THE DIFFERENCES BETWEEN REVALUATION AND ASSETS IMPAIRMENT

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Abstract:
Impairment and revaluation are terms closely related to one another, with subtle differences. Revaluation and impairment both require the company to evaluate the assets for their fair value, and then take appropriate action in updating the accounting books. The major difference between the two is that a revaluation can be made upwards (to increase the value of the asset to market value) or downwards (to decrease the value). An impairment, on the other hand, only refers to one of the two; a fall in the market value which is then written down.
The purpose of the paper is to establish what are the differences between revaluation and impairment of assets.

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Introduction

Fixed assets such as machinery, tools, equipment are tangible long term assets that are not sold in the business, rather used in the production of goods and services. Fixed assets are recorded in the books at their cost price and are then frequently updated to show their true and fair market value.

IAS/IFRS require fixed assets to be initially recorded at cost but they allow two models for subsequent accounting for fixed assets, namely the cost model and the revaluation model.

Revaluations and impairments are closely related events in asset management, they relate directly to the 'measurement of asset carrying values after recognition', whether the cost model or the revaluation model is adopted.

Revaluation of fixed assets is the process of increasing or decreasing their carrying value in case of major changes in fair market value of the fixed asset. Revaluation is a technique that helps determine the true and fair market value of a fixed asset.

Impairment occurs when the economic value of an asset falls below its carrying value or net book value. This implies that the current carrying value of the asset may not be economically recovered in its current circumstances over its remaining useful life.

There may be instances in which a fixed asset loses its value and needs to be written down in the accounting books of the firm. An asset can become impaired for a number of reasons, which include becoming obsolete, failing to meet regulatory standards, damages to the asset, changing market conditions, etc. Other company accounts such as a goodwill and accounts receivable can also become impaired. Firms are required to conduct regular tests on asset impairment (especially on goodwill) and any impairment then will be written off.

Revaluation

IAS 16 provides for two acceptable alternative approaches to accounting for long-lived tangible assets. The first one is the historical *cost model*, under which acquisition or construction cost is used for initial recognition, subject to depreciation over the expected economic life and to possible write-down in the event of a permanent impairment in value, and the other one is the *revaluation model*.

Revaluation helps to determine and account a fixed asset at the true and fair market value. When a revaluation is done, the asset's recorded value (historical cost value in the ledger) will be adjusted to the market value. The historical values recorded in the books are not accurate since the market value of the asset will fluctuate and may be higher or lower over time. A revaluation will be done to establish the most accurate accounting information regarding the asset's value.

In the revaluation model, the fair value (defined as the amount for which the asset could be exchanged between knowledgeable, willing parties in an arm's-length transaction), it is used in order to make comparision and to determine the differences that will be registred like revaluations adjustments. Usually, the fair value is determined by appraisers, using market-based evidence. Market values can also be used for machinery and equipment, but since such items often do not have readily determinable market values, particularly if intended for specialized applications, they may instead be valued at depreciated replacement cost.

The revaluation must be done by licensed specialists who will have to study markets carefully where such assets are sold in order to determine the accurate market value. Besides determining the true market value of a fixed asset, revaluation can be used to set funds aside for the replacement of the asset, to negotiate prices in a merger or acquisition, for taking loans my mortgaging fixed assets, for regulatory reasons, etc.

Under the revaluation model, revaluations should be carried out regularly, so that the carrying amount of an asset does not differ materially from its fair value at the balance sheet date.

If an item is revalued, the entire class of assets to which that asset belongs should be revalued.

Accounting for revaluation adjustments

If a revaluation results in an increase in value, it should be credited to other comprehensive income and accumulated in equity under the heading "revaluation surplus" unless it represents the reversal of a revaluation decrease of the same asset previously recognised as an expense, in which case it should be recognised as income.

A decrease arising as a result of a revaluation should be recognised as an expense to the extent that it exceeds any amount previously credited to the revaluation surplus relating to the same asset.

When a revalued asset is disposed of, any revaluation surplus may be transferred directly to retained earnings, or it may be left in equity under the heading revaluation surplus. The transfer to retained earnings should not be made through the income statement (that is, no "recycling" through profit or loss).

So, generally, revaluation adjustments are to be recognized in other comprehensive income and accumulated in equity under the heading of revaluation surplus. If a revalued asset is subsequently found to be impaired, the impairment provision is first offset against the revaluation surplus, and only when that has been exhausted is it expensed. Equally, if an asset carried at historical cost had been impaired, but was subsequently revalued above historical cost, because of some dramatic change in economic circumstances, the previous impairment provision would

flow back through profit, and only the increase above historical cost would be recognized in other comprehensive income and accumulated in equity.

Under the provisions of IAS 16, the amount credited to revaluation surplus can either be transferred to retained earnings, but not through profit or loss, as the asset is being used by an entity, or it can be held in the surplus account until such time as the asset is disposed of or retired from service. If some of the surplus is transferred as the asset is used, the amount of surplus transferred is limited to the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's historical cost.

Example for revaluation adjustments:

At the beginning of the year a company purchased a building with a carrying value of 400,000 and a useful life of 20 years and the company uses straight line depreciation. So, yearly depreciation is hence 400,000/20 or 20,000. Accumulated depreciation after 3 years is 20,000*3 or 60,000 and the carrying amount is 400,000 minus 60,000 which equals 340,000. At this moment the company use revaluation model and carries out a revaluation exercise which estimates the fair value of the building to be $380,000 as at this date. The carrying amount at the date is $340,000 and revalued amount is $380,000 so result, an upward adjustment of $40,000 is required to building account. It is recorded through the following journal entry:

Building	40,000	
Revaluation Surplus		40,000

Upward revaluation is not considered a normal gain and is not recorded in income statement rather it is directly credited to an equity account called revaluation surplus. **Revaluation surplus** holds all the upward revaluations of a company's assets until those assets are disposed of.

The depreciation in periods after revaluation is based on the revalued amount. In case of the same example depreciation for the next year shall be the new carrying amount divided by the remaining useful life or 380,000/17 which equals 22,352.

If a revalued asset is subsequently valued down due to impairment, the loss is first written off against any balance available in the revaluation surplus and if the loss exceeds the revaluation surplus balance of the same asset the difference is charged to income statement as impairment loss.

Suppose after 2 years the company revalues the building again to find out that the fair value should be 320,000. Carrying amount as at this moment is $380,000 minus 2 years depreciation of 44,704 which amounts to 335,296.

The carrying amount exceeds the fair value by 15,296 so the account balance should be reduced by that amount. Already, there is a balance of 20,000 in the revaluation surplus account related to the same building, so no impairment loss shall go to income statement. The journal entry would be:

Revaluation Surplus	15,296	
Building Account		15,296

Otherwise, if the fair value been 280,000 the excess of carrying amount over fair value would have been 55,296. In that situation the following journal entry would have been required.

Revaluation Surplus	40,000	
Impairment Losses	15,296	
Building		40,000
Accumulated Impairment Losses		15,296

Impairment

On the other side, impairment is the other aspect of changing the value of an asset, there may be instances in which a fixed asset loses its value and needs to be written down in the accounting books of the firm. In such an instance, the value will be written down to its true market price or will be sold. An asset that loses its value and needs to be written down is referred to as an impaired asset. Once an asset has been impaired, there is very little possibility for the asset to be written up; therefore, the asset must be carefully evaluated before it is categorized as an impaired asset.

IAS 36 defines impairment as the excess of carrying value over recoverable amount, and defines recoverable amount as the greater of two alternative measures: net selling price and value in use.

At each balance sheet date, review all assets to look for any indication that an asset may be impaired, its carrying amount may be in excess of the greater of its net selling price and its value in use. IAS 36 has a list of external and internal indicators of impairment. If there is an indication that an asset may be impaired, then you must calculate the asset's recoverable amount.

An asset can become impaired for a number of reasons, which include becoming obsolete, failing to meet regulatory standards, damages to the asset, changing market conditions, etc. Other company accounts such as a goodwill and accounts receivable can also become impaired. Firms are required to conduct regular tests on asset impairment (especially on goodwill) and any impairment then will be written off.

Indications of impairment could be from **external sources (**market value declines**,** negative changes in technology, markets, economy, or laws**,** increases in market interest rates**,** company stock price is below book value) or from **internal sources (**obsolescence or physical damage**,** asset is part of a restructuring or held for disposal**,** worse economic performance than expected).

The following external and internal signs of possible impairment are to be given consideration:

1. Market value declines for specific assets or cash generating units, beyond the declines expected as a function of asset aging and use;
2. Significant changes in the technological, market, economic, or legal environments in which the enterprise operates, or the specific market to which the asset is dedicated;
3. Increases in the market interest rate or other market-oriented rate of return such that increases in the discount rate to be employed in determining value in use can be anticipated, with a resultant enhanced likelihood that impairments will emerge;
4. Declines in the (publicly owned) entity’s market capitalization suggest that the aggregate carrying value of assets exceeds the perceived value of the enterprise taken as a whole;
5. There is specific evidence of obsolescence or of physical damage to an asset or group of assets;
6. There have been significant internal changes to the organization or its operations, such as product discontinuation decisions or restructurings, so that the expected remaining useful life or utility of the asset has seemingly been reduced; and
7. Internal reporting data suggest that the economic performance of the asset or group of assets is, or will become, worse than previously anticipated.

The mere fact that one or more of the foregoing indicators suggests that there might be cause for concern about possible asset impairment does not necessarily mean that formal impairment testing must proceed in every instance, although in the absence of a plausible explanation why the signals of possible impairment should not be further considered, the implication would be that some follow-up investigation is needed.

These lists are not intended to be exhaustive. Further, an indication that an asset may be impaired may indicate that the asset's useful life, depreciation method, or residual value may need to be reviewed and adjusted.

The recoverable amount of an asset is the greater of its 'fair value less costs to sell' and its 'value in use'.

To measure impairment, the asset's carrying amount is compared with its recoverable amount. Recoverable amount is higher then fair value less costs to sell and value in use.

Determining recoverable amount

- If fair value less costs to sell or value in use is more than carrying amount, it is not necessary to calculate the other amount. The asset is not impaired.
- If fair value less costs to sell cannot be determined, then recoverable amount is value in use.
- For assets to be disposed of, recoverable amount is fair value less costs to sell.

Fair value less costs to sell

- If there is a binding sale agreement, use the price under that agreement less costs of disposal.
- If there is an active market for that type of asset, use market price less costs of disposal. Market price means current bid price if available, otherwise the price in the most recent transaction.
- If there is no active market, use the best estimate of the asset's selling price less costs of disposal.
- Costs of disposal are the direct added costs only (not existing costs or overhead).

Value in use

The calculation of value in use should reflect the following elements:

- an estimate of the future cash flows the entity expects to derive from the asset
- expectations about possible variations in the amount or timing of those future cash flows
- the time value of money, represented by the current market risk-free rate of interest
- the price for bearing the uncertainty inherent in the asset
- other factors, such as illiquidity, that market participants would reflect in pricing the future cash flows the entity expects to derive from the asset

Cash flow projections should be based on reasonable and supportable assumptions, the most recent budgets and forecasts, and extrapolation for periods beyond budgeted projections. IAS 36 presumes that budgets and forecasts should not go beyond five years; for periods after five years, extrapolate from the earlier budgets.Management should assess the reasonableness of its assumptions by examining the causes of differences between past cash flow projections and actual cash flows.

Cash flow projections should relate to the asset in its current condition – future restructurings to which the entity is not committed and expenditures to improve or enhance the asset's performance should not be anticipated.

Estimates of future cash flows should not include cash inflows or outflows from financing activities, or income tax receipts or payments.

Discount rate

In measuring value in use, the discount rate used should be the pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the asset.

The discount rate should not reflect risks for which future cash flows have been adjusted and should equal the rate of return that investors would require if they were to

choose an investment that would generate cash flows equivalent to those expected from the asset.

For impairment of an individual asset or portfolio of assets, the discount rate is the rate the entity would pay in a current market transaction to borrow money to buy that specific asset or portfolio.

If a market-determined asset-specific rate is not available, a surrogate must be used that reflects the time value of money over the asset's life as well as country risk, currency risk, price risk, and cash flow risk. The following would normally be considered:

- the entity's own weighted average cost of capital;
- the entity's incremental borrowing rate; and
- other market borrowing rates.

Cash-generating units

Recoverable amount should be determined for the individual asset, if possible.

If it is not possible to determine the recoverable amount (fair value less cost to sell and value in use) for the individual asset, then determine recoverable amount for the asset's cash-generating unit (CGU). The CGU is 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.

When carried out, the test is applied to the smallest group of assets for which the entity has identifiable cash flows, called a "cash generating unit." The carrying amount of the asset or assets in the cash generating unit (cash generating unit) is compared with the fair value and the present value of the cash flows expected to be generated by using the asset ("value in use"). If the higher of these future values is lower than the carrying amount, an impairment is recognized for the difference. The standard provides a set of indicators of potential impairment and suggests that these represent a minimum array of factors to be given consideration. Other more industry-or entity-specific gauges could be devised by the reporting enterprise.

Recognition of an impairment loss

- An impairment loss should be recognised whenever recoverable amount is below carrying amount.
- The impairment loss is an expense in the income statement (unless it relates to a revalued asset where the value changes are recognised directly in equity).
- Adjust depreciation for future periods.

The objective is to recognize an impairment when the economic value of an asset (or cash generating unit comprised of a group of assets) is truly below its book (carrying) value. In theory, and for the most part in practice also, an entity making rational choices would sell an asset if its net selling price (fair value less costs of disposal) were greater than the asset's value in use, and would continue to employ the asset if value in use exceeded salvage value. Thus, the economic value of an asset is most meaningfully measured with reference to the greater of these two amounts, since the entity will either retain or dispose of the asset, consistent with what appears to be its highest and best use. Once recoverable amount has been determined, this is to be compared to carrying value; if recoverable amount is lower, the asset has been impaired, and this impairment must be given accounting recognition. It should be noted that value in use is an entity-specific value, in contrast to fair value, which is based on market price. Value in use is thus a much more subjective measurement than is fair value, since it takes account of factors available only to the individual business, which may be difficult to validate. The determination of the fair value less costs to sell (i.e., net selling price) and the value in use of the asset being evaluated will typically present some difficulties. For actively traded assets, fair value can be ascertained by reference to

publicly available information (e.g., from price lists or dealer quotations), and costs of disposal will either be implicitly factored into those amounts (such as when a dealer quote includes pick-up, shipping, etc.) or else can be readily estimated. Most common productive tangible assets, such as machinery and equipment, will not easily be priced, however, since active markets for used items will either not exist or be relatively illiquid. It will often be necessary to reason by analogy (i.e., to draw inferences from recent transactions in similar assets), making adjustments for age, condition, productive capacity, and other variables.

Accounting for impairments

If the recoverable amount of the cash generating unit is lower than its carrying value, an impairment must be recognized. The mechanism for recording an impairment loss depends upon whether the entity is accounting for long-lived assets on the amortized historical cost or revaluation basis. Impairments computed for assets carried at historical cost will be recognized as charges against current period profit, either included with depreciation for financial reporting, or identified separately in the statement of comprehensive income (or in the separate income statement, reporting components of profit or loss, if the presentation of comprehensive income is achieved in two statements). For assets grouped into cash generating units, it will not be possible to determine which specific assets have suffered impairment losses when the unit as a whole has been found to be impaired, and so IAS 36 prescribes a formulaic approach. If the cash generating unit in question has been allocated any goodwill, any impairment should be allocated fully to goodwill, until its carrying value has been reduced to zero. Any further impairment would be allocated proportionately to all the other assets in that cash generating unit. The standard does not specify whether the impairment should be credited to the asset account or to the accumulated depreciation (contra asset) account. Of course, either approach has the same effect: net book value is reduced by the accumulated impairment recognized. European practice has generally been to add impairment provisions to the accumulated depreciation account. This is consistent with the view that reducing the asset account directly would be a contravention of the general prohibition on offsetting. If the entity employs the revaluation method of accounting for long-lived assets, the impairment adjustment will be treated as the partial reversal of a previous upward revaluation. However, if the entire revaluation account is eliminated due to the recognition of an impairment, any excess impairment should be charged to expense (and thus be closed out to retained earnings). In other words, the revaluation account cannot contain a net debit balance.

Example for impairments:

At the beginning of a year a company purchased a building for 2 million. Its estimated useful life at that date was 20 years and the company uses straight line depreciation method. After 5 years the government embarked on a plan to construct a fly-over adjacent to the building and the related installation reduced the access to the building thereby decreasing the value of the building. The company estimated that it can sell the company for 1 million but it has to incur costs of 50,000. Alternatively, it if continues to use it the present value of the net cash flows the building will help in generating is 1.2 million.The basic rule is to recognize impairment if carrying amount exceeds the recoverable amount.

First, it is necessary to determine the carrying amount. The building has a cost of 2 million, useful life of 20 years and is used for 5 years so far. This means that accumulated depreciation is 2/20*5 or 0.5 million. Carrying amount is 2 million minus 0.5 million or 1.5 million.

Second, it is necessary to determine the recoverable amount. Recoverable amount is the higher of fair value less costs to sell and value in use. Fair value less costs to sell in this scenario is 1 million minus 0.05 million or 0.95 million. Value in use is the present value of future cash flows which amounts to 1.2 million. Recoverable amount is the higher of 0.95 million and 1.2 million.

Carrying amount is 1.5 million while recoverable amount is 1.2 million. An impairment loss of 0.3 million is to be recognized. The journal entry would be:

Impairment Loss	300,000	
Accumulated Impairment Losses		300,000

If due to any event the impaired asset regains its value the gain is recorded in income statement to the extent of original impairment loss and any excess is considered a revaluation and is credited to revaluation surplus.

In the next year, the government constructed a service road parallel to the high way which improved the recoverable amount to 1.4 million. Depreciation for this year is 0.12 million.

Carrying amount as at the end of the year is 1.2 million minus 0.12 million or 1.08 million. The recoverable amount is 1.4 million which shows that the building has to be appreciated by 0.32 million. 0.3 of this amount is to be credited to income statement (because the original impairment loss routed through income statement was 0.3 million). The additional 0.02 million will be credited to revaluation reserve. The journal entry would be:

Accumulated Impairment Losses	300,000	
Building	20,000	
Gain in Value of Building		300,000
Revaluation Surplus		20,000

Conclusion

Revaluation and impairment are terms closely related to one another, with subtle differences. Revaluation and impairment both require the company to evaluate the assets for their true market value, and then take appropriate action in updating the accounting books. The major difference between the two is that a revaluation can be made upwards (to increase the value of the asset to market value) or downwards (to decrease the value). An impairment, on the other hand, only refers to one of the two; a fall in the market value which is then written down.

Revaluation and impairment is a special topic that accounting deals with. It is very sensitive problem, because the volume of revaluation surpluses / shortages and the amount of impairments accounted for influences the total volume of assets and liabilities disclosed in financial statements also with the final influence on profit or loss.

Fixed assets are initially recognized at historical cost. After initial recognition, companies choose either the cost model or the revaluation model for each class of them. Under the cost model, assets are carried at cost after the deduction of any accumulated depreciation and any accumulated impairmentlosses. Under the revaluation model, assets are regularly updated at fair value and subsequentdepreciation and impairment losses are based on the revalued amount at the date of revaluation.

Depreciation and impairment losses are required regardless of the method chosen for the subsequentvaluation.

Below is a summary of accounting rules for changes in the carrying amount:

- A revaluation increment is recognized in other comprehensive income and accumulated in equity under the heading of *revaluation surplus*. However, the increment is recognized in earnings to the extent that it

reverses a revaluation decrement of the same asset that was previously recognized in earnings.

- A revaluation decrement is recognized in earnings. However, the decrement is recognized in other comprehensive income to the extent of any credit balance that exists in the revaluation surplus with respect to the same asset.

Because fixed assets are recorded in the books at their cost price and are then frequently updated to show their true and fair market value, the difference between revaluation and impairment is:

• Revaluation is a technique where an asset's recorded value (historical cost value in the ledger) will be adjusted to the market value.

• An asset that loses its value and needs to be written down is referred to as an impaired asset.

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