



速成教育
SPEED UP EDUCATION



BUS 320

Intermediate Accounting

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S P E E D U P E D U C A T I O N

Lecture 10 Long-Lived Asset

Depreciation

Facts Equipment with a cost (or net revalued amount) of \$10,000 and a residual value of \$3,600 is acquired. The equipment has an estimated useful life of eight years, and its total expected life is 10 years with no salvage value.

Under IFRS, only \$6,400 of its cost is depreciated, as calculated below:

Original cost (or amount substituted for "cost")	\$10,000
Less: residual value	<u>3,600</u>
Depreciable amount	<u>\$ 6,400</u>

Its depreciation under IFRS would be \$800 if it uses straight-line depreciation. However, if the total expected life of the asset is 10 years with no salvage value, under ASPE the minimum depreciation charge would be \$1,000 per year. Journal entries to record the depreciation under IFRS versus ASPE are provided below.

<u>To record depreciation of the machine:</u>	<u>IFRS^a</u>	<u>ASPE^b</u>
Depreciation Expense	800	1,000
Accumulated Depreciation —Machinery	800	1,000

^a IFRS depreciation $(\$10,000 - \$3,600)/8 = \$800$

^b ASPE depreciation is the greater of $(\$10,000 - \$3,600)/8 = \$800$ or $(\$10,000 - \$0)/10 = \$1,000$

Depletion

Assume a company acquired the right to use 1,000 hectares of land in the Northwest Territories to mine for gold. Costs for the mine include:

Lease	\$ 500,000
Exploration/Evaluation	1,000,000
Development	38,500,000
Total capitalized cost	<hr/>

The company estimates the mine will provide approximately 50,000 ounces of gold. There is no residual value.

- a. Calculate the depletion rate and provide the journal entry to record depletion assuming that 12,500 ounces are extracted in the first year.

Impairment

External	Internal
Significant change in technology, market, economic, or legal environments	Obsolescence or physical damage
Increasing market rates—negative effect on recoverable amount or value in use	Significant changes in how the asset is used
Market capitalization exceeds carrying value of net assets	Reports that performance has worsened, e.g. increased downtime

- Management needs to regularly evaluate assets for indicators of impairment
 - IFRS requires this at the end of each reporting period
 - ASPE allows waiting until there is indication the carrying amount may not be recoverable (a trigger)
 - ASPE: Cost recovery impairment model
 - IFRS: Rational entity impairment model

Cost Recovery Model

- Under this model, an asset is impaired only if carrying amount cannot be recovered from using and eventually disposing of the asset (recoverability test)
 - i.e. impaired if carrying amount > undiscounted future net cash flows
- Impairment loss is the difference between the carrying amount and its fair value
- Impairment losses cannot be reversed

An asset's carrying amount is \$600,000 (\$800,000 cost less \$200,000 accumulated depreciation) Fair value is \$525,000

A. Expected future cash flow is \$650,000

B. Expected future cash flow is \$580,000

Rational Entity Model

- An impairment loss is determined by comparing the asset's carrying amount and recoverable amount (greater of the value in use and the fair value less cost of disposal)
- If carrying amount > recoverable amount, then impairment loss is difference between two values
- Impairment losses can be reversed

Carrying amount, \$45,000 (\$60,000 cost – \$15,000 accumulated depreciation)

Value in use, \$37,500

Fair value less costs of disposal, \$40,000

To decide whether a write-up (i.e., a reversal/recovery of the previously recognized loss) is possible and what \$ amount of this write-up should be, we will consider three dollar amounts as possible limits ...

... we will call them:

- i) Limit #1**
- ii) Limit #2, and**
- iii) Limit #3**

... reversal of any previously recognized impairment losses would not be possible if there were no such losses in the past

... so, one obvious limit, an amount that is readily obtainable, is the cumulated impairment losses in the past

this gives us our Limit #1

How big can the reversal of impairment loss be?

114 An impairment loss recognised in prior periods for an asset other than goodwill shall be reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. If this is the case, the carrying amount of the asset shall, except as described in paragraph 117, be increased to its recoverable amount. That increase is a reversal of an impairment loss.

... at most, the "Recoverable Amount"

this exception here refers to one more limit on the write-up amount; we will look at this additional limit on the next page

i.e., recovering/reversing a previously recognized impairment loss, and writing up the carrying amount to ...

... obviously, we don't want to write-up the carrying amount above the recoverable amount; if we do, we have to write-down the carrying amount right away to the recoverable amount; so, the most we can write-up to is ...

... at most, the "Recoverable Amount"

this gives us our Limit #2

How big can the reversal of impairment loss be?

this is very important; make sure that you read this paragraph enough times to understand the meaning of the requirement

Reversing an impairment loss for an individual asset

117 The increased carrying amount of an asset other than goodwill attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised for the asset in prior years.

this gives us our Limit #3

Cash-Generating Units (C G U)

- These assets are identified with an asset group or cash-generating unit (C.G U)
 - i.e. “smallest identifiable group of assets that generates cash inflows that are predominantly independent of the cash flows from other individual assets or other groups of assets” (I A S 36.68)

How to allocate the impairment loss for a CGU to the individual assets within the CGU?

IFRS 60

Impairment loss for a cash-generating unit

104 An impairment loss shall be recognised for a cash-generating unit (the smallest group of cash-generating units to which goodwill or a corporate asset has been allocated) if, and only if, the recoverable amount of the unit (group of units) is less than the carrying amount of the unit (group of units). The impairment loss shall be allocated to reduce the carrying amount of the assets of the unit (group of units) in the following order:

- (a) first, to reduce the carrying amount of any goodwill allocated to the cash-generating unit (group of units); and
- (b) then, to the other assets of the unit (group of units) pro rata on the basis of the carrying amount of each asset in the unit (group of units).

These reductions in carrying amounts shall be treated as impairment losses on individual assets and recognised in accordance with paragraph 60.

take away
Goodwill
first ...

... then to
other assets
on a
proportional
basis ...

... subject to
restrictions
in the next

Additional requirements in the allocation of the impairment loss for a CGU to the individual assets within the CGU

IFRS 61

105 In allocating an impairment loss in accordance with paragraph 104, an entity shall not reduce the carrying amount of an asset below the highest of:

- (a) its fair value less costs of disposal (if measurable);
- (b) its value in use (if determinable); and
- (c) zero.

The amount of the impairment loss that would otherwise have been allocated to the asset shall be allocated pro rata to the other assets of the unit (group of units).

WHY?
Why this
restriction?

Intangible Asset

Goodwill

Goodwill is difficult to imagine because it's not a tangible asset, **it can only be recognized when a business is acquired**, and it cannot be purchased or sold separately—it can only be sold when a business is sold.

Tractorling Ltd. Statement of Financial Position December 31, 2020			
Assets		Liabilities and equity	
Cash	\$ 25,000	Current liabilities	\$ 55,000
Accounts receivable	35,000	Share capital	20,000
Inventories	42,000	Retained earnings	180,000
Property, plant, and equipment (net)	153,000		
Total assets	<u>\$255,000</u>	Total liabilities and equity	<u>\$255,000</u>

Tractorling Fair Values, December 31, 2020	
Cash	\$ 25,000
Accounts receivable	35,000
Inventories	62,000
Property, plant, and equipment (net)	265,000
Patents	18,000
Liabilities	(55,000)
Fair value of identifiable net assets	<u>\$350,000</u>

Might be older inventory

Older land that has appreciated

Internally developed patents

Determination of Goodwill—Master Valuation Approach

Fair value of consideration transferred:		\$400,000
Fair value of identifiable net assets:		
Cash	\$ 25,000	
Accounts receivable	35,000	
Inventories	62,000	
Property, plant, and equipment	265,000	
Patents	18,000	
Liabilities	(55,000)	350,000
Value assigned to goodwill:		<u>\$ 50,000</u>

Cash	25,000
Accounts Receivable	35,000
Inventory	62,000
Property, Plant, and Equipment	265,000
Intangible Assets--Patents	18,000
Goodwill	50,000
Liabilities	55,000
Cash	400,000

Intangible Assets

Intangible assets **purchased from another party** are **measured at cost**

Companies incur costs internally to create intangibles (such as patents and brand names)

- A S P E allows for an accounting policy option to expense all costs relating to internally generated intangibles
- I F R S allows costs to be capitalized when certain criteria are met (can also be used under ASPE); otherwise costs are expensed

Research Phase Costs	Development Phase Costs
Costs incurred for research or during the research phase of an internal project do not meet the criteria for recognition as an intangible asset	Capitalize costs only if six specific conditions (see below) are met, and only when the future benefits are reasonably certain
Costs are recognized as expenses when they are incurred	Recognized only in limited situations because it cannot happen until all six criteria are met
	Costs incurred that cannot be distinguished from general business development costs are excluded: brands, mastheads, publishing titles, customer lists

- Meet all six of the following conditions—
 1. Technical feasibility of completion
 2. Intention to complete for use or sale
 3. Ability to use or sell it
 4. Availability of resources to complete it, use it, or sell it
 5. Show how future economic benefits will be generated—existence of a market or usefulness to the company
 6. Ability to reliably measure costs

Measurement

- **Cost model (CM)**—most widely used; only method under ASPE
- **Revaluation model (RM)**—applied only to assets that have a fair value determined in an active market

Impairment

Cost recovery Model

Fair value test compare carrying amount with fair value

Rational Entity Model



