



# IFRS Adviser Alert

## Insights into IAS 36 *Impairment of Assets*

January 2022

### Executive summary

The Grant Thornton International IFRS team has three new publications in the *Insights into IAS 36* series:

- *Estimating recoverable amount;*
- *Value in use: estimating future cash inflows and outflows;*
- *Value in use: applying the appropriate discount rate.*

IAS 36 *Impairment of Assets* is not a new standard, and while many of its requirements are familiar, an impairment review of assets (either tangible or intangible) is frequently challenging to apply in practice. This is because IAS 36's guidance is detailed, prescriptive and complex in some areas.

The *Insights into IAS 36* series have been written to assist preparers of financial statements and those charged with the governance of reporting entities to understand the requirements set out in IAS 36, and revisit some areas where confusion has been seen in practice.

The next three publications in the *Insights into IAS 36* series cover Step 4 of the impairment review, namely estimating the recoverable amount:

- *Estimating recoverable amount;*
- *Value in use: estimating future cash inflows and outflows;*
- *Value in use: applying the appropriate discount rate.*

The first publication covers the definitions of recoverable amount and fair value less costs of disposal (FVLCD) and provides an overview of value in use (VIU). The second and third publications discuss estimating future cash inflows and outflows and an appropriate discount rate in VIU calculations.

### Resource

The publications mentioned above follow this *IFRS Adviser Alert*.



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# Insights into IAS 36

## Estimating recoverable amount

IAS 36 ‘Impairment of Assets’ provides the guidance for carrying out impairment reviews of assets (both tangible and intangible). IAS 36 is not a new Standard, and while many of its requirements have been extensively commented on, IAS 36’s guidance is detailed, prescriptive and complex in some areas, and therefore frequently challenging to apply in practice.

The articles in our ‘Insights into IAS 36’ series have been written to assist preparers of financial statements and those charged with the governance of reporting entities understand the requirements set out in IAS 36, and revisit some areas where confusion has been seen in practice.

The next three articles in our ‘Insights into IAS 36’ series cover Step 4 of the impairment review, namely estimating the recoverable amount.

We cover:

- Recoverable amount and fair value less costs of disposal
- Value in use – estimating future cash inflows and outflows, and
- Value in use – applying the appropriate discount rate.

This article covers the definitions of recoverable amount and fair value less costs of disposal (FVLCO) and provides an overview of value in use (VIU).

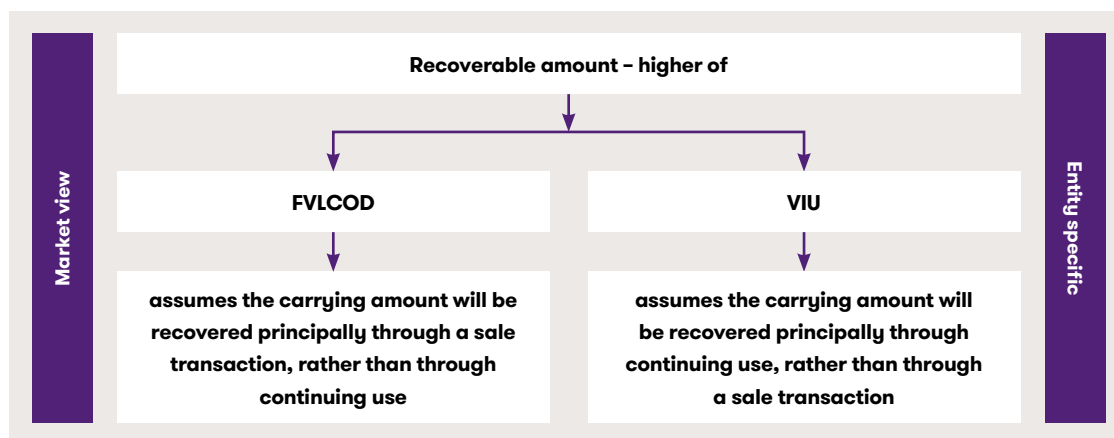


# Recoverable amount

IAS 36 defines the 'recoverable amount' and related terms as follows:

Term	Definition
<b>Recoverable amount</b>	The recoverable amount of an asset or a cash generating unit (CGU) is the higher of its FVLCOB and its VIU.
<b>Fair Value</b>	Fair value is 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.
<b>Costs of disposal</b>	Costs of disposal are incremental costs directly attributable to the disposal of an asset or CGU, excluding finance costs and income tax expense.
<b>Value in use</b>	VIU is the present value of the future cash flows expected to be derived from an asset or CGU.

This can be explained in the following diagram:



Therefore, an impairment test involves estimating both FVLCOB and VIU and comparing the higher amount to the asset's carrying amount. However, there are certain circumstances in which it is unnecessary to estimate both FVLCOB and VIU. This is explained in our article '[Insights into IAS 36 – Value in use: applying the appropriate discount rate](#)'.

## Fair value less costs of disposal

The 'fair value' and 'costs of disposal' elements of FVLCOB are discussed in turn below.

### Fair value

The FVLCOB component of recoverable amount applies whether or not management currently intends to sell the asset. IAS 36 previously included its own hierarchy of guidance to determine fair value, which was superseded in 2013 by the guidance in IFRS 13 'Fair Value Measurement'. IFRS 13 explains how to measure fair value by providing a clear definition and introducing a single set of requirements for almost all fair value measurements. It clarifies how to measure fair value when there is no active market or when an active market becomes less active. IFRS 13 applies to both financial and non-financial items but does not address or change the requirements on when fair value should be used.

For more information on IFRS 13, refer to our article '[Insights into IFRS 13 – Fair Value Measurement](#)', which not only summarises the Standard, but also provides detailed commentary on various aspects of applying IFRS 13 from the perspective of a preparer working alongside a valuation expert.

### Example 1 – Estimating fair value

An entity operates in the hotels sector. Management is testing a hotel for impairment for which the internal budget and cash flow forecasts include outflows and inflows relating to a significant enhancement planned to start in two years' time. This will involve temporary closure and undertaking a major upgrade from four to five-star status.

Management has determined that fair value and FVLCOB should be estimated using an income approach (ie a discounted cash flow approach).

Management is aware of IAS 36's requirement that, for VIU purposes, an asset's future cash flows should be estimated based on the asset's current condition. Management is considering whether, for the purposes of estimating FVLCOB using an income approach, adjustments are also required to exclude cash flows from the planned upgrade.

### Analysis

A fair value estimate takes into account characteristics of an asset that market participants would take into account in pricing the item. Put another way, when estimating fair value and FVLCOB (in the absence of a quoted price), management should aim to use inputs and assumptions consistent with those that prospective buyers would use. Accordingly, although FVLCOB should be based on the hotel's current condition, IAS 36's requirement to exclude cash flows relating to enhancements when estimating VIU does not apply in the same way when estimating FVLCOB. Cash flows relating to the upgrade would therefore be included if market participants would consider these in their pricing decisions. This does not mean management's budget and cash flow forecasts can simply be used without adjustment: various adjustments may be required to ensure the estimates are unbiased and consistent with the assumptions that market participants would make.

### Costs of disposal

Costs of disposal are incremental costs directly attributable to the disposal of an asset or CGU, excluding finance costs and income tax expense (and any other costs that have already been recognised as liabilities in the statement of financial position).

Potential examples of costs of disposal that should be deducted to derive the FVL COD include:

- legal costs
- stamp duty and similar transaction taxes
- costs of removing the asset, and
- direct incremental costs to bring an asset into condition for its sale.

#### Practical insight – Quantum of costs of disposal

In estimating costs of disposal, entities often consider overall disposal costs as a percentage of the transaction price based on discussions with transaction advisors.

#### Practical insight – Selection of Valuation Approach

Valuers often default to the market approach in calculating FVL COD. This is because the market approach, typically based on comparable enterprise value multiples, is most similar to the approach often used in negotiations during actual transactions when a company is bought and sold.

As long as the assumptions are consistent with the ‘market participant’ perspective of fair value, both the market approach and income approach should yield similar results.

## Value in use

VIU in effect assumes the asset will be recovered principally through its continuing use and ultimate disposal. VIU is 'entity-specific' in that it reflects the entity's intentions as to how an asset will be used. VIU therefore differs from fair value because fair value reflects the assumptions market participants would use when pricing the asset. VIU reflects the following factors, which may not be reflected in fair value to the extent they would not be generally available to market participants:

- additional value derived from grouping assets
- synergies between the asset being measured and other assets
- legal rights or legal restrictions that are specific only to the current owner of the asset, and
- tax benefits or tax burdens that are specific to the current owner of the asset.

Estimating VIU using the income approach involves the following:

**Estimating the future cash inflows and outflows to be derived from continuing to use the asset and from its ultimate disposal, and**

Refer to 'Insights into IAS 36 – Value in use: estimating future cash inflows and outflows'

**Applying the appropriate discount rate to those future cash flows.**

Refer to 'Insights into IAS 36 – Value in use: applying the appropriate discount rate'

### **Practical insight – Selection of valuation approach**

Due to the 'entity-specific' nature of the VIU calculation, valuers almost always calculate it using the income approach. However, for CGUs with few entity-specific cash flows, or which are operated in a manner consistent with the way in which a market participant would operate the CGU, a market approach may be appropriate.

## How we can help

We hope you find the information in this article helpful in giving you some insight into IAS 36. If you would like to discuss any of the points raised, please speak to your usual Grant Thornton contact or visit [www.grantthornton.global/locations](http://www.grantthornton.global/locations) to find your local member firm.





# Insights into IAS 36

## Value in use: estimating future cash inflows and outflows

IAS 36 'Impairment of Assets' prescribes the accounting for impairment reviews. There are some detailed requirements of IAS 36 that are complex and challenging for the preparers of financial statements to apply.

The articles in our 'Insights into IAS 36' series have been written to assist preparers of financial statements and those charged with the governance of reporting entities understand the requirements set out in IAS 36, and revisit some areas where confusion has been seen in practice.

This article is the second in a three-part series on Step 4 of the impairment review on estimating the recoverable amount and discusses estimating future cash inflows and outflows in value in use (VIU) calculations.

Estimating VIU involves the following:

**Estimating the future cash inflows and outflows to be derived from continuing to use the asset and from its ultimate disposal, and**

Refer to this article

**Applying the appropriate discount rate to those future cash flows.**

Refer to 'Insights into IAS 36 – Value in use: applying the appropriate discount rate'

The VIU estimate incorporates the following risk factors, either as adjustments to the cash flows or as adjustments to the discount rate, but not both:

- expectations about possible variations in the amount or timing of those future cash flows
- the price for bearing the uncertainty inherent in the asset, and
- other factors, such as illiquidity, that market participants would reflect in pricing the future cash flows that the entity expects to derive from the asset.



## Approaches to incorporating risk in present value

Appendix A to IAS 36 discusses two broad approaches to incorporating risk in the present value estimate:

- the traditional approach, and
- the expected cash flow approach.

The ultimate objective set out in IAS 36 is to reflect the expected present value of the future cash flows, while incorporating possible variations in the amount or timing of future cash flows. The table below describes each approach at a high level.

### Traditional approach

The traditional approach uses the single most likely cash flow projection and assumes that a single discount rate can incorporate all the expectations about the future cash flows and the appropriate risk premium. Therefore, the traditional approach places its emphasis on the selection of a discount rate.

### Expected cash flow approach

The expected cash flow approach uses all expectations about possible cash flows (instead of a single most likely cash flow) and applies probabilities to the estimated cash flows. As some risk assessment is incorporated into the cash flows using the expected cash flow approach, generally, a lower discount is applied when compared to the traditional approach.

The rest of this article considers the elements (estimating future cash flows and determining the appropriate discount rate) required to estimate VIU.

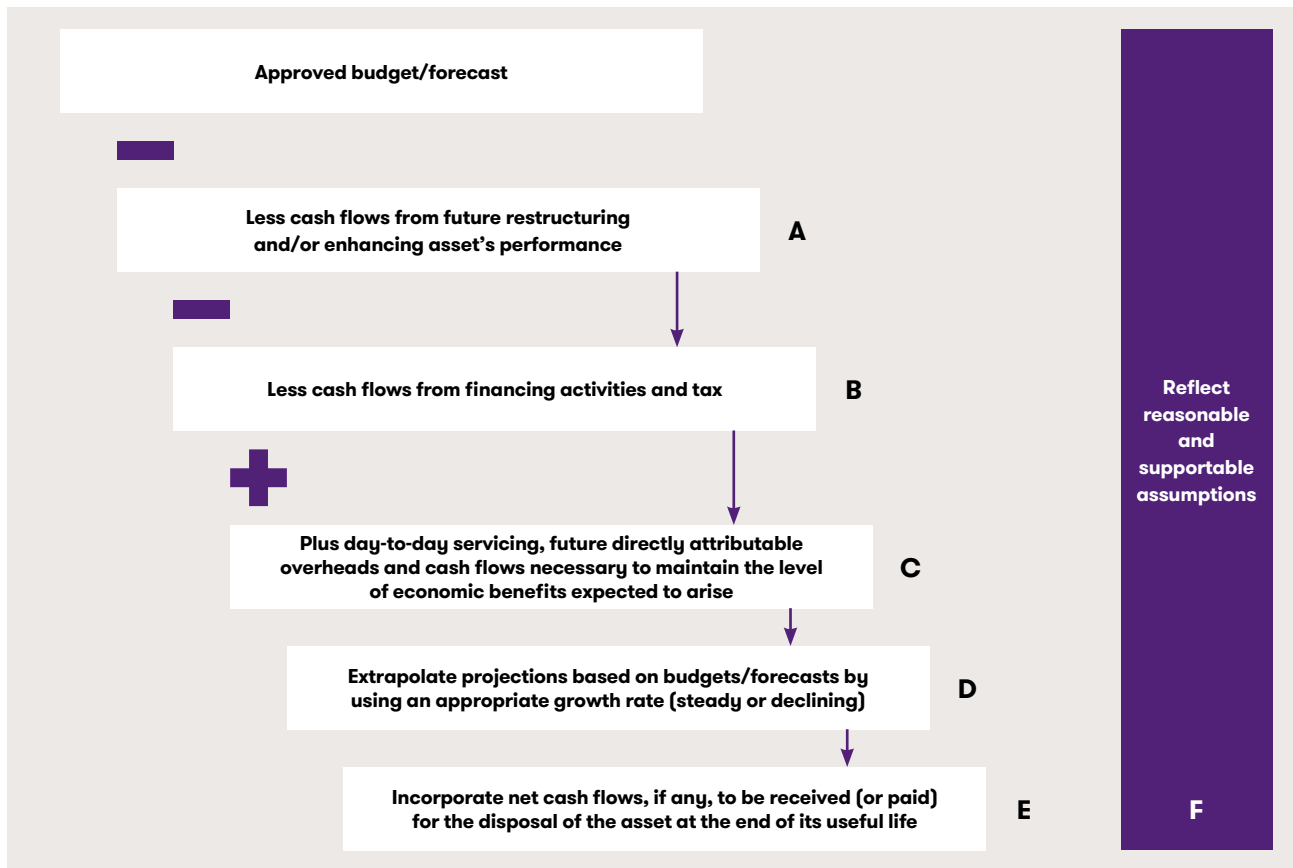
## Estimating the future cash inflows and outflows

The starting point for estimating future cash flows is the most recent financial budget or forecast approved by management. From this starting point, the budget or forecast typically needs to be both adjusted and extrapolated. IAS 36 specifically requires that these budgets/forecasts are adjusted to:

- exclude any estimated future cash inflows/outflows expected to arise from future restructuring or improving or enhancing the asset's performance
- exclude cash inflows or outflows from financing activities or income tax receipts/payments
- include costs for day-to-day servicing, future directly attributable overheads and cash flows necessary to maintain the level of economic benefits expected to arise from the asset in its current condition
- cover a maximum period of five years (unless a longer period can be justified). Cash flow projections needed beyond the period covered must be estimated by extrapolating the budget/forecast projections using a steady or declining growth rate for subsequent years (unless an increasing rate can be justified), and
- incorporate net cash flows, if any, to be received (or paid) for the disposal of the asset at the end of its useful life.

This list of adjustments is not exhaustive. The specific adjustments required in each case will naturally vary depending upon the basis of the budgets or projections used as a starting point and the nature of expected cash flows. As an overarching principle, it is essential to ensure the estimates and projections are based on reasonable and supportable assumptions.

The flowchart below summarises how to estimate future cash flows. Each consideration is discussed in further detail below.



**A. Exclude restructuring and anticipated cash flows from improving or enhancing asset performance**

Cash flows should be estimated for an asset based on the asset’s current condition. Therefore, the estimated future cash flows should not incorporate:

- cash flows related to future restructuring to which an entity is not yet committed (eg cost savings for reductions in staff costs), or
- cash flows related to improving or enhancing the asset’s performance.

**Restructuring**

Estimates of future cash inflows and outflows should include any projected cost savings and other benefits of a future restructuring only when the entity becomes committed to the restructuring.

Once the entity is committed to the restructuring, it will meet the requirements in IAS 37 ‘Provisions, Contingent Liabilities and Contingent Assets’ to recognise a provision (see our article ‘**Insights into IAS 36 – Other impairment issues**’ for discussion of the interaction between IAS 36 and IAS 37). The estimates of future cash outflows for restructuring will, at that time, be included in the restructuring provision in accordance with IAS 37.

**Guidance note – Effects of future restructuring when estimating VIU**

Example 5 in the Illustrative Examples accompanying IAS 36 explains how a restructuring affects the VIU calculation for a cash generating unit (CGU). It shows the effects of the restructuring (costs and benefits) being excluded from the cash flow estimates prior to the entity being committed to it. Once the entity is committed, which is itself a potential indicator of impairment reversal, the benefits expected from the restructuring are considered in forecasting the future cash flows. A provision is also recognised for any costs attributable to the restructuring.

### Improving or enhancing an asset's performance

Until an entity actually incurs cash outflows that improve or enhance the asset's performance, estimates of future cash flows do not include the estimated future cash inflows expected to arise from the enhancement.

#### Example 1 - Improving or enhancing an asset's performance

At the reporting period-end date (31 December 20X0), there is an indication that asset A may be impaired. Management estimates asset A's recoverable amount on the basis of a value in use (VIU) calculation. Management's approved budgets reflect:

- estimated cash flows necessary to maintain the level of economic benefit expected to arise from asset A in its current condition, and
- that in 20X2, management plans to incur CU50,000 to enhance asset A's performance.

Should Management include both (a) and (b) in its estimation of VIU in 20X0?

#### Analysis

No. At 31 December 20X0, the future cash flows used to determine VIU should include estimated costs necessary to maintain the level of economic benefit expected to arise from asset A in its current condition but exclude any estimated costs to enhance asset A's performance and the estimated benefits anticipated from enhancing its performance.

### B. Exclude financing activities or income tax receipts/payments

Cash flows related to financing activities are excluded from calculations of the enterprise value under both the VIU and fair value less cost of disposal (FVLCOF) calculations. This is because the valuation of an asset is independent of the way that the entity has financed it. For the same reason, the discount rate should be based on the target, or optimal, debt-to-capital from a market participant perspective.

Similarly, because the VIU and discount rate are determined on a pre-tax basis, future cash flows are estimated on a pre-tax basis. In practice, post-tax cash flows may be used if it is not possible to calculate the pre-tax discount rate directly. Refer to our article **'Insights into IAS 36 - Value in use: applying the appropriate discount rate'** for more discussion on pre-tax vs. post-tax cash flows and discount rates.

### C. Include day-to-day servicing and cash flows to maintain the level of economic benefit from the asset in its current condition

The premise underlying VIU is the carrying value of the asset will be recovered through its continued use and ultimate disposal. Therefore, all cash outflows necessary to maintain the level of economic benefits expected to arise from the asset in its current condition should be included. These future cash outflows include day-to-day servicing of the asset, as well as overheads that can be directly attributed, or allocated on a reasonable and consistent basis, to the asset.

When a CGU consists of assets with different estimated useful lives (all of which are essential to the ongoing operation of the unit), the replacement of assets with shorter lives and the replacement of a component of a single asset are considered to be part of the day-to-day servicing of the unit/asset when estimating the future cash flows associated with the unit/asset.

### **Example 2 – Day-to-day servicing and the consideration of the ‘core’ asset**

IAS 36 requires that the replacement of component parts necessary to maintain the cash inflows from the continued use of an asset are treated as cash outflows when estimating VIU. These components could include items that might be treated as separate depreciable components in accordance with IAS 16 ‘Property, Plant and Equipment’ (eg the lining of a furnace, the seating of an aircraft, the roof of a building). When estimating the VIU of a single asset, identifying the ‘core’ asset is straightforward (eg the furnace, aircraft or entire building). For example, when estimating the VIU of an airplane with an estimated useful life of 30 years, the entity would include the cash outflows for the day-to-day servicing and replacement of the components of the aircraft that have shorter useful lives such as the seating and engines.

The application of IAS 36 requires more judgement when estimating VIU for a group of CGUs, if goodwill is being tested. If goodwill is treated as the core asset, the CGU’s future life might be considered indefinite and the cash flows would include the replacement of the other assets within the CGU (in order to maintain the goodwill). If a particular identifiable asset is considered the core asset then the cash flows and useful life would be based on the useful life of that asset.

In our view, the appropriate approach will depend on the entity’s business model and the particular facts and circumstances of the impairment test in question. For example, when assessing a hotel for impairment as part of a CGU with goodwill, the entity may deem the hotel to be the core asset as the cash flows from the hotel presumably support the assessed life of the goodwill (there would not be goodwill without the core asset of the hotel).

In practice, when calculating the VIU of a CGU that includes goodwill, it is common to include a terminal value at the end of the specific projection period. This terminal value should be based on the ‘normalised’ forecast cash flows in the final period of the detailed budget or projection period, extrapolated using the long-term steady or declining growth rate and discounted to present value. The terminal value therefore takes account of a normalised level of cash flows for day-to-day servicing including replacement parts.

### **Practical insight – Including directly attributable (or reasonably allocated) future overheads**

IAS 36 requires that projections of cash outflows include those for ‘...future overheads that can be attributed directly, or allocated on a reasonable and consistent basis, to the use of the asset’. The Standard does not expand on what ‘future overheads’ may be included. In our view, the key objective should be to ensure the projections include all estimated outflows necessary to generate the estimated inflows. For example, a magazine company may identify two CGUs for impairment testing purposes (an online segment and a hard copy (ie printing) segment). It is likely to be appropriate to allocate central marketing costs to the relevant CGUs where such costs are directly attributable or reasonably allocated. Also, when a portion of a corporate asset is allocated to a CGU then this typically indicates a portion of the cash outflows associated with the corporate asset should also be allocated.

However, applying this guidance requires judgement and will always depend on the facts and circumstances.

### Cash outflows incurred before the asset is ready for use or sale

IAS 36 requires an entity to include an estimate of any further cash outflow that is expected to be incurred before the asset is ready for use or sale when the carrying amount of the asset does not yet include all the cash outflows to be incurred before it is ready for use or sale (eg building under construction or development project that is not yet completed).

#### **Practical insight – Considerations for capitalised development projects**

IAS 36 requires that intangible assets not yet ready for use are tested for impairment at least annually and at the end of the current annual period if initially recognised during the current annual period. Capitalised development projects/assets require further development before they are ready for commercial use.

IAS 36 requires an entity to include an estimate of any further cash outflow that is expected to be incurred before the asset is ready for use (or sale) when the carrying amount of the asset does not yet include all the cash outflows to be incurred before it is ready for use (or sale) (eg a development project that is not yet completed). This is an exception to the general principle that an asset is tested for impairment in its current condition.

When estimating VIU, in our view, estimated future expenditure (including expenditure that does not yet meet the capitalisation criteria) and estimated cash inflows from potentially successful projects should be included in the cash flow estimates. When there is uncertainty about a project ultimately reaching commercialisation (as may be the case for acquired research and development costs, for example) this risk should be taken into account.

Risk and uncertainty can be factored in either by adjusting the cash flows or by adjusting the discount rate.

In some cases the projections used for testing capitalised development project assets may (appropriately) extend beyond the normal five year period that IAS 36 sets as a benchmark for the availability of detailed, explicit and reliable financial budgets/forecasts.

(In estimating FVLCOB for a capitalised development project, the entity's objective should be to use assumptions consistent with a market participant perspective. These would normally include a market-based perspective on the probability of the project reaching commercialisation).

#### **D. Extrapolate projections based on budget/forecast information beyond the period covered**

IAS 36 asserts that detailed and reliable budget/forecast information for periods longer than five years is not usually available. Estimates of future cash flows should therefore normally be based on the most recent budgets/forecasts covering no longer than this, and then extrapolated if necessary (see below). An exception to the five year limit applies if management can demonstrate its ability to forecast cash flows accurately over a longer period.

Assets with useful lives longer than the budget/forecast cash flows should be extrapolated using a growth rate for subsequent years. This rate is steady or declining, unless an increase in the rate matches objective information about patterns over a product or industry lifecycle. A growth rate of zero, or a negative rate, might also be appropriate.

IAS 36 notes that entities will generally have difficulty exceeding the average historical growth rate over the long term, so this factor should, in our view, always be taken into account.

### Practical insight – Extrapolating future cash flows

IAS 36 implies, but does not state explicitly, the final period covered by a detailed budget or forecast (normally up to five years in duration) should be used as the ‘baseline’ for extrapolating cash flows into the future. This approach is reasonable for projecting future cash flows for an established, ‘going concern’ CGU in a reasonably stable state. In other scenarios, such as start-ups or limited life projects or assets, other approaches may be more appropriate. It is also important to ensure the baseline used for extrapolation is not affected by non-recurring factors (eg a planned shutdown that occurs less than annually). The approach taken will require judgement based on the particular facts and circumstances.

### E. Incorporate disposal proceeds

An estimate of the net cash flow to be received (or paid) for the disposal of an asset at the end of its useful life should be included in determining the estimated future cash flows. This estimate is determined in a similar manner to determining FVLCOB, except that, in estimating those net cash flows, the entity:

- uses prices at the date of the estimate for similar assets that have reached the end of their useful life and operated under similar conditions, and
- adjusts prices for general inflation and specific future price increases or decreases (although general inflation is not taken into account if the future cash flows from continuing use and discount rate exclude the effect of general inflation).

### F. Reflect reasonable and supportable assumptions

It is an overarching principle of the VIU estimate that assumptions should be ‘reasonable and supportable’. IAS 36 includes a requirement under which management should compare past projections with actual cash flows to ensure the assumptions on which current projections are based are consistent with past actual outcomes.

IAS 36 requires consideration of whether the budget/forecast information used as the basis for the cash flow estimates reflects reasonable and supportable assumptions and management’s best estimate of the set of economic conditions that will exist over the remaining useful life of the asset.

### Practical insight – Reflecting reasonable and supportable assumptions

A budget is of course a management tool and not simply a prediction about the future. A budget may therefore incorporate stretch targets or similar aspirational features. In using such a budget for VIU purposes, management should carefully consider whether these types of assumptions are reasonable and supportable in the context of IAS 36.

Supporting the assumptions in a budget is more challenging in situations such as start-ups and development projects. Budgets may be less reliable and past projections can vary greatly compared to actual cash flows. Sometimes different budgets may be prepared (one being highly aggressive while another incorporates more realistic expectations and assumptions). In such cases the more realistic budget should be the basis used for future cash flow projections in accordance with IAS 36.

Finally, IAS 36 requires management to ‘examine the causes of differences between past projections with actual cash flows’ to ensure the assumptions on which current projections are based are consistent with past actual outcomes. In our view, this examination is not limited to actual and projected outcomes for the past 12 months (ie the current period). Management should also consider the longer-term track record of projecting cash flows over its specific forecasting period (as used for IAS 36 purposes – eg 5 years).

## How we can help

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# Insights into IAS 36

## Value in use: applying the appropriate discount rate

IAS 36 'Impairment of Assets' sets out the requirements entities should follow prior to concluding if an asset should be written down in the financial statements (ie impaired). However, due to the complex nature of the standard, the requirements of IAS 36 can be challenging to apply in practice.

The articles in our 'Insights into IAS 36' series have been written to assist preparers of financial statements and those charged with the governance of reporting entities understand the requirements set out in IAS 36, and revisit some areas where confusion has been seen in practice.

This article is the final in a three-part series on Step 4 of the impairment review on estimating the recoverable amount and discusses how to estimate an appropriate discount rate in value in use (VIU) calculations.



## Estimating the appropriate discount rate

The discount rate applied to the estimated cash flows should reflect the return that investors would require if they were to choose an investment that would generate cash flows of amounts, timing and risk profile equivalent to those the entity expects to derive from the asset. IAS 36 prescribes that management should apply a pre-tax discount rate(s) that reflects the current market assessment of both:

- the time value of money, and
- the risks specific to the asset for which the future cash flow estimates have not been adjusted.

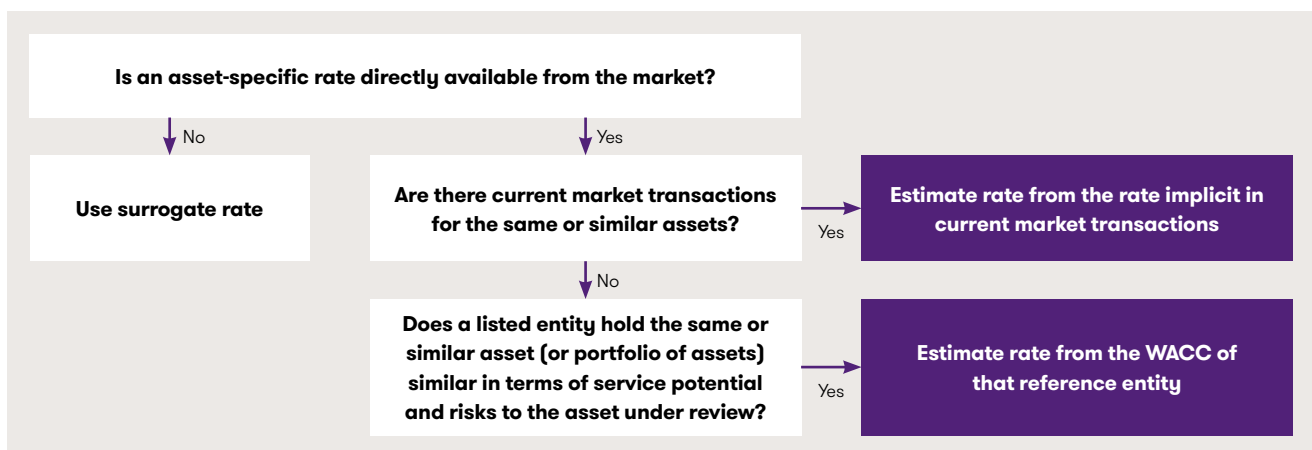
This rate may be estimated:

- from the rate implicit in current market transactions for similar assets, or
- from the weighted average cost of capital (WACC) of a listed entity that has a single asset (or a portfolio of assets) similar in terms of service potential and risks to the asset under review.

In the event that neither of the above are available, the entity estimates the discount rate using surrogates.

The discount rate should reflect assumptions consistent with the estimated future cash flows. For example, a nominal discount rate should be used if the cash flows are estimated in nominal rather than real terms. Both the cash flows and the discount rate should be prepared on a pre-tax basis (but see practical guidance below).

The following flow chart illustrates IAS 36's guidance on determining an appropriate discount rate.



### Using a surrogate

When an asset-specific rate is not directly available in the market (as is usually the case), the entity should use a surrogate to estimate the discount rate. The objective is to derive a market assessment reflecting factors such as:

- the time value of money through the end of the asset's useful life
- the risk relating to possible variances in the amount and timing of the cash flows
- the price for bearing the uncertainty inherent in the asset, and
- other, sometimes unidentifiable, factors (such as illiquidity) that market participants would reflect in pricing the future cash flows from the asset.

One common approach is for the entity to determine a market-consistent discount rate for the entity as a whole, then adjust this rate to take into account factors specific to the asset or cash generating unit (CGU) being tested. For example:

- start with the entity's WACC, and
- adjust these rates to reflect a market participant's view of the specific risks associated with the asset's estimated cash flows (considering country risk and currency risk).

Adjustments might also be necessary to exclude risks that are not relevant to the asset's estimated cash flows or for which the estimated cash flows have already been adjusted.

Estimating the discount rate when no asset-specific market rate is available:



### Practical insight – Determining the discount rate in practice

In our experience, entities most often estimate a risk-adjusted discount rate starting with the entity's WACC. The WACC is a post-tax measure of the overall required return on the entity as a whole – essentially the rate an entity is expected to pay on average to all its capital providers to finance its assets. This calculation proportionately weighs each category of an entity's capital (eg equity and long-term debt) to derive an entity-wide cost of capital.

Keeping with the objective outlined for deriving an appropriate discount rate, an entity also needs to adjust the entity-wide WACC to achieve a discount rate for each asset or CGU, consistent with a market participant perspective.

#### Cost of Equity

In practice, the most common method of calculating the cost of equity is the Capital Asset Pricing Model (CAPM). This is a model which describes the relationship between an investment's risks and its returns. The basic CAPM takes into account two factors:

- the return on an investment that is risk-free (based on long-dated government bonds which are assumed to be virtually risk-free), and
- the equity risk premium that would be required by an investor in the subject asset, over and above the risk-free rate.

In practice, most valuers break the risk premium down into sub-factors which might include elements like country risk-premium, size premium and 'alpha' factors. Alpha in this context is a term used in investing to describe an investment strategy's ability to beat the market.

#### Risk-free rate

The risk-free rate is typically based on yields on government bonds in developed economies, which should be in the same currency and of the same or similar duration as the cash flows of the asset or CGU. In practice, 10-year or 20-year bonds are used as a proxy for long-term rates. Adjustments may be required if government bond yields of the appropriate currency or duration are not available.

Some valuers also consider a 'normalised' risk-free rate rather than spot rates due to the current low rates compared to historical levels. This typically considers analysis of government bond yields over a period, such as the last 10 years. Whether or not a normalised rate is used, the results should be considered along with the market risk-premium.

#### Equity Risk Premium

The equity risk premium is calculated based on:

- A market risk premium (the long-term expected rate of return for equities in excess of the risk-free rate), multiplied by
- The 'beta', reflecting the industry or sector risk of the subject company relative to the market as a whole.

The market risk premium is typically based on historical studies of stock markets, covering long-periods of time. This is considered in conjunction with the risk-free rate (total market return), with the long-term total market return typically estimated to be between 7% and 9%.

The beta for the subject company can be estimated based on analysis of a set of comparable listed companies or a sector average. The most common approaches involve calculation of the 5-year or 2-year betas based on historical share prices. Selection of the appropriate beta is subjective and should consider the situation of the subject company compared to the benchmark companies used.

## Practical insight - Determining the discount rate in practice (continued)

### Country risk-premium

Where the operations of the subject company are in a country (or countries) other than that used for the estimation of the risk-free rate and equity risk premium, then a country risk premium may be considered to reflect the difference in risk perception of investing in those countries. For example, if cash flows are denominated in USD but the subject entity operates in Peru, then a country risk premium is included to reflect the additional return expectation from investing in Peru over a similar investment in the US.

Note that this relates to situations in which the cash flow currency is the same as the currency used to calculate the WACC. See 'Practical issues related to cash flows in a foreign currency' below, for further details on adjusting for foreign cash flows.

### Size Premium

Various studies indicate that there is an additional risk of investing in the equity of small companies over large companies. Data from the Duff & Phelps Stocks, Bonds, Bills and Inflation® (SBBi®) Yearbook is used by many valuers as a source for determining the appropriate size premium.

### Alpha factor

The valuer should assess whether the overall cost of equity determined is consistent with the risk in the cash flows. It may be necessary to include an additional 'alpha' factor to capture risks in the cash flows which are not captured by the 'market' cost of equity. This may include higher than average expected revenue growth or margins compared to the peer group.

Given the inherent difficulty in assessing such an 'alpha' factor, the preference is typically to adjust the cash flows instead.

### Cost of Debt

The cost of debt should be based on the long-term borrowing rates for the entity, consistent with the long-term cash flows. This is driven by factors such as the gearing of the business (higher gearing is more risky to debt investors) and the return expected by the market in general for debt with a similar level of risk.

The gearing should be based on the long-term, optimal capital structure for the business, which may not be the same as the current capital structure. Consideration may be given to longer-term sector averages to determine an appropriate long-term level.

Adjustments for country risk should also be considered in the assessment of the cost of debt.

Finally, given the WACC is a post-tax rate, it needs to be adjusted to a pre-tax rate. See below for a discussion about making this adjustment.

### Pre-tax and post-tax discount rates

IAS 36 requires the discount rate(s) used in estimating VIU to be a pre-tax rate(s). If the rate is derived initially on a post-tax basis, it must be adjusted to reflect a pre-tax rate. This is often necessary because many observable market rates and the entity's WACC are post-tax rates.

Using a post-tax discount rate to discount post-tax cash flows should lead to the same result as discounting pre-tax cash flows using a pre-tax discount rate if the pre-tax discount rate reflects an adjustment to take into account the specific amount and timing of the future tax cash flows. Calculating a pre-tax rate involves applying a post-tax rate to post-tax cash flows (tax cash flows being based on the allowances and charges available for the asset and related non-tax cash flows). The effective pre-tax rate is then calculated by removing the tax cash flows and using an iterative technique to calculate the rate that makes the present value of the adjusted cash flows equal the VIU calculated using post tax cash flows.

In the Basis for Conclusions of IAS 36 there is an example of how to calculate a pre-tax discount rate from post-tax calculations using the iterative method.

#### Practical insight – Deriving pre-tax discount rates from post-tax rates

Despite IAS 36 calling for a pre-tax discount rate, we note a post-tax analysis is often undertaken in practice. This is because most rates that are observable in the market and the entity's WACC are post-tax. Computing a 'true' pre-tax discount rate starting from a post-tax rate can be complex, requiring information about the specific timing of tax-related cash flows for the asset or CGU and also iterative or goal-seek calculations. When using market inputs, such as sector betas, it is not possible to calculate this on a pre-tax basis.

IAS 36 highlights the '...pre-tax discount rate is not always the same as the post-tax discount rate grossed up by the standard rate of tax'. This is because the tax cash flows do not normally occur proportionately with or at the same time as the pre-tax cash flows (eg due to temporary differences, tax loss carry-forwards and the timing of tax payments).

In our view, a gross-up approach may provide a reasonable approximation in some circumstances (although consideration should be given to any facts and circumstances that would impact the relationship between the pre-tax and post-tax rate). If a simplified approach results in a VIU significantly above the carrying amount, management may reasonably conclude it is unlikely that an impairment exists.

Alternatively, when there is a risk of impairment, valuers often rely instead on a post-tax discount rate with post-tax cash flows to perform the impairment analysis. The pre-tax rate can then be determined using pre-tax cash flows and then goal seeking the discount rate to reach the same concluded VIU.

IAS 36 requires disclosure of information about the discount rate and this is discussed in our article '[Insights into IAS 36 – Presentation and Disclosure requirements](#)'.

## Foreign currency issues

IAS 36 requires an entity to estimate future cash flows in the currency in which the cash flows will be generated and then discount the cash flows to present value using a discount rate appropriate for that currency. The entity then determines the VIU in its functional currency by translating the present value using the spot exchange rate at the date of the VIU calculation.

### Example 1 – Estimating VIU for a foreign investment

Entity P's functional currency is the Euro. P has an equity-method investment (Investment I) in an investee located in the United States with USD functional currency. Entity P determines there is a need to estimate the recoverable amount of Investment I, having identified an impairment indicator at 31 December 20X0. Entity P calculates Investment I's VIU using cash flows based in USD and a discount rate that reflects USD. The present value so derived is translated to Euro using the spot exchange rate at 31 December 20X0.

### Practical issues related to cash flows in a foreign currency

Typically, if it is not practical to calculate a WACC using the currency of the cash flows, two options are available to valuers. This involves calculating a WACC in an alternative currency (such as USD) and either:

- converting the WACC into a local currency discount rate considering differences in inflation between the currencies (ie the international Fisher Effect), or
- converting the cash flows into the WACC currency at the forecast exchange rate, thus capturing inflation differences.

However, in accordance with IAS 36, the use of the forward rate for converting foreign currency cash flows is prohibited. This is because the time value of money is taken into account by discounting the foreign currency cash flows at a rate appropriate for that currency. Converting expected foreign cash flows at estimated future spot exchange rates is also prohibited on the grounds of the unreliability of those future estimates.

### Practical Insights – Estimating the WACC in a foreign currency

Estimating a WACC in a foreign currency can be challenging. Typically, information used to determine the cost of equity and cost of debt is based on market data from a limited number of developed economies, in particular the US, UK and certain European countries, which have a long history of established debt and equity markets. For cash flows in currencies other than USD, GBP and EUR there are a number of complexities in determining the appropriate discount rates:

- **Risk-free rate:** for some countries, local government bonds may not be a reasonable proxy for a 'risk-free' rate. Typically, if the country does not have a very high sovereign credit rating (ie AAA or AA), the government bonds may not be considered to be truly 'risk-free', and
- **Market Risk Premium:** Estimates of the market risk premium are typically based on very long-term studies of the stock market. Most countries' stock markets do not have the 100+ year history of the US and UK, for example, which can mean there is not sufficient reliable data.

As a result, the valuer should consider the following approaches to estimating a local currency WACC:

- **WACC based on local currency inputs:** This may be a reasonable approach if sufficient and reliable data can be sourced, and
- **USD WACC converted into local currency:** This method is used by valuers to determine a WACC based on US (or UK or Euro) inputs and assumptions and including a country risk premium. The US WACC is then adjusted for local currency based on applying the inflation differential between the currencies based on the Fisher Effect from economics.

Note that applying a country risk premium does not address differences in currency, but rather the political and economic risk for an investor investing outside of a developed market (typically the US, based on the most common calculations of country risk premium).

## Exceptions to calculating both fair value less costs of disposal and value in use

Although recoverable amount is defined as the higher of the fair value less costs of disposal (FVLCO) and VIU, IAS 36 makes clear it is not always necessary to determine both estimates. The table below outlines instances when an entity need only calculate either FVLCO or VIU.

Situation	Calculate only	Reason
<b>When either amount exceeds the asset's carrying amount</b>	FVLCO or VIU	The asset is not impaired and it is not necessary to calculate the other amount
<b>It is not possible to measure FVLCO because there is no basis for making a reliable estimate of the price in accordance with IFRS 13 'Fair Value Measurement'</b>	VIU	It is usually possible to measure FVLCO with sufficient reliability (even without a quoted price in an active market for an identical asset or frequent transactions in similar assets with observable prices). However, IAS 36 indicates (without elaborating) that sometimes it will not be possible to measure FVLCO because there is no basis for making a reliable estimate
<b>There is no reason to believe that VIU materially exceeds FVLCO</b>	FVLCO	This will often be the case for an asset that is held for disposal as the future cash flows from continuing to use the asset until disposal are likely negligible and will consist mainly of net disposal proceeds

### Short-cuts for estimating FVLCOB or VIU

IAS 36 clarifies it is sometimes not necessary to perform the detailed computations for determining FVLCOB or VIU. Estimates, averages and/or computational short cuts may be used when they provide reasonable approximations of the detailed computations for determining FVLCOB or VIU.

IAS 36 also provides relief from calculating recoverable amount in some situations when an indicator has been identified or the annual impairment testing date has been reached. The table below summarises the relief provisions available in IAS 36 for intangible assets and goodwill. Broadly, the relief provisions note the concept of materiality applies in identifying the need to estimate recoverable amount.

Asset type	Description of relief
<b>Intangible assets with an indefinite useful life (or not yet available for use) and goodwill</b>	<p>The concept of materiality applies. Examples include:</p> <ul style="list-style-type: none"><li>• if previous calculations show an asset's recoverable amount is significantly greater than its carrying amount, the entity need not re-estimate the asset's recoverable amount if no events have occurred that would eliminate that difference</li><li>• if a previous analysis shows an asset's recoverable amount is not sensitive to one (or more) of the indicators identified. Refer to our article '<a href="#">Insights into IAS 36 – If and when to undertake an impairment review</a>'</li></ul> <p>See Example 2 below</p>
<b>Intangible assets with an indefinite useful life</b>	<p>The most recent detailed calculation of such an asset's recoverable amount made in a preceding period may be used in the impairment test for that asset in the current period, provided all of the following criteria are met:</p> <ul style="list-style-type: none"><li>• where an intangible asset is tested for impairment as part of the CGU to which it belongs, the asset and liabilities making up that unit have not changed significantly since the most recent recoverable amount calculation</li><li>• the most recent recoverable amount calculation resulted in an amount that exceeded the asset's carrying amount by a substantial margin, and</li><li>• based on an analysis of events that have occurred and circumstances that have changed since the most recent recoverable amount calculation, the likelihood that a current recoverable amount determination would be less than the asset's carrying amount is remote.</li></ul>
<b>Goodwill</b>	<p>The most recent detailed calculation made in a preceding period of the recoverable amount of a CGU to which goodwill has been allocated may be used in the impairment test of that CGU in the current period provided all of the following criteria are met:</p> <ul style="list-style-type: none"><li>• the assets and liabilities making up the unit have not changed significantly since the most recent recoverable amount calculation</li><li>• the most recent recoverable amount calculation resulted in an amount that exceeded the carrying amount of the unit by a substantial margin, and</li><li>• based on an analysis of events that have occurred and circumstances that have changed since the most recent recoverable amount calculation, the likelihood that a current recoverable amount determination would be less than the current carrying amount of the unit is remote.</li></ul>



### **Example 2 – Considering materiality despite an indicator of impairment being present or reaching the annual impairment testing date**

Market interest rates and returns on investments in general have increased during the reporting period, indicating that Entity A's asset may be impaired. Entity A's management is considering if it needs to estimate the recoverable amount of its asset.

#### **Analysis**

Entity A would not be required to estimate the recoverable amount of the asset if the discount rate used in calculating the asset's VIU is unlikely to be affected by the increase in these market rates (eg, increases in short-term interest rates may not have a material effect for an asset with a long remaining useful life). Further, even if the discount rate is likely to be affected by the increase in these market rates, Entity A would not be required to estimate the recoverable amount of the asset if a previous sensitivity analysis of recoverable amount shows it is unlikely there will be a material decrease in recoverable amount or the decrease in recoverable amount is unlikely to result in a material impairment loss.

### **Example 3 – Using the most recent detailed calculation**

Entity P has a 31 December 20X0 reporting date. In June 20X0, Entity P acquires subsidiary S, which will be accounted for in accordance with IFRS 3 'Business Combinations'. In November 20X0, Entity P completes the determination of the acquisition date fair values and allocates the resultant goodwill to the appropriate CGUs. At 31 December 20X0, the measurement period has closed (as Entity P has received the information it was requesting about subsidiary S) and the amounts are considered final. Entity P carries out a detailed impairment test on the goodwill as at 31 December 20X0 in accordance with IAS 36. The test indicates that recoverable amount exceeds carrying value by a comfortable margin.

Entity P wishes to set its annual impairment testing date for the goodwill as 30 June 20X1. Should it carry out another detailed test at 30 June 20X1 in order to establish its annual testing date?

#### **Analysis**

In our view, Entity P need not carry out a full impairment test as at 30 June 20X1 if the conditions in IAS 36 apply. This paragraph provides relief from performing a detailed impairment test if various conditions are met, but is still regarded as an impairment test for the purposes of IAS 36. The assumptions used in the previous 'full' impairment test calculation remain valid until facts and circumstances change such that a new detailed calculation becomes necessary.

## How we can help

We hope you find the information in this article helpful in giving you some insight into IAS 36. If you would like to discuss any of the points raised, please speak to your usual Grant Thornton contact or visit [www.grantthornton.global/locations](http://www.grantthornton.global/locations) to find your local member firm.

