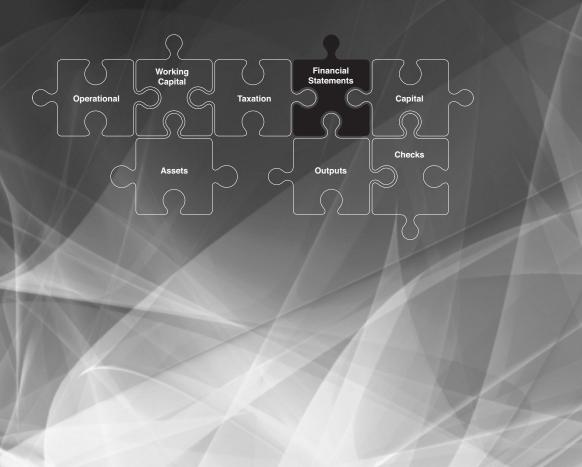


# Financial Modelling Fundamentals





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#### **IMPORTANT NOTICES**

Many of the examples provided throughout this commentary and examples book have been created within Microsoft Excel using bpmToolbox<sup>®</sup> – a best practice add-in available from Best Practice Modelling (<u>www.bestpracticemodelling.com</u>). The SSRB is of the opinion that the use of bpmToolbox within Microsoft Excel is the most efficient and effective means of implementing the Best Practice Spreadsheet Modelling Standards. A free trial of bpmToolbox may be downloaded from the Best Practice Modelling website at <u>www.bestpracticemodelling.com/software/bpmToolbox</u>.



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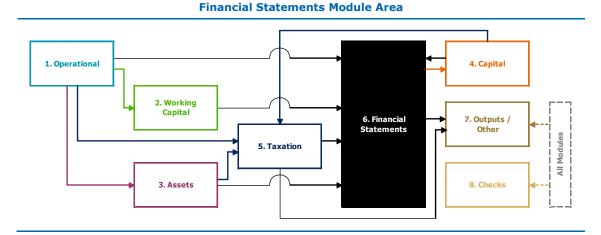
# Chapter 1.

### Introduction & Overview

#### 1.1. Overview

#### 1.1.1. Financial Statements Module Area

The Financial Statements Module Area is one of eight interconnected Module Areas of a spreadsheet model as shown in the diagram below. These generic Module Areas can be used to develop a "whole-of-business financial model".



The Financial Statements Module Area is comprised of three Module Types, representing each of the three financial statements. Each of these financial statements has the purpose of summarising a different component of an entity's financial position. The three different Module Types within the Financial Statements Module Area are:

- 1) Income Statement;
- 2) Balance Sheet; and
- 3) Cash Flow Statement.

It is important to understand the purpose of each of these three Financial Statements Module Types, and the functionalities that can be included within them to meet the requirements of model users. It is also important to understand how they can be interlinked with modules from other Module Areas, to ultimately create the required components of a spreadsheet model.

Each of the Financial Statements Module Types that may be included in a spreadsheet model is briefly explained below.

#### Financial Statements Modules Types

The three Financial Statements Module Types within the Financial Statements Module Area are defined as follows:



Module Type	Definition	
1) Income Statement	• Provides a summary of the revenues, costs and expenses of an entity during an accounting period.	
	<ul> <li>An Income Statement is generally used to calculate the Net Profit After Tax (NPAT) of an entity.</li> </ul>	
	<ul> <li>Also referred to as a 'Statement of Financial Performance' or a 'Profit &amp; Loss Statement'.</li> </ul>	
2) Balance Sheet	• Shows the status of an entity's assets, liabilities and owner's equity at a point in time, usually the close of a month.	
	<ul> <li>A Balance Sheet provides a snapshot of the entity's financial position, including the cumulative results of the Income Statement and Cash Flow Statement, at a point in time.</li> </ul>	
	<ul> <li>Also referred to as a 'Statement of Financial Position'.</li> </ul>	
3) Cash Flow Statement	<ul> <li>Shows how changes in Income Statement and Balance Sheet accounts affect cash and cash equivalents during an accounting period.</li> </ul>	
	<ul> <li>A Cash Flow Statement breaks the analysis down according to operating, investing and financing activities.</li> </ul>	
	Also referred to as a 'Statement of Cash Flows'.	

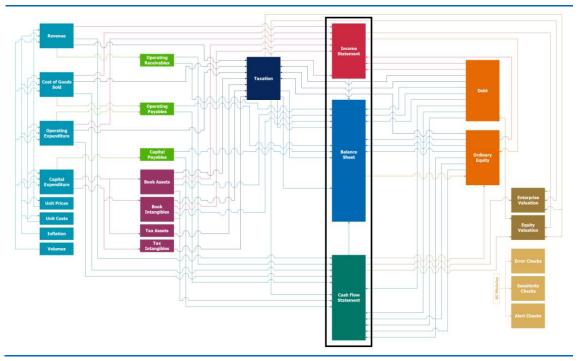
These three Financial Statement Modules can be built into a spreadsheet model independently, or linked together to establish relationships between them – e.g. Income Statement, Balance Sheet and Cash Flow Statement Modules might link in data from Operational, Working Capital and Assets Modules and then link to each other such that live, linked financial statements can be analysed.

#### 1.1.2. Financial Statements Module Location

The Financial Statements Module Area is an integral area in the spreadsheet modelling process, bringing together many other Module Areas to analyse the financial position of an entity – e.g. an Income Statement Module shows the profit/loss of an entity, sourcing information from Revenue, Cost of Goods Sold, Operating Expenditure, Book Assets, Book Intangibles, Ordinary Equity, Debt and Taxation Modules. Additionally, information from each Financial Statement Module Type can then be used by other Modules – e.g. Net Profit After Tax (NPAT) can be used in an Ordinary Equity Module as a basis for determining dividends declared in each period.

The diagram below shows each of the Module Types that can exist in a "whole of business financial model", organised into their respective Module Areas which are identifiable by colour coding. It highlights the Financial Statements Module Area and the potential links between the Financial Statements Modules and other modules from other module areas:





#### **Financial Statements Module Location**

#### **1.2.** Financial Statements Modelling Overview

The modelling of the financial statements components of an entity is a unique area of spreadsheet modelling, because it involves the systematic linking in of information from almost all of the other spreadsheet modelling areas. This section is designed to provide:

- An overview of the concepts that are required to be understood in order to undertake financial statements modelling;
- An explanation of the links between the three financial statements that ensure that the relationships between them are maintained at all times; and
- A general understanding of the different ways in which information is correctly and logically linked into each of the financial statements.

If undertaken according to the principles enunciated in this documentation, with the correct use of error checks, the modelling of the financial statements component of an entity should be the easiest part of the spreadsheet model development process.



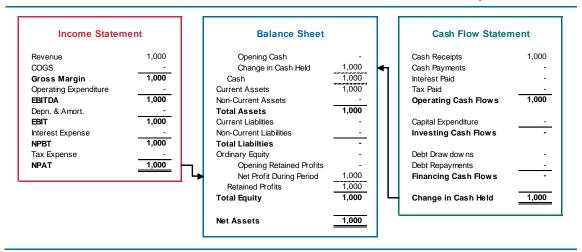
#### **1.2.1.** Links Between The Financial Statements

One of the most common causes of confusion when modelling financial statements is misunderstanding the links between the three financial statements. When using a Modular Spreadsheet Development approach, only two links are required between the three Financial Statements Modules, as follows:

- Net Profit After Tax (NPAT) from the Income Statement links into the Equity section of the Balance Sheet, adding to Retained Profits; and
- The Net Change in Cash Held from the Cash Flow Statement links into the Current Assets section of the Balance Sheet, adding to Cash.

All other links into each of the three Financial Statements Modules should be sourced from their applicable precedent modules.

These two links between the three financial statements are illustrated in the financial statement impacts schematic shown below, which uses the Revenue Module direct financial statement impacts as a simple example:

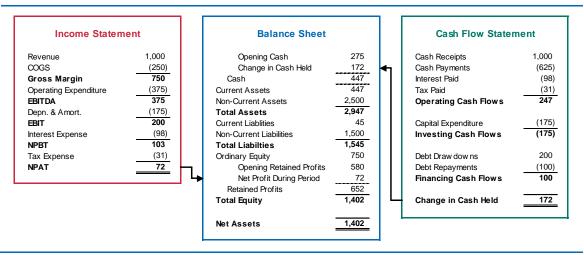


#### Links Between The Financial Statements – Revenue Module Example

Note from this simple example that the change in Total Equity resulting from the change in Retained Profits due to NPAT is offset by the change in Total Assets resulting from the change in Cash due to the Change in Cash Held. If this relationship is maintained, and each set of links into the financial statements from each financial statements precedent module is correct and logical, the Balance Sheet should never unbalance – i.e. Total Equity will always equal Net Assets.

Importantly, these principles remain applicable regardless of the number of precedent modules linked into the Financial Statements Modules, and regardless of the customisation of the financial statements which may be undertaken. Shown below is the three linked Financial Statements Modules including the impacts of links in from Revenue, Cost of Goods Sold, Operating Expenditure, Book Assets, Debt, Ordinary Equity and Taxation Modules:





Links Between The Financial Statements – Multiple Precedent Modules Example

From these examples, it can be seen that the challenges surrounding the development of live, linked financial statements do not result from the relationships between the three financial statements. Instead, the challenges result from the need to understand the financial statement impacts of each potential financial statements precedent module, and the ways in which the Financial Statements Modules can be customised without affecting their integrity and correctness.

These concepts are discussed in detail in the following sections.

#### 1.2.2. Financial Statement Impacts

As discussed in Section 1.2.1, understanding the ways in which different types of information (often from different precedent modules) impact the three financial statements is the key to the development of live, linked financial statements. Understanding these concepts will ensure that each time a precedent module is linked into any of the Financial Statements Modules, or the Financial Statements Modules are customised to reflect certain information, the integrity and correctness of the financial statements is maintained.

Generally, there are five different ways in which information may correctly impact the financial statements, as follows:

Impact Type	Description	Example	
Income Statement & Balance Sheet	<ul> <li>A revenue or expense is reported on the Income Statement, resulting in the creation of an asset or liability on the Balance Sheet.</li> </ul>	Employee     entitlements are     recorded as an	
	No impact on cash.	operating expenditure on the Income	
	<ul> <li>An Income Statement &amp; Balance Sheet impact is often unwound by a Balance Sheet &amp; Cash Flow Statement impact – e.g. when the asset or liability is removed from the Balance Sheet.</li> </ul>	Statement, and result in a Provision for Employee Entitlements (Liability) on the Balance Sheet.	



Impact Type	Description	Example
Income Statement & Cash Flow Statement	<ul> <li>A revenue or expense is reported on the Income Statement and is received or paid in cash in the same accounting period (and therefore recorded as a change in cash on the Cash Flow Statement).</li> <li>No direct impact on assets, liabilities or equity.</li> </ul>	<ul> <li>Revenue earned during a period is received as cash during the period, being reported on both the Income Statement and the Cash Flow Statement.</li> </ul>
Balance Sheet & Cash Flow Statement	<ul> <li>A change in cash results in the movement in an asset, liability or equity account on the Balance Sheet.</li> <li>No impact on earnings.</li> </ul>	<ul> <li>The cash receipt of revenue earned in a prior period results in a corresponding reduction in Accounts Receivable (Asset) on the Balance Sheet.</li> </ul>
Balance Sheet Only	<ul> <li>A movement in an asset, liability or equity account on the Balance Sheet is offset by a counter-acting movement in another asset, liability or equity account on the Balance Sheet.</li> <li>No impacts on earnings or cash.</li> </ul>	<ul> <li>An asset is re-valued, resulting in an offsetting movement in an Asset Revaluation Reserve (Equity) account.</li> </ul>
All Financial Statements	<ul> <li>A revenue or expense is reported on the Income Statement, a change in cash is reported on the Cash Flow Statement and an asset, liability or equity account is created on the Balance Sheet.</li> <li>Directly impacts earnings, cash and Balance Sheet accounts.</li> </ul>	<ul> <li>Capital Expenditure (on the Cash Flow Statement) is used to acquire an asset (on the Balance Sheet), which is then depreciated (on the Income Statement).</li> </ul>

It is important to understand each of these types of financial statement impacts because each financial statement precedent module will usually impact the financial statements in one of these ways. Additionally, any customisation of the Financial Statements modules should always be undertaken in accordance with one of these impact types, to ensure that the financial statements remain logical and correct.

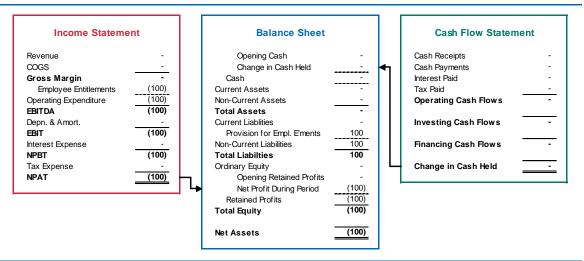
Each of these types of financial statement impacts will be discussed in turn.

#### Income Statement & Balance Sheet Impact

When information impacts the financial statements via the Income Statement and Balance Sheet, a revenue or expense is reported on the Income Statement, resulting in the creation of an asset or liability on the Balance Sheet. This type of impact on the financial statements does not impact cash flow, because it does not result in a change in cash on the Cash Flow Statement.

The following financial statement impacts schematic shows how information might impact the financial statements via the Income Statement and Balance Sheet. In this example, employee entitlements of \$100m have been reported on the Income Statement, but have not been paid out to employees during the accounting period. Hence, a non-current asset provision called 'Provision for Employee Entitlements' has been created on the Balance Sheet:





#### Income Statement & Balance Sheet Impact Example

Note from this example that the Employee Entitlements expense on the Income Statement does not affect cash on the Cash Flow Statement, because none of these entitlements were actually paid as cash to employees during the period. However, the entity underlying these financial statements has incurred a legal liability to pay out these entitlements to employees at some stage in the future, which is recorded on the Balance Sheet as a liability provision called 'Provision for Employee Entitlements'.

Importantly, when these entitlements are actually paid in cash to employees, the Provision for Employee Entitlements liability will be reduced accordingly, and a decrease in operating cash flows will be reported on the Cash Flow Statement – i.e. the unwinding of the Income Statement and Balance Sheet impact in this example will take place via a Balance Sheet and Cash Flow Statement impact.

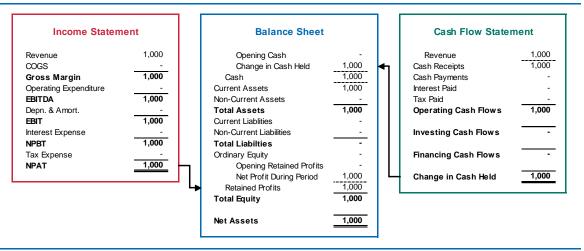
See below for a discussion of the Balance Sheet and Cash Flow Statement financial statements impact type.

#### Income Statement & Cash Flow Statement Impact

When information impacts the financial statements via the Income Statement and Cash Flow Statement, a revenue or expense is reported on the Income Statement and is received or paid in cash in the same accounting period (and therefore recorded as a change in cash on the Cash Flow Statement). This type of impact on the financial statements does not directly impact assets, liabilities or equity on the Balance Sheet – i.e. all Balance Sheet impacts take place indirectly via Net Profit After Tax (NPAT) from the Income Statement and the change in cash on the Cash Flow Statement.

The following financial statement impacts schematic shows how information might impact the financial statements via the Income Statement and Cash Flow Statement. In this example, revenue of \$1,000m earned during a period is received in full in cash during the period. Hence, cash receipts equal to the revenue earned are recorded as operating cash flows on the Cash Flow Statement:





#### Income Statement & Cash Flow Statement Impact Example

Note from this example that the revenue which is received as cash does not directly affect assets, liabilities or equity on the Balance Sheet – i.e. the \$1,000m increase in Retained Profits (from NPAT on the Income Statement) is offset by a \$1,000m increase in cash on the Balance Sheet.

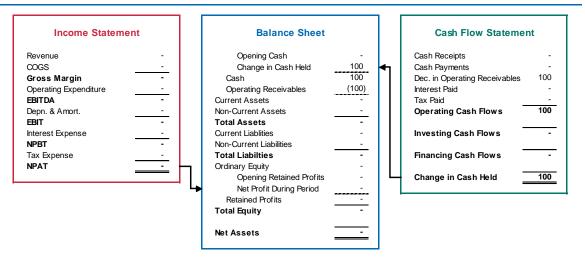
In reality, not all revenues and expenses reported on the Income Statement are received or paid as cash in the accounting period in which there are reported. This results in the need to record working capital assets, which reflect revenues to be received and/or expenses to be paid using cash in future accounting periods. In such cases, working capital assets and liabilities will be recorded as a result of an Income Statement and Balance Sheet financial statements impact (discussed above) and will be reduced when cash is received or paid, which will be reflected by a Balance Sheet and Cash Flow Statement financial statements impact (discussed below).

#### Balance Sheet & Cash Flow Statement Impact

When information impacts the financial statements via the Balance Sheet and Cash Flow Statement, a cash inflow or outflow causes a movement in an asset, liability or equity account on the Balance Sheet. This type of impact on the financial statements does not impact earnings on the Income Statement.

The following financial statement impacts schematic shows how information might impact the financial statements via the Balance Sheet and Cash Flow Statement. In this example, cash of \$100m has been received as a result of revenue earned in a period accounting period. When this revenue was earned and not received in the prior accounting period, an Operating Receivable asset will have been created, which in this example is reduced upon the receipt of the corresponding cash receipts. The schematic diagram below shows the Balance Sheet and Cash Flow Statement impacts of receiving this cash:





#### **Balance Sheet & Cash Flow Statement Impact Example**

Note from this example that the cash received is not reported on the Income Statement and therefore does no impact earnings during the accounting period. This is because the revenue with which the cash receipts are associated has already been reported on the Income Statement in the period in which it was earned, and is therefore already included in the Retained Profits of the entity. Hence, the receipt of the cash associated with this prior period revenue is recorded as an operating cash inflow, and is offset by a reduction in the associated Operating Receivables asset that was created in the period in which the revenue was earned.

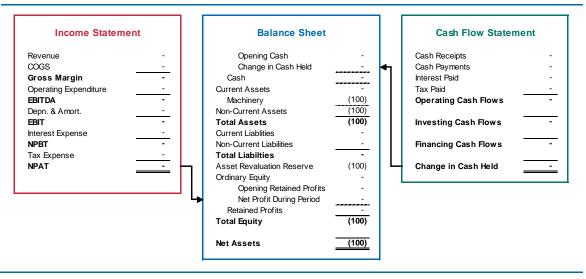
The reduction in a working capital asset or liability in this way would therefore usually take place in a period subsequent to a period in which revenues or expenses were reported on the Income Statement but not received or paid as cash, resulting in the creation of an associated working capital asset or liability. Hence, a Balance Sheet and Cash Flow financial statements impact would often follow a prior period Income Statement and Balance Sheet financial statements impact.

#### Balance Sheet Only Impact

When information impacts the financial statements via the Balance Sheet only, a movement in an asset, liability or equity account on the Balance Sheet is offset by a counter-acting movement in another asset, liability or equity account on the Balance Sheet. This type of financial statements impact has no impact on earnings or cash, and therefore nothing is reported on the Income Statement of Cash Flow Statement.

The following financial statement impacts schematic shows how information might impact the financial statements via the Balance Sheet only. In this example, a non-current called asset called 'Machinery' has been revaluated downwards by \$100m. This decrease in assets is offset by a decrease in the Asset Revaluation (Equity) account:





#### **Balance Sheet Only Impact Example**

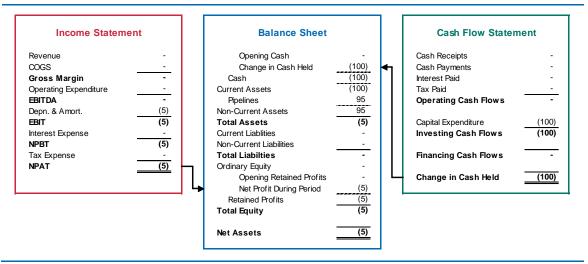
Note from this example that the movement in the asset on the Balance Sheet is not driven by earnings on the Income Statement or cash on the Cash Flow Statement. Instead, the asset revaluation has been offset by a corresponding decrease in Total Equity (via a reduction of the Asset Revaluation Reserve) and is thereby reflected in a \$100m reduction in the Net Assets of the entity.

#### All Financial Statements Impact

When information impacts all three financial statements, a revenue or expense is reported on the Income Statement, a change in cash is reported on the Cash Flow Statement and an asset, liability or equity account is created on the Balance Sheet. Hence, this type of financial statements impact directly impacts earnings, cash and Balance Sheet accounts.

The following financial statement impacts schematic shows how information might impact all three financial statements. In this example, capital expenditure of \$100m is used to acquire an asset called "Pipelines", which is then depreciated during the period in which it is acquired. Hence, capital expenditure it reported on the Cash Flow Statement as an investing cash outflow, depreciation is reported on the Income Statement as an expense and the written down value of the asset (i.e. capital expenditure less depreciation) is recorded as a non-current asset on the Balance Sheet:





#### All Financial Statements Impact Example

In this example, it has been assumed that 5% of the pipelines acquired during the period are depreciated before the end of the period. As a result, the closing value of Pipelines on the Balance Sheet is \$95m – i.e. \$100m of capital expenditure less the \$5m of depreciation incurred during the period. In this way, capital expenditure on depreciable assets impacts all three financial statements in the year in which the assets are acquired.

It is worth noting that this example could be sub-divided into two less complex financial statements impacts. Capital expenditure, which results in the recording of assets on the Balance Sheet, could viewed as the first impact – i.e. a Balance Sheet and Cash Flow Statement impact. The second impact would then be an Income Statement and Balance Sheet impact, when the asset is depreciated – i.e. causing a reduction in the asset value on the Balance Sheet equal to the depreciation expense reported on the Income Statement.

#### 1.2.3. Accounting Standards

The financial modelling conventions and methodologies used in developing the Financial Statements Modules shown in this document have been applied based on generally accepted, non-jurisdiction specific Accounting Standards.

There may be times when the line items, or methodologies used to develop the financial statements will differ slightly as a result of an entity's specific situation – e.g. entity type, ownership structure, classification of activities, operating jurisdiction, etc.

It is recommended that this document serve as an introduction to the spreadsheet modelling theory behind the financial statements, and that specialist accounting/financial advice is sought when required.

#### 1.2.4. Financial Statements Layout

The Financial Statements content and layout in this document are based on generally accepted, non-jurisdiction specific financial statements. Alterations to the content and format may be required depending on the needs of model users and developers.

It is recommended that this document serve as an introduction to the spreadsheet modelling theory behind the financial statements, and that specialist accounting/financial advice is sought when required.

# Chapter 2.

### Income Statement Module

#### 2.1. Overview

The Income Statement Module provides a summary of the revenues, costs and expenses of a company over a number of accounting periods in order to determine the Net Profit After Tax (NPAT) of an entity.

The module collects revenues and expenses from Operational, Assets, Capital and Taxation Modules (if included), and links out NPAT to the Balance Sheet (if included). The module also links out Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA) to Valuation Modules (if included).

Revenue	Revenue	
Cost of Goods Sold	Cost of Goods Sold	
Operating Expenditure	Operating Expenditure	
Book Assets	Book Assets Depreciation	
Book Intangibles	Book Intangibles Amortisation	
	Ordinary Equity Fees (Book) Amortisation	
Ordinary Equity	Net Profit after Tax	Income Statement
Debt	Interest Expense / Debt Fees (Book) Amortisation	
Taxation	Tax Expense	
Balance Sheet	Net Profit after Tax	_
Equity Valuation	EBITDA	_
Enterprise Valuation	EBITDA	-

#### **Income Statement Module – Overview**



#### 2.1.1. Layout

The diagram below shows an example of how an Income Statement might be laid out in order to present a summary of the revenues and expenses of an entity in order to calculate its Net Profit After Tax (NPAT). The diagram also shows where each of the Income Statement precedent modules would enter the Income Statement and the type of information that would link in from each of these precedent modules:

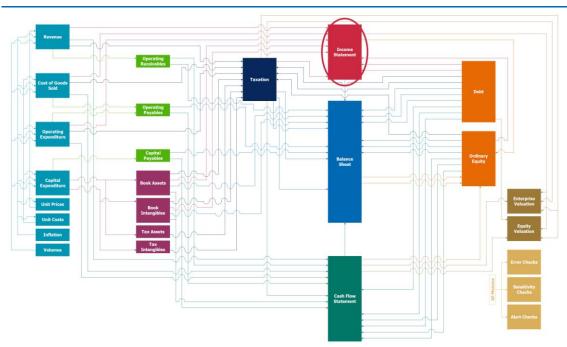
			Income Statement	
Revenue	\$1,500	Revenue	Revenue	\$1,500
Cost of Goods Sold	(\$200)	Cost of Goods Sold	Cost of Goods Sold	(\$200
			Gross Margin	\$1,300
Operating Expenditure	(\$300)	Operating Expenditure	Operating Expenditure	(\$300
			EBITDA	\$1,000
Book Assets	(\$150)	Book Assets Depreciation	Book Assets Depreciation	(\$150
Book Intangibles	(\$40)	Book Intangibles Amortisation	Book Intangibles Amortisation	(\$40
Ordinary Equity	(\$5)	Ordinary Equity Fees (Book) Amortisation	Ordinary Equity Fees (Book) Amortisation	(\$5
Debt	(\$5)	Debt Fees (Book) Amortisation	Debt Fees (Book) Amortisation	(\$5
Debt	(\$100)	7	Depreciation & Amortisation	(\$200
			EBIT	\$800
		Interest Expense	Interest Expense	(\$100
			Net Profit Before Tax (NPBT)	\$700
Taxation	(\$210)	Tax Expense	Tax Expense	(\$210
Balance Sheet	\$490	Net Profit After Tax (NPAT)	Net Profit After Tax (NPAT)	\$490

# The layout of an Income Statement is governed by the accounting standards and reporting requirements applicable to each entity. It is also governed by the choices the entity makes (within the boundaries of its reporting requirements) as to how it structures the presentation of its revenues and expenses on its Income Statement.



#### 2.1.2. Location

The diagram below shows the Income Statement Module contained within the Financial Statements Module Area and shows the potential links between the Income Statement Module and all other Modules:



#### **Income Statement Module Location**

#### 2.1.3. Definition

The Income Statement provides a summary of the revenues, costs and expenses of an entity during an accounting period. An Income Statement is generally used to calculate the Net Profit After Tax (NPAT) of an entity.

An Income Statement is also referred to as a 'Statement of Financial Performance' or a 'Profit & Loss Statement'.

#### 2.1.4. Purpose

The Income Statement Module is one of the three Module Types in the Financial Statements Module Area. As with all Modules, the Income Statement Module can be used in many different ways to create many different spreadsheet models. The Income Statement Module could be used to create a spreadsheet model that contains:

- a single Income Statement;
- multiple Income Statements;
- a single Income Statement Module linked to other types of Modules; or
- multiple Income Statement Modules linked to other types of Modules.



The Income Statement serves the purpose of providing a summary of the revenues and expenses of an entity for a specified period of time in order to calculate its Net Profit After Tax (NPAT). NPAT can then be used to derive the entity's Retained Profits on its Balance Sheet.

#### **2.2.** Functionalities

The Income Statement is different to many of the other module types due to the fact that its primary purpose is the collection and presentation of information from other areas within a spreadsheet model – i.e. the Income Statement Module links in revenues and expenses from various precedent modules and presents them in a commonly accepted format, ultimately calculating the Net Profit After Tax (NPAT) of an entity for an accounting period.

Hence, the only functionality to be taken into consideration when developing an Income Statement is the selection of information to be presented – i.e. the determination of which precedent modules will link information into the Income Statement. Once selected, the process of developing an Income Statement is comprised mainly of ensuring that this information in presented in a correct and logical manner.

For more information regarding Income Statement precedent modules, see 2.3 Precedent Modules. For more information regarding the layout of a typical Income Statement, see 2.1.1 Layout.

#### 2.3. Precedent Modules

As shown in the module links diagram below, the Income Statement Module has eight possible precedent modules; Revenue, Cost of Goods Sold, Operating Expenditure, Book Assets, Book Intangibles, Ordinary Equity, Debt and Taxation:

#### Income Statement Module – Precedent Modules

Revenue	Revenue	
Cost of Goods Sold	Cost of Goods Sold	
Operating Expenditure	Operating Expenditure	
Book Assets	Book Assets Depreciation	
Book Intangibles	Book Intangibles Amortisation	
	Ordinary Equity Fees (Book) Amortisation	
Ordinary Equity	Net Profit after Tax	Income Statement
Debt	Interest Expense / Debt Fees (Book) Amortisation	
Taxation	Tax Expense	
Balance Sheet	Net Profit after Tax	
Equity Valuation	EBITDA	
Enterprise Valuation	EBITDA	

A brief summary of each precedent module and the impact it will have on the Income Statement Module is provided below:

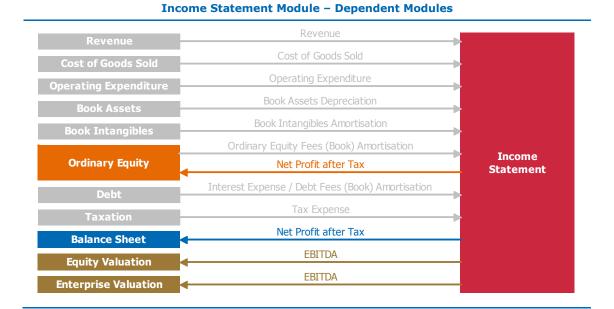
Precedent Module	Impacts on Income Statement Module	
Revenue	<ul> <li>Revenue is reported as positive earnings on the Income Statement.</li> </ul>	
	<ul> <li>Revenue generally causes an increase in Net Profit After Tax (NPAT).</li> </ul>	
	<ul> <li>Revenue is reported on the Income Statement and on the Cash Flow Statement as an operating cash inflow.</li> </ul>	
Cost of Goods Sold	<ul> <li>Cost of Goods Sold is often reported as an expense on the Income Statement.</li> </ul>	
	<ul> <li>Cost of goods sold generally causes a decrease in Net Profit After Tax (NPAT).</li> </ul>	
	<ul> <li>Cost of goods sold is reported on the Income Statement as an expense and on the Cash Flow Statement as an operating cash outflow.</li> </ul>	
Operating Expenditure	<ul> <li>Operating Expenditure is often reported as an expense on the Income Statement.</li> </ul>	
	<ul> <li>Operating expenditure generally causes a decrease in Net Profit After Tax (NPAT).</li> </ul>	
	<ul> <li>Operating expenditure is reported on the Income Statement as an expense and on the Cash Flow Statement as an operating cash outflow.</li> </ul>	
Book Assets	<ul> <li>Book Depreciation of book assets is often reported as an expense on the Income Statement.</li> </ul>	
	<ul> <li>Depreciation generally causes a decrease in Net Profit After Tax (NPAT).</li> </ul>	
	<ul> <li>Book depreciation is a non-cash expense, reflecting the usage of a book asset during an accounting period.</li> </ul>	
Book Intangibles	<ul> <li>Book Amortisation of book intangibles is often reported as an expense on the Income Statement.</li> </ul>	
	<ul> <li>Amortisation generally causes a decrease in Net Profit After Tax (NPAT).</li> </ul>	
	<ul> <li>Book amortisation is a <i>non-cash</i> expense, reflecting the usage of a book intangible during an accounting period.</li> </ul>	
Ordinary Equity	<ul> <li>Book Amortisation of ordinary equity refinancing is often reported as an expense on the Income Statement.</li> </ul>	
	<ul> <li>Amortisation generally causes a decrease in Net Profit After Tax (NPAT).</li> </ul>	
	<ul> <li>Book amortisation is a <i>non-cash</i> expense, reflecting the usage of a book intangible during an accounting period.</li> </ul>	
Debt	<ul> <li>Debt Module outputs potentially contain two expenses which may often be reported on the Income Statement:</li> </ul>	
	- Book Amortisation of debt refinancing fees; and	
	- Interest Expense.	
	<ul> <li>Both of these debt-related expenses generally cause a decrease in Net Profit After Tax (NPAT).</li> </ul>	
	<ul> <li>Book amortisation is a <i>non-cash</i> expense, reflecting the usage of a book intangible during an accounting period.</li> </ul>	

For a discussion of the manner in which each of these precedent modules impacts the Income Statement, see 2.1.1 Layout.



#### 2.4. Dependent Modules

As shown in the module links diagram below, the Income Statement Module has four possible dependent modules; Ordinary Equity, Balance Sheet, Equity Valuation and Enterprise Valuation.



### A brief summary of each link out and the impact it will have on the Balance Sheet is provided in the table below:

Revenue Module Impact on Dependent Modules	
<ul> <li>Net Profit After Tax is commonly used as a basis for determining the dividends declared in each accounting period within an Ordinary Equity Module.</li> </ul>	
<ul> <li>Net Profit After Tax (NPAT) is added to Opening Retained Profits on the Balance Sheet in order to determine Closing Retained Profits at the end of each accounting period.</li> </ul>	
<ul> <li>The Balance Sheet Module will therefore reflect the NPAT amounts which have been calculated within the Income Statement Module which links into the Balance Sheet Module.</li> </ul>	
<ul> <li>Earnings Before Interest, Tax, Depreciation &amp; Amortisation (EBITDA) is commonly used as the basis for determining the Terminal Value in an Equity Valuation Module.</li> </ul>	
<ul> <li>EBITDA will only be required within an Equity Valuation Module if the EBITDA Multiple assumption entry method has been included in the module for the determination of Terminal Value.</li> </ul>	



Dependent Module	<b>Revenue Module Impact on Dependent Modules</b>		
Enterprise Valuation	<ul> <li>Earnings Before Interest, Tax, Depreciation &amp; Amortisation (EBITDA) is commonly used as the basis for determining the Terminal Value in an Enterprise Valuation Module.</li> </ul>		
	<ul> <li>EBITDA will only be required within an Enterprise Valuation Module if the EBITDA Multiple assumption entry method has been included in the module for the determination of Terminal Value.</li> </ul>		

# Chapter 3.

### Balance Sheet Module

#### 3.1. Overview

The Balance Sheet Module provides a summary of an entity's assets, liabilities and equity at designated points in time.

The module collects asset, liability and equity balances from Working Capital, Assets, Taxation, Debt and Ordinary Equity Modules (if included), as well as the Income Statement and Cash Flow Statement Modules (if included). The module also links out Opening Cash at Bank and Opening Retained Profits to the Ordinary Equity Module (if included), which uses this information as a basis for determining dividends declared.

Operating Receivables	Operating Receivables Balances	
Book Assets	Book Asset Balances	
Book Intangibles	Book Intangibles Balances	
Operating Payables	Operating Payables Balances	
Capital Payables	Capital Payables Balances	
Taxation	Deferred Tax Assets & Liabilities, Income Tax Payable	Balance
Debt	Debt Balances, Interest Payable, Refinancing Fees	Sheet
Debt	Equity Balances, Dividends Payable, Refinancing Fees	
Ordinary Equity	Opening Cash at Bank	
orallary Equity	Opening Retained Profits	_
Cash Flow Statement	Δ Cash at Bank	•
Income Statement	Net Profit after Tax	

#### **Balance Sheet Module – Overview**

#### 3.1.1. Layout

The diagram below shows an example of how a Balance Sheet might be laid out in order to present a summary of the assets, liabilities and equity of an entity at a point in time. The diagram also shows where each of Balance Sheet precedent modules would enter the Balance Sheet and the type of information that would link in from each of these precedent modules:

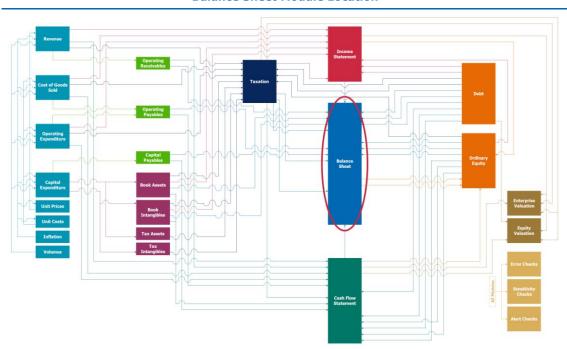
			Balance Sheet	
			Current Assets	
			Opening Cash	\$400
Cash Flow Statement	\$295	Change in Cash Held	Change in Cash Held	\$295
			Cash	\$695
Operating Receivables	\$125	Operating Receviables Balances	Operating Receivables	\$12
			Total Current Assets	\$82
			Non-Current Assets	
Book Assets	\$2,250	Book Assets Balances	Book Assets	\$2,250
Book Intangibles	\$250	Book Intangibles Balances	Book Intangibles	\$250
Debt (1/3)	\$30	Debt Refinancing Fees Balances	Debt Refinancing Fees	\$30
Ordinary Equity (1/4)	\$10	Ordinary Equity Refinancing Fees Balances	Ordinary Equity Refinancing Fees	\$10
Taxation (1/3)	\$145	Deferred Tax Assets Balances	Deferred Tax Assets	\$14
			Total Non-Current Assets	\$2,68
			Total Assets	\$3,50
			Current Liabilities	
Operating Payables	\$95	Operating Payables Balances	Operating Payables	\$95
Capital Payables	\$30	Capital Payables Balances	Capital Payables	\$30
Taxation (2/3)	\$273	Tax Payable Balances	Tax Payable	\$273
Debt (2/3)	\$175	Debt Interest Payable Balances	Debt Interest Payable	\$17
Ordinary Equity (2/4)	\$90	Ordinary Equity Dividends Payable Balances	Ordinary Equity Dividends Payable	\$90
			Total Current Liabilities	\$663
			Non-Current Liabilities	
Debt (3/3)	\$1,500	Debt Balances	Debt	\$1,500
Taxation (3/3)	\$85	Deferred Tax Liabilities Balances	Deferred Tax Liabilities	\$85
			Total Non-Current Liabilities	\$1,58
			Total Liabilities	\$2,248
			Net Assets	\$1,257
			Equity	
Ordinary Equity (3/4)	\$750	Ordinary Equity Balances	Ordinary Equity	\$750
			Opening Retained Profits	\$132
Income Statement	\$490	Net Profit After Tax	Net Profit During Period	\$490
Ordinary Equity (4/4)	(\$115)	Ordinary Equity Dividends Declared	Ordinary Equity Dividends Declared	(\$115
			Retained Profits	\$507

The layout of a Balance Sheet is governed by the accounting standards and reporting requirements applicable to each entity. It is also governed by the choices the entity makes (within the boundaries of its reporting requirements) as to how it structures the presentation of its assets, liabilities and equity accounts on its Balance Sheet.



#### 3.1.2. Location

The diagram below shows the Balance Sheet Module contained within the Financial Statements Module Area and shows the potential links between the Balance Sheet Module and all other Modules:



#### **Balance Sheet Module Location**

#### 3.1.3. Definition

The Balance Sheet shows the status of an entity's assets, liabilities and owner's equity at a point in time, usually the close of a month. A Balance Sheet provides a snapshot of the entity's financial position, including the cumulative results of the Income Statement and Cash Flow Statement, at a point in time.

A Balance Sheet is also referred to as a 'Statement of Financial Position'.

#### 3.1.4. Purpose

The Balance Sheet Module is one of the three Module Types in the Financial Statements Module Area. As with all Modules, the Balance Sheet Module can be used in many different ways to create many different spreadsheet models. The Balance Sheet Module could be used to create a spreadsheet model that contains:

- a single Balance Sheet Module;
- multiple Balance Sheet Modules;
- a single Balance Sheet Module linked to other types of Modules; or
- multiple Balance Sheet Modules linked to other types of Modules.



The Balance Sheet Module serves the purpose of providing a summary of an entity's assets, liabilities and equity at a specific date. The snapshot of an entity's financial position that the Balance Sheet provides includes the cumulative results of the Income Statement and Cash Flow Statement.

#### **3.2.** Functionalities

The Balance Sheet is different to many of the other module types due to the fact that its primary purpose is the collection and presentation of information from other areas within a spreadsheet model – i.e. the Balance Sheet Module links in asset, liability and equity balances from various precedent modules and presents them in a commonly accepted format, ultimately calculating the Net Assets of an entity at a point in time.

Hence, the only functionality to be taken into consideration when developing a Balance Sheet is the selection of information to be presented – i.e. the determination of which precedent modules will link information into the Balance Sheet. Once selected, the process of developing a Balance Sheet is comprised mainly of ensuring that this information in presented in a correct and logical manner.

For more information regarding Balance Sheet precedent modules, see 3.3 Precedent Modules. For more information regarding the layout of a typical Balance Sheet, see 4.1.1 Layout.

#### **3.3.** Precedent Modules

As shown in the module links diagram below, the Balance Sheet Module has ten possible precedent modules; Operating Receivables, Book Assets, Book Intangibles, Operating Payables, Capital Payables, Taxation, Debt, Ordinary Equity, Cash Flow Statement and Income Statement:

perating Receivables	Operating Receivables Balances	
Book Assets	Book Asset Balances	
Book Intangibles	Book Intangibles Balances	
perating Payables	Operating Payables Balances	
Capital Payables	Capital Payables Balances	
Taxation	Deferred Tax Assets & Liabilities, Income Tax Payable	Balance
Debt	Debt Balances, Interest Payable, Refinancing Fees	Sheet
	Equity Balances, Dividends Payable, Refinancing Fees	
Ordinary Equity	Opening Cash at Bank	
	Opening Retained Profits	
ash Flow Statement	Δ Cash at Bank	
ncome Statement	Net Profit after Tax	

#### **Balance Sheet Module – Precedent Modules**

A brief summary of each precedent module and the impact it will have on the Balance Sheet Module is provided below:

Precedent Module	Impacts on Balance Sheet Module
Operating Receivables	Operating Receivables are recorded as Current Assets     on the Balance Sheet.
	<ul> <li>Operating Receivables represent revenues earned prior to the Balance Sheet date but not yet received in cash.</li> </ul>
	<ul> <li>A decrease in Operating Receivables is offset by an operating cash inflow on the Cash Flow Statement.</li> </ul>
Book Assets	Book Assets are recorded as Non-Current Assets on the Balance Sheet.
	<ul> <li>Book Assets represent the tangible assets of an entity with a useful life greater than one accounting period.</li> </ul>
	<ul> <li>The Balance Sheet records the written down value of book assets at a point in time – i.e. capital expenditure less accumulated depreciation.</li> </ul>
Book Intangibles	<ul> <li>Book Intangibles are recorded as Non-Current Assets on the Balance Sheet.</li> </ul>
	<ul> <li>Book Intangibles represent the intangible assets of an entity with a useful life greater than one accounting period.</li> </ul>
	<ul> <li>The Balance Sheet records the written down value of book intangibles at a point in time – i.e. capital expenditure less accumulated amortisation.</li> </ul>
Operating Payables	<ul> <li>Operating Payables are recorded as Current Liabilities on the Balance Sheet.</li> </ul>
	<ul> <li>Operating Payables represent operating expenses incurred prior to the Balance Sheet date but not yet paid in cash.</li> </ul>
	<ul> <li>An increase in Operating Payables is offset by an operating cash inflow on the Cash Flow Statement.</li> </ul>
Capital Payables	<ul> <li>Capital Payables are recorded as Current Liabilities on the Balance Sheet.</li> </ul>
	<ul> <li>Capital Payables represent capital expenditure incurred prior to the Balance Sheet date but not yet paid in cash.</li> </ul>
	<ul> <li>An increase in Capital Payables is offset by an investing cash inflow on the Cash Flow Statement.</li> </ul>
Taxation	<ul> <li>A Taxation Module impacts the Balance Sheet in three ways:</li> </ul>
	<ul> <li>Deferred Tax Assets (Non-Current Asset);</li> </ul>
	- Tax Payable (Current Liability); and
	- Deferred Tax Liabilities (Non-Current Liability).
	<ul> <li>Deferred Tax Assets and Liabilities result from <i>timing</i> differences that cause temporary differences between Tax Expense and Tax Payable.</li> </ul>
	Tax Payable represents tax payable incurred prior to the Balance Sheet date but not yet paid in cash.

•

Precedent Module	Impacts on Balance Sheet Module		
Debt	<ul> <li>A Debt Module impacts the Balance Sheet in three ways:</li> </ul>		
	- Debt Refinancing Fees (Non-Current Asset);		
	<ul> <li>Debt Interest Payable (Current Liability); and</li> </ul>		
	- Debt Balances (Non-Current Liability).		
	<ul> <li>Debt Refinancing Fees represent capitalised fees incurred during the process of raising or refinancing debt.</li> </ul>		
	<ul> <li>Debt Interest Payable represents interest expense incurred prior to the Balance Sheet date but not yet paid in cash.</li> </ul>		
	<ul> <li>Debt Balances represent the debt outstanding of an entity as at the Balance Sheet date.</li> </ul>		
Ordinary Equity	<ul> <li>An Ordinary Equity Module impacts the Balance Sheet in four ways:</li> </ul>		
	<ul> <li>Ordinary Equity Refinancing Fees (Non-Current Asset);</li> </ul>		
	<ul> <li>Ordinary Equity Dividends Payable (Current Liability);</li> </ul>		
	<ul> <li>Ordinary Equity Balances (Non-Current Liability); and</li> </ul>		
	- Ordinary Equity Dividends Declared.		
	<ul> <li>Ordinary Equity Refinancing Fees represent capitalised fees incurred during the process of raising or refinancing ordinary equity.</li> </ul>		
	<ul> <li>Ordinary Equity Dividends Payable represents dividends declared incurred prior to the Balance Sheet date but not yet paid in cash.</li> </ul>		
	<ul> <li>Ordinary Equity Balances represent the book value of the ordinary equity outstanding of an entity as at the Balance Sheet date.</li> </ul>		
	<ul> <li>Ordinary Equity Dividends Declared represent the dividends declared during the accounting period up until the Balance Sheet date. Dividends declared are offset against Retained Profits on the Balance Sheet.</li> </ul>		
Cash Flow Statement	<ul> <li>The Change in Cash at Bank determined by the Cash Flow Statement is added to Cash on the Balance Sheet in order to determine the Cash held by an entity at the Balance Sheet date.</li> </ul>		
Income Statement	<ul> <li>Net Profit After Tax (NPAT) determined by the Income Statement is added to Retained Profits on the Balance Sheet in order to determine the Retained Profits of an entity at the Balance Sheet date.</li> </ul>		

For a discussion of the manner in which each of these precedent modules impacts the Income Statement, see 4.1.1 Layout.

#### 3.4. Dependent Modules

As shown in the module links diagram below, the Balance Sheet Module has one possible dependent module; Ordinary Equity:

	Operating Receivables Balances	
perating Receivables	· · · · · · · · · · · · · · · · · · ·	
Book Assets	Book Asset Balances	
Book Intangibles	Book Intangibles Balances	
Operating Payables	Operating Payables Balances	
	Capital Payables Balances	
Capital Payables	Deferred Tax Assets & Liabilities, Income Tax Payable	
Taxation	Debt Balances, Interest Payable, Refinancing Fees	Balance Sheet
Debt	· · · · · · · · · · · · · · · · · · ·	Sheet
	Equity Balances, Dividends Payable, Refinancing Fees	
Ordinary Equity	Opening Cash at Bank	
	Opening Retained Profits	
Cash Flow Statement	Change in Cash at Bank	
	Net Profit after Tax	
Income Statement		

#### **Balance Sheet Module Schematic – Dependent Modules**

A brief summary of each link out and the impact it will have on the Ordinary Equity Module is provided in the table below:

Dependent Module	Balance Sheet Module Impact
Ordinary Equity	<ul> <li>The Balance Sheet may link out two pieces of information to the Ordinary Equity Module:</li> </ul>
	- Opening Cash at Bank; and
	- Opening Retained Profits.
	<ul> <li>Both these pieces of information may be used in an Ordinary Equity Module as a basis for determining dividends declared in each accounting period.</li> </ul>

# Chapter 4.

### Cash Flow Statement Module

#### 4.1. Overview

The Cash Flow Statement Module provides an analysis of the cash flows of an entity over a number of accounting periods, showing how changes in and Income Statement and Balance Sheet accounts affect cash and cash equivalents.

The module collects cash inflows and outflows Operational, Working Capital, Assets, Taxation, Debt and Ordinary Equity Modules (if included), and links out the change in cash held during each period to the Balance Sheet (if included). The module also links out Cash Flow Available for Dividends to the Ordinary Equity Module (which is used to determine dividends declared) and Cash Flow Available To Equity and Cash Flow to Capital Providers to the Valuation Modules.

Revenue	Revenue	•
Operating Receivables	∆ Operating Receivables	
Cost of Goods Sold	Cost of Goods Sold	
Operating Expenditure	Operating Expenditure	
Operating Payables	Δ Operating Payables	
Book Assets	Book Assets Capital Expenditure	
Book Intangibles	Book Intangibles Capital Expenditure	
	Δ Capital Payables	Cash Flow
Capital Payables Tax Paid		Statement
Tax	Drawdowns, Repayments, Interest Paid, Fees Paid	
Debt	Raisings, Repayments, Dividends Paid, Fees Paid	
Ordinary Equity	Cash Flow Available for Dividends	-
Balance Sheet -	Δ Cash at Bank	_
Equity Valuation	Cash Flow Available to Equity	
Enterprise Valuation	Cash Flow Available to Capital Providers	

#### **Cash Flow Statement Module – Overview**



#### 4.1.1. Layout

There are two common methods used to lay out a Cash Flow Statement. These two methods are summarised in the following table:

Method	Description
Direct	<ul> <li>The Cash Flow Statement is comprised purely of the cash inflows and outflows of an entity during the accounting period.</li> </ul>
	<ul> <li>No reconciliation with Net Profit After Tax (NPAT) on the Income Statement is undertaken.</li> </ul>
Indirect	<ul> <li>The Cash Flow Statement is built up by starting with Net Profit After Tax (NPAT) from the Income Statement.</li> </ul>
	<ul> <li>NPAT is adjusted for differences between Income Statement revenues and expenses and actual cash inflows and outflows during the period.</li> </ul>

The layout used for each of these Cash Flow Statement methods will be discussed in turn.



#### Direct Cash Flow Statement Layout

The diagram below shows an example of how a Cash Flow Statement might be laid out in order to present the cash inflows and outflows of an entity during a period using the *direct* method. The diagram also shows where each of the Cash Flow Statement precedent modules would enter the Cash Flow Statement and the type of information that would link in from each of these precedent modules:

			Cash How Statement (Direct)	
		Revenue	Cash Flow from Operating Activities	
Revenue	\$1,500		Revenue	\$1,500
Operating Receivables	(\$200)	Decrease in Operating Receivables	Decrease in Operating Receivables	(\$200
			Cash Receipts	\$1,300
Cost of Goods Sold	(\$200)	Cost of Goods Sold	Cost of Goods Sold	(\$200
perating Expenditure	(\$300)	Operating Expenditure	Operating Expenditure	(\$300
Operating Payables	\$20	Increase in Operating Payables	Increase in Operating Payables	\$20
			Cash Payments	(\$480
Debt (1/4)	(\$90)	Debt Interest Paid	Debt Interest Paid	(\$90
Taxation	(\$150)	Tax Paid	Tax Paid	(\$150
			Net Cash Flow from Operating Activities	\$580
			Cash Flow from Investing Activities	
Book Assets	(\$200)	Book Assets Capital Expenditure	Book Assets Capital Expenditure	(\$200
Book Intangibles	(\$50)	Book Intangibles Capital Expenditure	Book Intangibles Capital Expenditure	(\$50
Capital Payables	\$20	Increase in Capital Payables	Increase in Capital Payables	\$20
			Net Cash Flow from Investing Activities	(\$230
			Cash Flow from Financing Activities	
Debt (2/4)	\$200	Debt Drawdowns	Debt Drawdowns	\$200
Debt (3/4)	(\$100)	Debt Repayments	Debt Repayments	(\$100
Debt (4/4)	(\$4)	Debt Refinancing Fees Paid	Debt Refinancing Fees Paid	(\$4
Ordinary Equity (1/4)	\$50	Ordinary Equity Raisings	Ordinary Equity Raisings	\$50
Ordinary Equity (2/4)	(\$100)	Ordinary Equity Repayments	Ordinary Equity Repayments	(\$100
Ordinary Equity (3/4)	(\$100)	Ordinary Equity Dividends Paid	Ordinary Equity Dividends Paid	(\$100
Ordinary Equity (4/4)	(\$1)	Ordinary Equity Refinancing Fees Paid	Ordinary Equity Refinancing Fees Paid	(\$1
			Net Cash Flow from Financing Activities	(\$55
Balance Sheet	\$295	Net Increase / (Decrease) in Cash Held	Net Increase / (Decrease) in Cash Held	\$295

#### **Cash Flow Statement Layout – Direct Method Example**

Note that when the direct method is used to lay out a Cash Flow Statement, no reconciliation is undertaken with Net Profit After Tax (NPAT) on the Income Statement – i.e. all line items within a Direct Cash Flow Statement are actual cash inflows or outflows, not revenues or expenses.

The layout of a Cash Flow Statement is governed by the accounting standards and reporting requirements applicable to each entity. It is also governed by the choices the entity makes (within the boundaries of its reporting requirements) as to how it structures the presentation of its cash inflows and outflows on its Cash Flow Statement.



#### Indirect Cash Flow Statement Layout

The diagram below shows an example of how a Cash Flow Statement might be laid out in order to present the cash inflows and outflows of an entity during a period using the *indirect* method. The diagram also shows where each of the Cash Flow Statement precedent modules would enter the Cash Flow Statement and the type of information that would link in from each of these precedent modules:

			Cash Flow Statement (Indirect)	
			Cash Flow from Operating Activities	
come Statement (1/4)	\$490	Net Profit After Tax (NPAT)	Net Profit After Tax (NPAT)	\$490
ome Statement (2/4)	\$210	Tax Expense	(Add Back) Tax Expense	\$210
ome Statement (3/4)	\$100	Debt Interest Expense	(Add Back) Debt Interest Expense	\$100
ome Statement (4/4)	\$200	Depreciation & Amortisation	(Add Back) Depreciation & Amortisation	\$200
erating Receivables	(\$200)	Decrease in Operating Receivables	Decrease in Operating Receivables	(\$200
perating Payables	\$20	Increase in Operating Payables	Increase in Operating Payables	\$20
Debt (1/4)	(\$90)	Debt Interest Paid	Debt Interest Paid	(\$90
Taxation	(\$150)	Tax Paid	Tax Paid	(\$150
			Net Cash Flow from Operating Activities	\$580
			Cash Flow from Investing Activities	
Book Assets	(\$200)	Book Assets Capital Expenditure	Book Assets Capital Expenditure	(\$200
Book Intangibles	(\$50)	Book Intangibles Capital Expenditure	Book Intangibles Capital Expenditure	(\$50
Capital Payables	\$20	Increase in Capital Payables	Increase in Capital Payables	\$20
			Net Cash Flow from Investing Activities	(\$230
			Cash Flow from Financing Activities	
Debt (2/4)	\$200	Debt Drawdowns	Debt Drawdowns	\$200
Debt (3/4)	(\$100)	Debt Repayments	Debt Repayments	(\$100
Debt (4/4)	(\$4)	Debt Refinancing Fees Paid	Debt Refinancing Fees Paid	(\$4
rdinary Equity (1/4)	\$50	Ordinary Equity Raisings	Ordinary Equity Raisings	\$50
dinary Equity (2/4)	(\$100)	Ordinary Equity Repayments	Ordinary Equity Repayments	(\$100
dinary Equity (3/4)	(\$100)	Ordinary Equity Dividends Paid	Ordinary Equity Dividends Paid	(\$100
rdinary Equity (4/4)	(\$1)	Ordinary Equity Refinancing Fees Paid	Ordinary Equity Refinancing Fees Paid	(\$1
			Net Cash Flow from Financing Activities	(\$55
		Net Increase / (Decrease) in Cash Held		

#### **Cash Flow Statement Layout – Indirect Method Example**

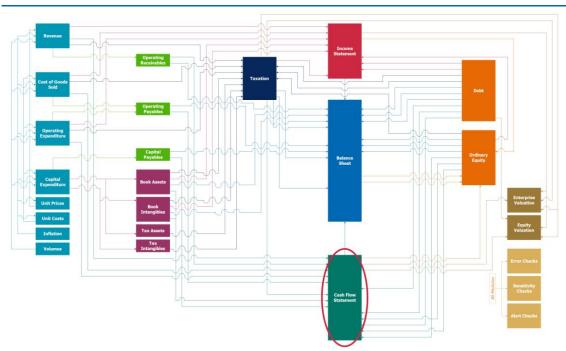
Note that when the indirect method is used to lay out a Cash Flow Statement, a reconciliation is undertaken with Net Profit After Tax (NPAT) on the Income Statement – i.e. NPAT is used as a starting point, after which adjustments are made for non-cash items in order to determine the cash inflows and outflows during the period.

The layout of a Cash Flow Statement is governed by the accounting standards and reporting requirements applicable to each entity. It is also governed by the choices the entity makes (within the boundaries of its reporting requirements) as to how it structures the presentation of its cash inflows and outflows on its Cash Flow Statement.



#### 4.1.2. Location

The diagram below shows the Cash Flow Statement Module contained within the Financial Statements Module Area and shows the potential links between the Cash Flow Statement Module and all other Modules:



#### **Cash Flow Statement Module Location**

#### 4.1.3. Definition

The Cash Flow Statement shows how changes in Income Statement and Balance Sheet accounts affect cash and cash equivalents during an accounting period. A Cash Flow Statement breaks the analysis down according to operating, investing and financing activities.

A Cash Flow Statement is also referred to as a 'Statement of Cash Flows'.

#### 4.1.4. Purpose

The Cash Flow Statement Module is one of the three Module Types in the Financial Statements Module Area. As with all Modules, the Cash Flow Statement Module can be used in many different ways to create many different spreadsheet models. The Cash Flow Statement Module could be used to create a spreadsheet model that contains:

- a single Cash Flow Statement;
- multiple Cash Flow Statements;
- a single Cash Flow Statement Module linked to other types of Modules; or
- multiple Cash Flow Statement Modules linked to other types of Modules.



The Cash Flow Statement serves the purpose of providing a summary of the cash inflows and outflows of an entity over a specified period of time. Its aim is to calculate an entity's 'Net Increase/(Decrease) in Cash' for a period. This calculated 'Net Increase/(Decrease) in Cash' amount can then be used to derive the amount of "Cash at Bank" for the entity, as shown on the Balance Sheet.

#### 4.2. Functionalities

The Cash Flow Statement is different to many of the other module types due to the fact that its primary purpose is the collection and presentation of information from other areas within a spreadsheet model – i.e. the Cash Flow Statement Module links in cash inflows and outflows from various precedent modules and presents them in a commonly accepted format, ultimately calculating the Change in Cash Held by an entity during an accounting period.

Hence, the only functionality to be taken into consideration when developing a Cash Flow Statement is the selection of information to be presented – i.e. the determination of which precedent modules will link information into the Cash Flow Statement. Once selected, the process of developing a Cash Flow Statement is comprised mainly of ensuring that this information in presented in a correct and logical manner.

For more information regarding Cash Flow Statement precedent modules, see 4.3 Precedent Modules. For more information regarding the layout of a typical Cash Flow Statement, see 4.1.1 Layout.



#### 4.3. Precedent Modules

As shown in the module links diagram below, the Cash Flow Statement Module has eleven possible precedent modules; Revenue, Operating Receivables, Cost of Goods Sold, Operating Expenditure, Operating Payables, Book Assets, Book Intangibles, Capital Payables, Taxation, Debt and Ordinary Equity:

Revenue	Revenue	•
Operating Receivables	∆ Operating Receivables	
Cost of Goods Sold	Cost of Goods Sold	
	Operating Expenditure	
Operating Expenditure	Δ Operating Payables	•
Operating Payables	Book Assets Capital Expenditure	•
Book Assets	Book Intangibles Capital Expenditure	<b>→</b>
Book Intangibles	Δ Capital Payables	Cash Flow
Capital Payables	Tax Paid	Statement
Тах	· · · · · · · · · · · · · · · · · · ·	-
Debt	Drawdowns, Repayments, Interest Paid, Fees Paid	r .
Ordinary Equity	Raisings, Repayments, Dividends Paid, Fees Paid Cash Flow Available for Dividends	• 
Balance Sheet	∆ Cash at Bank	-
Equity Valuation	Cash Flow Available to Equity	
Enterprise Valuation	Cash Flow Available to Capital Providers	

#### **Cash Flow Statement Module – Precedent Modules**

A brief summary of each precedent module and the impact it will have on the Cash Flow Statement Module is provided below:

Precedent Module	Impact on Cash Flow Statement Module	
Revenue	<ul> <li>Revenue is often reported as an operating cash inflow on the Cash Flow Statement.</li> </ul>	
	Revenue generally causes an increase in cash.	
	<ul> <li>Revenue is reported on the Income Statement and on the Cash Flow Statement as an operating cash inflow.</li> </ul>	
Operating Receivables	<ul> <li>Operating Receivables are recorded as Current Assets on the Balance Sheet.</li> </ul>	
	<ul> <li>Operating Receivables represent revenues earned prior to the Balance Sheet date but not yet received in cash.</li> </ul>	
	<ul> <li>A decrease in Operating Receivables is offset by an operating cash inflow on the Cash Flow Statement.</li> </ul>	
Cost of Goods Sold	<ul> <li>Cost of Goods Sold is often reported as an operating cash outflow on the Cash Flow Statement.</li> </ul>	
	• Cost of goods sold generally causes a decrease in cash.	
	<ul> <li>Cost of goods sold is reported on the Income Statement as an expense and on the Cash Flow Statement as an operating cash outflow.</li> </ul>	

Precedent Module	Impact on Cash Flow Statement Module	
Operating Expenditure	Operating Expenditure is often reported as an operating cash outflow on the Cash Flow Statement.	
	<ul> <li>Operating expenditure generally causes a decrease in cash.</li> </ul>	
	<ul> <li>Operating expenditure is reported on the Income Statement as an expense and on the Cash Flow Statement as an operating cash outflow.</li> </ul>	
Operating Payables	<ul> <li>Operating Payables are recorded as Current Liabilities on the Balance Sheet.</li> </ul>	
	<ul> <li>Operating Payables represent operating expenses incurred prior to the Balance Sheet date but not yet paid in cash.</li> </ul>	
	<ul> <li>An increase in Operating Payables is offset by an operating cash inflow on the Cash Flow Statement.</li> </ul>	
Book Assets	<ul> <li>Capital Expenditure on Book Assets is reported as an investing cash outflow on the Cash Flow Statement.</li> </ul>	
Book Intangibles	<ul> <li>Capital Expenditure on Book Intangibles is reported as an investing cash outflow on the Cash Flow Statement.</li> </ul>	
Capital Payables	<ul> <li>Capital Payables are recorded as Current Liabilities on the Balance Sheet.</li> </ul>	
	<ul> <li>Capital Payables represent capital expenditure incurred prior to the Balance Sheet date but not yet paid in cash.</li> </ul>	
	<ul> <li>An increase in Capital Payables is offset by an investing cash inflow on the Cash Flow Statement.</li> </ul>	
Taxation	<ul> <li>Tax Paid is recorded as an operating cash outflow on the Cash Flow Statement.</li> </ul>	
	• Tax Paid may not be equal to the Tax Payable during a period, which in turn may not be equal to Tax Expense.	
Debt	<ul> <li>A Debt Module impacts the Cash Flow Statement in four ways:</li> </ul>	
	<ul> <li>Debt Interest Paid (Operating Cash Outflow);</li> </ul>	
	<ul> <li>Debt Drawdowns (Financing Cash Inflow);</li> </ul>	
	<ul> <li>Debt Repayments (Financing Cash Outflow); and</li> </ul>	
	<ul> <li>Debt Refinancing Fees Paid (Financing Cash Outflow).</li> </ul>	
	<ul> <li>Debt Interest Paid represents the cash payment of Interest Expense and is reported as an operating cash outflow.</li> </ul>	
	<ul> <li>Debt Drawdowns represent debt drawn during an accounting period and is reported as a financing cash inflow.</li> </ul>	
	<ul> <li>Debt Repayments represent debt repaid during an accounting period and is reported as a financing cash outflow.</li> </ul>	
	<ul> <li>Debt Refinancing Fees Paid represent fees paid as a result of the drawing of debt.</li> </ul>	



Precedent Module	Impact on Cash Flow Statement Module	
Ordinary Equity	<ul> <li>An Ordinary Equity Module impacts the Cash Flow Statement in four ways:</li> </ul>	
	<ul> <li>Ordinary Equity Raisings (Financing Cash Inflow);</li> </ul>	
	<ul> <li>Ordinary Equity Repayments (Financing Cash Outflow);</li> </ul>	
	<ul> <li>Ordinary Equity Dividends Paid (Financing Cash Outflow); and</li> </ul>	
	<ul> <li>Ordinary Equity Refinancing Fees Paid (Financing Cash Outflow).</li> </ul>	
	<ul> <li>Ordinary Equity Raisings represents ordinary equity raised during an accounting period and is reported as a financing cash inflow.</li> </ul>	
	<ul> <li>Ordinary Equity Repayments represents ordinary equity repaid during an accounting period and is reported as a financing cash outflow.</li> </ul>	
	<ul> <li>Ordinary Equity Dividends Paid represent dividends paid in cash (as opposed to dividends declared) during an accounting period and are reported as a financing cash outflow.</li> </ul>	
	<ul> <li>Ordinary Equity Refinancing Fees Paid represents fees paid as a result of the drawing of debt.</li> </ul>	

For a discussion of the manner in which each of these precedent modules impacts the Income Statement, see 4.1.1 Layout.



#### 4.4. Dependent Modules

As shown in the module links diagram below, the Cash Flow Statement Module has four possible dependent modules; Ordinary Equity, Balance Sheet, Equity Valuation and Enterprise Valuation:

	Revenue	
Revenue	∆ Operating Receivables	
Operating Receivables		
Cost of Goods Sold	Cost of Goods Sold	
Operating Expenditure	Operating Expenditure	
Operating Payables	$\Delta$ Operating Payables	
Book Assets	Book Assets Capital Expenditure	
	Book Intangibles Capital Expenditure	
Book Intangibles	∆ Capital Payables	Cash Flow
Capital Payables	· · · · · · · · · · · · · · · · · · ·	Statement
Тах	Tax Paid	
Debt	Drawdowns, Repayments, Interest Paid, Fees Paid	
	Raisings, Repayments, Dividends Paid, Fees Paid	
Ordinary Equity	Cash Flow Available for Dividends	
Balance Sheet	Δ Cash at Bank	
	Cash Flow Available to Equity	
Equity Valuation	Cash Flow Available to Capital Providers	

A brief summary of each link out and the impact it will have on the Balance Sheet is provided in the table below:

Dependent Module	Cash Flow Statement Module Impact	
Ordinary Equity	<ul> <li>Cash Flow Available for Dividends is commonly used as a basis for determining the dividends declared in each accounting period within an Ordinary Equity Module.</li> </ul>	
Balance Sheet	<ul> <li>Change in Cash at Bank is added to Opening Cash on the Balance Sheet in order to determine Closing Cash at the end of each accounting period.</li> </ul>	
	<ul> <li>The Balance Sheet Module will therefore reflect the cash amounts which have been calculated within the Cash Flow Statement Module which links into the Balance Sheet Module.</li> </ul>	
Equity Valuation	<ul> <li>Cash Flow Available to Equity (CFAE) is used as the basis for determining the equity cash flows to be discounted in an Equity Valuation Module.</li> </ul>	
Enterprise Valuation	<ul> <li>Cash Flow Available to Capital Providers is used as the basis for determining the enterprise cash flows to be discounted in an Enterprise Valuation Module.</li> </ul>	



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