

## Introduction to Financial Statements

### Financial Reporting

Financial reporting is based on the preparation of three inter-related financial statements:

- **Balance Sheet**, which presents a snapshot of the financial position of a business at a point in time. The financial position is measured by determining the value of assets and liabilities at the balance date;
- **Income statement**, which reports the results of a series of transactions over a particular reporting period;
- **Cash Flow statement**, which reports those transactions that had an impact on the company's cash balance during the reporting period.

These are produced for external and internal audiences. Although the nature of reports used for these audiences differ significantly, the principles underlying the preparation of financial statements are common.

In Australia, external financial reports are produced on a six monthly basis. The company's Annual report includes financial statements as well as management commentary on results and near term prospects. These financial reports must be prepared in line with legal requirements as to content and principles used in their preparation. As a result of legal disclosure requirements companies are also required to disclose information which might be price sensitive to the market on a timely basis. In addition companies will make available presentations they make to major shareholders and investors during the year.

### External Financial Reports

Financial statements are prepared in accordance with what are described as Generally Accepted Accounting Principles. These principles are reflected in Accounting Standards. It is a legal requirement for companies to use these standards in the preparation of accounts. Until recently individual countries used accounting standards which were country specific, however, in an effort to achieve harmonisation of financial reporting, many countries are working towards adopting a uniform set of international standards, known as International Financial Reporting Standards ("IFRS"). The Australian Accounting Standards Board ("AASB") made the adoption of these standards obligatory from 1<sup>st</sup> January 2005.<sup>1</sup> There are currently approximately forty standards, covering

---

<sup>1</sup> The other major regulatory change to external reporting has been the adoption of stricter and more prescriptive governance standards in most countries. These mainly involve guidelines relating to Board composition, risk management processes and various disclosures. Adapting internal organisational processes in order to ensure compliance with these standards has had a significant impact on organisations. In Australia these guidelines can be reviewed on the ASX website [www.asx.com.au/ccccc](http://www.asx.com.au/ccccc). The United States equivalent is the well known Sarbanes Oxley Act. Although not directly relevant to Australian

virtually all aspects of commercial transactions, including Revenue and Expense Recognition, Construction Contracts and Interests in Joint Ventures<sup>2</sup>.

Underlying the individual standards is a series of conventions which provide a framework for deciding how to reflect transactions in financial reports. It is important to be aware of some of these:

### ***1. Matching principle, also known as accrual accounting***

The matching principle is necessary because we are trying to measure performance for a financial period, which is a subset of a project's or business's life. The objective is to allocate expenses to the period in which the revenue is recognised, to ensure that the profit fairly reflects performance for that period. Examples of the matching principle include:

- Depreciation: depreciation represents the allocation of the original cost of a capital asset over its expected useful life. The depreciation in each year is recognised as an expense in calculating profit even though the cash was outlaid when the asset was purchased;
- Inventory: even though product may have been produced during a particular financial period, and incurred cash expenses, it will not be recognised as an expense because the revenue has yet to be earned. Instead it is treated as an asset, and charged as an expense when sold;
- Accruals and prepayments, which you will see on virtually all company balance sheets.

The matching principle is one reason why cash flow will be different to profit.

### ***2. Historic Cost convention***

This convention requires that, when calculating the balance sheet of an entity, asset items be recorded at the original cost (minus accumulated depreciation) and liabilities be recorded at face value. Thus the balance sheet does not attempt to display the market value of the business, but rather the sum outlaid or received. This reflects the initial purpose of accounting which was directed at stewardship.

This convention has been under challenge in recent years and, while still an overriding principle, there are a number of exceptions:

- Lower of cost or market: where an asset's market value is less than its original (historic) cost then the balance sheet must be reduced to this market value;

---

companies it is a requirement of foreign companies to meet these requirements if they wish to raise funds in the US public markets.

<sup>2</sup> A full listing of standards is available at the AASB website [www.aasb.com.au](http://www.aasb.com.au) .

- In Australia, companies are required to revalue their land and buildings to market value on a three yearly basis;
- Certain Financial institutions are able to value assets and liabilities at current market values. (For example, banks holding long-term government securities will value these assets at market value).

### ***3. Going Concern assumption***

Assumes the entity being reported will continue to operate. In fact directors must act if they consider the business is unable to meet debts as and when they fall due. In accounting terms, violation of this assumption would require the company to be valued on a liquidation basis.

### ***4. Consolidated Financial reports***

Most modern organisations will comprise a number of legal entities, with the parent company investing in a number of subsidiaries. These subsidiaries may represent a different line of business or different geographical entities. Although these are separate legal entities, company financial statements are prepared on a consolidated basis, as if all the entities are one. There are conditions which must be met to allow for this, however, virtually all listed organisations meet these. When lending to individual entities within a group it is important to understand the financial position of that entity, as the assets of the consolidated group may not be available to service debts of that subsidiary entity.

## **The Balance Sheet**

The balance sheet represents the company's financial position at a point in time by reporting assets, liabilities and shareholders equity. The balance sheet is based on the following identity:

$$\text{ASSETS} = \text{LIABILITIES} + \text{EQUITY}$$

This can also be described in term of Net Assets as follows:

$$\text{NET ASSETS} = \text{ASSETS} - \text{LIABILITIES} = \text{EQUITY}$$

## Income Statement

The income statement reports the results of transactions arising from the company's operations over the reporting period.

The Income Statement is built around the following identity:

|               |   |         |   |                     |   |                             |   |              |   |                  |   |                          |
|---------------|---|---------|---|---------------------|---|-----------------------------|---|--------------|---|------------------|---|--------------------------|
| Net<br>Income | = | Revenue | - | Cost<br>of<br>sales | - | Other<br>operating<br>costs | - | Depreciation | - | Finance<br>costs | - | Income<br>tax<br>expense |
|---------------|---|---------|---|---------------------|---|-----------------------------|---|--------------|---|------------------|---|--------------------------|

Capital transactions such as asset purchases or new borrowings are not included, however, the annual costs of these, represented by depreciation and interest expense, are included.

### *The many definitions of profit....*

The profit number most referred to in the press is probably a company's *Profit after tax*. This reports the profits available for distribution to shareholders after deducting the claims of all other stakeholders including tax, financing costs and minority interest. It is therefore, appropriately, the ultimate measure of performance from the shareholders' perspective. However, most analysts will utilise a number of alternative profit definitions, mainly because of the different perspective they give on different aspects of performance. For example, consider two companies that are identical in all aspects of operations but have different depreciation policies, different financing strategies or even different tax strategies. In this case the companies will report different *Profits after tax*, however, if we are interested in better understanding the drivers of the business' underlying performance, which will be the ultimate driver of long term performance and therefore value, we need to break up *Profit* into component parts.

Common profit definitions used in practice are described below. None of these is, a priori, superior to the other; the usefulness of each one depends on the purpose of the analysis being undertaken.

- *EBIT: Earnings before Interest and taxes*, which measures a business's income before it is divided among creditors, owners and tax payments. It is therefore a useful measure of underlying profit performance, not distorted by a number of 'corporate' level cost items;
- *EBITDA: Earnings before Interest, taxes depreciation and amortisation*. This adds back depreciation and amortisation, partly to get closer to cash flow and to minimise the impact of distortions caused by different depreciation policies. The main problem with this particular measure is that it does not incorporate all the real costs of operating a business – including, importantly, working capital and replacement of assets – and materially overstates any realistic concept of cash flow;

- *Gross profit*: The objective of such a measure is to measure performance of manufacturing activity; the suggested definition is *Revenue* less *Cost of Goods Sold*; the precise definition can vary;
- *Contribution margin*: is defined as *Revenue* minus *Variable costs*. This measures the contribution which an additional unit makes towards covering fixed costs. Fixed costs will usually include the '*Other operating costs*' described earlier, as well as manufacturing *fixed costs*. The contribution margin is often used to estimate the breakeven level of sales volume; the volume of sales required to return a zero net profit;
- *Net Operating Profit after Tax*: is usually the 'headline' results number. It represents profit available to shareholders after deducting all other claims on income, including taxes and interest expense. The share of income attributable to minority interest will also be deducted.

## Cash Flow Statement

The cash flow statement reports and analyses transactions that have an effect on the company's cash balances. It is thus similar to the profit and loss statement in that it reports the effects of a series of transactions over the period. Although a company's reported profit is the more high profile result, it is actually a company's expected cash flow which is the underlying driver of value. Cash flow is also generally recognised as a more objective measure of performance, as it is not affected by accounting policies and non-cash items. The movement in cash balances is, by itself, relatively uninformative so it is usual to group the sources of cash flow movements into similar type categories, which makes analysis easier.

The cash flow statement is built around the following identity:

|                           |   |                                     |   |                                 |   |   |
|---------------------------|---|-------------------------------------|---|---------------------------------|---|---|
| Cash flow from operations | - | Cash flow from investing activities | + | Cash flow inflow from financing | = | Net change in cash and cash equivalents |
|---------------------------|---|-------------------------------------|---|---------------------------------|---|---|

This statement can be thought as taking movements in each of the balance sheet items, extracting out those movements that had an impact on cash (or cash equivalents) and then sorting them into the broad categories above.

Cashflows from operations may be shown as:

|  |
|--|
| Receipts from customers                          |
| Less Payments to suppliers                       |
|  |
| Add Interest received                            |
| Less Borrowing costs                             |
| Less Income tax paid (net)                       |
| Add GST received                                 |
| Receipts from other operating activities         |
| Less Expenditure from other operating activities |
| Net cash inflow from operating activities        |

This method is known as the *direct* method of calculating cashflows.

An alternative way of understanding cash flow from operations is the (compulsory) reconciliation between cash flow from operations and profit. This second method ties back cash flow to profit, highlighting the link between cash flow and profits. It is known as the *indirect* method. The key principle in this reconciliation is to convert the profit result, which incorporates the effect of a number of non cash transactions mainly as a result of the 'matching' principle (or accrual accounting), onto a cash basis. These adjustments highlight the difference between the 'profit cycle', which calculates profit according to accrual principles, and the 'cash cycle', which only looks at transactions which impact on cash balances.

|                                    |
|------------------------------------|
| Profit / (loss)                    |
| Add back                           |
| Depreciation                       |
| Other non cash charges             |
| Deduct                             |
| Cash outlays which are capitalised |
| Increase in working capital        |
| Net cash flow from operations      |

## **Final word of Caution**

When companies determine their accounting policies, and hence the way they treat and report transactions etc, not all issues are covered by Accounting Standards. Furthermore, some Standards are subject to interpretation. Judgements are made when applying Standards in different circumstances. The impact of differing accounting policies can, therefore, have a very significant effect on the reported bottom-line of a company and/or their balance sheet. Also be aware, most analysts will adjust a company's published financial statements. They will do this to ensure comparability across companies they are studying and also to derive analytical measures of performance including financial ratios.

**Applied Finance Centre  
February 2008**