

WEEK 6

Ethics in accounting

1. Explain the nature of ethics (H&P LO 29.1)

Ethics:-Concerned with what is **good and right** for human beings

-What conditions, attributes and characteristics for we need to do the best we can in a particular situation?

-Not only individuals, but **communities**

•Aristotle (384-322 BCE) argued ethics relates to the way power is exercised within communities.

•He asked: —Should power be exercised to promote the well being of the community or the self-interest of a few?

Relevance of ethics in the context of accounting

A. Recognising that ethics is concerned with **conditions** that **promote well being**

- Results in accountants thinking about what characteristics are necessary to achieve excellence in accounting practice

B. Recognising that ethics is also about **power and how it is exercised**

- Provides valuable insights into what might be 'good' behaviour in accounting practice because accountants are often in more powerful positions than their clients

C. Understanding **what skills and attributes** accountants need and **how** they exercise those skills and attributes

- Makes ethics a highly relevant and practical matter for accountants to understand

Little doubt that there is widespread concern about business ethics

›Unethical behaviour damages:

- The **reputation of all accountants**

- The **reputation of Australian business**

It may also have broader **social and environmental consequences**

2. Distinguish between rules-based and values-based ethics (H&P LO 29.2)

Two approaches for making ethical judgements:

A. **Right/wrong perspective** (rules-based)

-When we make ethical judgements with reference to **specific rules or law**

-**Binary perspective**—either right or wrong—black or white

B. **Good/bad perspective** (values-based)

-When we make ethical judgements with reference to an **individual's value judgements**, not to rules

-Allows for **grey areas**

C. The **relationship** between the rules-based and values-based approach:

-Rules are **not independent** of a good/bad or values-based approach

-Rules may appear to be **objective**, but they are ultimately derived from **subjective value judgements**

›In summary, rules and values are **interrelated** approaches to ethics; **Values** are **more fundamental** than rules because rules are derived from a **community's values**.

3. Understand the **foundational ethical principles** and their application (H&P LO 29.4)

›Multicultural societies have differences in values and customs, but this does not mean 'anything goes'.

›**Three shared ethical principles** from which communities derive values:

A. **Beneficence** – the duty to do good and avoid harm

B. **Justice** – the duty of universal fairness or equity

C. **Respect for persons** – the duty to respect the rights and dignity of others

Three points should be noted about the three principles:

A. They are only **starting points** and must be interpreted by each community based on their own history and experiences.

B. The three foundational ethical principles reflect Aristotle's view that ethics is about **power and how power is exercised**.

C. The application of these principles in practice is **not always easy or straightforward**.

4. Understand the fundamental ethical principles of the accounting profession (H&P LO 29.6)

The Accounting Professional and Ethical Standards Board (APESB):

The institute of Chartered Accountants in Australia; CPA Australia; the Institute of Public Accountants (IPA)

APES 110 'Code of Ethics for Professional Accountants':

›Three general messages:

A. the Code is **mandatory** for all members of the **three professional bodies** (non-compliance can lead to **disciplinary proceedings**)

B. Some jurisdictions may have requirements and guidance that **differ from the Code** (comply with the **more stringent requirements and guidance**)

C. Members should also be guided by **the spirit of the Code**

The fundamental ethical principles of the **Australian accounting profession**:

›**Integrity**: To be straightforward and honest in professional and business relationships (Respect for persons-honesty)

›**Objectivity**: To not allow bias, conflict of interest or the undue influence of others to compromise their professional or business judgment (Justice-treat all cases alike)

›**Professional competence and due care**: To maintain professional knowledge and skill at the level required to ensure that clients or employers receive competent professional service; to act diligently in accordance with applicable technical and professional standards when providing their services (Beneficence-avoid harm)

›**Confidentiality**: To respect confidentiality and not disclose confidential information without specific authority or unless there is a legal duty to disclose; to not use confidential information to their personal or third party advantage (Beneficence-avoid harm)

- › **Professional behaviour**: To comply with relevant laws and regulations; and to avoid any action or omission that may bring discredit to the profession (Beneficence-avoid harm)

Disciplinary procedures of two major Australian professional accounting bodies are similar:

- They begin with a **complaint** about a member
- In CPA Australia, **written complaints** are referred to the **Manager Professional Conduct (MPC)**; [if it's relevant, transferred to a **Professional Conduct Office (PCO)** for investigation; a report is prepared by PCO to CEO of CPA]
- If it is believed there is a case to answer, the complaint is referred to the **One Person Tribunal (OPT)** or the **Disciplinary Committee** [MPC refer the complaint to an **Investigating Case Manager (ICM)** to prepare a written summary]

Several different **penalties** may be imposed:

- Fines, censure, reprimand, suspension, expulsion, publication of complaint and penalty details (the hardest penalty is expulsion from the professional body)

5. Learn how decisions can be taken that incorporate ethics in a systematic and justifiable way (H&P LO 29.7)

- › Values can be applied in the context of **two core skills** in ethics:

Decision making (we will focus on this aspect in ACCT 6001) & **Policy (rule) making**

- › **Decision making** is about:

Attempting to **resolve a specific problem** that is occurring at **a specific time**, at **a specific place**, and involving **specific individuals**.

- › Most decisions need to be: **Systematic and Justifiable**

- › Decision making requires:

- Adoption of a process that encourages consideration of the **various ethical dimensions** of a problem
- Consideration of potential **short-term and long-term consequences** for ourselves and others

Many different decision-making models offered by philosophers, academics, professional bodies. The **American Accounting Association (AAA)** model of ethical decision making is one example.

Steps in the AAA model of ethical decision making (inter-related steps):

- **Determine the facts**
- **Define the ethical issue**
- **Identify the major principles, rules and values**
- **Specify the alternatives**
- **Compare value and alternatives—see if a clear decision emerges**
- **Assess the consequences**
- **Make your decision**

6. Understand some of the **ethical issues** facing Australian accountants (H&P LO 29.9)

Accountants face a wide variety of ethical issues in the practice of their profession.

› **Three ethical issues** most frequently encountered (Leung and Cooper):

- **Conflict of interest**

- Client proposals to **manipulate financial statements**

- Client proposals for **tax evasion**

(Work of Leung and Cooper illustrates clearly that ethical problems are a major issue for Australian accountants)

WEEK 7

Provisions & contingent liabilities / income & profit

Learning objectives – Provisions & contingent liabilities

Deegan: Chapter 10 pp.335-344

1. Explain the definition & recognition criteria for liabilities (Deegan LO 10.1)

Definition: AASB 137 para 10 and the Framework

A **liability** is a **present obligation** of the entity arising from **past events**, the settlement of which is expected to result in an **outflow** from the entity of resources embodying **economic benefits**.

A. Present obligation

- › **duty or responsibility** to act/perform in a certain way towards an **external party**
 - not necessary to know who the external party is
- › most obligations are **legally enforceable** (arise from contracts)
 - may also be a **constructive obligation** (inferred from the facts/circumstances)
- › **mere intention** to sacrifice economic benefits is **not sufficient**

B. Outflow (sacrifice) of economic benefits

- › little, if any, discretion to avoid future sacrifice of economic benefits
- i.e., failure to honor obligations will result in **legal, social, political or economic consequences**
- › future sacrifice may take **various forms**
 - e.g., cash, goods, using up resources to provide services
- › settlement may be **on demand**, on a **specified date**, or **when an event occurs**

C. Past events

- › event must leave the entity with **no realistic alternative but to settle the obligation**
- › only obligations arising from past events that exist **independently of future actions** should be recognised

Recognition criteria - (2010 Framework paras 83 & 91)

4.38 An item that meets the definition of an element should be recognised if:

- (a) it is **probable** that any future economic benefit associated with the item will flow to or from the entity; and

(b) the item has a cost or value that can be **measured with reliability**.

4.46 A liability is recognised in the **balance sheet** when it is **probable** that an **outflow of resources embodying economic benefits** will result from the settlement of a **present obligation** and the amount at which the settlement will take place can be **measured reliably**. In practice, obligations under contracts that are equally proportionately unperformed (for example, liabilities for inventory ordered but not yet received) are generally not recognised as liabilities in the financial statements. However, such obligations may meet the definition of liabilities and, provided the recognition criteria are met in the particular circumstances, may qualify for recognition. In such circumstances, recognition of liabilities entails recognition of **related assets or expenses**.

Note:

-where the **obligation is mature or unconditional** and **settlement is certain** then **recognition criteria** are more likely to be **satisfied**

-A liability that fails the recognition criteria may require disclosure as a **contingent liability**

Recognition & Uncertainty

Uncertainty

Very low <-----> Very high

Borrowings Provisions Contingent

Liabilities

Accruals

Accounts payable

- Describe which events should be treated as provisions (liabilities) & apply the appropriate accounting treatment (Deegan LO 10.4)

Definition:

A **provision** is a liability of **uncertain timing or amount** (AASB 137 para 10).

Recognition criteria: AASB 137 para 14

14 A provision shall be recognised when:

- An entity has a **present obligation** (legal or constructive) as a result of a **past event**;
- It is **probable** that an **outflow of resources embodying economic benefits** will be required to settle the obligation; and
- A **reliable estimate** can be made of the amount of the obligation.

If these conditions are not met, no provision shall be recognised.

AASB 137 para 15: In rare cases where it is **not clear** whether there is a present obligation, a past event is deemed to give rise to a present obligation if, taking account of **all available evidence**, it is **more likely than not** that a present obligation exists **at the reporting date**

›Many types of items meet the definition and recognition criteria of liabilities

-e.g., **provisions for warranties, refunds, restoration**

›Where **no present obligation** exists to an **external party** a liability does not exist

-e.g., setting aside a reserve for a future event

Amount to be recognised: AASB 137 para 36

36 The amount recognised as a provision shall be the **best estimate of the expenditure** required to settle the present obligation at the end of the reporting period.

›Need to consider **risks and uncertainties**

›Recognition based on **best estimate** of the **present value** of the obligation (where effect of **time value of money** is material)

e.g. Jet Ltd provides a two year warranty on the engines it manufactures and sells.

In 2009 Jet sells 1,000 engines.

Past experience indicates that approximately 10% of engines sold will require repairs and the average repair cost will be \$150 per engine.

Actual repair costs in 2010 amount to \$14,200.

Recognise provision in 2009:

Dr Warranty expense	15,000	
Cr Provision for warranty		15,000
(10% x 1,000 x \$150)		

Record actual repairs in 2010:

Dr Provision for warranty	14,200	
Cr Cash/spare parts, etc		14,200

What about excess of \$800?

›Either **reverse back** to expense

Dr Provision for warranty	800	
Cr Warranty expense		800

- OR -

›**Recognise lower expense** when accounting for the provision arising from 2010 sales

3. Discuss the nature of contingent liabilities & their accounting treatment (Deegan LO 10.2)

Definition –AASB 137 para 10:

A **contingent liability** is:

- (a) a **possible obligation** that arises from **past events** and whose existence will be confirmed only by the **occurrence or non-occurrence** of one or more uncertain future events **not** wholly within the **control** of the entity; or
- (b) a **present obligation** that arises from **past events** but is not recognised because:
 - (i) it is **not probable** that an outflow of resources embodying economic benefits will be required to settle the obligation; or
 - (ii) the amount of the obligation **cannot** be measured with sufficient **reliability**.

Notice: the term 'contingent liability' is used for liabilities which **do not meet the recognition** criteria (AASB 137 para 12)

Recognition criteria – AASB 137 para 27:

27 An entity shall **not recognise** a contingent liability.

›Contingent liability is not recognised in financial statements

›**Note disclosures** are required where the **probability** of a sacrifice of future economic benefits is **higher than remote** (AASB 137 para 28)

e.g.: Recognition of a contingent liability

During 2013, Mark Richards Limited, whose reporting period ends on 30 June each year, guarantees the bank overdraft of Shawn Thomson Limited. At the time of providing the guarantee, Shawn Thomson Limited was in a sound financial position. During 2015, international trading conditions deteriorated to such an extent that Shawn Thomson Limited incurred substantial losses. Finally, on 28 June 2015, Shawn Thomson Limited was forced to file for protection from its creditors.

REQUIRED

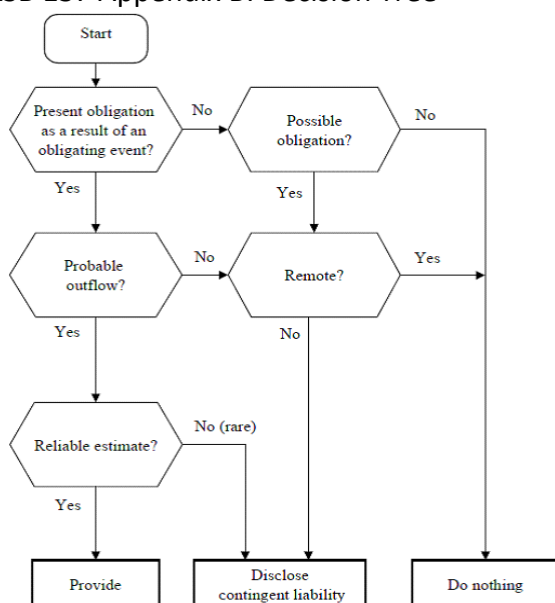
How would Mark Richards Limited report the guarantee provided to Shawn Thomson Limited in its financial statements ending 30 June 2014 and 30 June 2015?

SOLUTION

In this illustration, the obligating event is the provision of the guarantee, which gives rise to a legal obligation. At 30 June 2014, it is **unlikely** that an outflow of resource's embodying economic benefits will occur. No provision is recognised. However, the guarantee is disclosed as a **contingent liability**.

At 30 June 2015, it is **probable** that an outflow of resources embodying economic benefits will be required to settle the obligation. A **provision**-which is a liability which must be recognised within the financial statements-for the best estimate of the obligation must be recognised.

AASB 137 Appendix B: Decision Tree



4. Compare the treatments of contingent liabilities & contingent assets

Contingent Assets - AASB 137 paras 31 – 35:

32 Contingent assets usually arise from **unplanned or other unexpected events** that give rise to the **possibility of an inflow of economic benefits** to the entity. An example is a claim that an entity is pursuing through **legal processes**, where the outcome is uncertain.

33 Contingent assets are not recognised in financial statements since this may result in the recognition of income that may never be realised.

34&35 If an inflow of economic benefits has become **probable**, an entity **discloses** the contingent asset.

Learning objectives – Income & profit

H& P Chapter 16 pp. 503-514

1. Understand different approaches to profit measurement (H&P LO 16.1)

› **Traditionally**, profit has been the process of:

- **Matching revenues** for a period **with expenses** incurred in generating those revenues

The traditional profit measurement is no longer appropriate due to:

- Changes in the categorisation and labelling of financial statement elements
- Reduced emphasis on matching

Three possible approaches:

› **Operating-profit approach:**

Profit is measured as **income from operations** minus **expenses from operations**

(Ordinary operations => Predicting future profits; Profit manipulation)

› **All-inclusive approach:**

Profit is measured as the result of ordinary operations plus **income and expenses relating to prior periods**, the effects of some **accounting policy changes** and the result of **extraordinary transactions and events**

(Restrict profit manipulation; more relevant info; easier to prepare but still judgement)

› **Comprehensive income approach:**

Profit includes all income and expenses as defined in **Framework 2010**. **All changes in net assets or equity**, other than transactions with owners, are included in the measurement of profit

(Determined conceptually, no bypassing; reduce manipulation; not a good basis for predicting future profits)

2. Understand the approach adopted in Australia (H&P LO 16.2)

Adoption of **comprehensive income approach** in AASB 101(FP):

Includes:

- items of **other comprehensive income**,
- such as **changes in asset revaluation surplus**,
- Re-measurement of **defined benefit superannuation plans**
- gains and losses from **translating the financial statements of a foreign operation** in the statement of comprehensive income

› Measurement of comprehensive income:

Statement of comprehensive income

Income

Less: Expenses

= Profit or loss for the period

+/- Items of other comprehensive income

=Total comprehensive income for the period

3. Apply the requirements for the preparation of a statement of comprehensive income in AASB101 (FP) Presentation of Financial statements (H&P LO 16.3)

AASB 101(FP) para 10A requires the preparation of:

- A **single** statement of **comprehensive** income; or
- A **separate** income statement and a **statement of comprehensive** income

Approach to profit measurement in AASB 101(FP):

An entity shall recognise **all items of income and expense** in a period in profit or loss unless an Australian Accounting Standard requires or permits otherwise (AASB 101(FP) para 88)

› In addition to items required by other Australian accounting standards, the **profit or loss** section shall include:

- Revenue
- Finance costs
- Equity accounted share of profit or loss of associates
- Tax expenses
- A single amount for the total discontinued operations (AASB 101(FP) para 82)
- › Components of **other comprehensive income** include:
 - Changes in revaluation surplus
 - Remeasurement of defined benefit plans
 - Gains and losses arising from translating the financial statements of a foreign operation
 - Gains and losses on remeasuring financial assets at fair value through other comprehensive income
 - Effective portion of gains and losses on hedging instruments in a cash flow hedge

4. Apply the requirements of AASB 118(FP) for the recognition and measurement of revenue in the statement of comprehensive income (H&P LO 16.4)

Definition - AASB 118(FP) defines revenue as:

- The **gross inflow of economic benefits** during the period
- Arising in the course of the **ordinary activities** of an entity
- When those inflows result in **increases in equity**
- **Other than** increases relating to **contributions from equity** participants (AASB 118(FP) para 7)

Measurement: Revenue shall be measured at the **fair value** of the consideration **received or receivable** (AASB 118(FP) para 9)

- › The amount of revenue will usually be **cash (or cash equivalents) received or receivable**
- › When **goods or services** are exchanged for others of a **similar nature and value** it does not give rise to revenue (AASB 118(FP) para 12)
- › If exchange of goods or services are for **dissimilar items** revenue is equal to **fair value** of goods received (AASB 118(FP) para 12)

There are **three categories** of revenue:

1. Sale of **goods**

2. Rendering of **services**

3. **Interest, royalties** and **dividends**

A. Where the revenues arise from the sale of **goods**, there are **three additional recognition** requirements (AASB 118(FP) para 14):

1. The entity has transferred to the buyer the significant **risks and rewards of ownership** of the goods
2. The entity retains neither **continued managerial** involvement nor **effective control** over the goods sold
3. The costs incurred or to be incurred can be **measured reliably**

B. Where the revenues arise from providing **services**, there are **additional recognition** requirements (we will discuss these in more detail next week):

- The **stage of completion** of the transaction at reporting date can be **measured reliably**
- The **costs incurred** and **costs to complete** can be **measured reliably**

5. Apply the requirements of AASB 101(FP) for the classification of expenses (H&P LO 16.6)

Classification by **nature** might involve expense categories such as:

- Depreciation
- Purchases of raw materials; and
- Employee benefits

(AASB 101(FP) para 102)

Revenue		X
Other income		X
Changes in inventories	X	
Raw materials and consumables used	X	
Employee benefits expense	X	
Depreciation and amortisation expense	X	
Other expenses	<u>X</u>	
Total expenses		<u>(X)</u>
Profit before tax		<u>X</u>

Classification by **function** might involve expense categories such as:

- Cost of sales
- Cost of distribution; and
- Cost of administration

(AASB 101(FP) para 103)

Revenue		X
Cost of sales		<u>(X)</u>
Gross profit	X	
Other income	X	
Distribution costs	(X)	
Administrative expenses	(X)	
Other expenses		<u>(X)</u>
Profit before tax		<u>X</u>

6. Understand the required treatment of unusual items in AASB 101(FP) (H&P LO 16.7)

› **No requirements** for disclosure of specific categories of **unusual items** in AASB 101(FP)

› AASB 101(FP) para 97-98 does have requirements for the identification and disclosure of **important items** of income and expense:

- When items of income and expense are **material**, their nature and amount shall be **disclosed separately**;

e.g.: write-downs of inventory or property, plant and equipment;

restructuring of the entity's activities;

disposal of property, plant and equipment;

discontinued operations;

and litigation settlements

P16.11

On 1 July 2012, Lancer Ltd purchased 1000 debentures with a face value of \$100 each for a price of \$107 985. The debentures were issued by Evo Ltd and pay interest on 30 June each year at a nominal rate of 10% per annum, while the effective interest implied by Lancer's purchase price is 8% per annum. The debentures mature and will be repaid on 30 June 2017.

Required

(a) Prepare a table showing the interest revenue recognised by Lancer Ltd in each of the next five years, in accordance with AASB 118.

(b) Show general journal entries for Lancer Ltd relating to the debentures and debenture interest on 30 June 2013 and 30 June 2017.

(a) Table of interest

Year ended 30 June	Principal at beginning	Interest revenue	Cash inflow	Adjustment to principal (+/-)
2013	107 985	8 639	10 000	(1 361)
2014	106 624	8 530	10 000	(1 470)
2015	105 154	8 412	10 000	(1 588)
2016	103 566	8 285	10 000	(1 715)
2017	101 851	8 148	10 000	(1 852)

(b) General Journal entries

30 June 2013	Cash at bank	Dr	10 000	
	Investment in debentures	Cr		1 361
	Interest revenue	Cr		8 639
30 June 2017	Cash at bank	Dr	10 000	
	Investment in debentures	Cr		1 852
	Interest revenue	Cr		8 148
30 June 2017	Cash at bank	Dr	100 000	
	Investment in debentures	Cr		100 000

WEEK 8

Construction Contracts

1. Understand the requirements of AASB 111: Construction Contracts (H&P LO 21.5)

› Recall from Week 7:

1. “**Matching**” of revenues with expenses is thought **inappropriate** now
2. Standard-setters now say profit includes all income and expenses as defined in the framework. This is called the **comprehensive income approach**.
3. Under AASB118 (FP) para 20, revenue from **services** is recognised using the **percentage of completion method**.

› Construction contracts take **multiple accounting periods** to complete

Consequently, they present financial statement preparers with the following accounting issues:

- **inventory valuation** of partly completed contracts.
- **revenue** recognition and measurement

› **AASB 111** is the accounting standard that provides specific guidance for construction contracts.

AASB 111 para 11 **identifies the revenue** arising from a construction contract as:

- The initial amount of revenue determined in accordance with the contract and amounts arising from variations, claims and incentive payments

11 **Contract revenue** shall comprise:

- (a) the **initial amount of revenue** agreed in the contract; and
- (b) **variations** in contract work, **claims** and **incentive payments**:
 - (i) to the extent that it is **probable** that they will result in revenue; and
 - (ii) they are capable of being **reliably measured**

AASB 111 para 16 **identifies the costs** arising from a construction contract as:

16 Contract costs shall comprise:

- (a) costs that relate directly to the **specific contract**;
- (b) costs that are **attributable to contract activity** in general and **can be allocated** to the contract; and
- (c) such other costs as are **specifically chargeable** to the customer under the terms of the contract.

› Construction contract types: AASB 111 para 3

A **construction contract** is a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use.

- **Cost-plus contract**:

The contractor is reimbursed for allowable or otherwise **defined costs**, **plus a percentage** of those costs or a fixed fee

- **Fixed-price contract**:

The contractor agrees to a **fixed contract price**, or a **fixed rate** per unit of output

› ACCT6001 will only cover **fixed price** contracts

2. Apply the percentage-of-completion method of accounting for construction contracts (H&P LO 21.6)

AASB 111 para 22 requires use of the **percentage-of-completion method** when:

- The **outcome** of a construction contract can be **estimated reliably**
- This method **recognises profit progressively** throughout the construction period

This method recognises a % of the construction project profit each accounting period based on the progress made on the project during the accounting period.

AASB 111 para 23:

23 In the case of a **fixed price contract**, the outcome of a construction contract can be **estimated reliably** when **all** the following conditions are **satisfied**:

- (a) **total contract revenue** can be measured reliably;
- (b) it is **probable** that the economic benefits associated with the contract will flow to the entity;
- (c) both the **contract costs** to complete the contract and **the stage of contract completion** at the end of the reporting period can be measured reliably; and
- (d) the **contract costs attributable** to the contract can be clearly identified and measured reliably so that **actual contract costs** incurred can be **compared** with prior estimates.

AASB 111 para 32: If the conditions in AASB111 para 23 are **not satisfied**

32 When the outcome of a construction contract **cannot be estimated reliably**:

- (a) revenue shall be recognised **only** to the extent of contract costs incurred that it is **probable** will be **recoverable**; and
- (b) **contract costs** shall be recognised as an **expense** in the period in which they are incurred.

An **expected loss** on the construction contract shall be recognised as an **expense** immediately in accordance with paragraph 36

AASB 111 para 30:

30 The **stage of completion** of a contract may **be determined** in a variety of ways. The entity uses the method that measures reliably the work performed. Depending on **the nature of the contract**, the methods may include:

- (a) the **proportion that contract costs incurred** for work performed to date bear to the estimated total contract costs;
- (b) surveys of **work performed**; or
- (c) completion of a **physical proportion** of the contract work.

Progress payments and advances received from customers often do not reflect the work performed.

Hint: The information in the practice and exam questions will tell you which method to use.

AASB 111 para 38: **change of estimates**

38 The percentage of completion method is applied on a **cumulative basis** in each reporting period to the **current estimates** of contract revenue and contract costs. Therefore, the effect of a change in the estimate of contract revenue or contract costs, or the effect of a

change in the estimate of the outcome of a contract, is accounted for as a change in accounting estimate (see AASB 108 Accounting Policies, Changes in Accounting Estimates and Errors). **The changed estimates** are used in the determination of the amount of revenue and expenses **recognised in profit or loss** in the period in which the change is made and in subsequent periods.

Financial effects from changes in estimates are recognised in SCI (Statement of Comprehensive Income) in year change occurs.

Example 21.2 H&P pages 713-715

Accounting for a construction contract: **estimated reliably**

The following data relate to the construction of a building by Acme Construction Company for Trustworthy Insurance Company:

Contract price	\$6 million
Construction period	January 2015 to December 2017
Billing	Acme will bill Trustworthy in November 2015, November 2016 and on completion of the job in 2017. The amounts of the interim payments will be determined by the supervising architect.

Details of the billings and costs incurred in each of the three years are summarised below:

	2015	2016	2017
Costs during the year	\$2 400 000	\$900 000	\$1 700 000
Total costs to year end	2 400 000	3 300 000	5 000 000
Estimated costs to complete	2 400 000	1 700 000	—
Estimated total costs	4 800 000	5 000 000	5 000 000
Estimated total profit	1 200 000	1 000 000	1 000 000
Billings during the year	1 000 000	1 500 000	3 500 000
Total billings to date	1 000 000	2 500 000	6 000 000
Cash collections during the year	800 000	1 400 000	3 800 000

Required

Prepare general journal entries to account for the construction contract from its inception to its completion in accordance with AASB 111. Assume the outcome of the construction contract can be **estimated reliably** and that the Acme Construction Company uses the **cost basis** of estimating the **stage-of-completion** of the contract.

Suggested solution:

The general journal entries for each year would be as follows:

2015

- 1 To record the construction costs

Construction-in-progress	Dr	\$2 400 000	
Materials, cash, etc.	Cr		\$2 400 000

The **construction-in-progress** account is an **asset** account (often classified as **inventory**) in which construction costs plus gross profit earned to date are accumulated.

2 To record progress billings

Accounts receivable	Dr	\$1 000 000	
Billings on construction-in-progress	Cr		\$1 000 000

The **billings on construction-in-progress** account is not a revenue account but a **contra-asset account**, usually shown as a deduction from the construction-in-progress account in the statement of financial position.

3 To record the receipt of cash

Cash at bank	Dr	\$800 000	
Accounts receivable	Cr		\$800 000

4 To record the revenues and expenses

At the end of the year, **costs** of \$2.4 million have been incurred out of a total cost of construction estimated to be \$4.8 million. This means that, at the end of 2015, **50%** ($\$2\,400\,000 \div \$4\,800\,000$) of the estimated total costs has been incurred. The **profit** recognised for 2015 is **50%** of the estimated total profit of **\$1.2 million** ($\$6\,000\,000$ contract price – $\$4\,800\,000$ estimated total costs). Profit for 2015 is, therefore, **\$600 000**. (cost=>profit=>revenue)

Revenue for 2015 is calculated either by:

- (i) adding the profit recognised for the period to the costs incurred during the period (i.e. $\$2\,400\,000$ costs incurred during 2015 + $\$600\,000$ profit), or
- (ii) by multiplying the total estimated revenue by the percentage of completion ($\$6\,000\,000$ contract price x 50%).

The **revenues and expenses for 2015** are recorded as follows:

Construction expenses	Dr	\$2 400 000	
Construction-in-progress	Dr	600 000	
Construction revenues	Cr		\$3 000 000

The net effect of recognising revenues of \$3 million and expenses of \$2.4 million is that a profit of \$600 000 is reported. **The profit** for the period is added to **construction-in-progress**, which means that **the asset includes accumulated costs plus accumulated profits**.

The **statement of financial position** at the end of **2015** would show the following among current assets:

Accounts receivable	\$200 000	
Construction-in-progress	\$3 000 000	
less Billings on construction-in-progress	<u>1 000 000</u>	\$2 000 000

2016

1 To record the construction costs

Construction-in-progress	Dr	\$900 000	
Materials, cash, etc.	Cr		\$900 000

2 To record progress billings

Accounts receivable	Dr	\$1 500 000	
Billings on construction-in-progress	Cr		\$1 500 000

3 To record the receipt of cash

Cash at bank	Dr	\$1 400 000	
Accounts receivable	Cr		\$1 400 000

4 To record the revenues and expenses

At the end of 2016 the estimated **stage-of-completion** is $\$3\,300\,000 \div \$5\,000\,000$, or **66%**. During the year, estimated total costs have increased from \$4.8 million to \$5 million, which has reduced total expected profit on the construction contract from \$1.2 million to \$1 million. **Paragraph 38 of AASB 111** requires that this change in estimates be accounted for in accordance with **AASB 108**. Thus, the effect of the increase in estimated costs is to be recognised in Acme's statement of comprehensive income starting in 2016. Using the stage-of-completion method, the

profit for 2016 is, therefore, 66% of \$1 million less the profit recognised in 2015, or $(\$1\,000\,000 \times 0.66) - \$600\,000 = \$60\,000$.

Revenues for the period of \$960 000 would be calculated as either

- (i) $\$900\,000$ (expenses) + $\$60\,000$ (profit) = $\$960\,000$; or
- (ii) 66% of \$6 million (contract price) less the revenue recognised in 2015. Thus: $(\$6\,000\,000 \times 0.66) - \$3\,000\,000 = \$960\,000$.

The revenues and expenses for 2016 would be recorded as follows:

Construction expenses	Dr	\$900 000	
Construction-in-progress	Dr	60 000	
Construction revenues	Cr		\$960 000

The statement of financial position at the end of the year 2016 would show the following among the current assets:

Accounts receivable		\$300 000
Construction-in-progress	\$3 960 000	
less Billings on construction-in-progress	<u>2 500 000</u>	1 460 000

2017

1 To record the construction costs

Construction-in-progress	Dr	\$1 700 000	
Materials, cash, etc.	Cr		\$1 700 000

2 To record progress billings

Accounts receivable	Dr	\$3 500 000	
Billings on construction-in-progress	Cr		\$3 500 000

3 To record the receipt of cash

Cash at bank	Dr	\$3 800 000	
Accounts receivable	Cr		\$3 800 000

4 To record the revenues and expenses

At the end of 2017 the contract is completed and the remaining profit of \$340 000 can be recognised – that is, \$1 million total profit – \$600 000 profit recognised in 2015 – \$60 000 profit recognised in 2016.

The revenues for the period would be calculated as either:

- (i) $\$1\,700\,000$ (expenses) + $\$340\,000$ (profit) = $\$2\,040\,000$; or
- (ii) $\$6\,000\,000$ (total revenue) – $\$3\,960\,000$ (revenues already recognised in 2015 and 2016) = $\$2\,040\,000$.

The general journal entry would be as follows:

Construction expenses	Dr	\$1 700 000	
Construction-in-progress	Dr	340 000	
Construction revenues	Cr		\$2 040 000

The balances in construction-in-progress and billings on construction-in-progress are both \$6 million; these accounts can be closed off against each other as follows:

Billings on construction-in-progress	Dr	\$6 000 000	
Construction-in-progress	Cr		\$6 000 000

The profit recognised on the contract in each of the three years, as shown by the stage-of-completion method, is as follows:

2015	\$600 000
2016	60 000
2017	<u>340 000</u>
Total	<u>\$1 000 000</u>

Example 21.2 continued H&P pages 717-719

Accounting for a construction contract: **cannot be estimated reliably**

The outcome of the construction contract cannot be estimated reliably until the contract has been completed. Assume there are indications, however, that the **contract costs will be recoverable**.

Paragraph 32 of AASB 111 requires that if the conditions specified in paragraphs 23 and 24 are **not satisfied** – that is, the contract outcome cannot be reliably estimated – revenue is to be recognised **only** to the extent that it is probable that contract costs incurred will be recoverable. Also, the contract costs must be recognised as an **expense** in the period in which they are incurred. Thus, because the contract outcome cannot be determined until the end of the contract in 2017, **profit** will be **recognised** only when the contract is **completed** and **ownership** passes to the buyer. The costs of construction and the progress billings are accumulated until the job is either completed or substantially completed.

Suggested solution:

The general journal entries for each of the three years would be as follows:

2015

1 To record the construction costs

Construction-in-progress	Dr	\$2 400 000	
Materials, cash, etc.	Cr		\$2 400 000

2 To record progress billings

Accounts receivable	Dr	\$1 000 000	
Billings on construction-in-progress	Cr		\$1 000 000

3 To record the receipt of cash

Cash at bank	Dr	\$800 000	
Accounts receivable	Cr		\$800 000

4 To record the revenues and expenses

Since the contract outcome cannot be estimated reliably, revenue can be recognised only to the extent of contract costs for which **recovery is probable** (AASB 111 para. 32). Further, contract costs must be recognised as an **expense** in the period in which they are incurred (AASB 111 para. 32). In the case of Acme Construction Company the costs of \$2.4 million incurred during 2015 would be recognised as an expense. Since the costs are expected to be recovered, construction revenue equal to the costs would also be recognised. The revenue and expense items will cancel each other out to produce a nil profit recognised for the construction project in 2015 – that is, \$2.400 000 construction revenues – \$2 400 000 construction expenses = \$0 construction profit.

In summary, the **revenues and expenses for 2015** would be recorded as follows:

Construction expenses	Dr	\$2 400 000	
Construction revenues	Cr		\$2 400 000

At the end of 2015, Acme's **statement of financial position** would include the following among current assets:

Accounts receivable		\$200 000
Construction-in-progress	\$2 400 000	
less Billings on construction-in-progress	<u>1 000 000</u>	<u>\$1 400 000</u>

2016

1 To record the construction costs

Construction-in-progress	Dr	\$900 000	
Materials, cash, etc.	Cr		\$900 000
2 To record progress billings			
Accounts receivable	Dr	\$1 500 000	
Billings on construction-in-progress	Cr		\$1 500 000
3 To record the receipt of cash			
Cash at bank	Dr	\$1 400 000	
Accounts receivable	Cr		\$1 400 000

4 To record the revenues and expenses

In the case of Acme Construction Company, the costs of \$900 000 incurred during 2016 would be recognised as an expense. Since the costs are expected to be recovered, construction revenue equal to the costs would also be recognised. The revenue and expense items will cancel each other out to produce a nil profit recognised for the construction project in 2016 – that is, \$900 000 construction revenues – \$900 000 construction expenses = \$0 construction profit.

The revenues and expenses for 2016 would be recorded as follows:

Construction expenses	Dr	\$900 000	
Construction revenues	Cr		\$900 000

At the end of 2016, Acme's statement of financial position would show the following among current assets:

Accounts receivable		\$300 000
Construction-in-progress	\$3 300 000	
/less Billings on construction-in-progress	<u>2 500 000</u>	\$800 000

2017

1 To record the construction costs

Construction-in-progress	Dr	\$1 700 000	
Materials, cash, etc.	Cr		\$1 700 000

2 To record progress billings

Accounts receivable	Dr	\$3 500 000	
Billings on construction-in-progress	Cr		\$3 500 000

3 To record the receipt of cash

Cash at bank	Dr	\$3 800 000	
Accounts receivable	Cr		\$3 800 000

4 To record the revenues and expenses

As the job is now complete and the contract outcome is known, the profit on the contract can be recorded. The total profit for the contract of \$1 million is recognised as an increase in construction-in-progress, the construction costs for the year of \$1.7 million are recognised as an expense, and revenue for the year is calculated by adding the profit recognised for the year to the costs incurred (\$1 000 000 + \$1 700 000):

Construction expenses	Dr	\$1 700 000	
Construction-in-progress	Dr	\$1 000 000	
Construction revenues	Cr		\$2 700 000

The net effect of recognising revenue of \$2.7 million and expenses of \$1.7 million is that the total contract profit of \$1 million is reported.

The balances in construction-in-progress and billings on construction-in-progress are both \$6 million; these accounts can be closed off against each other as follows:

Billings on construction-in-progress	Dr	\$6 000 000	
Construction-in-progress	Cr		\$6 000 000

The **profit** recognised on the contract in each of the three years is as follows:

2015	\$0
2016	\$0
2017	<u>\$1 000 000</u>
Total	<u>\$1 000 000</u>

3. Apply the treatment of expected losses on construction contracts (H&P LO 21.7)

AASB 111 para 36 requires that, if it is **probable** that **total contract costs** will **exceed total contract revenue** arising from a construction contract:

-The **expected loss**, to the extent that it has not already been recognised, must be recognised as **an expense immediately**.

Example 21.3 H&P pages 720-721

Expected losses

Easy Construction Company contracted to build, over **two years**, a fishing boat for Mussel Company for **\$2.5 million**. At the date of signing the contract, Easy estimated that the construction costs would be **\$2 million**. The outcome of the contract can be estimated reliably.

By the end of the first year the cost estimates had been revised to **\$3 million**, indicating a **probable loss of \$500 000** on the contract. Details of the costs and billings for the two years are shown below:

	End of year 1	End of year 2
Costs incurred to date	\$1 000 000	\$3 000 000
Estimated costs to complete	2 000 000	—
Estimated total costs	3 000 000	3 000 000
Billings to date	1 125 000	2 500 000
Cash receipts to date	1 125 000	2 500 000

Suggested solution:

The entire **expected loss of \$500 000** is recorded at the end of the period when it **first becomes probable**. The general journal entries for each of the three years would be as follows:

2017

1 To record the construction costs

Construction-in-progress	Dr	\$1 000 000	
Materials, cash, etc.	Cr		\$1 000 000

2 To record progress billings

Accounts receivable	Dr	\$1 125 000	
Billings on construction-in-progress	Cr		\$1 125 000

3 To record the receipt of cash

Cash at bank	Dr	\$1 125 000	
Accounts receivable	Cr		\$1 125 000

4 To record the revenues and expenses

At the end of year 1, costs of \$1 million have been incurred out of a total cost of construction estimated to be \$3 million. This means that 33% ($\$1\,000\,000 \div \$3\,000\,000$) of the estimated total costs has been incurred. The revenue recognised for year 1 is 33% of the estimated total revenue ($\$2\,500\,000 * 33\%$) = \$825 000. There is an expected loss of \$500 000 (\$500 000 revenues less \$1 million expenses) and the whole of the expected loss must be recognised immediately. Therefore, the construction-in-progress asset account is reduced by the anticipated loss (i.e. the asset is written down to its recoverable amount) and the contract expense for the year is \$1.325 million (\$825 000 + \$500 000):

Construction expenses	Dr	\$1 325 000	
Construction-in-progress	Cr		\$500 000
Construction revenues	Cr		\$825 000

The statement of financial position at the end of year 1 would show the following as a current liability:

Billings on construction-in-progress	\$1 125 000
less Construction-in-progress	<u>500 000</u>
	<u>\$625 000</u>

Year 2

1 To record the construction costs

Construction-in-progress	Dr	\$2 000 000	
Materials, cash, etc.	Cr		\$2 000 000

2 To record progress billings

Accounts receivable	Dr	\$1 375 000	
Billings on construction-in-progress	Cr		\$1 375 000

3 To record the receipt of cash

Cash at bank	Dr	\$1 375 000	
Accounts receivable	Cr		\$1 375 000

4 To record the revenues and expenses

Construction expenses	Dr	\$1 675 000	
Construction revenues	Cr		\$1 675 000
$(2\,500\,000 - 825\,000 = 1\,675\,000)$			

5 To close the asset and contra-asset accounts

Billings on construction-in-progress	Dr	\$2 500 000	
Construction-in-progress	Cr		\$2 500 000

4. Understand the completed-contract method of accounting for construction contracts (H&P LO 21.8)

Definition:

Completed-contract method:

The method employed in accounting for construction contracts where profit is recognised only when the contract is completed and ownership passes to the buyer.

Measurement:

Costs are accumulated in the construction-in-progress account and revenue is accumulated in the billings on construction-in-progress account until the job is completed:

-At that stage, the **profit** on the contract is recognised (the **same as** for Example 21.2 where the stage-of-completion method is applied in a situation where the outcome of the construction contract **cannot be estimated** until the contract has been completed).

Major **advantages**:

- It is **objective** because revenues and expenses are not recorded until they are certain
- It is **conservative** because it **delays the recognition of profit** until it is certain

Major **disadvantage**:

- It **fails to allocate profit** on a contract **to the periods** during which the profit is earned

Summary: Some issues to consider

Construction contracts:

- Think of “**Construction in Progress**” as the construction company’s **inventory**.
- Construction contracts extend over **multiple financial years**, so recognition of construction revenues, expenses and profits/losses is a difficult issue.
- Is percentage of completion method consistent with **framework** or consistent with **matching** (or both)?
- Consider **consistency** – of recognition for profits and losses

Future direction

›IASB recently released ED/2011/6 **Revenue from Contracts with Customers**

›**Core principle** will change the revenue recognition criteria requiring a seller to:

- identify** the contract with the **customer**
- identify** the **separate performance obligations** under the contract
- determine** the **transaction price**
- allocate** the **transaction price** across the **separate performance obligations**
- identify** when the **performance obligations** have been **achieved**

›If released as an international accounting standard, it will eventually have significant effects for construction contracts due to their **long operating cycle** & **unique performance obligations**

WEEK 9

Accounting for Income Taxes

1. Identify the major differences between tax and accounting treatments (H&P LO 9.1)

›**Taxable income** usually differs from **accounting profit before tax**.

- Assessable income** is similar (but not identical) to accounting income
 - Allowable deductions** are similar (but not identical) to accounting expenses
- Assessable income - Allowable deductions = Taxable income**

›Many **expenses payable**:

- Accounting treatment: recognised as an expense **when accrued**

- Tax treatment: recognised as a tax deduction **when paid**
- › **Revenue received in advance:**
 - Accounting treatment: recognised as revenue **when earned**
 - Tax treatment: typically assessed for tax **when received**
- › **Entertainment expenses:**
 - Accounting treatment: recognised as an expense
 - Tax treatment: **not a tax deduction** in current or future periods
- › **Doubtful debts:**
 - Accounting treatment: recognised as an **expense** when identified as **impaired**
 - Tax treatment: treated as a tax deduction when the receivables are **written off as bad**
- › **Property, plant and equipment:**
 - Accounting treatment: depreciation is allocated over the estimated useful life of the asset
 - Tax treatment: depreciation recognised as a tax deduction in **the schedule of depreciation rates issued by the ATO**

Table 9.1 H&P page 233:

Some of the differences between accounting and tax treatments

Item	Generally accepted accounting treatment	Tax treatment
Many expenses payable (for example, long-service leave and warranty costs)	<ul style="list-style-type: none"> recognised as an expense when accrued any unpaid amount is recognised as a liability (provision) 	<ul style="list-style-type: none"> recognised as a tax deduction when paid no liability recognised
Many expenses paid in advance (for example, prepaid rent)	<ul style="list-style-type: none"> recognised as an expense when the economic benefits are consumed any prepaid amount is recognised as an asset 	<ul style="list-style-type: none"> typically recognised as a tax deduction when paid no asset recognised
Revenue received in advance (for example, rental revenue)	<ul style="list-style-type: none"> recognised as revenue when earned any prepaid amount is recognised as a liability 	<ul style="list-style-type: none"> typically assessed for tax when received no liability recognised
Entertainment expenses	<ul style="list-style-type: none"> recognised as an expense 	<ul style="list-style-type: none"> not a tax deduction in current or future periods
Doubtful debts	<ul style="list-style-type: none"> recognised as an expense when identified as doubtful balance of allowance for doubtful debts is recognised and deducted from accounts receivable 	<ul style="list-style-type: none"> treated as a tax deduction when the receivables are written off as bad no allowance for doubtful debts recognised
Research and development	<ul style="list-style-type: none"> research expenditure written off when incurred development expenditure may be recognised as an expense immediately or, if six conditions are satisfied, capitalised any development asset recognised is to be amortised over its useful life 	<ul style="list-style-type: none"> not a deduction in current or future period no asset recognised
Property, plant and equipment	<ul style="list-style-type: none"> depreciation is allocated over the estimated economic life of the asset in accordance with the expected consumption of economic benefits the cost of property, plant and equipment is initially recognised as an asset which is allocated as depreciation 	<ul style="list-style-type: none"> depreciation recognised as a tax deduction in accordance with the schedule of depreciation rates issued by the Australian Taxation Office the cost of property, plant and equipment is initially recognised

	over its economic life	as an asset and allocated as depreciation in accordance with the depreciation schedule
Goodwill	<ul style="list-style-type: none"> recognised as an asset and subject to annual impairment testing 	<ul style="list-style-type: none"> not a tax deduction in current or future period

2. Identify and explain alternative ways of accounting for company income tax (H&P LO 9.2)

Income tax **payable** is:

- The amount that must be **paid to the government**
- Calculated by applying the company **income tax rate** to **taxable income**

Income tax **expense** is:

- The amount of income tax shown as **an expense** on the statement of comprehensive income
- Not** necessarily the **same as** income tax **payable**

There are **2 methods** of accounting for income tax:

- **Tax-payable method:**

In which both tax expense and tax payable are measured by reference to taxable income

- **Tax allocation / the statement of financial position approach:**

Using a statement of financial position approach

Tax payable method:

› **Assumes tax expense** in a period is the **tax payable** to the government

Example 9.1 H&P page 235:

Captain Ltd uses a single depreciable asset that cost \$100 000 and has an estimated useful life of four years and a zero residual value. For accounting purposes, the company depreciates the asset on a straight-line basis, recording an annual depreciation expense of \$25 000. For taxation purposes, the company claims a depreciation allowance calculated on a four-year useful life at a depreciation rate of 40%, 30%, 20% and 10% of cost. In all other respects, the calculation of accounting profit and taxable income are the same. Captain pays tax at the rate of 30% of taxable income. Details of accounting profit and taxable income for the four years of the asset's life are as follows:

	Year 1	Year 2	Year 3	Year 4
Accounting profit				
Profit before depreciation	\$100 000	\$100 000	\$100 000	\$100 000
Depreciation expense	<u>25 000</u>	<u>25 000</u>	<u>25 000</u>	<u>25 000</u>
Profit before tax	<u>\$75 000</u>	<u>\$75 000</u>	<u>\$75 000</u>	<u>\$75 000</u>
Taxable income				
Taxable income before depreciation	\$100 000	\$100 000	\$100 000	\$100 000
Depreciation allowance	<u>40 000</u>	<u>30 000</u>	<u>20 000</u>	<u>10 000</u>
Taxable income	<u>\$60 000</u>	<u>\$70 000</u>	<u>\$80 000</u>	<u>\$90 000</u>
Income tax payable (30%)	\$18 000	\$21 000	\$24 000	\$27 000

Year 1 journal entry:

Income tax expense	Dr	\$18 000	
Income tax payable	Cr		\$18 000

The profit after tax in each of the four years of the asset's useful life would be as follows:

	Year 1	Year 2	Year 3	Year 4
Profit before tax	\$75 000	\$75 000	\$75 000	\$75 000
Income tax expense	<u>18 000</u>	<u>21 000</u>	<u>24 000</u>	<u>27 000</u>
Profit after tax	<u>\$57 000</u>	<u>\$54 000</u>	<u>\$51 000</u>	<u>\$48 000</u>

Advantages of tax-payable method:

- **Simple** to apply
- **Reasonable to assume** that tax expense for a period is the tax that **must be paid for the period**

3. Understand the perceived problems with the tax-payable method (H&P LO 9.3)

Criticisms:

- It was believed it resulted in **misleading financial statements**
- Changes in profit after tax may **not be caused by changes in performance** but by **vagaries of the income tax legislation**

Counter argument:

- Tax payable method **reflects reality**

Eventually, it was concluded that the **tax-payable method** was **misleading** and a method that **smoothed after-tax profit** was sought. The result is the **tax-allocation method**.

4. Apply the statement of financial position approach to tax allocation (H&P LO 9.4)

Tax base of an asset or liability:

- The amount at which it would be shown in a statement of financial position derived from **accounts prepared for tax purposes**

› Captain Ltd had a depreciable asset costing \$100,000 with a zero residual value:

For accounting purposes: The asset was depreciated over four years on a straight-line basis

For taxation purposes: The asset was depreciated over four years on a reducing-balance basis

Carry Amount of the asset in the accounting records:

Cost	100,000
Less accumulated depreciation	<u>25,000</u>
	<u>75,000</u>

The **Tax Base** of the asset:

Cost	100,000
Less accumulated depreciation	<u>40,000</u>
	<u>60,000</u>

The CA of asset > TB by \$15,000

The **depreciation expense** recognised for accounting purposes is \$15,000 less than the amount claimed for tax.

Different depreciation charges for accounting and tax purposes result in **temporary differences** between the carrying amount and tax base of the asset

The use of reducing-balance depreciation for tax purposes has **deferred the payment of some tax** until later periods

Income tax expense has **two components**:

- Amount of income tax payable (**current income tax expense**); plus
- The amount necessary to restate the deferred tax liability to its correct amount (**deferred income tax expense**)

General journal entries:

Current income tax expense	Dr	\$18,000
Income tax payable	Cr	\$18,000
Deferred income tax expense	Dr	\$4,500
Deferred tax liability	Cr	\$4,500

OR

Income tax expense	Dr	\$22,500
Income tax payable	Cr	\$18,000
Deferred tax liability	Cr	\$4,500

Deferred tax liabilities (DTLs) and **deferred tax assets** (DTAs):

- Arise because of **temporary differences** between the carrying amount and tax basis of an asset
- They are **removed** from the financial statements on **reversal of the temporary differences**

Example 9.2 H&P pages 240-242:

Before considering the issue below, note that the accounting profit and taxable income of Vanguard Ltd for years 1 and 2 was \$200 000. Vanguard Ltd recognised a warranty expense of \$50 000 for financial reporting purposes in year 1, but did not spend the cash on rectifying the faults until year 2. In year 2, no warranty expense was recognised and at the end of year 2 there was a zero balance in the provision for warranties account (liability). The information is summarised as follows:

	Year 1	Year 2
Accounting profit		
Profit before warranty expense and taxation	\$200 000	\$200 000
Warranty expense	50 000	—
Profit before tax	150 000	200 000
Taxable income		
Taxable income before warranty costs	\$200 000	\$200 000
Deduction for warranty costs	—	50 000
Profit before tax	200 000	150 000

In this example, Vanguard Ltd recognises a warranty expense of \$50 000 in the first year by passing the following general journal entry:

Warranty expense	Dr	\$50 000
Provision for warranties	Cr	\$50 000

The **warranty expense** is **not an allowable deduction** for tax purposes. It can be claimed only when the costs of rectifying the faults in a product are **incurred**. The costs of rectification are incurred in the second year. In this case, we are dealing with liabilities rather than assets. We first determine the current income tax expense in the same manner as in the **tax-payable method**. For the first year, income tax payable is $\$200\,000 \times 0.30 = \$60\,000$, and thus current income tax expense is \$60 000. We then determine the **deferred tax expense** by comparing the carrying amount of the liability with its tax base. The **tax base** of a liability is the amount at which it would be shown in a statement of financial position

derived from accounts **prepared for tax purposes**. In this case, the tax base of the provision for warranties is zero. There is no liability because the warranty expense has not been recognised for tax purposes. From a tax point of view, there is no obligation. Therefore, we have:

Carrying amount of provision for warranties	\$50 000
Tax base of provision for warranties	nil
Excess of carrying amount over tax base	<u>\$50 000</u>

This difference occurs because the warranty expense has been recognised for accounting purposes but not for tax purposes. This is a **temporary difference** because a deduction will be allowed for tax purposes when the costs of rectification are incurred.

When we considered **deferred tax liabilities** we noted that there were **two implicit assumptions**. The first assumption was that the **accounting entries were 'correct'**. Had the accounting recognition criteria been used for tax purposes in the first year, income tax payable would have been \$15 000 less. Because the accounting recognition criteria were not used for tax purposes, the company has deferred this tax reduction until a later period. There is a **deferred tax benefit**. The second assumption is that the entity is a **going concern** and that **future taxable income will be earned**, against which the deferred tax asset can be realised. Without this assumption there are no future economic benefits and hence no asset under Framework 2010. When the deferred tax benefits are recognised as an asset, they are described as a **'deferred tax asset'**.

Where there is a **deferred tax asset** that is increasing, the **income tax expense** is the **current income tax expense less the addition to the deferred tax asset** necessary to restate it to the correct amount – that is, the deferred income tax expense is \$15 000 (**credit**). In this example, the income tax expense is as follows:

Current income tax expense	\$60 000
Deferred income tax expense	<u>(15 000)</u>
Income tax expense	<u>\$45 000</u>

The general journal entries would be as follows:

Current income tax expense	Dr	\$60 000	
Income tax payable	Cr		\$60 000
Deferred tax asset	Dr	15 000	
Deferred income tax expense	Cr		15 000

In the second year, the current income tax expense is **equal** to the income tax payable and is calculated by multiplying taxable income by the tax rate ($\$150\,000 \times 0.30$) = \$45 000. In addition, the accounting liability is settled and its carrying amount is now zero. The **tax base** of the liability is also zero. There is, therefore, no difference between the carrying amount and the tax base of the liability at the end of the year.

	Carrying amount	Tax base
Provision for warranty	nil	nil

In both cases, they would be zero. The 'correct' balance in the **deferred tax asset** account is zero. It must, therefore, be reduced by \$15 000, and thus **deferred tax expense** is \$15 000 (**debit**). Income tax expense would be:

Current income tax expense	\$45 000
Deferred income tax expense	15 000
Income tax expense	<u>\$60 000</u>

The general journal entries would be as follows:

Current income tax expense	Dr	\$45 000	
Income tax payable	Cr		\$45 000
Deferred income tax expense	Dr	15 000	
Deferred tax asset	Cr		15 000

Permanent differences:

- Assets or liabilities that are recognised in either an **accounting** statement of financial position or a **tax** statement of financial position but are never recognised in the other

Examples:

- Tax exempt income with a zero tax base (lottery winnings)
- Expenses payable with a zero tax base (entertainment expenses)
- Allowable tax deductions that are not recognised for accounting purposes
- Assessable income receivable that is not recognised for accounting purposes

They do not result in DTAs or DTLs

5. Understand and apply the requirements of AASB 112(FP) (H&P LO 9.5)

› AASB 112 (FP) para 7: The **tax base** of an **asset** is

Either:

- The amount that will be **deductible for tax purposes** against any **taxable economic benefits** that will flow to an entity when it recovers the **carrying amount** of the asset; or
- The carrying amount where the **economic benefits** will **not be taxable**.

› Example:

- A non-current asset cost \$100,000 and accumulated depreciation for accounting purposes is \$40,000: The carrying amount = \$60,000
- An amount of \$55,000 has been claimed as a depreciation deduction for tax purposes:
- **The tax base = Carrying amount + deductible amount – assessable amount**

$$= \$60\,000 + \$45\,000 - \$60\,000$$

$$= \$45,000$$

Deductible amount: the amount that can **be deducted** from assessable income in arriving at taxable income **in the future**.

Assessable amount: the **income** expected to **be generated** from recovering the carrying amount of the asset.

- **Temporary difference:** Carrying amount - Tax base = \$60,000 - \$45,000 = 15,000

If the tax rate is 30%: \$15,000 X 30% = \$4,500 **DTL**

The general journal entry (assuming a \$3,000 carried-forward DTL balance):

Deferred income tax expense	Dr	\$1,500	
Deferred tax liability	Cr		\$1,500

If the carried-forward balance is \$5500, the general journal entry would be:

Deferred tax liability	Dr	\$1,000	
Deferred income tax expense	Cr		\$1,000

E.g. 1. If there is a balance in **accounts receivable** of **\$14 000** and sales revenue is recognised at the point of sale for both accounting and tax purposes.

$$\begin{aligned}\text{Tax base} &= \text{Carrying amount} + \text{deductible amount} - \text{assessable amount} \\ &= \$14\,000 + \text{nil} - \text{nil} \\ &= \$14\,000\end{aligned}$$

E.g. 2. For accounting purposes, **\$2000** of the accounts receivable is recognised as **an allowance for doubtful debts**, reducing the **carrying amount** of the asset to **\$12 000**. The doubtful debt is not deductible for tax purposes until it is written off as 'bad'.

$$\begin{aligned}\text{Tax base} &= \text{Carrying amount} + \text{deductible amount} - \text{assessable amount} \\ &= \$12\,000 + 2\,000 - \text{nil} \\ &= \$14\,000\end{aligned}$$

$$\text{Deferred tax asset: } \$2000 * 0.30 = \$600.$$

If the **carried-forward balance of the deferred tax asset** relating to this asset is **\$200**, the amount of the general journal entry for the deferred tax asset is the difference between \$600 and the carried-forward balance of the deferred tax asset relating to this asset.

Deferred tax asset	Dr	\$400	
Deferred income tax expense	Cr		\$400

E.g. 3. **Prepaid rent of \$1000** has been claimed as a tax deduction in the period in which it was paid. No further deductions are available. Recovery of the prepayment through a **refund** would be assessable.

$$\begin{aligned}\text{Tax base} &= \text{Carrying amount} + \text{deductible amount} - \text{assessable amount} \\ &= \$1\,000 + \text{nil} - \$1\,000 \\ &= \text{nil}\end{aligned}$$

$$\text{The temporary difference} = \$1\,000 - \text{nil} = \$1\,000$$

$$\text{Deferred tax liability: } \$1000 * 0.30 = \$300$$

If the carried-forward balance of the deferred tax liability is \$100:

Deferred income tax expense	Dr	\$200	
Deferred tax liability	Cr		\$200

If the prepaid rent had **not been claimed as a deduction**. The carrying amount would remain at \$1000, but the deductible amount would become \$1000, as this amount would be claimed in future periods.

$$\begin{aligned}\text{Tax base} &= \text{Carrying amount} + \text{deductible amount} - \text{assessable amount} \\ &= \$1\,000 + \$1\,000 - \$1\,000 \\ &= \$1\,000\end{aligned}$$

The carrying amount of the asset would then be equal to its tax base and there is no temporary difference.

› AASB 112(FP) para 8:

Tax base of a liability is the **carrying amount less** any amount that will be **deductible** for tax purposes in respect of that liability

For **revenue received in advance**

= Carrying amount – Any amount of revenue that **will not be taxable in future periods**

› Example:

- Provision for long-service leave of \$100,000

Carrying Amount = \$100,000

The tax base = Carrying amount - deductible amount + assessable amount

= \$100,000 - \$100,000 + nil

= nil

Temporary difference = \$100,000

DTA = \$100,000 X 30% = \$30,000

E.g. 1. An entity has a **loan payable of \$1000**. There would be no tax implications. The loan will not give rise to future deductions or assessable income.

The tax base = Carrying amount - deductible amount + assessable amount

= \$1 000 – nil + nil

= \$1 000

There is no difference between the carrying amount and the tax base of the liability.

E.g. 2. An entity has a **provision for long-service leave of \$100 000**. This amount would have been recognised as an expense for accounting purposes when the provision was created, but it will be deductible for tax purposes only when the leave is taken and paid for. There are no future assessable amounts.

The tax base = Carrying amount - deductible amount + assessable amount

= \$100 000 – \$100 000 + nil

= nil

The temporary difference: \$100 000

Deferred tax asset is: \$100 000 * 0.30 = \$30 000.

If the carried-forward balance of the deferred tax asset relating to this asset is \$23 000:

Deferred tax asset	Dr	\$7 000
Deferred income tax expense	Cr	\$7 000

If the carried-forward balance is \$35 500:

Deferred income tax expense	Dr	\$5 500
Deferred tax asset	Cr	\$5 500

E.g. 3. An entity has a foreign currency **loan payable of \$10 000** that has been written down to \$9900 to reflect a favourable change in exchange rates. When the loan is settled with a payment of \$9900, the **foreign exchange gain of \$100** will be taxable income.

The tax base = Carrying amount - deductible amount + assessable amount

$$= \$9\,900 - \text{nil} + \$100$$

$$= \$10\,000$$

The temporary difference: \$100

Deferred tax liability: $\$100 \times 30\% = \30

E.g. 4. **Rent of \$1000 received in advance** that is assessable for tax purposes when it is received. The carrying amount of the liability is \$1000 but, as the revenue has already been taxed, it will not be assessable in future periods.

Tax base = Carrying amount – Amount of revenue that will not be taxed in future periods

$$= \$1\,000 - \$1\,000$$

$$= \text{nil}$$

A deductible temporary difference: \$1000

Deferred tax asset: $\$1000 \times 0.30 = \300

If the carried-forward balance of the deferred tax asset relating to this liability is \$120:

Deferred tax asset	Dr	\$180	
Deferred income tax expense	Cr		\$180

E.g. 5. **Revenue received in advance** is taxed in the year in which the service is provided. In this situation, the carrying amount would be \$1000, none of which would be taxed as revenue.

Tax base = Carrying amount – Amount of revenue that will not be taxed in future periods

$$= \$1\,000 - \text{nil}$$

$$= \$1\,000 \text{ (no temporary difference)}$$

Conclusion: AASB 112(FP) requirements

Asset	Gives rise to:	When multiplied by tax rate will result in:
Carrying amount > tax base	Taxable temporary difference	Deferred tax liability
Carrying amount < tax base	Deductible temporary difference	Deferred tax asset
Liability		
Carrying amount > tax base	Deductible temporary difference	Deferred tax asset
Carrying amount < tax base	Taxable temporary difference	Deferred tax liability

Example 9.4 H&P pages 250-254:

The following information is provided from the accounting records of Lewis Ltd for the financial years ending 30 June 2012 and 30 June 2013. The information for 2012 represents the first year of trading as a company following its incorporation on 1 July 2011.

	2012	2013
Profit before tax	\$260 000	\$310 000
Warranty expense	20 000	25 000
Warranty claim payments made	–	30 000
Provision for warranty at 30 June	20 000	15 000
Long-service leave expense	25 000	15 000
Long-service leave paid	8 000	5 000
Provision for long-service leave at 30 June	17 000	27 000
Entertainment expenses	2 000	3 000
Revenue received in advance	1 000	–

The tax treatment for each of the items is as follows:

- Payments in satisfaction of a claim under a warranty are tax deductible.

- Long-service leave expense is an allowable deduction in the period in which the leave is taken and the cash is paid.
- Plant costing \$120 000 was acquired on 1 July 2011. For accounting purposes the plant is depreciated using straight-line depreciation at a rate of 20%. The allowable tax depreciation rate is 30% straight-line.
- Entertainment expenses are not tax deductible.
- Revenue received in advance is treated as assessable income in the period in which the cash is received.
- The tax rate is 30% and there are no opening balances in the deferred tax asset and deferred tax liability accounts and no other differences between the accounting and tax treatments.

Required: Show calculations and general journal entries for tax in the books of Lewis Ltd for each of 2012 and 2013.

Suggested solution

For the year ended in 30 June 2012

Step 1: Calculate **taxable income** to determine income tax payable and current income tax expense for 2012. Taxable income is determined by adjusting profit before tax for differences between the accounting and tax treatment for income and expenses.

Calculation of taxable income		2012
Profit before tax		\$260 000
<i>Adjust profit for differences between accounting and tax treatments</i>		
+ warranty expense	\$20 000	
– warranty tax deduction	–	
+ long-service leave expense	25 000	
– long-service leave tax deduction	(8 000)	
+ depreciation expense (\$120 000 × 20%)	24 000	
– depreciation tax deduction (\$120 000 × 30%)	(36 000)	
+ non-deductible entertainment expenses	2 000	
+ revenue received in advance assessable in 2012	1 000	28 000
Taxable income		\$288 000

Step 2: Identify **temporary differences** resulting in deferred tax assets and deferred tax liabilities for 2012 to determine the changes in the deferred tax asset and deferred tax liability accounts using a **deferred tax worksheet**.

Lewis Ltd Deferred tax worksheet for reporting period ended 30 June 2012						
Extract from Statement of Financial Position	Carrying amount	Tax base	Taxable temporary difference (TTD)	Deductible temporary differences (DTD)	Deferred tax liability (DTL) ^a	Deferred tax asset (DTA) ^b
Assets						
Plant	120 000	120 000				
less Accumulated depreciation	(24 000)	(36 000)				
	96 000	84 000	12 000		3 600	
Liabilities						
Provision for warranty	20 000	0		20 000		6 000
Provision for long-service leave	17 000	0		17 000		5 100
Revenue received in advance	1 000	0		1 000		300
Closing balances as at 30/6/2012			12 000	38 000	3 600	11 400
DTA/DTL carried forward – 1/7/2011^c					0	0
Change in DTA/DTL					3 600	11 400

^a The amount of the DTL is calculated by multiplying the TTD by the relevant tax rate. For 2012: \$12 000 × 30% = \$3 600.

^b The amount of the DTA is calculated by multiplying the DTD by the relevant tax rate. For 2012: \$38 000 × 30% = \$11 400.

^c As there are no DTAs or DTLs balances carried forward, the total of the closing balance is the amount recorded in the general journal entry.

Step 3: Record the **general journal entries** for income tax payable and current income tax expense and changes in deferred tax asset, deferred tax liability and deferred tax expense accounts for 2012.

The amount of income tax payable and current income tax expense is equal to taxable income multiplied by the tax rate (tax-payable method). For 2012: $\$288\,000 \times 0.30 = \$86\,400$. The following general journal entry is passed:

Current income tax expense	Dr	\$86 400
Income tax payable	Cr	\$86 400

As there are no deferred tax asset or deferred tax liability balances carried forward, the total of the closing balance is the amount recorded in the general journal entry. Thus the general journal entry is:

Deferred tax asset	Dr	\$11 400
Deferred income tax expense	Cr	\$7 800
Deferred tax liability	Cr	\$3 600
(\$11 400 - \$3 600 = \$7 800)		

For the year ended in 30 June 2013

Step 1: Calculate **taxable income** to determine income tax payable and current income tax expense for 2013. Taxable income is determined by adjusting profit before tax for differences between the accounting and tax treatment for income and expenses.

Calculation of taxable income		2013
Profit before tax		\$310 000
Adjust profit for differences between accounting and tax treatments		
+ warranty expense	\$25 000	
– warranty tax deduction	(30 000)	
+ long-service leave expense	15 000	
– long-service leave tax deduction	(5 000)	
+ depreciation expense (\$120 000 × 20%)	24 000	
– depreciation tax deduction (\$120 000 × 30%)	(36 000)	
+ non-deductible entertainment expenses	3 000	(4 000)
Taxable income		\$306 000

Step 2: Identify **temporary differences** resulting in deferred tax assets and deferred tax liabilities for 2013 to determine the changes in the deferred tax asset and deferred tax liability accounts using a **deferred tax worksheet**.

Lewis Ltd Deferred tax worksheet for reporting period ended 30 June 2013						
Extract from Statement of Financial Position	Carrying amount	Tax base	TTD	DTD	DTL ^a	DTA ^b
Assets						
Plant	120 000	120 000				
less Accumulated depreciation	(48 000)	(72 000)				
	72 000	48 000	24 000		7 200	
Liabilities						
Provision for warranty	15 000	0		15 000		4 500
Provision for long-service leave	27 000	0		27 000		8 100
Closing balances as at 30/6/2013			24 000	42 000	7 200	12 600
DTA/DTL carried forward – 1/7/2012^c					3 600	11 400
Change in DTA/DTL^d					3 600	1 200

^a The amount of the DTL is calculated by multiplying the TTD by the relevant tax rate. For 2013: $24\,000 \times 30\% = \$7\,200$.

^b The amount of the DTA is calculated by multiplying the DTD by the relevant tax rate. For 2013: $42\,000 \times 30\% = \$12\,600$.

^c The balance of the DTA and DTL are taken from the deferred tax worksheet for 2012 on page 252.

^d The changes in DTA and DTL are the amounts recorded in the general journal for the deferred tax expense for 2013.

Step 3: Record the **general journal entries** for income tax payable and current income tax expense and changes in deferred tax asset, deferred tax liability and deferred tax expense accounts for 2013.

The amount of income tax payable and current income tax expense is equal to taxable income multiplied by the tax rate (tax-payable method). For 2012: $\$306\,000 \times 0.30 = \$91\,800$. The following general journal entry is passed:

Current income tax expense	Dr	\$91 800
Income tax payable	Cr	\$91 800

The amount of the DTA and DTL is the change in the account balance from 2012 to 2013. The DTA increases from an opening balance of \$11 400 to a closing balance of \$12 600; hence an increase of \$1200 is recorded. The DTL increases from an opening balance of \$3600 to a closing balance of \$7200; hence an increase of \$3600 is recorded. Thus the general journal entry is:

Deferred tax asset	Dr	\$1 200
Deferred income tax expense	Dr	\$2 400
Deferred tax liability	Cr	\$3 600
(\$3 600- \$1 200= \$2 400)		

The following information would be presented in the financial statements for the two years. Note that the income tax expense in the statement of comprehensive income is the sum of the current and deferred income tax expense.

Extract from the Statement of Comprehensive Income	2012	2013
Profit before tax	\$260 000	\$310 000
Income tax expense	<u>78 600</u>	<u>94 200</u>
Profit after tax	<u>\$181 400</u>	<u>\$215 800</u>
Extract from the Statement of Financial Position	2012	2013
Non-current asset		
Deferred tax asset	\$11 400	\$12 600
Current liabilities		
Income tax payable	86 400	91 800
Non-current liabilities		
Deferred tax liability	3 600	7 200

($86400-7800=78600$; $91800+2400=94200$)

Revalued assets

› **Revaluation** of property, plant and equipment gives rise to a **taxable temporary difference** (AASB 112(FP) para.61A)

Example:

-A depreciable asset was acquired for \$100,000 with a useful life of 10 years

-The asset was depreciated straight-line over the same useful life for accounting and tax purposes

-After 5 years the asset is revalued to \$75,000

Tax base after revaluation would be:

Carrying amount \$75,000

Tax Base \$50,000

In this case, **current tax** and **deferred tax** must be **charged or credited directly to equity** (AASB 112(FP) para.61A, note in particular 61A(a) and (b))

Example 9.5 H&P pages 257-258

On 1 July 2005, Ramsay Ltd acquired a depreciable asset at a cost of \$100 000 and uses the revaluation model to measure property, plant and equipment. The asset is depreciated for accounting purposes at 5% per annum and for taxation purposes at 10% per

annum. The company pays tax at 30% and intends to recover the asset's carrying amount through use. On 30 June 2011 (after six years) the position is as follows:

	Carrying amount	Tax base
Cost	\$100 000	\$100 000
less Accumulated depreciation	30 000	60 000
	<u>\$70 000</u>	<u>\$40 000</u>

As the carrying amount exceeds the tax base, there is a taxable temporary difference of \$30 000 and therefore a deferred tax liability of $\$30\,000 \times 0.30 = \$9\,000$. On the first day of the seventh year, 1 July 2011, the asset is revalued to its fair value of \$90 000. The general journal entry to record the revaluation would be:

Accumulated depreciation	Dr	\$30 000	
Asset	Cr		\$30 000
Asset	Dr	20 000	
Revaluation surplus	Cr		20 000

After the revaluation, the position is as follows:

	Carrying amount	Tax base
Cost (revalued amount)	\$90 000	\$100 000
less Accumulated depreciation	—	60 000
	<u>\$90 000</u>	<u>\$40 000</u>

There is now a taxable temporary difference of \$50 000 and the deferred tax liability should be $\$50\,000 \times 0.30 = \$15\,000$. It must be increased from \$9 000 to \$15 000, or by \$6 000. AASB 112 requires the following general journal entry:

Revaluation surplus	Dr	\$6 000	
Deferred tax liability	Cr		\$6 000

In accordance with paragraph 61A of AASB 112, the resultant deferred tax has been debited directly to equity. In effect, the revaluation surplus is now recorded net of tax effects: $\$20\,000 - \$6\,000 = \$14\,000$.

In subsequent years, for accounting purposes the depreciable amount of the asset is the revalued amount. In this example, the asset has a remaining useful life of 14 years and the annual depreciation charge would therefore be $\$90\,000 \div 14 = \$6\,429$. Note that, for tax purposes, the asset continues to be depreciated at the rate of 10% based on cost. At the end of the seventh year (one year after revaluation) on 30 June 2012, the position would be as follows:

	Carrying amount	Tax base
Cost (revalued amount)	\$90 000	\$100 000
less Accumulated depreciation	6 429	70 000
	<u>\$83 571</u>	<u>\$30 000</u>

There is now a taxable temporary difference of \$53 571 and the deferred tax liability associated with the asset should be $\$53\,571 \times 0.30 = \$16\,071$. As the deferred tax liability is currently \$15 000, it must be increased by \$1 071. If income tax payable was (say) \$20 000, Ramsay would pass the following general journal entries:

Current income tax expense	Dr	\$20 000	
Income tax payable	Cr		\$20 000
Deferred income tax expense	Dr	1 071	
Deferred tax liability	Cr		1 071

Note that all the increase in the deferred tax liability is debited to expense. It might be expected that part of the increase in the deferred tax liability related to the depreciation on the revaluation increment would be debited to the revaluation surplus account. AASB 112 does not directly address this question; however, appendix B in example 2 shows that the reversal of the taxable temporary difference arising from the revaluation through the use of the building is included as a reduction in deferred tax expense.

If the asset is sold at the end of the eighth year (30 June 2013) for \$85 000, accumulated depreciation is \$12 858 ($6\,429 \times 2$), the general journal entry would be as follows:

Cash at bank	Dr	\$85 000	
Accumulated depreciation	Dr	12 858	
Asset	Cr		\$90 000
Gain on sale	Cr		7 858

The **taxable temporary difference** would become zero and the **deferred tax liability** asset associated with the asset would have to be **reduced by \$16 071** ($15000 + 1071$). If income tax payable was \$25 000, the general journal entries would be as follows:

Current income tax expense	Dr	\$25 000	
Income tax payable	Cr		\$25 000
Deferred tax liability	Dr	16 071	
Deferred income tax expense	Cr		16 071

Again, the **reversal of the deferred tax liability** is taken through the **deferred tax expense** account, **not the revaluation surplus account**.

Disclosure

AASB 112(FP).79-.94 requires the disclosure of the major components of tax expense (income) including:

- **Current tax expense** (income)
- Any **adjustments** recognised in the period for current tax of prior profits
- Amount of **deferred tax expense** (income) relating to the **origination** and **reversal of temporary differences**
- Amount of **deferred tax expense** (income) relating to **changes in tax rates** or the **imposition of new taxes**

Statement of financial position approach

- › After **criticism** of the **tax payable method** of accounting for income tax, a **new and more complicated method** emerged that sought to **smooth reported profits**.
- › With the emergence of the conceptual framework, which **pays more attention to statement of financial position items**, this method was adjusted to what we see today.
- › The method is **controversial** and requires thought:
 - Questions arise whether a **deferred tax liability** really is a **liability** as defined by the framework, and whether a **deferred tax asset** really is an **asset** as defined by the framework.
 - Questions also arise about **the meaning of the amount** reported in the income statement as **income tax expense**.

Example 9.7 H&P pages 263-264: **Comprehensive example**

Excellent Ltd reported a profit before tax for the year ended 30 June 2013 of \$969 333. The following information about Excellent's accounting and tax position is also available.

- **Long-service leave expense** for the year is \$30 000 and the long-service leave liability at the end of the year is \$350 000. At the end of the previous reporting period, a deferred tax asset of \$108 000 was recognised in relation to the long-service leave liability.
- Impairment of goodwill of \$205 000 is recognised for accounting purposes, but is not tax deductible.
- **Depreciation expense** for accounting purposes was \$78 167. A deferred tax liability of \$35 000, arising from differences between the carrying amount and the tax base of property, plant and equipment, was also recognised in the statement of financial position at the end of the previous reporting period. The following depreciable assets are held by Excellent:

	Carrying amount	Tax base
A	\$40 000	\$20 000

B	110 000	100 000
C	48 000	35 000
D	315 000	280 000
E	28 000	25 000
	<u>\$541 000</u>	<u>\$460 000</u>

- Excellent had a **tax loss carry-forward** of \$400 000 at the beginning of the current reporting period, resulting in a **deferred tax asset of \$120 000**.
- The company tax rate is 30%.

Step 1: Calculate taxable income to determine and record income tax payable and current income tax expense.

	Profit before tax (accounting)		\$969 333
Add:	long-service leave expense	\$ 30 000	
	depreciation expense	78 167	
	impairment of goodwill not deductible	<u>205 000</u>	<u>313 167</u>
			1 282 500
Deduct:	long-service leave tax deduction	40 000 ^a	
	tax depreciation	42 500 ^b	
	tax carry-forward losses	<u>400 000^c</u>	<u>482 500</u>
	Taxable income		800 000
	x Tax rate		30%
	Current income tax expense		\$240 000

Workings:

a **Long-service leave liability** at the end of the year is \$350 000. The opening balance of the long-service leave liability can be determined from the opening balance of the deferred tax asset for long-service leave. The long-service leave liability at the beginning of the year is **(108 000/30%) = \$360 000**. Therefore, for the long-service leave liability to have decreased by \$10 000, long-service leave payments must have exceeded long-service leave expense by \$10 000.

b The deferred tax liability **for property, plant and equipment** is \$35 000 at the beginning of the year, implying a taxable temporary difference of $(\$35\ 000 / 30\%) = \$116\ 667$. At the end of the year, the taxable temporary difference is \$81 000, a decrease of \$35 667. As accounting depreciation is \$78 167, this implies **tax depreciation of $(\$78\ 167 - 35\ 667) = \$42\ 500$** .

c The **carry-forward tax loss** is fully utilised having been offset against income in the current period. **The deferred tax asset balance of \$120 000 $(\$400\ 000 \times 30\%)$ attributable to the carry-forward loss should now be reduced to zero.**

The following general journal entry is recorded:

Current income tax expense	Dr	\$240 000	
Income tax payable	Cr		\$240 000
Deferred income tax expense	Dr	120 000	
Deferred tax asset	Cr		120 000

Step 2: Calculate temporary differences, deferred tax assets and deferred tax liabilities and hence deferred tax expense. (Refer to the deferred tax worksheet following.)

Excellent Ltd						
Deferred tax worksheet for reporting period ended 30 June 2013						
Extract from Statement of Financial Position	Carrying amount	Tax base	TTD	DTD	DTL ^a	DTA ^b
Assets						
Non-current assets – net	541 000	460 000	81 000		24 300	
Liabilities						
Provision for long-service leave	350 000		0	350 000		105 000
Closing balances as at 30/6/2013			81 000	350 000	24 300	105 000
DTA/DTL carried forward: 1/7/2012					35 000	108 000
Change in DTA/DTL					(10 700)	(3 000)

^a The amount of the DTL is calculated by multiplying the TTD by the relevant tax rate. For 2013: $\$81\,000 \times 30\% = \$24\,300$.

^b The amount of the DTA is calculated by multiplying the DTD by the relevant tax rate. For 2013: $\$350\,000 \times 30\% = \$105\,000$.

Goodwill

The initial recognition and subsequent impairment of goodwill can be ignored as the difference between the asset's carrying amount and its tax base is permanent. Refer to paragraphs 21 and 21A of AASB 112.

The following general journal entry is recorded:

Deferred tax liability	Dr	\$10 700	
Deferred income tax expense	Cr		\$7 700
Deferred tax asset	Cr		3 000

Workings

1 Long-service leave

The tax base of the long-service leave liability is calculated as follows:

Carrying amount	+	deductible amount	–	assessable amount	=	Tax base
\$350 000	–	\$350 000	+	nil	=	nil

The temporary difference at the end of the year is \$350 000 and, as this is a deductible temporary difference, the deferred tax asset at the end of the year is $\$350\,000 \times 0.30 = \$105\,000$.

2 Non-current assets

The tax base of non-current assets is given in the question as \$460 000, which gives an assessable temporary difference of \$81 000. This gives rise to a deferred tax liability at the end of the year of $\$81\,000 \times 0.30 = \$24\,300$.

Disclosures

Excellent Ltd Extract from the Statement of Comprehensive Income for the year ended 30 June 2013

	Note	
Profit before income tax		\$969 333
less Income tax expense	4	<u>352 300</u>
Profit for the period		<u><u>\$617 033</u></u>

Notes to the accounts

Note 4

Major components of income tax expense

Current income tax expense	\$240 000
Deferred income tax expense arising from tax losses	120 000
Deferred income tax expense arising from other temporary differences	<u>(7 700)</u>
Income tax expense	<u><u>\$352 300</u></u>

Reconciliation of income tax expense and *prima facie* tax

Pre-tax profit	\$969 333
Tax at the Australian tax rate of 30%	290 800
Tax effect of expenses that are not deductible (goodwill impairment)	<u>61 500</u>
Income tax expense	<u><u>\$352 300</u></u>

Excellent Ltd Extract from the Statement of Financial Position as at 30 June 2013

Non-current assets	
Deferred tax assets	\$105 000
Current liabilities	
Income tax payable	240 000
Non-current liabilities	
Deferred tax liabilities	24 300 ^a

^a The deferred tax liability balance at the end of the year of \$24 300 may be set-off against the deferred tax asset balance of \$105 000 provided the set-off conditions specified in paragraph 74 of AASB 112 are satisfied. This would result in a net deferred tax asset of \$80 700, which would be reported in the statement of financial position.

WEEK 10

Accounting for Financial Instruments

Introductory comment:

- › Deregulation of financial markets from late 1970s, **emergence and trading of sophisticated financial instruments** (eg, options to buy or sell assets for a particular price);

- Enabled entities to raise funds;
 - Assisted entities in the management of risks such as changes in interest rates, currency exchange rates and market prices of securities;
 - Provide entities with “off-balance-sheet” financing opportunities;
 - Also fee income for financial institutions.
- ›Accounting standard setters **struggled to deal with financial instruments**
- High turnover of financial instruments; rapid changes in value
 - When used for “off-balance-sheet” financing, exposure to financial instruments was not apparent in financial reports;
- ›Accounting standard-setters began by **seeking disclosures** about financial instruments, then **tried to standardise accounting**.
- Standard setters’ controversial idea** was that financial instruments should be:
- recognised in financial statements;
 - revalued regularly to fair value; and that
 - Value changes be included as part of profit/loss.
- ›**Strong opposition from preparers** of financial reports,
- Financial instruments were at the heart of the 2007/8 financial crisis. The accounting standard for financial instruments changed suddenly during the crisis, and has been changing further since then.

Learning objectives covered in class

1. Calculate carrying amount of investments and interest revenue using the **effective interest rate method** (H&P LO 16.5)

Definition of **amortised cost** for financial instruments (AASB 139 para 9):

The amortised cost of a financial asset or financial liability is the amount at which the financial asset or financial liability is measured at **initial recognition** minus **principal repayments**, plus or minus **the cumulative amortisation** using the **effective interest method** of any difference between that **initial amount** and the **maturity amount**, and **minus** any reduction (directly or through the use of an allowance account) for **impairment or uncollectibility**.

›Definition of the **effective interest rate method** for financial instruments (AASB 139 para 9):

The effective interest method is a method of calculating the **amortised cost** of a financial asset or a financial liability (or group of financial assets or financial liabilities) and of **allocating the interest income or interest expense** over the relevant period. The effective interest rate is the rate that **exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument** or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, an entity shall **estimate cash flows considering all contractual terms** of the financial instrument (e.g., prepayment, call and similar options) but **shall not consider future credit losses**. The calculation includes all fees and points paid or received between parties to the contract that are an integral part of the effective interest rate (see AASB 118 Revenue), transaction costs, and all other premiums or discounts. There is **a presumption** that the **cash flows** and **the expected life** of a group of similar financial instruments can be **estimated reliably**. However, in those rare cases when it is not possible to estimate reliably the cash flows or the expected life of a

financial instrument (or group of financial instruments), the entity shall use the contractual cash flows over the full contractual term of the financial instrument (or group of financial instruments).

Example 16.1 H&P pages 514-515

The effective interest method

On 1 July 2012, Troilus Ltd invested in 100 debentures issued by Cressida Ltd. The five-year debentures each had a face value of \$1000, with interest at 4.56% payable on 30 June each year. The debentures were acquired at a discount of 10%.

The effective interest rate on the investment by Troilus in the debentures is found by solving for i in the following equation:

$$\$90\,000 = \$4560 \frac{1 - (1 + i)^{-5}}{i} + \$100\,000 (1 + i)^{-5}$$

$$i = 0.07$$

The interest revenue in each year is, therefore, 7% of the principal outstanding during the year. In the first year, the principal is \$90 000 and the interest revenue is $\$90\,000 \times 0.07 = \6300 . The cash received, however, is only \$4560. The difference between the interest revenue and the cash inflow is an addition to the principal. In the first year, the general journal entry to record interest revenue would be as follows:

Cash at bank	Dr	\$4 560	
Investment in debentures	Dr	1 740	
Interest revenue	Cr		\$6 300

The position for each year of the five years is summarised in the following table.

Year ended 30 June	Principal at beginning of year \$	Interest revenue \$	Cash inflow \$	Addition to principal \$
2013	90 000	6 300	4 560	1 740
2014	91 740	6 422	4 560	1 862
2015	93 602	6 552	4 560	1 992
2016	95 594	6 692	4 560	2 132
2017	97 726	6 834	4 560	2 274

On 30 June 2017 the following general journal entry would be passed:

Cash at bank	Dr	\$4 560	
Investment in debentures	Dr	2 274	
Interest revenue	Cr		\$6 834

The balance in the investment account would now be \$100 000 and the following general journal entry would be passed to record receipt of the principal:

Cash at bank	Dr	\$100 000	
Investment in debentures	Cr		\$100 000

2. Define “financial instrument” and distinguish between primary and derivative financial instruments, and between simple and compound financial instruments (H&P LO 14.1)

A **financial instrument** is (AASB 132 para 11):

Any **agreement** that creates a **financial asset** of one entity and a **financial liability or equity** instrument of another entity

For example, the sale of goods by one entity to another on credit will give rise to:

- a **financial asset** for the seller (**accounts receivable**) and
- a **financial liability** for the purchaser (**accounts payable**).

Financial asset (AASB 132 para 11):

- Cash
- An **equity instrument** of another entity
- A **contractual right**:
 - To **receive cash or another financial asset**; or
 - To **exchange** financial assets or financial liabilities under **potentially favourable conditions**;or
- A **contract** that will or may be **settled in the entity's own equity instruments** and is:
 - A **non-derivative** for which the entity is or may be obliged to **receive** a variable number of the entity's own equity instruments; or
 - A **derivative** that will or may be settled other than by the **exchange of a fixed amount** of cash or another financial asset

Financial liability (AASB 132 para 11):

- A **contractual obligation**:
 - To **deliver cash** or another financial asset
 - To **exchange** financial assets or financial liabilities under **potentially unfavourable conditions**;
- A **contract** that will or may be **settled in the entity's own equity instruments** and is:
 - A **non-derivative** for which the entity is or may be obliged to **deliver a variable number of the entity's own equity instruments**; or
 - A **derivative** that will or may be settled other than by the **exchange of a fixed amount** of cash or another financial asset.

Primary financial instruments:

- Financial **assets**: Such as **cash**, **accounts receivable**, **notes receivable**, **loans receivable**
- Financial **liabilities**: Such as **accounts payable**, **notes payable**, **loans payable**
- Specified in **cash terms** and **directly convertible to cash**

Derivative (secondary) financial instruments:

- Derive their value from something else **underlying** the financial instrument (eg **share price** or **exchange rate**)
- Create **rights and obligations** that have the effect of transferring between the parties to the instrument one or more of the **financial risks inherent** in an underlying primary financial instrument.

›Examples: **forward contracts**, **options**, **interest rate** or **currency swaps**

AASB 139 para 9:

Definition of a Derivative

A derivative is a financial instrument or other contract within the scope of this Standard (see paragraphs 2-7) with all three of the following characteristics:

- (a) its **value changes** in response to the **change in a specified** interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract (sometimes called the '**underlying**');
- (b) it requires **no initial net investment** or an initial net investment that is **smaller than** would be required for other types of contracts that would be expected to have a similar response to changes in market factors; and
- (c) it is settled at a **future date**.

Simple financial instruments:

Consist of a **single** financial **asset**, financial **liability** or **equity** instrument
-such as a loan receivable, a loan payable or an **ordinary share**

Compound financial instruments:

-Consist of a **combination of characteristics** of financial assets, financial liabilities and equity instruments
-E.g., **a debt security convertible into ordinary shares**

›It is important to distinguish between **financial liabilities** and **equity instruments** because:

- Classifying financial instruments as **liabilities rather than equity** will affect an entity's:
 - leverage (gearing)** and **solvency ratios**, and
 - whether they **breach the covenants** in their debt contracts.
- AASB132 (para 15) requires **substance over form** approach to classifications.

Offsetting a financial asset and financial liability in the **statement of financial position**

-NB: **Offsetting** means **effectively off-balance-sheet**

›A financial asset and a financial liability must be **offset** and the **net amount presented in the balance sheet** when, and **only when**, an entity (AASB 132 para 42):

- Currently has a **legally enforceable right** to set off the recognised amounts; **and**
- Intends either to **settle on a net basis**, or to realise the **asset** and settle the **liability simultaneously**

3. Identify the categories of financial assets and financial liabilities in AASB 9 "Financial Instruments" (H&P LO 14.2)

Categories of financial assets: Introductory comment:

Recognition and measurement of financial instruments has been **controversial**.

-**Standard-setters** tried to require all financial instruments to be measured and reported at **fair value**, to remeasure (revalue) them every period and to include the **changes in value** in the **profit or loss** for the period.

-That approach has been strongly opposed.

›The result of the opposition to the standard-setters' preferred fair value measurement of all financial instruments, with changes in value included in profit each year has been the development of "purpose-led" classifications based on management intent.

-Categories of financial instruments devised with different accounting requirements for each category.

1. Amortised cost; 2. Fair value through P&L; 3. Fair value through OCI

-The recognition and measurement of a financial instrument, and the effect on the financial reports, differs depending on the category

AASB 9 categories of financial assets:

›In the latest changes in AASB 9, the categories of financial instruments are determined with reference to the entity's "business model".

›The business model test relates to the entity's approach to managing its financial assets (AASB 9 para 4.1.1)

"an entity shall classify financial assets as subsequently measured at either amortised cost or fair value on the basis of both:

(a) the entity's business model for managing the financial assets; and

(b) the contractual cash flow characteristics of the financial asset"

1. AASB 9 categories of financial assets: amortised cost

›Applies only to debt instruments

"A financial asset shall be measured at amortised cost if both of the following conditions are met:

(a) the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows.

(b) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding" (AASB 9 para 4.1.2)

›At initial recognition these financial assets are measured at fair value plus transaction costs directly attributable to acquisition (AASB 9 para 5.1.1)

›Subsequently, these financial assets are measured at amortised cost (AASB 139 para 9 via AASB 9 para 5.2.1)

2. AASB 9 categories of financial assets: FV through P&L

-Financial assets measured at fair value through profit and loss. Applies to all financial assets unless otherwise classified

-Includes financial assets held for trading purposes and derivatives (except for a derivative that is a designated and effective hedging instrument)

-Initially measured at fair value (AASB 9 para 5.1.1)

-Subsequent to initial recognition, measured at fair value at each reporting date, with changes in fair value included in calculating the profit or loss for the reporting period (AASB 9 para 5.1.5)

3. AASB 9 categories of financial assets: FV through OCI

Financial assets measured at fair value through other comprehensive income:

- Applies to **equity instruments** that are **not held for trading** and that are designated in this way on initial recognition (AASB 9 para 5.7.5)
- On initial recognition** measured at **fair value plus transaction costs** (AASB 9 para 5.1.1)
- Subsequent** to initial recognition, measured at fair value with any **changes in fair value** recognised in **other comprehensive income** (AASB 9 para 5.7.5)

AASB 9 categories of **financial liabilities**:

1. Financial liabilities measured at **fair value through profit and loss**

- Applies to financial liabilities incurred for **trading purposes** and for **derivatives that are not part of a hedging arrangement**
- Initially** recognised at **fair value** (AASB 9 para 5.1.1)
- Subsequently**, measured at fair value each reporting period with **changes in fair value** included in calculating the **profit and loss** for each period (AASB 9 para 4.2.1(a))

2. **Other financial liabilities**

- Recognised **initially** at **fair value plus transaction costs** (AASB 9 para 5.1.1)
- Subsequently** measured at **amortised cost** using the effective interest method (AASB 9 para 4.2.1)

Example 14.1 H&P pages 436-437

Classification of financial instruments

Central Highlands Technologies (CHT) Ltd is an importer and distributor of computer hardware and software. In its statement of financial position for the year ended 30 June 2013 there were listed among its assets and liabilities the following financial instruments:

Assets

Accounts receivable
Bank term deposits
Derivative financial assets (comprising foreign currency futures contracts)
Listed shares

Liabilities

Accounts payable
Debt instruments

Required

Identify the category into which the above financial instruments would be classified in accordance with the requirements of AASB 9.

Suggested solution

- 1 **Accounts receivable** would be classified by CHT Ltd in the **amortised cost** category because the entity's objective is **to collect the contractual cash flows**. However, if the entity's **business model** involved **selling its receivables to a discounter or factor**, they would be classified as at **fair value through profit or loss**.
- 2 **Bank term deposits** would be classified in the **amortised cost** category provided the business model's objective is **to collect the contractual cash flows**.
- 3 **Derivative financial assets** are likely to be designated by management in the at **fair value through profit or loss** category (AASB 139, para. 9).

- Level 3: **unobservable inputs** e.g. **Discount cash flows**; or **option pricing models** (AASB 13 paras 86-90)

In class Question 3

Direct Investments Ltd purchases 1,000 shares in MD Airways on 1 July 2015 for \$3.30 each. Transaction costs of \$100 were also incurred for this transaction.

Direct Investments Ltd's financial year ends on 30 June.

The market value of the shares in subsequent years is:

30 June 2016 \$3.50

30 June 2017 \$3.10

30 June 2018 \$2.90

Direct Investments Ltd sold the shares on 1 August 2018 for \$3.05.

Required: Provide journal entries related to these shares for each financial year and identify the effect on reported profit each year, assuming that:

a) Direct Investments Ltd business model is that they hold shares for **trading purposes** and treats them as "**Fair value through profit and loss**"; and

b) Direct Investments Ltd has elected under AASB 9 para 5.7.5 to treat the shares as "**Fair value through other comprehensive income**"

a) Investment treated as "Fair value through profit and loss"

<i>Date</i>	<i>Particulars</i>	<i>Debit</i>	<i>Credit</i>
1/07/15	Investment in MD Airways	3,300	
	Financial transaction expenses	100	
	Cash at Bank		3,400
	<i>Purchase of 1,000 shares MD Airways @\$3.30</i>		
30/06/16	Investment in MD Airways	200	
	Gain on investment		200
	<i>Mark to fair value 30/6</i>		

Effect on profit for year ended 30/6/2016: = +100 (change in fair value +\$200 - transaction cost \$100)

<i>Date</i>	<i>Particulars</i>	<i>Debit</i>	<i>Credit</i>
30/06/17	Loss on investment	400	
	Investment in MD Airways		400
	<i>Mark to fair value 30/6</i>		

Effect on profit for year ended 30/6/2017: = -400

<i>Date</i>	<i>Particulars</i>	<i>Debit</i>	<i>Credit</i>
30/06/18	Loss on investment	200	
	Investment in MD Airways		200
	<i>Mark to fair value 30/6</i>		

Effect on profit for year ended 30/6/2018: = -200

<i>Date</i>	<i>Particulars</i>	<i>Debit</i>	<i>Credit</i>
1/8/2018	Cash at bank	3,050	
	Investment in MD Airways		2,900
	Gain on sale of investment		150
	<i>Sale of investment in MD airways</i>		

Effect on profit for year ended 30/6/2019: = +150

Overall effect on profit = -350 (+100, -400, -200, +150)

b) Investment treated as “Fair value through other comprehensive income”

<i>Date</i>	<i>Particulars</i>	<i>Debit</i>	<i>Credit</i>
1/07/15	Investment in MD Airways	3,400	
	Cash at Bank		3,400
	<i>Purchase of 1,000 shares MD Airways @\$3.30 plus transaction cost \$100</i>		
30/06/16	Investment in MD Airways	100	
	Investment revaluation surplus		100
	<i>Mark to fair value 30/6</i>		

Effect on profit for year ended 30/6/2016: = 0 (the revaluation is shown in other comprehensive income)

<i>Date</i>	<i>Particulars</i>	<i>Debit</i>	<i>Credit</i>
30/06/17	Investment revaluation surplus	400	
	Investment in MD Airways		400
	<i>Mark to fair value 30/6</i>		

Effect on profit for year ended 30/6/2017: = 0 (the revaluation is shown in other comprehensive income)

<i>Date</i>	<i>Particulars</i>	<i>Debit</i>	<i>Credit</i>
30/06/18	Investment revaluation surplus	200	
	Investment in MD Airways		200
	<i>Mark to fair value 30/6</i>		

Effect on profit for year ended 30/6/2018: = 0 (the revaluation is shown in other comprehensive income)

<i>Date</i>	<i>Particulars</i>	<i>Debit</i>	<i>Credit</i>
1/8/2018	Investment in MD airways	150	
	Investment revaluation surplus		150
	<i>Revaluation of investment prior to sale</i>		
	Cash at bank	3050	
	Investment in MD airways		3050
	Losses on sale of investment in MD airways	350	
	Investment revaluation surplus		350
	<i>Sale of investment in MD airways. Close off balance in investment revaluation surplus by reclassifying via P&L</i>		

Effect on profit for year ended 30/6/2019: = -350 (plus the two adjustments to the revaluation surplus (+150, +250) will show in other comprehensive income)

Overall effect on profit = -350

Note: investment revaluation surplus transactions were +100, -400, -200, +150, +350 = 0). These show in the other comprehensive income section of the statement of comprehensive income.

Hedge accounting

Financial instruments may be used for:

-Trading purposes (ie. speculative); or

-Hedging (often to manage risks)

A hedging arrangement involves taking a position opposite to the original transaction so the entity minimizes its exposure to gains and losses on particular assets and liabilities.

e.g.: An entity holds property in the USA that it expects to sell for US\$1 million in two years.

-To hedge the US\$1 it expects to receive in two years, it might enter a forward exchange contract (a **derivative** financial instrument) to pay US\$1 million in two years in exchange for an amount of Australian \$ that is specified now.

-One argument **against** accounting for **derivatives** by applying **fair value** with value changes included in the **profit or loss** is that the derivatives may be used for **hedging purposes**.

› AASB 9 permits “**hedge accounting**” under **limited circumstances**.

- **Hedge accounting** would mean that the **value changes** in **both** the **derivative** and the **hedged item** would be **treated in the same way**, ie both through OCI or both through P&L (AASB 9 para 6.5.8).

› ACCT6001 will not cover detailed accounting for hedges.

4. Understand the purpose of and identify the main disclosure requirements in AASB 7 “Financial Instruments: Disclosures” and AASB 132 “Financial Instruments: Presentation” (H&P LO 14.6)

Disclosure requirements:

Purpose of the disclosure requirements in AASB 7 (para 1)

› To **provide information** that enables users to **evaluate the significance** of financial instruments to an entity’s financial position and performance

› The **nature** and **extent of risks** arising from financial instruments

› How the entity **manages those risks**

Summary:

› Most reporting entities use financial instruments. Accounting for financial instruments presents recognition and reporting challenges for preparers of financial statements, and challenges for the users of those statements to understand that financial information.

› Accounting standards setters have struggled to develop effective accounting standards, because the issue is controversial, and because many of the financial instruments are complex and new types are emerging all the time.

› Biggest issues:

- 1. Is treating **all financial instruments** at **FV through P&L** the best way to proceed?

- 2. Classifications and **changes in classifications** allow preparers **flexibility**. That flexibility is **controversial**.

› Expect ongoing controversy and change.

WEEK 11

Equity: Preference Shares and Compound Financial Instruments

1. Define and identify the components of equity (H&P LO 15.1)

Equity is defined as:

The residual interest in the **assets** of the entity after **deducting its liabilities** (2010 Framework para 4.4(c))

Implications of the definition of equity:

- Equity cannot be identified, recognized and measured until this is done for assets and liabilities. (It can be difficult to distinguish between equity and liabilities.)
- Rights to an entity's equity belong to some other entity or entities.
- If an entity is wound up, equity ranks after all liabilities.

Components of equity for companies are:

- Share capital
- Retained profits
- Reserves

2. Distinguish between ordinary shares and preference shares (H&P LO 15.7)

Preference shares are:

- Issued with conditions that give them priority (or preference) over ordinary shares under specified conditions
- Usually subject to special conditions, e.g. set at a fixed minimum level, dividends accumulate if they are not paid or participate in profits above the fixed minimum level
- Ordinary shareholders will not receive a dividend until the preference shareholders' entitlements have been met.

Preference shares may also be redeemable:

- They require the company to repay the preference shareholders' capital contributions.
 - If redemption is probable, the shares may meet the definition of liabilities in the 2010 Framework para 4.4(b).
- We need to understand the terms and conditions of preference shares to decide how to classify them in the financial statements.

3. Understand the requirements of AASB 132(FP) as they relate to the classification of preference shares (H&P LO 15.8)

›AASB132 (FP) para 15

- The issuer of a financial instrument classifies the instrument, or its component parts, in accordance with the substance of the arrangement at the time the instrument is initially recognized
- In accordance with the substance means as a financial asset, a financial liability or an equity instrument

›AASB 132 (FP) para 11 definitions

- Equity instrument: "any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities"
- Financial liability: includes a "contractual obligation to deliver cash or another financial asset to another entity."

›Preference shares that are redeemable on a specific date or at the holder's option:

- The issuer has an obligation to transfer financial assets to the shareholder
- The issuer should disclose the shares as liabilities

›Preference shares that are redeemable **at the issuer's option**:

-The issuer has **no obligation** to transfer financial assets to shareholders.

-The shares should be classified as **equity**

›The **classification of preference shares** depends on the **rights attached to the shares**.

-To help decide whether shares are redeemable on a specific date or at the holder's option, see AASB 132, AG25.

AG25: Preference shares may be issued with various rights. In determining whether a preference share is a **financial liability** or an **equity instrument**, an issuer assesses the **particular rights** attaching to the share to determine whether it exhibits the **fundamental characteristic of a financial liability**. For example, a preference share that provides for redemption on a **specific date** or **at the option of the holder** contains a **financial liability** because the issuer has an **obligation** to transfer financial assets to the holder of the share. The potential inability of an issuer to satisfy an obligation to redeem a preference share when contractually required to do so, whether because of a lack of funds, a statutory restriction or insufficient profits or reserves, does not negate the obligation. **An option of the issuer** to redeem the shares for cash does not satisfy the definition of a financial liability because the issuer **does not have a present obligation** to transfer financial assets to the shareholders. In this case, redemption of the shares is solely at the discretion of the issuer. **An obligation may arise**, however, when the issuer of the shares exercises its option, usually by **formally notifying the shareholders of an intention to redeem** the shares.

-To help decide on classification when the shares are **not redeemable** see AASB 132, AG26.

AG26: When preference shares are **non-redeemable**, the appropriate **classification is determined by the other rights** that attach to them. Classification is based on an assessment of the **substance of the contractual arrangements** and the **definitions** of a financial liability and an equity instrument. When **distributions to holders** of the preference shares, whether cumulative or non-cumulative, are **at the discretion of the issuer**, the shares are **equity instruments**. The classification of a preference share as an equity instrument or a financial liability is **not affected by**, for example:

(a) a **history** of making distributions;

(b) an **intention** to make distributions in **the future**;

(c) a possible negative impact on the **price** of ordinary shares of the issuer if distributions are not made (because of restrictions on paying dividends on the ordinary shares if dividends are not paid on the preference shares);

(d) the amount of the issuer's **reserves**;

(e) an issuer's **expectation of a profit or loss** for a period; or

(f) an ability or inability of the issuer to **influence the amount of its profit or loss** for the period.

4. Explain the nature of compound financial instruments and how to account for them (H&P LO 15.9)

Compound financial instruments: Some securities may be **legally classified as debt** but **contain elements of equity**.

For example a **convertible note**:

- Debt instruments that include an option to convert them to equity under specified conditions
- The equity conversion option might also be regarded as an “embedded derivative”, a term that is used in AASB139 (FP)

› Ways of treating convertible notes include:

- Recognizing them as a liability consistent with their legal form; OR
- The definitions and recognition criteria of liability and equity in the 2010 Framework could be applied to decide whether to classify as either liability or equity; OR
- The definitions and recognition criteria of liability and equity in the 2010 Framework could be applied so each component is disclosed separately

5. Understand the requirements of AASB 132(FP) as they relate to accounting for convertible notes (H&P LO 15.10)

AASB 132(FP) requires:

An issuer of a financial instrument with a financial liability and an equity element to classify the instrument's components separately in its statement of financial position AASB 132(FP) para 28

› The equity component of a compound financial instrument is assigned

- the residual amount after deducting from the fair value of the instrument as a whole the amount separately determined for the liability component AASB 132(FP) para. 31
- The fair value of liability component is determined by calculating fair value of a similar instrument without the conversion option AASB 132(FP) para. 32

(Equity element = Fair value - Liability)

Example 15.5 H&P pages 493-495

On 1 July 2013, Pilly Ltd issued 10 million \$4 notes with a coupon rate of 8% per annum and a term of 10 years at a time when the market interest rate for similar debt without the conversion option was 10% per annum.

In this case, the liability component is measured as the present value of two cash flows; namely, the annual coupon payments (\$3 200 000 = 8% * \$40 000 000) and principal repayment (\$40 000 000) in 10 years' time discounted at 10% per annum. Therefore, using the present value tables, the amount of the liability component is:

$\$3\,200\,000 \times 6.1445 =$	$\$19\,662\,400$
$\$40\,000\,000 \times 0.38554 =$	$15\,421\,600$
	<u><u>\$35\,084\,000</u></u>

The note holders have paid \$40 million for these notes, so the conversion option has a value of $\$40\,000\,000 - \$35\,084\,000 = \$4\,916\,000$, calculated in accordance with AASB 132 paragraph 31. At the time the notes are issued, paragraph 28 requires the compound financial instrument to be treated as comprising two financial instruments – a debt instrument and an equity instrument. To reflect this classification, the following general journal entry would be passed to recognize the convertible notes liability and convertible note option (equity).

Cash at bank	Dr	\$40 000 000	
Convertible notes liability	Cr		\$35 084 000
Convertible notes option (equity)	Cr		4 916 000

Subsequent to initial recognition, **interest expense** is recognized at **fair value** using the 'effective interest method' throughout the term of the notes, until such time as the convertible note option is exercised. The preparation of an effective interest schedule is shown in the following table.

Date	Interest payment ($\$40\text{M} \times 8\%$ coupon rate) \$	Interest expense (convertible notes liability \times 10% market rate) \$	Fair value (FV) adjustment (interest expense – interest payment) \$	Convertible notes liability (FV adjustment + notes liability at beginning) \$
1/07/2013				35 084 000
30/06/2014	3 200 000	3 508 400	308 400	35 392 400
30/06/2015	3 200 000	3 539 240	339 240	35 731 640
30/06/2016	3 200 000	3 573 164	373 164	36 104 804
30/06/2017	3 200 000	3 610 480	410 480	36 515 284
30/06/2018	3 200 000	3 651 528	451 528	36 966 812
30/06/2019	3 200 000	3 696 681	496 681	37 463 493
30/06/2020	3 200 000	3 746 349	546 349	38 009 842
30/06/2021	3 200 000	3 800 984	600 984	38 610 826
30/06/2022	3 200 000	3 861 083	661 083	39 271 909
30/06/2023	3 200 000	3 928 091*	728 091	40 000 000

* Subject to rounding error.

The schedule shows that **interest expense** – that is, **the effective interest** – is measured at **fair value**. The effective interest schedule also shows the fair value of the convertible notes liability outstanding at the end of each reporting period during the term of the convertible notes issue. At **maturity** on 30 June 2023, the convertible notes issue must be settled by a **cash payment of \$40 million**, unless the **convertible notes option is exercised** to **convert the notes liability to equity**. The following general journal entry is made at the end of each reporting period to recognize interest expense and the convertible notes liability at fair value. The general journal entry made on **30 June 2014** is:

Interest expense	Dr	\$3 508 435	
Cash at bank	Cr		\$3 200 000
Convertible notes liability	Cr		308 435

If, at **maturity** on 30 June 2023 note holders **exercise the convertible notes option to convert the notes to equity**, the following general journal entry is made:

Convertible notes liability	Dr	\$40 000 000	
Convertible notes option (equity)	Dr	4 915 654	
Share capital	Cr		\$44 915 654

If, however, the exercise of the **convertible notes option occurs**, say, **earlier on 30 June 2017**, the following general journal entry is made:

Convertible notes liability	Dr	\$36 515 791	
Convertible notes option (equity)	Dr	4 915 654	
Share capital	Cr		\$41 431 445

However, if note holders **do not exercise the convertible notes option** at maturity, the following general journal entries are made to **recognize settlement of the convertible notes liability** and **the derecognition of the convertible notes option** through retained earnings:

Convertible notes liability	Dr	\$40 000 000	
Cash at bank	Cr		\$40 000 000
Convertible notes option (equity)	Dr	4 915 654	
Retained earnings	Cr		4 915 654

6. Distinguish between reserves and retained earnings (H&P LO 15.11)

Reserves arise from **two sources**:

-Application of **the Corporations Act** and **accounting standards**

For example: AASB 116 - **revaluation surplus**

-Transfers from **retained earnings to reserves**

Signals **some part of retained earnings will not be distributed as a dividend**

Retained earnings or **accumulated losses**:

Represent the **balance of the profits and losses** that **have not been**:

-Paid as **dividends**;

-Used to **fund share** issues to shareholders;

-**Transferred to reserves**; or

-Used to **buy back shares**

7. Understand the requirements of AASB 101(FP) as they relate to the classification and disclosure of equity (H&P LO 15.12)

As a **minimum**, the following must be **shown** on the face of the **statement of financial position** (AASB 101(FP) para .54):

-**Non controlling interest**, **presented within equity**; and

-**Issued capital** and **reserves attributable** to owners of the parent

Additional disclosures (AASB 101(FP) para.79) include:

-**Details for each class of shares**

-The description of the **purpose and nature of each reserve**

-For **each class of share capital**:

-the number of shares **authorised**;

-the number of shares **issued** and **the extent to which they are fully paid**;

-the **par value of the shares** or that the shares have **no par value**;

-a **reconciliation** of the number of shares outstanding at the beginning and end of the period;

-the **rights, preferences and restrictions** on each share class in respect to **dividend and repayment of capital**;

-shares in the entity **held by the entity** or **by its subsidiaries or associates**;

AASB 101(FP) para.106 also requires the **preparation of a statement of changes in equity**:

-Total **comprehensive income** for the period

- For each equity component, effects of retrospective changes in accounting policies and correction of errors
- For each equity component, a reconciliation between the carrying amount at the beginning and end of the period
- Dividends and related per-share amounts

Summary:

- ›Equity is the residual interest in an entity's assets after deducting its liabilities.
- ›The distinction between equity and liabilities is considered important, and it plays a significant part in financial analysis. (Solvency ratios, gearing etc).
- ›Often companies issue financial instruments that are not easy to classify. They will have features of debt (liabilities) and features of equity.
- ›Accounting standard-setters have responded with requirements that seem inconsistent:
 - For preference shares: decide whether the terms and conditions are more like equity or more like a liability.
 - For compound financial instruments: consider the components. Identify the amount of the liability component and treat the residual amount as equity.

WEEK 12

Specific Accounting Issues for Extractive Industries

1. Understand the nature of extractive industries (H&P LO 20.1)

Extractive industries cover a range of activities:

Including exploration for, production and sale of non-renewable natural resources such as minerals, oil and natural gas

Characteristics of the extractive industries:

- High degree of risk
- Lengthy period between discovery and sale
- Long period to exploit the deposit fully

Accounting requirements

- IASB preference was to have no special standard – see table 20.1, p657

Aspects of accounting for the extractive industries previously covered in AASB 1022 table 20.1

Phase of operation/transaction or event	Relevant standards ¹
Activities that precede exploration for and evaluation of mineral resources ²	Framework 2010 AASB 116 'Property, Plant and Equipment' AASB 138 'Intangible Assets'
Development and construction costs	AASB 116 'Property, Plant and Equipment' AASB 138 'Intangible Assets'
Amortisation of capitalised costs	AASB 116 'Property, Plant and Equipment'
Stripping costs	Interpretation 20 'Stripping Costs in the Production Phase of a Surface Mine'
Inventories	AASB 102 'Inventories'
Revenue recognition	AASB 118 'Revenue'
Restoration costs	AASB 137 'Provisions, Contingent Liabilities and Contingent Assets' AASB 116 'Property, Plant and Equipment'

¹ Some issues related to extractive activities are not specifically dealt with in other Australian Accounting Standards. Consequently, entities may need to refer to the AASB 108 'Accounting Policies, Changes in Accounting Estimates and Errors' hierarchy (see paras 10–12) in determining their accounting policies in those cases.

² Paragraphs BC10–BC13 of the Basis for Conclusions to IFRS 6 'Exploration for and Evaluation of Mineral Resources' provide some guidance for the treatment of expenditures incurred before exploration for and evaluation of mineral resources.

- Lobbying by major companies; AASB led to **AASB6: Exploration for and Evaluation of Mineral Resources**
- Recent **IASB** activity: **discussion paper** but no decision to put project on agenda
- Recent **AASB** activity: **Interpretation 20** 'Stripping costs in the **production phase** of a surface mine'

Nature of extractive industries: **Phases of activity**

› **Pre-production**

- **Exploration** of areas leased

Includes the **topographical, geological, geochemical and geophysical studies** that are usually made over a wide area

- **Evaluation**: of exploration results

Work is undertaken to determine the **technical feasibility** and **commercial viability** of the prospect

- **Development**: of the deposit for exploitation

Activities involved in **the establishment of access** to the deposit or field and **other preparation** for commercial production

- **Construction**

Includes the establishment of the **facilities for extraction, treatment and transportation** from the deposit or field

› **Production**:

Activities involved in **extracting** minerals, oil and natural gas from the deposit or field on a **commercial scale**, as well as any **relevant processing before the sale** of the output

2. Explain the nature of the accounting issues in the extractive industries (H&P LO 20.2)

- Main problem: How to account for **costs incurred during each phase**
- Treatment of **pre-production** costs, particularly **exploration** and **evaluation** is most **disputed**

3. Identify **four** methods of accounting for **exploration and evaluation** costs (H&P LO 20.8)

Approaches to accounting for exploration and evaluation costs:

- **Expense (or costs written-off)** method:

Recognizes the costs as expenses in the period they are incurred.

- **Expense-and-reinstate** method:

Recognizes the costs as expenses in the period they are incurred;

But **Reinstates** them as **assets** if the costs subsequently give rise to **economically recoverable reserves**.

- **Full-cost** method:

Recognizes the costs as an **asset irrespective of** the likely **success** of the exploration program.

- **Successful-efforts** method:

Limits asset recognition to those costs **likely to result in** the discovery of **economically recoverable reserves**.

4. Apply AASB 6 to **accounting** for exploration and evaluation costs (H&P LO 20.3)

AASB 6 requires:

For each **area of interest**, exploration and evaluation costs must be either **expensed as incurred** or **partially or fully capitalised as an asset** (AASB 6 para Aus7.1)

AASB 6 Appendix A:

Area of interest is defined as an **individual geological area**

- which is considered to constitute **a favourable environment** for the presence of a mineral deposit or an oil or natural gas field; or
- has been **proved to contain** such a deposit or field

AASB 6 para Aus 7.2:

Exploration and evaluation costs for **an area of interest** may be carried forward as an asset if:

- **Rights to tenure** of the area are current; and
- At least **one of the following** is also met:

Exploration and evaluation costs are **expected to be recouped**; OR

Exploration and evaluation has **not yet reached** a stage permitting **a reasonable assessment of the existence of reserves**, and **active and significant operations are ongoing**

Example 20.1 H&P pages 660-661

Recognition of exploration and evaluation assets

During the year ended 30 June 2014 the Dimbulah Mining Company acquired three areas – **North Western**, **East Western** and **Western**. Dimbulah has spent the past year undertaking exploration and evaluation activities in these three areas of interest. Details of the costs incurred are as follows:

Site	Acquisition costs	Exploration costs	Evaluation costs
North Western	\$6 000 000	\$12 000 000	\$4 000 000
East Western	\$12 000 000	\$8 000 000	–
Western	\$6 000 000	\$14 000 000	\$3 500 000

On 29 March 2014, ore is discovered at the **North Western** site. Company geologists estimate that 100 000 tonnes of ore are located at the site, which exceeds the company's minimum benchmark of 50 000 tonnes of ore to proceed with the development of an area of interest.

Preliminary drilling has shown promising results for the **East Western** site. However, the East Western site has also been identified by conservation groups as the only mainland Australian habitat for a rare and endangered marsupial. Recent Commonwealth legislation has been enacted regarding rare and endangered Australian marsupials, which imposes an **unconditional ban** on any development in habitat areas.

Exploration at the **Western** site is still preliminary and company geologists expect to have access to core drilling data in early 2015, which will assist in assessing the viability of the area of interest.

Required

Determine the amount of exploration and evaluation assets recognised by Dimbulah Mining Company for the year ended 30 June 2014 in accordance with the requirements of AASB 6.

Suggested solution

AASB 6 requires that the decision to **expense or capitalise** exploration and evaluation costs is made for each **area of interest** – in this case, the North Western, East Western and Western areas of interest.

North Western area of interest

The \$22 million in exploration and evaluation costs (\$6 000 000 + \$12 000 000 + \$4 000 000) can be **capitalised** as exploration and evaluation assets in accordance with **paragraph Aus7.1(b) of AASB 6**, because the conditions of **paragraph Aus7.2** are met. That is:

(a) there is no evidence to suggest any impediments to the **current rights to tenure** of the area of interest; and

(b) the exploration and evaluation **costs are expected to be recouped** through successful development and exploitation of the area. Assuming that the company does not expect a significant reduction in market prices for the ore, the estimated reserve of 100 000 tonnes of ore exceeds the company's minimum commercial viability benchmark of 50 000 tonnes of ore.

East Western area of interest

The \$20 million in exploration costs (\$12 000 000 + \$8 000 000) would be recognised as an **expense** in accordance with **paragraph Aus7.1(a) of AASB 6** because the conditions of **paragraph Aus7.2** are not satisfied. That is:

(a) the **current rights to tenure** of the area of interest will likely be negated by the Commonwealth legislation that bans all development – for example, mining activities in the habitats of rare and endangered Australian marsupials; and

(b) this ban makes **the recoupment** of the exploration costs through successful development of the area unlikely.

Western area of interest

The \$23.5 million in exploration and evaluation costs (\$6 000 000 + \$14 000 000 + \$3 500 000) can be **capitalised** as exploration and evaluation assets in accordance with **paragraph Aus7.1(b) of AASB 6** because the conditions of **paragraph Aus7.2** are met. That is:

(a) there is no evidence to suggest any impediments to the **current rights to tenure** of the area of interest; and

(b) the exploration and evaluation costs **have not reached** a stage that permits a **reasonable assessment** of the existence or otherwise of **economically recoverable reserves**, with **significant evaluation activities** (e.g. core drilling) expected to **continue** into early 2015.

5. Apply AASB 6 to **measuring** exploration and evaluation costs (H&P LO 20.4)

AASB 6 requires:

- Exploration and evaluation assets to be **initially measured at cost** para 8
- Entities to apply either the **cost model** or the **revaluation model** to exploration and evaluation assets **subsequent** to initial recognition para 12
- Exploration and evaluation assets to be classified as **tangible or intangible** para 15
- Exploration and evaluation assets to be **assessed for impairment** when facts and circumstances suggest their **carrying amount** exceeds **recoverable amount** para 18

6. Apply the relevant accounting standards to accounting for development and construction costs (H&P LO 20.5)

› Costs incurred during the **development and construction phases** are accounted for in accordance with: Applicable accounting standards and the Framework

› Development and construction costs are likely to be accounted for in accordance with

- **AASB 116 Property, Plant and Equipment**

Eg vehicles, drilling rigs, major equipment

- **AASB 138(FP) Intangible Assets (for profit entities)**

Eg: acquisition of rights to explore (drilling rights, exploration licences) geological, geochemical study costs

7. Understand how to account for stripping, removal and restoration costs (H&P LO 20.6)

› **Stripping** is the **removal of soil and other materials** to **access the deposit**.

When it occurs in the **production phase** it can have **two benefits** that need to be accounted for:

1. **the soil** may **contain economically viable reserves** that can be **turned into inventory**
2. the removal of the soil gives **access to the inventory**

You are not expected to know how to account for stripping in ACCT 6001

› **Removal and Restoration** relates to the **dismantling of mine infrastructure** and the **restoration of a site** as required by a lease or legally enforceable agreement

› **Costs of restoration** should be attributed to:

The **particular phase** of operations giving rise to the need for the **restoration work**

› AASB 6 requires:

‘Any **obligations** for removal and restoration that are incurred during a **particular period** as a consequence of **having undertaken** the **exploration** for and **evaluation** of mineral resources’ is to be recognised (AASB 6 para 16(c))

› Need to also consider **AASB 137** requirements: AASB 137 para 14

• A **provision for removal and restoration** is to be recognised when:

- a) An entity has a **present obligation** (legal or constructive) as a result of a **past event**
- b) It is **probable** that an **outflow of resources embodying economic benefits** will be required to settle the obligation; and

c) A **reliable estimate** can be made of the amount of the obligation

Example 20.2 H&P pages 666-667

Recognition and measurement of removal and restoration costs

Aus Oil operates an offshore oilfield in Bass Strait where its licensing agreement requires the removal of the oil rig at the end of production, and the restoration of the seabed. The 10-year licensing agreement was operational from 1 July 2012 after completion of exploration and evaluation activities. The estimated removal and restoration costs are \$2 855 000 of which 90% relates to the removal of the oil rig and restoration of damage caused by building it, and 10% is expected to arise through the extraction of oil. The appropriate discount rate for removal and restoration costs is 5%.

The oil rig was constructed by 30 June 2013 and **production began on 1 July 2013**. By 30 June 2014, 1 million barrels of oil had been extracted. Company geologists estimate that 12 million barrels of oil will be extracted over the current 10-year term of the licensing agreement, after which time the licensing agreement is not expected to be renewed.

Required

- Determine whether a provision for restoration costs should be recognised for the years ended 30 June 2013 and 30 June 2014.
- Prepare any general journal entries in the books of Aus Oil for the provision for restoration costs for the years ended 30 June 2013 and 30 June 2014.

Suggested solution

- Recognition of provision for restoration costs at 30 June 2013 and 2014

AASB 137 requires that a **provision for removal and restoration costs** is recognised when (a) an entity has a **present obligation** (legal or constructive) as a result of a **past event**; (b) it is **probable** that an **outflow of resources embodying economic benefits** will be required to settle the obligation; and (c) a **reliable estimate** can be made of the amount of the obligation (para. 14).

For both years, the key criterion is (a), an **obligating event**. For the year ended 30 June 2013, the construction of the oil rig creates a legal obligation under the terms of the licence to remove the rig and restore the seabed. Similarly, for the year ended 30 June 2014, the commencement of oil extraction creates a legal obligation to rectify the damage that has been caused by the current year's oil extraction. Criteria (b) and (c) are also satisfied since an **outflow of resources embodying economic benefits** in settlement of the obligations is probable in both years (criterion (b)) and a **reliable estimate** can be made (criterion (c)). Thus, a provision for restoration costs is recognised for the activities undertaken in 2013 and 2014.

- General journal entries to recognise the provision for restoration costs

The measurement of the provision will be based on the **best estimate** of the removal and restoration costs (para. 36) reported at **present value** (para. 45). Using the provided discount rate of 5%, the amount of the provision at the end of 2013 and 2014 would be calculated as follows:

Provision for restoration costs at 30 June 2013

There are no removal and restoration costs identified with the exploration and evaluation activities undertaken prior to 1 July 2012 when the current licensing agreement is signed. Between 1 July 2012 and 30 June 2013 the construction of the oil rig creates a legal obligation under the terms of the license to remove the rig and restore the seabed. These costs are included as part of the cost of the oil rig, which is a **development cost**. The best estimate of the **removal and restoration costs** is \$2 569 500, or $90\% \times \$2\,855\,000$. At 30 June 2013, one year of the 10-year licensing agreement that allows access to the oilfield has expired. Thus, the present value of the provision for restoration costs would be measured by **discounting \$2 569 500 using a discount rate of 5% over nine years**. That is:

Development cost $(90\% \times \$2\,855\,000) \times 1.05^{-9} = \$1\,656\,323$ (present value)			
The general journal entry to recognise the provision would be:			
30 June 2013			
Development asset	Dr	\$1 656 323	
Provision for restoration costs	Cr		\$1 656 323

Provision for restoration costs at 30 June 2014

Between 1 July 2013 and 30 June 2014, extraction of oil commences, which gives rise to a legal obligation to rectify the damage that has been caused by the current year's oil extraction. These costs are included as part of **the cost of production**.

The best estimate of the restoration costs arising from total oil extraction is \$285 500, or $10\% \times \$2\,855\,000$. The portion of the obligation for restoration costs recognised for the year ended 30 June 2014 is the portion of **\$285 500** that arises from the extraction of oil for the year. The portion of restoration costs to be recognised is **\$23 792, or $8.33\% \times \$285\,500$** , where 8.33% is equal to **1 million barrels extracted \div 12 million barrels expected over the term** of the licensing agreement.

The present value of the obligation for restoration costs would be measured by **discounting \$23 792 using a discount rate of 5% over eight years**. That is:

Production cost $(10\% \times \$2\,855\,000) \times (1\,000\,000 \text{ barrels of oil} \div 12\,000\,000 \text{ barrels of oil}) \times 1.05^{-8} = \$16\,103$ (present value)			
The general journal entry to recognise the restoration costs arising from the current year's oil extraction would be:			
30 June 2014			
Production costs	Dr	\$16 103	
Provision for restoration costs	Cr		\$16 103

A **further adjustment** to the provision for restoration costs is required at 30 June 2014. This adjustment reflects the due date for the obligation becoming one year closer – that is, the **'unwinding of the discount'**. It is calculated by restating any prior balances in the provision for restoration costs to present value as at 30 June 2014. In this case, the provision for restoration costs arising from development activities is restated as follows:

Development cost (recalculated)	$(90\% \times \$2\,855\,000) \times 1.05^{-8}$	\$1 739 139
Production cost		16 103
Total provision balance		<u>\$1 755 242</u>
(recalculated at 30 June 2014)		
Less existing provision balance	$(\$1\,656\,323 + \$16\,103)$	<u>1 672 426</u>
Increase in provision		<u><u>\$82 816</u></u>

The increase in the provision of \$82 816 is recorded as a finance cost in accordance with paragraph 8 of Interpretation 1. The general journal entry would be:

30 June 2014			
Finance costs	Dr	\$82 816	
Provision for restoration costs	Cr		\$82 816

8. Understand how to account for the costs carried forward once production commences (H&P LO 20.7)

Amortisation:

- Most frequently used method is the **units-of-production method**
- An amortisation rate is calculated by **relating the costs carried forward to the 'reserve base'**

Reserve base: "the **estimated quantity of materials** that can **be recovered from the deposit**", ideally **measured in units of end product** eg, a gram of gold, a kg of nickel.

In **AASB 6** also called **economically recoverable reserves** (Appendix A):

Economically recoverable reserves:

The **estimated quantity of product** in an **area of interest** that can be expected to be **profitably extracted, processed and sold** under current and foreseeable economic conditions.

Amortisation based on production (example)

Mining firm has:

\$100M in carried forward costs (could be tangible or intangible assets) estimated reserves of **4M tonnes; 250,000 tonnes** are extracted in this period.

What amount of costs are assigned to inventory in this period?

$100,000,000 \times (250,000 / 4,000,000) = \$6,250,000$

Depreciation:

- **AASB 116 para 60** requires the depreciation method used **reflect the pattern of consumption of the asset's future economic benefits**

- If the **useful life** of the plant and equipment **exceeds the life of the reserves** and it **could not be removed economically** from the mine site:

It should be depreciated over **the life of the reserves**

- If the plant and equipment **can be removed** or **its useful life is less** than the productive life of the reserves:

It should be depreciated **in the same way as other** depreciable assets

Example of the whole cycle

Insensitive Mining Ltd holds rights to mine in **two areas of interest**. On 1 July 2006 it commenced operations to search for kryptonite. During the year it incurred **exploration and evaluation costs** in two areas of interest:

Daintree Rainforest area (DRF) \$15m

Great Barrier Reef area (GBR) \$10m

Activities in both areas **have not reached a stage** which permits a **reasonable assessment** of the existence or otherwise of **economically recoverable reserves**.

› The firm chooses to **capitalise** its exploration and evaluation costs, and uses the **cost model**

› Costs incurred to date are regarded as **intangibles**

Entries for financial year ended 30 June 2007:

Dr Exploration and Evaluation asset [DRF]	15m	
Dr Exploration and Evaluation asset [GBR]	10m	
Cr Cash/payables		25m

(Recognition of E&E assets)

During the 2008 financial year, following evaluation of the **GBR site**, it is **abandoned**. **None** of the exploration & evaluation asset costs **can be shifted to alternative uses**

Dr Impairment loss	10m	
Cr Exploration and Evaluation asset [GBR]		10m

(Record abandonment of GBR site)

In July 2007 (2008 financial year) kryptonite is **discovered in the DRF** area of interest:

- Further **evaluation costs of \$5m** are incurred, and then the decision is made to **develop** the site for mining

During the 2008 financial year:

- **development costs of \$8m** that satisfy the requirements of **AASB138** are incurred

Entries for financial year ended 30 June 2008:

Dr Exploration & Evaluation asset [DRF]	5m	
Cr Cash/payables		5m

(Recognise further E&E costs at DRF site)

Dr Intangible asset under construction	20m	
Cr E&E asset [DRF]		20m

(Reclassify impairment tested E&E asset to development) (15m+5m)

Dr Intangible asset under construction	8m	
Cr Cash/payables		8m

(Recognise development cost)

In the 2008 financial year, construction costs are incurred at the Daintree site (DRF).

- **Plant & equipment \$1m**

- **Buildings \$2m**

Plant & equipment could be **relocated** but it would be **impractical** to **move the buildings**

Plant & equipment has a **10-year useful life** and **zero residual value**

Dr Plant and equipment	1m	
Dr Buildings	2m	
Cr Cash		3m

(Recognise construction costs)

Note: No depreciation until production commences

2009 financial year, the firm moves into **production phase**:

- estimated that site can produce 8 million tonnes of kryptonite in total
- 2 million tonnes of kryptonite mined in 2009
- 1.5 million tonnes are sold at \$40/tonne
- production costs (e.g. wages) amount to \$500,000
- site restoration on completion of mining has not yet been contemplated

Entries for financial year ended 30 June 2009:

Dr Mineral resource asset (intangible) 28m
 Cr Intangible asset under construction 28m

(Reclassify development assets)(20m+8m)

This asset will be amortised on a units of production basis:

Dr Inventory, Kryptonite 7m
 Cr Accumulated amortisation minres asset 7m

(Amortise mineral resource asset) (\$28m/8m x 2m=7m: units of production basis)

Dr Inventory, Kryptonite 0.5m
 Cr Cash 0.5m

(Recognise production costs)

Dr Inventory, Kryptonite 0.1m
 Cr Accumulated depreciation 0.1m

(Capitalise plant depreciation in cost of inventory) (Depreciation on plant: \$1m/10 year: useful life)

Dr Inventory, Kryptonite 0.5m
 Cr Accumulated depreciation 0.5m

(Capitalise building depreciation in cost of inventory) (Depreciation on building: \$2m/8m x2m:reserve life)

Kryptonite inventory (calculated on "cost" basis):

Amortisation of mineral resource	\$ 7.0m
Production costs	\$ 0.5m
<u>Depreciation, plant & building</u>	<u>\$ 0.6m</u>
Total costs of inventory	\$ 8.1m

2 million tonnes were extracted in 2009. Cost per tonne is \$ 8.1M /2m = \$ 4.05 per tonne

Entries for financial year ended 30 June 2009:

Dr Cost of goods sold 6.075m
 Cr Inventory, Kryptonite 6.075m

(Recognise COGS) (1.5 million tonnes @ \$4.05 per tonne)

Dr Cash/receivables 60m
 Cr Sales revenue 60m

(Record sales) (1.5 million tonnes @ 40 per tonne)

Disclosures and ongoing issues

- › High degree of risk in industry
- › Expectation for high level of disclosure and pressure for more disclosures when new international standard is finalised

- › Extractive industry generally has a high level of non-financial disclosures related to:
 - Health/safety
 - Stakeholder engagement
 - Environment