Chapter 6
Revaluations and impairment testing of non-current assets

Objectives of this lecture
• Understand the meaning of fair value
• Understand how and when to revalue an item of property, plant and equipment in accordance with AASB 116
• Understand how and when to revalue an intangible asset in accordance with AASB 138
• Understand the difference in accounting treatments for upward revaluations to ‘fair value’, as opposed to write-downs to ‘recoverable amount’
• Understand what an ‘impairment loss’ is and know how to account for one

Objectives (cont.)
• Understand how to account for revaluations that act to reverse previous revaluation increments and decrements
• Understand how to account for accumulated depreciation when a non-current depreciable asset is revalued
• Understand that, subsequent to revaluation, new depreciation charges will be based on the revalued amount of the non-current asset
• Know how the profit is determined on disposal of a revalued non-current asset
Objectives (cont.)

- Understand how asset revaluations can affect an organisation’s profits owing to changes in depreciation expenses and in final profits or losses on the sale of the revalued asset
- Be able to explain possible motivations driving an organisation to elect to revalue, or not to revalue, its non-current assets to fair value
- Know the disclosure requirements pertaining to asset revaluations

Relevant accounting standards

There are three standards of particular relevance

1. AASB 116 Property, Plant and Equipment
   Requirements for revaluations, depreciation and determining acquisition cost of property, plant and equipment
2. AASB 138 Intangible Assets
   Revaluation of intangible assets and other issues
3. AASB 136 Impairment of Assets
   When to recognise an ‘impairment loss’

Introduction to revaluations

- Historical cost has been criticised for bearing no relation to current asset values
- In Australia, entities may revalue many non-current assets
  - However, AASB 138 specifically excludes the revaluation of some intangible assets
- Asset revaluations—what are they?
  - Recognising a reassessment of the carrying amount of a non-current asset to fair value as at a particular date
  - Excludes recoverable amount write-downs (i.e. impairment losses)
Introduction to impairment losses

- If a non-current asset's **carrying amount** exceeds its **recoverable amount** it **must be** written down to its recoverable amount (AASB 136)
  - The write-down is called an **impairment loss** (again, not to be confused with a revaluation)
  - **Carrying amount**: cost of asset (or revalued amount) less accumulated depreciation and accumulated impairment losses
  - **Recoverable amount**: higher of an asset’s fair value less costs of disposal, and value in use

Introduction to impairment losses (cont.)

- **Fair value, less costs of disposal (or net selling price)**: amount obtained from the sale of an asset in an arm’s length transaction between knowledgeable, willing parties less the costs of disposal
- **Value in use**: present value of the future cash flows expected to be derived from an asset

Impairment losses

- Impairment losses can be reversed in subsequent periods (unless a particular accounting standard prohibits it—as is the case with intangible assets)
- Worked Example 6.1 (p. 205) provides an example of a reversal of an impairment loss
- Impairment losses will at times be determined by reference to a ‘cash-generating unit’ rather than to a specific asset.
- AASB 136 defines a cash-generating unit as ‘the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets’
- See Worked Example 6.4 (p. 208)—Accounting for an impairment loss by reference to a cash-generating unit
Ulladulla Ltd has a printing process comprising four separate but highly interdependent assets.
The printing machinery has a combined carrying value of $1,000,000, made up as follows:

<table>
<thead>
<tr>
<th>Asset</th>
<th>Carrying Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset 1</td>
<td>$100,000</td>
</tr>
<tr>
<td>Asset 2</td>
<td>$200,000</td>
</tr>
<tr>
<td>Asset 3</td>
<td>$300,000</td>
</tr>
<tr>
<td>Asset 4</td>
<td>$400,000</td>
</tr>
<tr>
<td>Total</td>
<td>$1,000,000</td>
</tr>
</tbody>
</table>

- It was determined that the value in use of the cash-generating unit, which is calculated at its present value, amounted to $800,000.

- The current fair value less costs of disposal of the entire unit is $750,000.
- The total impairment loss will therefore be equal to $1,000,000 less the greater of the value in use and fair value less costs to sell.
- This gives us a total impairment loss of $200,000.
The impairment loss would be apportioned across the four assets by using their respective carrying values as the basis for the allocation.
- For example, the allocation of the impairment loss to Asset 4 would be $400,000 divided by $1,000,000 multiplied by $200,000. This would equal $80,000.

Hence the accounting entry to record the impairment loss on the cash-generating unit would be:

- Dr Impairment loss 200,000
- Cr Accum. impairment losses—Asset 1 20,000
- Cr Accum. impairment losses—Asset 2 40,000
- Cr Accum. impairment losses—Asset 3 60,000
- Cr Accum. impairment losses—Asset 4 80,000
Measuring property, plant and equipment at cost or fair value—the choice

- AASB 116 requires each class of property, plant and equipment to be measured at either cost or fair value
  - Examples of classes are land and buildings, machinery and motor vehicles
- Some classes might be measured at cost and others at fair value
- With a mix of measurement methods, is the total balance of non-current assets meaningful?
- Entities may switch from fair value to cost for justifiable reasons and provided adequate disclosures are made (AASB 116)

Measuring property, plant and equipment at cost or fair value (cont.)

- Where an entity changes from cost (that is, they have been using the ‘cost model’) to fair value (that is, they have decided to use the ‘revaluation model’) for a class of non-current assets and there was a previous impairment loss (AASB 116):
  - any increase in an asset’s carrying amount is first recognised as income; and
  - any excess above the amount if no impairment loss was recognised is transferred to a revaluation surplus account

Measuring property, plant and equipment at cost or fair value (cont.)

- If a class of non-current assets is measured at cost, AASB 136 is to be applied:
  - if an asset’s carrying amount is greater than its recoverable amount, an ‘impairment loss’ must be recognised
  - this would not constitute a revaluation
The use of fair values

- Any revaluation of non-current assets must be to fair value (AASB 116)
- Fair value is defined in the accounting standard and in accordance with AASB 13 Fair Value Measurement (issued in September 2011) as:
  - the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.
- This definition of fair value is the same as that of fair value used in other accounting standards.
- Hence, under AASB 116 a specific valuation method has been stipulated, this being fair
- Fair value is determined on the assumption that the entity is a going concern

The use of fair values (cont.)

- The required disclosures regarding asset revaluations (AASB 116) are:
  - effective date of revaluation
  - whether an independent valuer was involved
  - methods and significant assumptions applied
  - extent to which fair values were determined, with reference to observable prices in active markets or recent market transactions
  - for each revalued class, the carrying amount if the cost model was used
  - the revaluation surplus, indicating the change for the period and any restrictions on distribution of the balance to shareholders

The use of fair values (cont.)

- Revaluations must be made with sufficient regularity so the carrying amount of each asset in the class does not differ materially from its fair value (AASB 116)
- If values change regularly and changes are material, revaluations might be necessary each reporting period
- Otherwise every three to five years is sufficient
Revaluation increments

• General procedure (AASB 116)

Debit  Asset
Credit  Revaluation surplus

• The revaluation surplus is part of shareholders’ funds (owners’ equity)

Treatment of balances of accumulated depreciation upon revaluation

• If a revalued asset is a depreciable asset, any balance of accumulated depreciation is credited to the asset account prior to revaluation (AASB 116)

• Journal entry (net-amount method)

  Dr  Accumulated depreciation—machine
  Cr  Machine

  Dr  Machine
  Cr  Revaluation surplus

• Subsequent depreciation is to be based on the revalued amount of the asset

Worked Example 6.5—Revaluation of a depreciable asset using the net-amount method

As at 1 July 2014, Farrelly Ltd has an item of machinery that originally cost $40,000 and has accumulated depreciation of $15,000.

Its remaining life is assessed to be five years, after which time it will have no residual value.

Farrelly decided on 1 July 2014 that the item should be revalued to its fair value, which was assessed as $45,000.
Worked Example 6.5—Revaluation of a depreciable asset using the net-amount method (cont.)

The total revaluation increment will represent the difference between the carrying amount and the fair value. In this case it would be:

$45,000 – ($40,000 – $15,000) = $20,000

The journal entries on 1 July 2014 would be:

Dr Accumulated depreciation—machinery 15,000
Cr Machinery 15,000

Dr Machinery 20,000
Cr Revaluation surplus 20,000

Illustration 2—Revaluation increment

- A building with a cost of $400,000 and accumulated depreciation of $190,000 is revalued to its fair value of $350,000
- What are the journal entries?

Dr Accumulated depreciation 190,000
Cr Building 190,000

Dr Building 140,000
Cr Revaluation surplus 140,000

Treatment of balances of accumulated depreciation upon revaluation (cont.)

- Alternative method (AASB 116)
  - Accumulated depreciation may be restated proportionately with the change in gross carrying amount of the asset, so the carrying amount after revaluation equals the revalued amount
  - This is referred to as the gross method
- Journal entry
  - Debit Asset
  - Credit Accumulated depreciation
  - Credit Revaluation surplus
- Refer to Worked Example 6.6 (p. 212)—Revaluation of a depreciable asset—the use of the gross method
Revaluation decrements

- In line with the concept of conservatism, revaluation decrements are recognised as an expense within profit or loss in the statement of comprehensive income.
- Contrast this with a revaluation increment wherein the increase in the revaluation surplus is included in ‘other comprehensive income’.
- Journal entry (AASB 116)

\[
\begin{align*}
\text{Dr} & \quad \text{Accumulated depreciation} \\
& \quad \text{Cr} \quad \text{Asset} \\
\text{Dr} & \quad \text{Loss on revaluation of asset} \\
& \quad \text{Cr} \quad \text{Asset}
\end{align*}
\]

Refer to Worked Example 6.7 (p. 213)—A revaluation decrement.

Illustration—Revaluation decrement

Refer to the previous example, except this time the fair value of the building (acquired for $400 000 and having accumulated depreciation of $190 000) is $150 000 rather than $350 000.

What are the journal entries?

\[
\begin{align*}
\text{Dr} & \quad \text{Accumulated depreciation} \quad 190 000 \\
& \quad \text{Cr} \quad \text{Building} \quad 190 000 \\
\text{Dr} & \quad \text{Loss on revaluation of building} \quad 60 000 \\
& \quad \text{Cr} \quad \text{Building} \quad 60 000
\end{align*}
\]

Reversal of revaluation decrements and increments

- For an asset class, reversals of previous revaluations should be recorded by the reverse of the initial revaluation entries.
- If a revaluation decrement reverses a previous increment for the same asset, then the entries are:

\[
\begin{align*}
\text{Dr} & \quad \text{Accumulated depreciation} \\
& \quad \text{Cr} \quad \text{Asset surplus} \\
\text{Dr} & \quad \text{Loss on revaluation (the excess, if any)} \\
& \quad \text{Cr} \quad \text{Asset}
\end{align*}
\]
Example of a reversal of a previous revaluation increment (Worked Example 6.8, p. 214)

- PK Ltd acquires a block of land on 1 January 2013 for $200,000 in cash
- Due to increased housing demand in the area, the land has a market value of $290,000 on 1 January 2014
- However, the market value falls to $140,000 on 30 June 2016

1 January 2013
Dr Land 200,000
Cr Cash 200,000

1 January 2014
Dr Land 90,000
Cr Revaluation surplus 90,000

30 June 2016
Dr Revaluation surplus 90,000
Dr Loss on revaluation of land 60,000
Cr Land 150,000

Reversal of revaluation decrements and increments (cont.)

- If a revaluation increment reverses a previous decrement for the same asset then we recognise a gain, which is included within profit or loss, to the extent it reverses the previous revaluation decrement.
- The general form of the journal entry would be:

Dr Asset
Cr Gain on revaluation
Cr Revaluation surplus (the excess if any)

Example of a reversal of a previous revaluation decrement

Land was acquired for $200,000 on 1 July 2012. On 30 June 2013 it has a fair value of $150,000. On 30 June 2015, due to increased population, the land is considered to have a fair value of $270,000.

1 July 2012
Dr Land 200,000
Cr Cash 200,000

30 June 2013
Dr Loss on revaluation of land 50,000
Cr Land 50,000
(loss included within profit or loss)

30 June 2015
Dr Land 120,000
Cr Gain on revaluation of land 50,000
Cr Revaluation surplus 70,000
(gain included in profit or loss and the increase in revaluation surplus is included within ‘other comprehensive income’)
Accounting for the gain or loss on disposal of a revalued non-current asset

- Gain or loss from **derecognition** of an item of property, plant and equipment is to be calculated as the difference between (AASB 116):
  - net disposal proceeds (if any), and
  - the asset's carrying amount
- **Derecognition** is:
  - the point in time when an asset is removed from the statement of financial position (balance sheet)
  - when an asset is sold, or
  - when no future economic benefits are expected from an asset's use or disposal

Accounting for profit on disposal of a revalued non-current asset

- When an asset is sold, any resulting balance in the revaluation surplus (AASB 116):
  - may be transferred directly to retained earnings
  - cannot be transferred to the profit or loss
- If a non-current asset is revalued upwards, any gain on sale will be less than the gain if the asset had not previously been revalued
- Refer to Worked Examples 6.9, 6.10 and 6.11 on pages 216–218

Consideration of present values

- **Recoverable amount** is the higher of an asset's fair value less costs of disposal, and value in use (AASB 136)
- Value in use (AASB 136) is:
  - the present value of the future cash flows expected from an asset
- Estimating value in use (AASB 136) involves:
  - estimating future cash inflows and outflows from the continued use and subsequent disposal of the asset; and
  - applying the appropriate discount rate to future cash flows
- Discounting future cash flows will decrease the calculated recoverable amount
Can we offset revaluation increments and decrements within a class of assets?

- Increments and decrements may be offset only to the extent that they relate to a particular asset (AASB 116)
  - Therefore, if, say, one item of land increased in fair value by $10 million and another item of land decreased in fair value by $1 million (and assuming no prior revaluations), then a loss of $1 million would be recognised in profit or loss for the period (and the $10 million would be shown as part of ‘other comprehensive income’)

Do we think this is ‘sensible’?

Economic consequences of asset revaluations

- If contracts in place are tied to reported profits (debt or management compensation), management might have an incentive not to revalue
- However, if assets are increased, a revaluation might loosen constraints such as debt-to-assets restrictions
- Firms subject to political scrutiny might be more likely to undertake upwards revaluation resulting in a reduction in profits
- As the perceived competence of independent valuers increases, audit time might be reduced

Disclosure requirements

- AASB 116 includes various disclosure requirements relating to the revaluation of non-current assets
- These were previously discussed under the heading ‘The use of fair values’
Summary

- This lecture considered the revaluation of non-current assets, with the emphasis on property, plant and equipment.
- If the recoverable amount is below the carrying amount, an impairment loss should be recorded.
- For upwards revaluations:
  - assets are to be revalued to fair value
  - any increase is to be transferred to a revaluation surplus, unless it is a reversal
- For downwards revaluations:
  - any decrease is to be treated as an expense, unless it is a reversal.

Summary (cont.)
- When a revaluation is undertaken:
  - any existing accumulated depreciation should be credited against the non-current asset (if the net method is used—which is the common approach), and
  - the non-current asset should be increased by the amount of the revaluation.
- Where a revalued asset is sold, the gain or loss is the difference between the carrying amount and the net disposal proceeds of the asset.
- The lecture also discusses how revaluations can loosen certain accounting-based debt covenants.