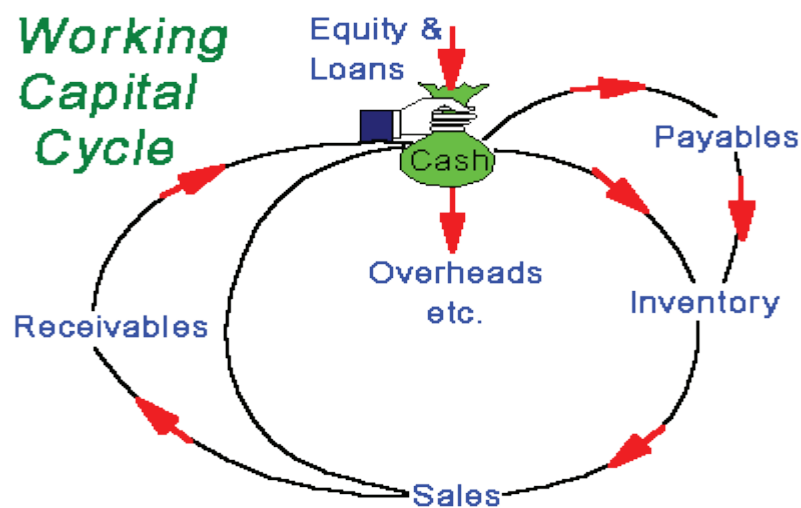
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1. Working Capital Cycle

Cash flows in a cycle into, around and out of a business. It is the business's life blood and every manager's primary task is to help keep it flowing and to use the cashflow to generate profits. If a business is operating profitably, then it should, in theory, generate cash surpluses. If it doesn't generate surpluses, the business will eventually run out of cash and expire. [Click here](#) for more information about the vital distinction between profits and cashflow.

The faster a business expands, the more cash it will need for working capital and investment. The cheapest and best sources of cash exist as working capital right within business. Good management of working capital will generate cash will help improve profits and reduce risks. Bear in mind that the cost of providing credit to customers and holding stocks can represent a substantial proportion of a firm's total profits.

There are two elements in the business cycle that absorb cash - **Inventory** (stocks and work-in-progress) and **Receivables** (debtors owing you money). The main sources of cash are **Payables** (your creditors) and **Equity and Loans**.



Each component of working capital (namely inventory, receivables and payables) has two dimensionsTIME and MONEY. When it comes to managing working capital - **TIME IS MONEY**. If you can get money to move faster around the cycle (e.g. collect monies due from debtors more quickly) or reduce the amount of money tied up (e.g. reduce inventory levels relative to sales), the business will generate more cash or it will need to borrow less money to fund working capital. As a consequence, you could reduce the cost of bank interest or you'll have additional *free* money available to support additional sales growth or investment. Similarly, if you can negotiate improved terms with suppliers e.g. get longer credit or an increased credit limit, you effectively create *free* finance to help fund future sales.

<i>If you</i>	<i>Then</i>
• Collect receivables (debtors) faster	You release cash from the cycle
• Collect receivables (debtors) slower	Your receivables soak up cash
• Get better credit (in terms of duration or amount) from suppliers	You increase your cash resources
• Shift inventory (stocks) faster	You free up cash
• Move inventory (stocks) slower	You consume more cash

It can be tempting to pay cash, if available, for fixed assets e.g. computers, plant, vehicles etc. If you do pay cash, remember that this is now longer available for working capital. Therefore, if cash is tight, consider other ways of financing capital investment - loans, equity, leasing etc. Similarly, if you pay dividends or increase drawings, these are cash outflows and, like water flowing down a plug hole, they remove liquidity from the business.

More businesses fail for lack of cash than for want of profit.

2. Sources of Additional Working Capital

Sources of additional working capital include the following:

- Existing cash reserves
- Profits (when you secure it as cash !)
- Payables (credit from suppliers)
- New equity or loans from shareholders
- Bank overdrafts or lines of credit
- Long-term loans

If you have insufficient working capital and try to increase sales, you can easily over-stretch the financial resources of the business. This is called *overtrading*. Early warning signs include:

- Pressure on existing cash
- Exceptional cash generating activities e.g. offering high discounts for early cash payment
- Bank overdraft exceeds authorized limit
- Seeking greater overdrafts or lines of credit
- Part-paying suppliers or other creditors
- Paying bills in cash to secure additional supplies
- Management pre-occupation with *surviving* rather than managing
- Frequent short-term emergency requests to the bank (to help pay wages, pending receipt of a cheque).

3. Handling Receivables (Debtors)

Cashflow can be significantly enhanced if the amounts owing to a business are collected faster. Every business needs to know.... who owes them money.... how much is owed.... how long it is owing.... for what it is owed.

Late payments erode profits and can lead to bad debts.

Slow payment has a crippling effect on business, in particular on small businesses who can least afford it. **If you don't manage debtors, they will begin to manage your business** as you will gradually lose control due to reduced cashflow and, of course, you could experience an increased incidence of bad debt. The following measures will help manage your debtors:

1. Have the right mental attitude to the control of credit and make sure that it gets the priority it deserves.

2. Establish clear credit practices as a matter of company policy.
3. Make sure that these practices are clearly understood by staff, suppliers and customers.
4. Be professional when accepting new accounts, and especially larger ones.
5. Check out each customer thoroughly before you offer credit. Use credit agencies, bank references, industry sources etc.
6. Establish credit limits for each customer... and stick to them.
7. Continuously review these limits when you suspect tough times are coming or if operating in a volatile sector.
8. Keep very close to your larger customers.
9. Invoice promptly and clearly.
10. Consider charging penalties on overdue accounts.
11. Consider accepting credit /debit cards as a payment option.
12. Monitor your debtor balances and ageing schedules, and don't let any debts get too large or too old.

Recognize that the longer someone owes you, the greater the chance you will never get paid. If the average age of your debtors is getting longer, or is already very long, you may need to look for the following possible defects:

- weak credit judgement
- poor collection procedures
- lax enforcement of credit terms
- slow issue of invoices or statements
- errors in invoices or statements
- customer dissatisfaction.

Debtors due over 90 days (unless within agreed credit terms) should generally demand immediate attention. Look for the warning signs of a future bad debt. For example.....

- longer credit terms taken with approval, particularly for smaller orders
- use of post-dated checks by debtors who normally settle within agreed terms
- evidence of customers switching to additional suppliers for the same goods
- new customers who are reluctant to give credit references
- receiving part payments from debtors.

Profits only come from paid sales.

The act of collecting money is one which most people dislike for many reasons and therefore put on the long finger because they convince themselves there is something more urgent or important that demand their attention now. **There is nothing more important than getting paid for your product or service.**

A customer who does not pay is not a customer. Here are a few ideas that may help you in collecting money from debtors:

- Develop appropriate procedures for handling late payments.
- Track and pursue late payers.
- Get external help if your own efforts fail.
- Don't feel guilty asking for money.... its yours and you are entitled to it.
- Make that call now. And keep asking until you get some satisfaction.
- In difficult circumstances, take what you can now and agree terms for the remainder. It lessens the problem.
- When asking for your money, *be hard on the issue - but soft on the person*. Don't give the debtor any excuses for not paying.
- Make it your objective is to get the money - not to score points or get even.

Our range of financial planners, [Exl-Plan](#) and [Cashflow Plan](#), contain extensive facilities for exploring alternative payment scenarios for receivables. See also the *white paper* on [Making Cashflow Forecasts](#) and [Checklist for Improving Cashflow](#).

Get a Cash Flow Planner for Free

Cashflow Plan Free generates comprehensive short-term cashflow and financial projections. It is useful in its own right and a great introduction to our [Cashflow Plan](#) and [Exl-Plan](#) ranges. Get [details](#) and [download](#).

4. Managing Payables (Creditors)

Creditors are a vital part of effective cash management and should be managed carefully to enhance the cash position.

Purchasing initiates cash outflows and an over-zealous purchasing function can create liquidity problems. Consider the following:

- Who authorizes purchasing in your company - is it tightly managed or spread among a number of (junior) people?
- Are purchase quantities geared to demand forecasts?
- Do you use order quantities which take account of stock-holding and purchasing costs?
- Do you know the cost to the company of carrying stock ?
- Do you have alternative sources of supply ? If not, get quotes from major suppliers and shop around for the best discounts, credit terms, and reduce dependence on a single supplier.
- How many of your suppliers have a returns policy ?
- Are you in a position to pass on cost increases quickly through price increases to your customers ?
- If a supplier of goods or services lets you down can you charge back the cost of the delay ?
- Can you arrange (with confidence !) to have delivery of supplies staggered or on a just-in-time basis ?

There is an old adage in business that *if you can buy well then you can sell well*. Management of your creditors and suppliers is just as important as the management of your debtors. It is important to look after your creditors - slow payment by you may create ill-feeling and can signal that your company is inefficient (or in trouble!).

Remember, a good supplier is someone who will work with you to enhance the future viability and profitability of your company.

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5. Inventory Management

Managing inventory is a juggling act. Excessive stocks can place a heavy burden on the cash resources of a business. Insufficient stocks can result in lost sales, delays for customers etc.

The key is to know how quickly your overall stock is moving or, put another way, how long each item of stock sit on shelves before being sold. Obviously, average stock-holding periods will be influenced by the nature of the business. For example, a fresh vegetable shop might turn over its entire stock every few days while a motor factor would be much slower as it may carry a wide range of rarely-used spare parts in case somebody needs them.

Nowadays, many large manufacturers operate on a *just-in-time* (JIT) basis whereby all the components to be assembled on a particular today, arrive at the factory early that morning, no earlier - no later. This helps to minimize manufacturing costs as JIT stocks take up little space, minimize stock-holding and virtually eliminate the risks of obsolete or damaged stock. Because JIT manufacturers hold stock for a very short time, they are able to conserve substantial cash. JIT is a good model to strive for as it embraces all the principles of prudent stock management.

The key issue for a business is to identify the fast and slow stock movers with the objectives of establishing optimum stock levels for each category and, thereby, minimize the cash tied up in stocks. Factors to be considered when determining optimum stock levels include:

- What are the projected sales of each product?
- How widely available are raw materials, components etc.?
- How long does it take for delivery by suppliers?
- Can you remove slow movers from your product range without compromising best sellers?

Remember that stock sitting on shelves for long periods of time ties up money which is not working for you. For better stock control, try the following:

- Review the effectiveness of existing purchasing and inventory systems.
- Know the stock turn for all major items of inventory.
- Apply tight controls to the *significant few* items and simplify controls for the *trivial many*.
- Sell off outdated or slow moving merchandise - it gets more difficult to sell the longer you keep it.
- Consider having part of your product outsourced to another manufacturer rather than make it yourself.
- Review your security procedures to ensure that no stock "is going out the back door !"

Higher than necessary stock levels tie up cash and cost more in insurance, accommodation costs and interest charges.

Our range of financial planners, [Exl-Plan](#) and [Cashflow Plan](#), contain extensive facilities for exploring alternative stock-holding strategies. See also the *white paper* on [Making Cashflow Forecasts](#) and [Checklist for Improving Cashflow](#)

6. Key Working Capital Ratios

The following, easily calculated, ratios are important measures of working capital utilization.

Ratio	Formulae	Result	Interpretation
Stock Turnover (in days)	$\frac{\text{Average Stock} * 365}{\text{Cost of Goods Sold}}$	= x days	On average, you turn over the value of your entire stock every x days. You may need to break this down into product groups for effective stock management. Obsolete stock, slow moving lines will extend overall stock turnover days. Faster production, fewer product lines, just in time ordering will reduce average days.
Receivables Ratio (in days)	$\frac{\text{Debtors} * 365}{\text{Sales}}$	= x days	It take you on average x days to collect monies due to you. If your official credit terms are 45 day and it takes you 65 days... why ? One or more large or slow debts can drag out the average days. Effective debtor management will minimize the days.
Payables Ratio (in days)	$\frac{\text{Creditors} * 365}{\text{Cost of Sales (or Purchases)}}$	= x days	On average, you pay your suppliers every x days. If you negotiate better credit terms this will increase. If you pay earlier, say, to get a discount this will decline. If you simply defer paying your suppliers (without agreement) this will also increase - but your reputation, the quality of service and any flexibility provided by your suppliers may suffer.
Current Ratio	$\frac{\text{Total Current Assets}}{\text{Total Current Liabilities}}$	= x times	Current Assets are assets that you can readily turn in to cash or will do so within 12 months in the course of business. Current Liabilities are amount you are due to pay within the coming 12 months. For example, 1.5 times means that you should be able to lay your hands on \$1.50 for every \$1.00 you owe. Less than 1 times e.g. 0.75 means that you could have liquidity problems and be under pressure to generate sufficient cash to meet oncoming demands.
Quick Ratio	$\frac{(\text{Total Current Assets} - \text{Inventory})}{\text{Total Current Liabilities}}$	= x times	Similar to the Current Ratio but takes account of the fact that it may take time to convert inventory into cash.
Working Capital Ratio	$\frac{(\text{Inventory} + \text{Receivables} - \text{Payables})}{\text{Sales}}$	As % Sales	A high percentage means that working capital needs are high relative to your sales.

Other working capital measures include the following:

Other working capital measures include the following:

- Bad debts expressed as a percentage of sales.
- Cost of bank loans, lines of credit, invoice discounting etc.
- Debtor concentration - degree of dependency on a limited number of customers.

Once ratios have been established for your business, it is important to track them over time and to compare them with ratios for other comparable businesses or industry sectors.

When planning the development of a business, it is critical that the impact of working capital be fully assessed when making cashflow forecasts. Our financial planning software packages - Exl-Plan and Cashflow Plan - can facilitate this task as they provide for the setting of targets for receivables, payables and inventory

7. Introducing PlanWare

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We also offer an extensive range of commercial software for writing business plans, market planning, assessing business ideas and evaluating strategies.

PlanWare also features:

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