ACCT7106 - Session #6: Reformulating the Financial Statements

PART 1 - Background

overarching objective: Assignment Project Exam Help

to conduct fundamental va imating the 'intrinsic value' of a firm's common shares https://eduassistpro.github.io/

- requires an understanding of the firm s Chat edu_assist_pro
- ⇒ need to accumulate a 'tool kit' as the basis for developing the *pro forma Financial Statements*

```
Balance Sheet (B/S)

⇒ projected Income Statement (I/S)

over the forecast of Cash Flows (SCF)
```

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core inputs

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Sessions #3 \rightarrow #9

STEP 1 **Understanding the past**

- Information collection
- **Understanding the business**
- **Accounting analysis**
- Financial ratio analysis
- Cash flow analysis

STEP 2 Forecasting the future

Assignment Project Exam Help. Cost of capital

2. Valuation models - AE, FCF, D

https://eduassistpro.github4iocomplications

Add WeChat edu_assist_prob. Value creation and destruction

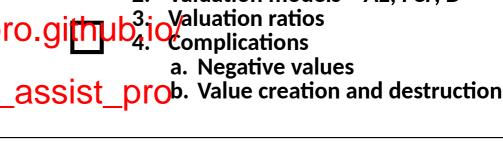


Figure 1.1 Lundholm & Sloan, Framework for Equity Valuation

STEP 3

Valuation

Stages of the Analysis

Stage 1 – Understanding the Business

- → 'Strategy Analysis'
- product market
- competition
- regulatory constraints
- business strategies
- technology



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Stage 2 – Analysing Information

Accounting Analysis & Financial Analysis

- quality of accounting information
- reformulating the F/S to uncover business activities
- ratio and cash flow analysis

Stage 3 – **Prospective Analysis: Forecasting**

⇒ pro-forma

- Income Statement
- Balance Sheet
- Statement of Cash Flows



Abnormal, Earnings Model https://eduassistpro.githubilio Valuation Models tatement of Cash Flows



Stage 5 – **Prospective Analysis: Application**

→ investment decision

investor – decision to buy, hold, sell

manager – decision to adopt strategy or not

external environment

- economic prospects
- macroeconomic factors
- socio-cultural forces
- political / regulatory

Analysis of Financial Statements

- understanding current F/S
- re-formulating the F/S
- accounting quality

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Industry dynamics

→ Porter's five forces

(suppliers, buyers, new entrants, substitutes, rivalry)

- analysts' reports
- management forecasts
- financial press
- ???

- > Financial Statements AASB 101:
 - Balance Sheet
 - Income Statement and/or Statement of Comprehensive Income
 - Statement of Changes in Equity
 - Statement of Cash Flows
 - Notes to the financial statements

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- ➤ building blocks → definitio https://eduassistpro.github.io/
- > accounting principles > AASBIRING LINES Edu_assistuMing decisions/choices
- recognition (item to F/S) *versus* disclosure (notes)

'articulation' -> Financial Statements constitute an 'integrated system'

= Net Income (NPAT

pro forma Income Statement

	2019	2020	2021E	2022E	2023E
Sales	38,176	37,408	± ?	± ?	±?
Other operating revenue	288	376			
Cost of sales	(29,253)	(28,043)	±?	±?	±?
Other income As	ssignment	Proj e €t Ex	am Help		
Administrative expenses	https://o	duaccietar	±?	±?	± ?
Other expenses	тирѕ.//е	uuassisipi	o.github.io	/	
Share – equity investments	Aðd We	Chat edu_	assist_pro		
Financing costs	(42)	(443)	± ?	± ?	± ?
Income tax expense	(347)	(341)	± ?	± ?	± ?

caution - for 'clean surplus' and consistent estimates, the accounting system must reconcile

⇒ 'articulation': must concurrently develop the pro forma B/S and SCF

PART 2 - Reformulation Preliminaries

Objectives:

- separate **operating** activities from **financing** activities
- fix-up some accounting classifications (relatively few)
- https://eduassistpro.github.io/
 for the Income Statement, xpenses based on their driver (sales volume or other), and white they edu assist proon-recurring

- > separation of a company's **operations** from how those operations are **financed**
 - Operations: buying and selling goods and services
 - Financing: the company's use of debt and equity to finance its operations, as well as the company's investment in financial assets

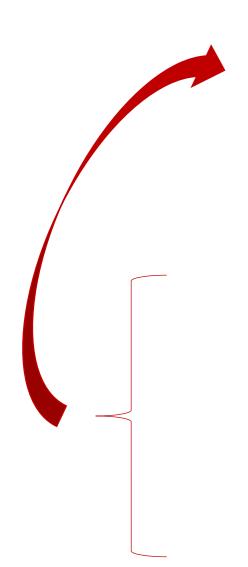
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- Why separate the two? https://eduassistpro.github.io/
 - industrial companies generate value from edu_assist pro not from their financial activities
 - financial activities can hide a company's true operating performance
 - notion of 'levered' versus 'unlevered'

- **Levered** → measured **after** the effects of financial activities
 - → reflect the company's operations <u>and</u> the effects of financial activities
 - → levered metrics capture the shareholders' perspective
- Unlevered → measured before the effects of financial activities
 - → reflect purely the compa https://eduassistpro.github.io/
 - → unlevered metrics capture the Chatiedu_assiste P/shareholder perspective

In general: Unlevered metrics = Levered metrics + Effects of financing

note – this disaggregation can be applied at the overall firm level, as well as individually with the B/S, I/S, and SCF



levered *

- → firm after financing charges
- → to only common shareholders

unlevered *

- → firm before financing charges
- → to debt + equity

* need to adjust both for tax

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applied to valuation

market value of net market value market value of net financial obligations operating assets of equity market value of net market value market value of net Assignment Project Essats Help of equity financial obligations

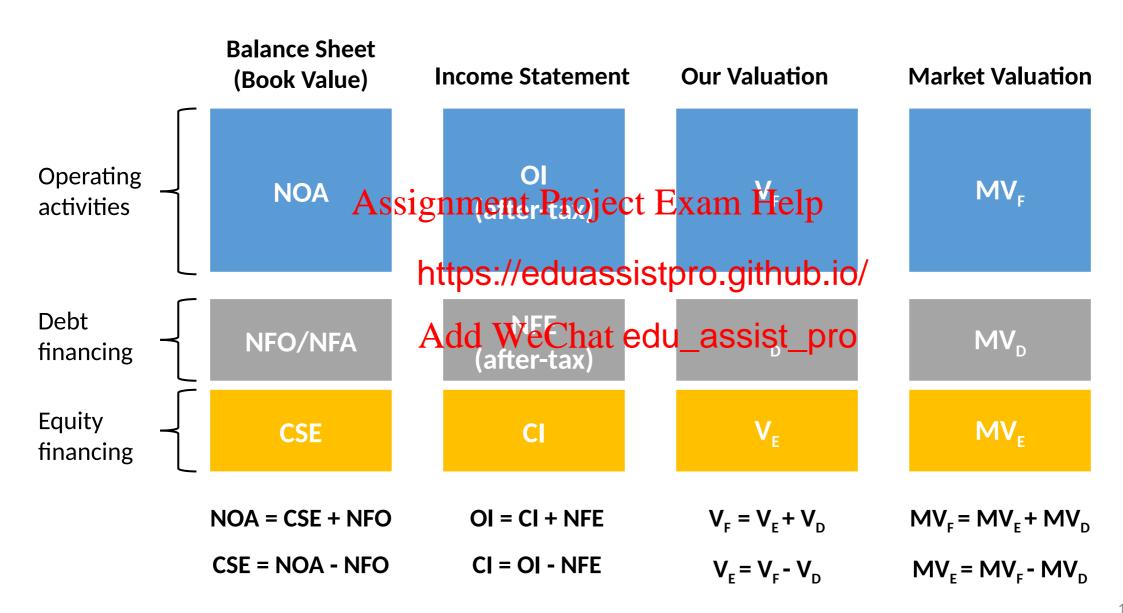
'market value of NOA' is often ca https://eduassistpro.gitalule.(6)/)

- the market value of the company's operati 'unlevered' because it measures the value assist pro and net debt together

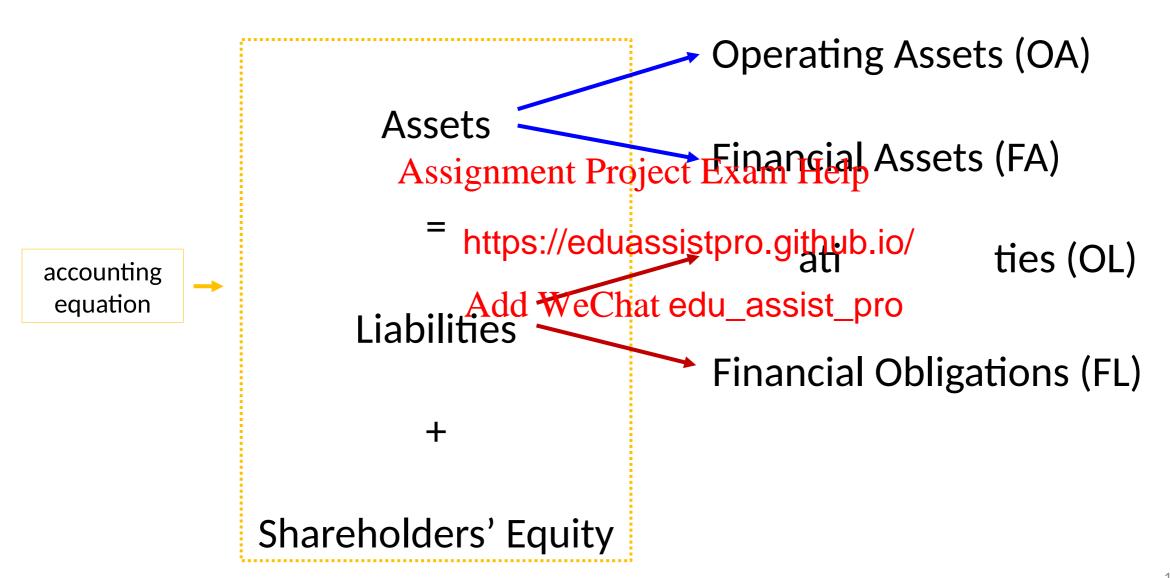
'market value of equity' is also called the market capitalisation (market cap)

• 'levered' because it measures the value of the company after removing the value of net debt (financing activities)

'market value of NFO' represents the company's financing activities



PART 3 - Balance Sheet Reformulation



```
Assets (A) = Liabilities (L) + Shareholders' Equity (S/E)

[OA + FA] = [OL + FO] + S/E

reformulating → (OA - OL) = (FO - FA) + S/E

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```

AASB / IFRS Balance Sheet						
Assets		Liabilities & Equity				
Operating Assets	OA	Operating Liabilities	OL			
Financial Assets	FA	Financial Obligations	FO			
		Shareholders' Equity	S/E			
Total Assets	OA + FA	Total Claims	OL + FO + S/E			
Assignment Project Exam Help https://eduassistpro.github.io						
Reformulated B t Add WeChat edu_assist_pro						
Net Operating Assets						

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Net Operating Assets			Financial Obligations & Shareholder's Equity			
Operating Assets	OA		Financial Obligations	FO		
Operating Liabilities	OL		Financial Assets	<u>(FA)</u>		
			Net Financial Obligations	NFO		
			Shareholders' Equity	S/E		
Total	OA – OL		Total	NFO + S/E		

Step #1 - Operating Assets (OA) versus Financial Assets (FA)

- Operating Assets (OA) essentially assets used in selling goods and services (the company's business)

Aside: there is an active debate in the Barker, 2010, Accounting and Busine https://eduassistpro.guthanbs.ho/e not adopted this structure for IFRS reporting!

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There are two broad things to consider (Barker,

- o **nature** of the item itself e.g., p,p&e is inherently operational (physical assets that are used in production) compared to an investment in government bonds
- function of the item in the company's operations e.g., a retail company does not generate profits from trading financial securities, but a hedge fund does → investments in financial securities are likely a FA for a retail company, but an OA for a hedge fund

Typical Operating Assets (OA):

- Operating cash (see later slide)
- Accounts Receivable: almost always an OA, but check that is isn't a hidden loan to another company
- Inventory: almost always an OA
- Assignment Project Exam Help
 Prepaid expenses: check w

 Iy an OA
- Goodwill: almost always an https://eduassistpro.github.io/
- Equity-accounted investments delay receive the company's operations
- Property, plant & equivalent (p,p&e): almost always OA
- Intangibles: almost always OA
- Deferred tax assets: treat this as an OA in this course

Typical indicators of Financial Assets (FA) (none are decisive on their own):

- the item is financial nature, such as investments in debt/equity securities
- typically measured at fair value e.g., investments in debt or equity
- typically earn interest or dividends for the company
- the asset is not integrated into the company's operations (could be sold without Assignment Project Exam Help disrupting anything) and/or the company is not expected to generate value above ordinary investment returns https://eduassistpro.github.io/

Typical Financial Assets (FA): Add WeChat edu_assist_pro

- financial cash (see later slide)
- short-term investments
- investments in debt or equities securities (without control/significant influence e.g., an investment in another company's bonds or a small <20% equity stake in another company)

note – there is sometimes room for disagreement about what constitutes a OA and FA for a particular company. Use your judgement where there is doubt, but make sure you can justify your decision

aside:

In the Balance Sheet, assets and liabilities are quassified into current and non-current this distinction does not pla ed Balance Sheet; rather, similar current and non-current ac https://eduassistpro.githenleig/, short-term and longterm bank loans)

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'common' problem areas -

- cash & cash equivalents
- investment properties
- 'other assets'

☐ Cash & Cash Equivalents

- most businesses need some cash to operate i.e., to meet day-to-day cash flows (transaction motive) → 'working cash' → 'operating cash' = OA
- however, many businesses maintain much larger cash balances than they need for daily operations → 'financial cash' = FA

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- separating operating cash (Ohttps://eduassistpro.githupatter of judgement
- things to consider:
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 - competitor cash balances
 - the company's historical cash balances
 - nature of the company's operations
- a classic approach (used by the textbook and often in practice) is to assume operating cash is some percentage of sales (e.g., 0.5% of sales)

- ☐ Investment Properties
 - for most companies, land and buildings will be an OA i.e., the company uses them in its operations (perhaps a factory)
 - however, some/all of a company's land and buildings can be FA in the following circumstances:
 - the land and buildings are clearly excessive to the company's needs
 - they are rented/leased https://eduassistpro.github.io/
 - they are accounted for using 'AASB 14 t Property' (note investment properties can be carried at fall edu_assist_pro
- $oldsymbol{\Box}$ 'Other assets'
 - check the notes for details about what 'Other assets' means (if provided)
 - if the company provides a break-down, classify each component as OA or FA depending upon details
 - if the company provides no information, usually it is safe to assume they are OA

re: Coles

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→ OA (after checking note)

OA / FA (0.5%)

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→ OA (after checking note)

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→ FA

→ OA (after checking note)

→ OA (after checking note)

28 JUNE 2020 30 JUNE 2019 NOTES \$M \$M

Non-current assets

Property, plant and equipment

Right-of-use assets

Intangible assets

Deferred tax assets

Equity accounted investments

Other assets

Total non-current assets

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→ OA (after checking note)

OA (after checking note)

→ OA (after checking note)

PART 4 - Reformulating the Balance Sheet (cont)

Step #2 - Operating Liabilities (OL) versus Financial Obligations (FO)

- Operating Liabilities (OL) liabilities associated with selling goods and services (i.e. the company's business
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 Financial Obligations (FO) sources of financing other than CSE (basically debt)

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Typical indicators of Financial Obligations (FO): Add WeChat edu_assist_pro

- the company pays interest on them and has an obligation to repay
- most are measured at amortised cost (or rarely fair value)
- the liability is not integrated with the company's operations, e.g. an industrial company could switch a bank loan for a bond without much disruption, but couldn't easily separate its provision for warranty expenses from its operations

- ☐ Typical Operating Liabilities (OL):
 - Accounts Payable: almost always an OL (but if the company has to pay interest, you should investigate whether it is a hidden FO)
 - Accrued Expenses: almost always an OL
 - Provisions: almost always a OL, but check the notes
 - Assignment Project Exam Help Deferred tax liabilities: tre Deferred revenue

 - https://eduassistpro.github.io/ Income tax payable
- ☐ Typical Financial Obligations (FO): WeChat edu_assist_pro
 - Interest-bearing liabilities/loans
 - Lease obligations
 - Notes/bonds (in liabilities)
 - Preference shares and other hybrid securities

- ☐ Dividends payable is sometimes classified into Current Liabilities
 - this make no sense from a shareholder perspective can't owe ourselves money!
 - why do accountants recognise dividends payables in current liabilities?
 - we will instead treat Dividends payable as part of CSE Assignment Project Exam Help
- ☐ Preference shares (or preferr https://eduassistpro.github.io/sslified as part of Equity
 - preference shares are usually be chat edu_assist that definition of Liability or Equity
 - from the common shareholder perspective, *preference* shares should be classified as a FO and dividends on preference shares should be classified as a financial expense

☐ Derivative Securities

- 'derivative financial assets' and 'derivative financial liabilities' basically represent unrealised gains/losses on derivative contracts
- conceptually, classification should depend on why the company uses the derivative to illustrate,
 - if it is an interest rates is supposed the decivative asset/li

 /FO
 - if it is forward contrac https://eduassistpro.github.io/
 operating asset, then the derivative edu_assist pure be an OA/OL
- given the challenges in specifically confirming each contract, we will treat 'derivative financial assets' as FA and 'derivative financial liabilities' as FO

- ☐ Leases
 - leases appear on both the asset and liabilities side of the Balance Sheet
 - historically came in two varieties:

Operating leases: basically rental agreements

the company does <u>not</u> recognise the leased asset or the associated liability on the Balance Sheet; but recognised an 'operating lease expense' on the Income Statement Assignment Project. Exam Help

Finance/capital leases: basically a loan to buy an asset

the company recognises the https://eduassistpro.github.io/ he Balance Sheet; and associated depreciation and interes

- under the new AASB 16, operating tealer edu_assist deppear and all leases will be recognised as finance leases
 - ⇒ treat financial lease assets as OA and lease obligations as FO treat lease interest as a financial expense

		CONSOLIDATED			* Note 2.9 reveals that 2019 'provisions' include amounts for 'lease provisions' ≡ FO		
Liabilities			28 JUNE 2020	30	0 JUNE 2019		Tot Tease provisions = 1 0
Current liabilities	1	NOTES	\$N		\$M		
Trade and other payables						\rightarrow	OL (after checking note)
Provisions						\rightarrow	OL/FO (after checking note)
Lease liabilities	Assi	ionme	nt Project E	x am	Heln	\rightarrow	FO (after checking note)
Other	7 1001		nt i roject L	Aum	Погр	\rightarrow	OL (assumed)
Total current liabilities		https:	//eduassistp	oro.g	github.io/		
Non-current liabilities		Add V	WeChat edu	_as	sist_pro		
Interest-bearing liabilities						\rightarrow	FO (after checking note)
Provisions						\rightarrow	OL/FO (after checking note)
Lease liabilities						\rightarrow	FO (after checking note)
Other						\rightarrow	OL (assumed)
Total non-current liabilities							
Total liabilities							04

Reformulation Summary - Coles

	2020	2019		2020	2019
OA	17,502	9,028	FA	847	749
OL	<u>5,297</u>	Assignmen	t Proj eo t Exam F	lelp 10,437	<u>112</u>
		https://	/eduassistpro.git	9,590 hub.i <mark>o</mark> /	(637)
			VeChat edu_assi		<u>3,357</u>
NOA	12,205	2,720	N CCITAL Caa_assi	12,205	2,720

applied to valuation

'market value of equity' (16 December)

= 1,334 million shares x \$18.16 = \$24,25.44 million

'market value of NFO' – most p
market valuation

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ounting) value of NFO instead of
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→ \$9,590

→ 'market value of net operating assets' (enterprise value)

= \$24,225.44 million + \$9,590 = \$33,815.44 million

PART 5 - Income Statement Reformulation

overview – reformulation of the AASB/IFRS Income Statement <u>and</u> Statement of Comprehensive Income into a Reformulated Income Statement such that it:

- 1. divides Income Statement items into operating versus financing activity related Assignment Project Exam Help
- 2. further divides operating in es, based on whether the items are recurring and driven by https://eduassistpro.github.io/
- 3. reallocates income tax expendent edu_assists probet financing/financial assets
- 4. divides OCI into operating and financing aspects

Process (as per schema on the next slide) -

Step #1: divide every line item in the Income Statement between operating and financing

Step #2: divide operating items into:

- core operating income from sales
- core other operating income Assignment Project Exam Help
 unusual operating income

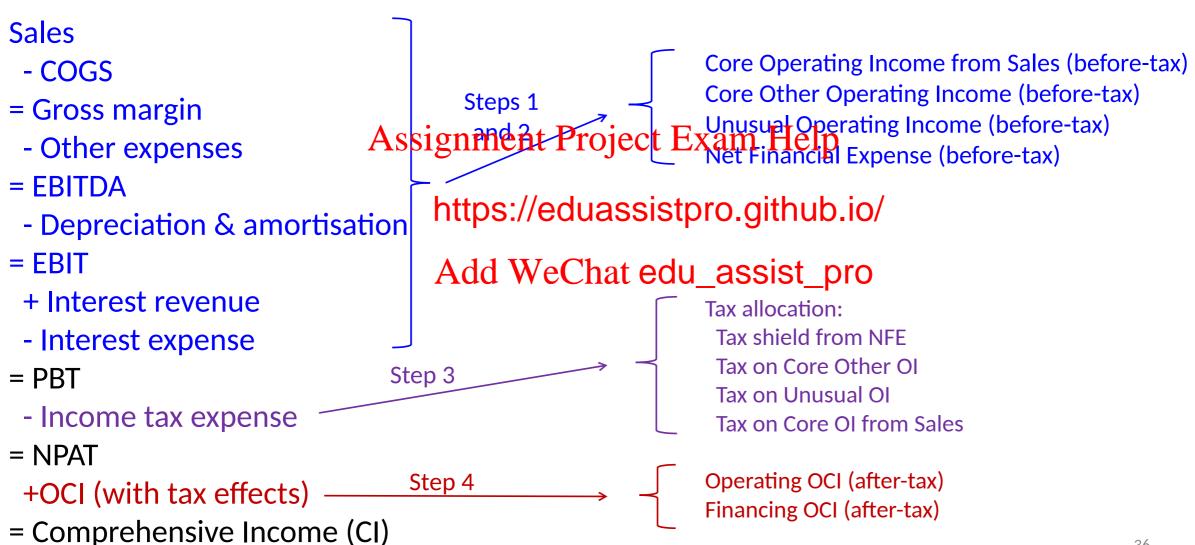
Step #3: divide income tax exp https://eduassistpro.github.io/

- core operating income from edeleweChat edu_assist_pro
- core other operating income
- unusual operating Income
- net financial expense (or net financial income)

Step #4: divide OCI items (after-tax) between operating and financing

AASB/IFRS Income Statement & **Statement of Comprehensive Income**

Reformulated Income Statement



Step #1: d	livide every l	line item in	the Income	Statement betwee	n operating and	financing

- ☐ Operating items: revenues/expenses (or gains/losses) related to the company's operations e.g., sales, COGS, wages, advertising, depreciation, etc.
- ☐ **Financing** items: revenues/expenses (or gains/losses) related to the company's financing activities e.g., interest revenue, interest expense, etc. Assignment Project Exam Help
 - o consider information in t https://eduassistpro.giannerating model (use judgement)
 - o try to be consistent in how you reformul nd 1/S
 - operating revenues/expenses should relate to operating assets/liabilities
 - financial income/expenses should relate to financial assets/obligations e.g., if a company's 'equity-accounted investments' are classified as a FA, then 'share of profits of equity-accounted investments' should be a financial gain/loss

- ☐ Typical operating items:
 - sales or revenue from sales of goods/provision of services
 - cost of goods sold or cost of sales
 - wages and salaries or employee benefits
 - advertising
 - research and development
 - selling, general & administrative expenses (SG&A)
 - repairs and maintenance Assignment Project Exam Help
 - depreciation and amortisation
 - operating lease expense
 share of profits/less on aguits/

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 - share of profits/loss on equity-

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☐ Typical financial items:

- interest revenue or financial revenue
- interest expense or financial expense
- finance lease expense
- dividend revenue from financial assets
- gain/loss on revaluation of financial assets reported in the income statement (e.g. investment property, financial securities)

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lacking Notes on 'other operating revenue' and 'other income', will treat all items as 'operating items' except 'financing costs' which will be classified as a 'financial item'

PART 6 - Reformulating the Income Statement (cont)

Step #2: divide 'operating items' into:

- core operating income from sales
 - recurring operating income related to the company's main operations (driven by sales volume) e.g., sales, coGS, wage expense

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- core other operating income
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 recurring operating income that is not r

 e company's main operations (not driven by sales volume) e.g., share of profits of equity-accounted investments, royalty income
- unusual operating income_
 - → non-recurring (one-time) operating income e.g., restructuring charges, extraordinary items, gain/loss on sale of PPE 40

Why these classifications? facilitates forecasting

Why separate 'core operating income' and 'unusual operating income'?

- when evaluating historical performance, it is useful to know whether earnings was affected by unusual items e.g., suppose a company makes \$100m in profit, but \$80m came from a one-time gain on selling surplus land.
- from a one-time gain on selling surplus land
 Assignment Project Exam Help
 when forecasting, it is useful to know whether an item is likely to repeat in the future e.g., a loss due to a floohttps://eduassistpro.github.io/

Why then further split 'core operating income income from sales' and 'core other operating income'?

- for forecasting purposes, it is useful to know the 'driver' of an item
- items in 'core operating income from sales' are likely to be associated with sales volume (e.g., COGS), whereas items in 'core other operating' are likely driven by other factors (e.g., royalty income)

☐ Core versus Unusual

- core items occur every year, and are fairly stable and predictable
- unusual items do not occur every year, or vary greatly from year-to-year and/or are unpredictable
- restructuring charges <u>Aextraordinary items</u>, impairments passet/business sales are generally unusual items,
 ey are not recurring
- https://eduassistpro.github.io/
 clues as to what be non-r
 and the company's investop present edu_assistispjodgement; do not necessarily follow the company's advice if an item looks like it is actually a normal expense or recurring)
- note 'other comprehensive income (OCI)' is considered separately in Step #4; we will implicitly treat all OCI items as 'unusual'

- ☐ Core Operating Income from Sales versus Core Other Operating Income
 - typical 'core operating income from sales':
 - sales or revenue from sales of goods/provision of services
 - cost of goods sold or cost of sales
 - wages and salaries or employee benefits
 - Assignment Project Exam Help advertising
 - research and developm https://eduassistpro.github.io/

 - repairs and maintenance
 - depreciation and amortisation

- typical 'core other operating income':
 - royalty income
 - rental income (not related to Investment property, which would be financing)
 - grant income
 - share of profits/loss on equity-accounted investments.

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 - 'other income'
 - income from 'side busines https://eduassistpro.githukeri@ut on the income statement

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- Core OI from sales
- Core other OI
- Core OI from sales

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Core other OI

Core OI from sales & Unusual OI*

https://eduassistpro.github.io/core financing expense (NFE)

Add WeChat edu_assist_pro Core financing expense (NFE)

→ Step #3

Unusual OI

^{*} Note 1.4 indicates that 'Administrative expenses' include an 'impairment reversal' of \$41 million in 2020 and an 'impairment expense' of \$42 million in 2019 ** 'Unusual OI'

Summary - Coles reformulated Income Statement (following Steps #1 & #2)

	2020	2019				
Core OI from Sales (before tax	x) 1,243	934				
Core Other OI (before tax)	478	721				
Core OI (before tax) Assign	ment Project Exam Hel	1,655				
Unusual OI (before tax)		315				
Core NFE (before tax)	tps://eduassistpro.gith	(188)				
Add WeChat edu_assist_pro_*2020 reconciles; 2019 does NOT - tax adjustment						
versus reported profit before tax from the I/S						
	2020	2019				
Profit before tax	1,319	1,425				

Process -

- ✓ **Step #1:** divide every line item in the Income Statement between operating and financing
- ✓ **Step #2**: divide operating items into:
 - core operating income from sales
 core other operating income

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 - unusual operating inco https://eduassistpro.github.io/

Step #3: divide income tax expanse between edu assist_pro

- core operating income from sales
- core other operating income
- unusual operating Income
- net financial expense (or net financial income)

Step #4: divide OCI items (after-tax) between operating and financing

ART 7 – Summary: Sessions #1 → #6

overarching objective:

to conduct fundamental value for the purpose of estimating the 'intrinsic value' of a firm's common shares

- requires an understanding of the firm's 'value drivers'
 - Assignment Project Exam Help
 need to accumulate a 'tool kit' as the basis for developing the pro forma
 Financial Statement https://eduassistpro.github.io/

Add WeChat edu_assist_pro STEP 1 STEP 2 STEP 3 **Understanding the past** Forecasting the future **Valuation** Information collection 1. Structured forecasting 1. Cost of capital 2. Income Statement forecasts 2. Valuation models - AE, FCF, D **Understanding the business** 3. Valuation ratios **Accounting analysis** 3. Balance sheet forecasts Financial ratio analysis 4. Cash flow forecasts 4. Complications Cash flow analysis a. Negative values b. Value creation and destruction

external environment

- economic prospects
- macroeconomic factors
- socio-cultural forces
- political / regulatory



- understanding current F/S
- re-formulating the F/S
- accounting quality

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Industry dynamics

→ Porter's five forces

(suppliers, buyers, new entrants, substitutes, rivalry)

- analysts' reports
- management forecasts
- financial press
- ???