

Business essentials: cash-flow forecast and break-even point

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The basics:

- among the most important figures for your business is cash flow, use it to predict if you'll have enough money to pay future bills
- don't confuse making a profit with cash flow. You might be making a profit, but if you run out of cash to pay your bills, your business can't operate
- you can be making what seems a healthy turnover but in fact making a loss: work out the break-even point so you know how much you have to sell to cover your costs

Overview

This information sheet describes two basic financial tools every business should use, the **cash-flow forecast** and the **break-even point**. You don't have to be an accountant to understand these terms, as once you read this information sheet you'll see why they are 'must haves' for success.

The cash flow forecast: cash is oxygen

Overview

■ **The most important tool for business health** Cash is the oxygen of business, because unless cash is available to pay bills when needed the business might be unable to operate or close its doors — even if profits are being made.

A **cash flow forecast** helps you estimate how much you can spend today without unexpectedly running out of cash. It uses estimated or real figures you collect and add to a simple worksheet (Table 1 on page 4) from the day you start the business. After 12 months you'll have a good idea as to what your cash balance will be, month by month for your second year of operation. You can also use the worksheet to write a **business plan** using cash flow projections (estimates). For more details about writing business plans, visit the Business Victoria website (www.business.vic.gov.au).

There are a few ways to use a cash flow forecast as a planning tool:

- **short term planning** to see where more cash than usual is needed in a month, for example, when several large annual bills are due, and the cash in the bank is likely to be low.
- **business planning (long term planning)** to find where cash flow could break the business, especially when the business wants to expand. For example, a seasonal swimwear retailer, after months of quiet winter trading with a low cash flow, has to buy new season's stock, employ extra staff and advertise. But it may also be planning to extend into the shop next door. After several lean months, the cash supply may be at its lowest — even without the added expense of the new premises. Cash will be very tight for several months, even with good takings, so the cash flow will need careful planning.

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Using a cash flow spreadsheet

Having a cash flow spreadsheet is just the first step. You need to know how to analyse the figures to see where the strengths and weaknesses of your business are:

You should be doing all of the following

- **estimate your cash flow if you're writing a business plan**
- **track your actual cash flow if you already have a business**
- **stress test what will happen to your cash flow if there's a increase or fall in profits and expenses (depending on what you're expecting)**

Estimating your cash flow for a business plan

Another way to use the Table 1 is to estimate what will happen in the first year without knowing the real figures, a common task for someone writing a business plan.

To **estimate** your cash flow before the business starts (using Table 1):

- **Step 1:** Write your estimates into Table 1. Be conservative, especially with cash in. Don't forget to factor in GST, payroll taxes, superannuation etc
- **Step 2:** Once the business starts operating, replace your estimates at the end of each month with the real cash in and cash out figures

If you're going into business for the first time, estimating cash in and out is hard as there are so many unknowns. Good market research is the answer. Perhaps speak to another business like yours (and distant enough so they won't see you as a competitor), or an accountant who prepares tax returns for your type of business, or an industry association.

To find a business or industry contact, use the Contact Search on the Business Victoria website (www.business.vic.gov.au). The website also has a section called *Planning Your Finances* with more detailed information about cash flow.

Tracking your actual cash flow

To **track** your cash flow once the business starts (using Table 1):

- **Step 1:** On the first day of the business, write the **cash balance** (the money the business actually has in the bank) in the top row of Month one.
- **Step 2:** At the end of the first month, write in the actual figures for **cash in** and **cash out**. When a customer pays on a past invoice, add the payment to the cash in, in the month you receive it. When you pay an invoice, add the amount to cash out in the month you actually pay.
- **Step 3:** at the end of the month, you can work out the **net difference**, that is, if more cash came in, than went out (or vice versa). For example, if cash in was \$5000, and cash out was \$3500, net difference was \$1500. Or perhaps month one was less than brilliant, cash in was \$6000 and cash out was \$9000, so the net difference was -\$3000.
- **Step 4:** Add or subtract the **net difference** (step 3) from the opening cash balance (step 1) for Month 1. The result is the first month's **cash balance** (bottom row). For example, if the cash balance was \$10,000 at the start of month one, and the net difference was -\$2000, then the new cash balance for month one was \$8000.

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- **Step 5:** Now write month one's cash balance in the top row of Month two: this is now the **cash balance** for the start of month two. (Table 2 has a worked example.)

Did you know?

Odd as it may seem, most small businesses are making a profit when they go out of business. Why? Because they ran out of cash to pay their bills and had to close their doors.

Use cash flow planning as a tool to make sure you know the best times to spend, especially if you need extra cash to expand the business.

Stress test your business

Another way to use a cash flow spreadsheet is to experiment with what will happen if there's a fall in income or increase in expenses. This is also known as scenario planning.

To **stress test** your cash flow (using the cash flow worksheet on the Business Victoria website):

- **Step 1:** Write your estimates into the worksheet. Be conservative, especially with cash in. Don't forget to factor in GST, payroll tax, superannuation etc.
- **Step 2:** Use the cash flow scenario planner and select the cells in B6 and B7. Using the drop-down fields at the top, choose a percentage change to your forecast income and expenses.
- **Step 3:** On the tab labelled cash flow report you are able to view an estimate of your cash position based on your scenario e.g. costs go up 5%.
Note: If your cash position is negative at any time you will need access to cash to meet your commitments.

It is important to understand your profit is dependant on changes in income and expenses. You will need to know how much expenses have to be reduced when revenues fall to remain profitable.

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Diagram 1 : Sample cash flow for the first three months. Note how the cash balance (bottom row) for the end of Month two is the same as Month one, because the business has started to cover its costs. Month three shows a net difference of \$2,000, which means \$2,000 more cash in than cash out, or profit.

Month *	Month one	Month two	Month three	Month four
Cash balance at the start of each month	30,000	26,160	26,160	
Cash in				
<i>Sales income</i>	2,800	6,000	7,500	
<i>Other income</i>	200	200	500	
Total cash in at end of month	3,000	6,200	8,000	
Cash out				
<i>Administration, insurance</i>	1,500	1,500	1,500	
<i>Marketing</i>	500	500	500	
<i>Cost of goods</i>	2,000	1,500	1,300	
<i>Interest expense, bank charges</i>	300	300	300	
<i>Capital costs</i>	500	400	400	
<i>Tax, GST, wages, PAYG, super etc</i>	2,000	2,000	2,000	
<i>Other payments</i>	40			
Total cash out at end of month	6,840	6,200	6,000	
Net difference † (subtract cash out from cash in)	-3,840	0	2,000	
Cash balance at the end of each month ‡	26,160	26,160	28,160	

Table 1: Cash flow for the first year: When you start the business, add your monthly figures for **cash in** and **cash out**. If you are using the table as part of a business plan, fill out as much of the table as you can with the cash flow projections (estimates) and replace these with the real figures when you have them.

Month *	Month one	Month two	Month three	Month four	Month five	Month six	Month seven	Month eight	Month nine	Month ten	Month eleven	Month twelve
Cash balance at the start of each month												
Cash in												
<i>Sales income</i>												
<i>Investments</i>												
<i>Other income</i>												
Total cash in at end of month												
Cash out												
<i>Administration, insurance</i>												
<i>Marketing</i>												
<i>Cost of goods</i>												
<i>Interest expense, bank charges</i>												
<i>Capital costs</i>												
<i>Tax, GST, wages, PAYG, super etc</i>												
<i>Other payments</i>												
Total cash out at end of month												
Net difference † (subtract cash out from cash in)												
Cash balance at the end of each month ‡												

Notes: * You may wish to write in the names of the months under the numbers to keep track. The 1st month is the month you start the business
 † 'Net difference' shows if more cash came in, than went out, or vice versa; and how much.
 ‡ To get the cash balance (last row), add or subtract the **Net difference** from the **Cash balance at the start of the month** (top row). This figure becomes the next month's new cash balance.

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Tip

In some cases you'll need to rely on loans or savings for more than a year until the business turns over enough to be profitable.

Avoid taking money out of the business unless it's in your financial plan, as it will take the business longer to reach the break-even point.

Consider using a small business mentor along the way or another professional: they can offer objectivity and advice, especially if your business prospects appear less than bright.

Contact details for the Small Business Mentoring Service are on the last page.

The break-even point is where profit starts

Every business needs to know how many sales have to be made before all the expenses are covered and actual profit begins. A business could well be turning over a lot of money — but running at a loss. This is where a simple calculation, the break-even point, is used to find where profit really starts.

Break-even analysis: To find the break-even point we use a calculation called the break-even analysis. Keep in mind it's just an estimate, because in reality calculating an exact break-even point is complicated.

Using the break-even analysis to calculate the break-even point

To do the calculation, we'll use three figures from an average month's sales, extracted from the twelve-month statements of profit and loss, and cash flow. If you don't have these figures (perhaps you're writing a business plan for a business you want to start) use your best estimates. The following table defines the terms using an ice-cream retail outlet as an example.

Table 2: Three figures used to calculate the break-even, with examples from an ice-cream retail outlet

Description of terms used to calculate break-even	Example: ice-cream shop
Average total revenue per unit: This is the price you charge the customer for each sale (or hour of service for a service provider) before you deduct any of your costs to produce it.	Our shop sells natural ice-creams at \$5.00 each
Average per unit cost: what it costs to make each unit (a unit can also be an hour of service) once the business is set up and ready to produce and sell it. The per unit cost includes the materials and direct labour costs. The cost doesn't consider complicating factors such as savings made from buying materials in bulk.	The cost of materials and basic labour for each ice-cream is \$2.00 each.
An average month's fixed running costs: the costs for an average month for lighting, insurance, wages, office stationery, rent, interest payments. These are basic running costs you have to pay in an average month to be able to start producing and selling the very first item of anything.	We spend \$5,000 a month to run a shop and lease the equipment.

The formula is:

$$\frac{\text{Average month's fixed running costs}}{(\text{Unit selling price} - \text{cost to produce})} = \text{break-even point (number of units to sell)}$$

Insert your figures here:

\$ average month's fixed running costs
 \$ average revenue per unit
 \$ average per unit cost

_____ = units you'll need to sell per month before you make a profit

Example using the figures from the ice cream shop:

\$5,000 average month's fixed running costs
 \$5 average revenue per unit
 \$2 average per unit cost

$$\frac{5000}{(5 - 2)} = \text{we need to sell 1,667 ice-creams a month before we make a profit}$$

So, by adding up these expenses and takings, we can plot a simple graph (Diagram 2) to see when a month's ice-cream sales will cover costs: in this case it's when we sell 1,667 ice-creams (or we look at the break-even point for a month in terms of \$'s only, which would be 1,667 ice-creams x \$5 = \$8,333).

Remember this simple version of the break-even calculation uses just one product — an ice-cream sold at one price. The calculation avoids the complex

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Did you know?

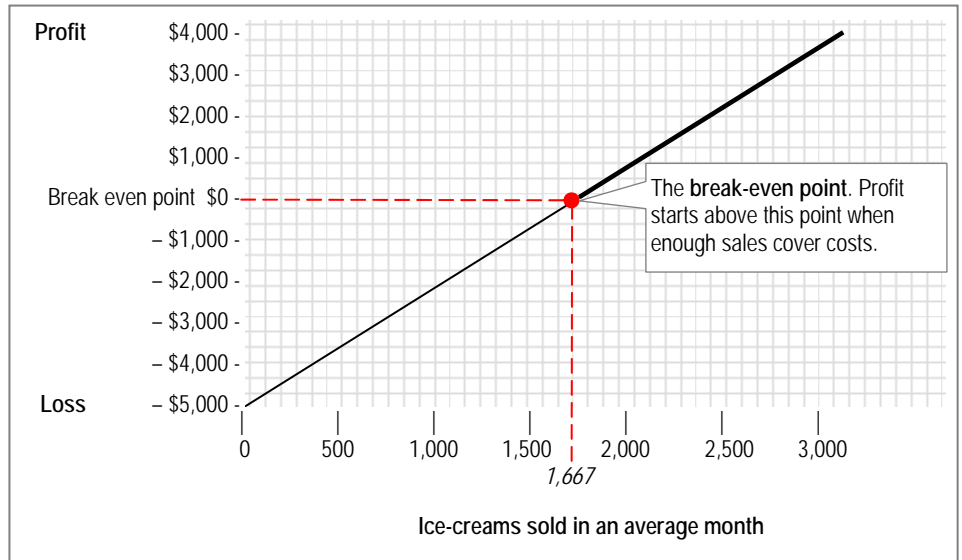
Odd as it may seem, most small businesses are making a profit when they go out of business. Why? Because they ran out of cash to pay their bills and had to close their doors.

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realities of a business selling different products with different profit margins. The point of this exercise is to help you build an understanding of the value of calculating the break-even point and its value to the business.

Note: The \$5,000 month's running costs from the example above are listed as the -\$5,000 loss in Diagram 2, because it is where zero ice-creams have been sold, so no running costs have been covered by sales.

Diagram 2: Graph shows how many ice-creams we have to sell before losses end and profits start



Contact details for information and support

What they can help you with	Address and phone details	Website
All small business enquiries	Small Business Victoria Visit the Victorian Consumer & Business Centre Ground Floor, 113 Exhibition Street, Melbourne VIC 3000 Business Victoria 13 22 15 TTY (telephone typewriter) Service (03) 9651 7596	www.business.vic.gov.au
Visit the Business Victoria website for more information about business finance	For your nearest Victorian Business Centre (VBC) call the Business Victoria on 13 22 15	www.business.vic.gov.au/vbc
Look up licences and permits required by business from state, federal and local governments on the Business Licence Information Service (BLIS)	Business Licence Information Service (BLIS) section of the Business Victoria website	www.business.vic.gov.au/blis
Search for contact details across all levels of government and business organisations	Contacts section of the Business Victoria website	www.business.vic.gov.au/stepbystep
Mentoring and business referrals	Small Business Mentoring Service (SBMS) Call Business Victoria 13 22 15	www.sbms.org.au

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