What are the common mistakes with valuations and depreciation?

By: David Edgerton FCPA
Director APV Valuers and Asset Management
Email: Dave@apv.net)

This brief paper sets out a range of common mistakes with valuations and depreciation which in turn impact the accuracy of those figures as well as sustainability ratios used to assess the performance of public sector entities.

Unfortunately, many of the mistakes are well embedded from traditional practices that date prior to key changes in the accounting standards.

When assessing the appropriateness of a valuation or depreciation methodology consideration should be given to the commentary below. It is far better to identify issues prior to starting a project then trying to deal with audit issues at the end of the project.

BACKGROUND

Over the past 30 years I have been heavily involved with the implementation of accrual accounting across the public sector, responsible for the external audit of over 350 different asset intensive public sector entities as well as the identification, valuation and asset management of public sector assets. This has included over 20 years with the Audit Office as well as 12 years with Australia's leading public sector asset valuation firm (APV Valuers and Asset Management).

As an expert in the area I have been asked to write industry guides (such as CPA Australia's guides to the valuation and depreciation of public and NFP sector assets under the accounting standards) and participate in major national projects (including the AASB's special project for Fair Value in the Public Sector).

My experience has included development of asset accounting frameworks under both IFRS and IPSAS with experience across a number of different countries.

With this background I am regularly asked to explain why there is so much variation in valuation and depreciation expense figures from year-to-year and between different valuers. Obviously, there will always be variation due to the exercise of professional judgement by different valuers resulting in variances in assumptions.

However, the biggest cause of variation and misstatement is usually due to fundamental errors with the underlying valuation and depreciation methodologies.

FAILURE TO ADAPT TO CHANGES IN THE ACCOUNTING STANDARDS

The primary driver behind most of the issues is the failure of valuers to adjust their methodologies to adapt to changes in the accounting standards and other prescribed requirements.

Over the past 20 – 30 years there has been significant maturing of our understanding of how assets behave and the service potential that they provide. This has led to the advancement of asset management as well as to the refinement of a range of accounting concepts and requirements.

In the Australian context this has included the development of new accounting standards such as –

- AASB13 with corresponding changes in the definition and concept of 'Fair Value'
- ASB116 which sets out requirements regarding depreciation expense

The new or changed requirements have also been supported by a range of guidance material issued by the AASB including –

- Interpretation 1030 – Depreciation of Long-Lived Physical Assets: Condition-Based Depreciation and Related Methods
- May 2015 Residual Value decision

COMMON ERRORS WITH METHODOLOGY

The following are common mistakes made within the valuation and depreciation methodology that represent direct non-compliance with the accounting standards. The net impact of these mistakes is usually the understatement of Fair Value and overstatement of Depreciation Expense. They include -

- Failure to base valuation on the key characteristics
- Incorrectly basing value on depreciation expense
- Failure to componentise or use of inappropriate components
- Failure to comply with May 2015 Residual Value decision

Failure to base valuation on the key characteristics

When AASB13 Fair Value Measurement was implemented in 2013 it created a new definition and concept for 'Fair Value'. This resulted in the replacement of Depreciated Replacement Cost (DRC) with Current Replacement Cost (CRC).

Under the new concept Fair Value is to be –

- A 'market based' assessment determined from
- The 'key characteristics' relevant to 'market participants'
- Based on the 'highest and best use' from the perspective of the 'market participants'.

Specifically, in addition to the impact of general obsolescence, paragraph 11 of AASB13 sets out the key characteristics as being –

- Condition
- Location
- Restrictions on sale

Most public sector assets are valued under the cost approach and therefore the 'restrictions on sale' is not relevant. **As a result, if the valuation methodology calculations are not based on obsolescence, condition and location and any other key characteristics identified as relevant the valuation will be non-compliant with AASB13**.

Perhaps the most common mistake is basing the valuation on irrelevant factors such as Useful Life, Remaining Useful Life or Depreciation Expense while ignoring the key characteristics as set out in paragraph 11.

Incorrectly basing value on depreciation expense

As noted in the previous item perhaps the most common fundamental error is trying to base the calculation of Fair Value on factors that relate to the calculation of 'Depreciation Expense'.

The requirements for the calculation of depreciation expense' are covered under the various standards that deal with the specific type of assets. In most cases this is AASB116 which deals with Property Plant and Equipment.

There is consistency across the standards that specify that the 'depreciable amount' is to be depreciated over the 'useful life'.

The problem for approaches based on Useful life or Depreciation Expense is that AASB116 deals with the calculation depreciation expense whereas the valuation standard (AASB13) deals with the how to calculate the 'Fair Value'. AASB13 makes no mention of Useful Life, RUL or Depreciation Expense as being a 'key characteristic' relevant to 'market participants'.

Furthermore, the only reference to 'depreciation' in AASB13 is the statement clarifying that there is absolutely no relationship between Fair Value and Depreciation expense.

> *Obsolescence encompasses physical deterioration, functional (technological) obsolescence and economic (external) obsolescence and is broader than depreciation for financial reporting purposes (an allocation of historical cost) or tax purposes (using specified service lives).*

Information such as the estimated life, age to date, RUL or estimated depreciation expense are not generally relevant to market participants in the assessment of Fair Value. This lack of relevance is also highlighted in the International Valuation Standards (IVS) which highlights that market participants will take into account asset condition and the estimated cost of renewal combined with general obsolescence to determine a market price.

Approaches based on useful life or depreciation expense also break a fundamental requirement of the new Fair Value concept. AASB13 requires that the value be 'market based' rather than 'entity specific'. Depreciation Expense must be limited to the use of the asset for the entity and as a result is 'entity specific'.

As a result, any valuation that is based purely on asset age, Useful Life, RUL or Depreciation Expense and fails to take into account the key characteristics as specified in paragraph 11 will be non-compliant with AASB13.

Failure to componentise or use of inappropriate components

While theoretically an asset may not need to be componentised in order to determine its Fair Value (for example an asset valued using market or income approach) it is important that the valuation outputs include information that enables the entity to satisfy its financial reporting requirements. This includes the need to depreciate the depreciable amount of the different parts of the asset with a different useful life over their respective useful lives.

If the parts within a complex asset comprising different parts that exhibit a different useful life are not depreciated separately the resulting depreciation expense estimates are likely to be materially misstated and will be non-compliant with AASB116.

For assets valued under the cost approach the need for componentisation is even greater as the overall value of an asset will be impacted by the condition of each component.

Componentisation is also critical to support the asset management function. As such the components need to reflect the different elements of the asset that are subjected to different renewal treatments and regimes. This allows modelling of future renewal cash flows and optimisation of the renewal and maintenance strategies.

The design of the components is critical and unfortunately some entities adopt components based on 'cost inputs' rather than the elements that are relevant to asset management planning needs. For example - from a 'cost input' perspective the 'structure' of a building includes a range of elements that experience different lifecycles and are usually modelled separately with asset management system. These include –

- Sub-Structure (depending on type may have very different lifecycle to rest of building)
- Structure (depending on type may have very different lifecycles and renewal treatment regime)
- Floor Coverings (usually replaced numerous times throughout the life of the building)
- Fit-Out (depending on service level and nature of the building as well as material type will experience different lifecycle to the structure of the building)
- Roof (usually undergoes numerous renewals over the life of the building).

Under AASB116 each 'part' that has a different 'useful life' must be depreciated separately. **If the components reflect 'cost inputs' where elements within that component exhibit different useful lives the methodology is non-compliant with AASB116.**

Failure to comply with May 2015 Residual Value decision

Continuing from the previous issue is the failure of the methodology to comply with the clarification provided by the AASB Residual Value decision.

The decision clarified the requirements of AASB116 in relation to both the definition of Residual Value and the interpretation of the determination of a 'part of the asset with a different useful life'. The decision clarified –

- If the cost of renewal was less than the cost of the overall component this indicates that the component is comprised of two different parts with each having a different useful life
- The 'parts' do not have to be physically identifiable
- The 'short-life' part represents the estimated cost of future renewal and is to be depreciated over the expected period from acquisition to renewal or renewal to renewal
- The 'long-life' part represents the 'recyclable part' and is to be depreciated over the assets overall expected useful life.

If the asset is split into components based on 'cost inputs' rather than reflecting the asset management lifecycle and then further split into short-life and long-life parts the methodology is non-compliant with AASB116, the AASB Residual Value decision and Australian Interpretation 1030.

SUMMARY

Just as having a well-designed floor plan and engineering plan based on building standards is critical to the construction of a quality and compliant building the need for a well-designed and compliant methodology is critical to the calculation of both values and depreciation expense estimates.

The primary reason for large variations in values and depreciation estimates from year-to-year is usually as a result of poor or non-compliant methodology rather than changes in underlying assumptions.

The most common non-compliant issues are -

- Failure to base valuation on the key characteristics
- Incorrectly basing value on depreciation expense
- Failure to componentise or use of inappropriate components
- Failure to comply with May 2015 Residual Value decision

Before adopting a particular methodology or set of algorithms it is imperative that appropriate due-diligence is undertaken to ensure the methodology complies with the accounting standards and as a result will withstand a robust external audit.