Institute of Actuaries of India

FAIR VALUE OF ASSETS IN THE CONTEXT OF ACCOUNTING FOR EMPLOYEE BENEFIT PLANS

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Agenda

1. Accounting Standards' View Point
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   - IAS 19R
2. Measuring Fair Value
   - IFRS 13
   - AS 30
3. Actuarial View Point
   - Consistency
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4. Key Issues – The Indian Context

Accounting Standards: View Point

Accounting Standard	Fair Value : Concept and Methodology
AS15R	• Amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm's length transaction [Paragraph 7] • When no market value is available, the fair value of plan assets is estimated for example by discounting expected future cash flows using a discount rate that reflects both the risk associated with the plan assets and the maturity or expected disposal date of those assets. If the assets have no maturity, the expected period until the settlement of the related obligation needs to be considered. [Paragraph 100]

Accounting Standards: View Point

Accounting Standard	Fair Value : Concepts and Methodology
IAS19R	• 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 [See IFRS13: Fair Value Measurement]- Paragraph 8 • Paragraphs 113-119 deals with recognition and measurement of plan assets. These paragraphs only provide a link to "Basis for Conclusions" for further guidance on concept and measurement of Fair Value

Accounting Standards: View Point

Accounting Standard	Fair Value : Concepts and Methodology
IAS19R (continued)	• Basis for Conclusions [BC191-BC194] ➢ Plan assets should be measured at Fair Value ➢ Where market value is used as a proxy for fair value, market value is defined as the amount obtainable from the sale for an asset, in an active market". ➢ Use of "market related" values would add excessive and unnecessary complexity ➢ There should not be a different basis for measuring investments that have a fixed redemption value – conflict with IAS26 (Accounting and Reporting by Retirement Benefit Plans) which permits an amortized cost basis.

Measuring Fair Value

Accounting Standard	Fair Value : Measurement
IFRS 13	• This Accounting Standard defines "Fair Value" and replaces the requirement contained in the individual standards. • Fair Value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions(i.e. an exit price) regardless of whether that price is directly observable or estimated using another valuation technique. • Fair Value is a market based measurement, not a entity specific measurement. As a result, an entity's intention to hold an asset or to settle or otherwise fulfil a liability is not relevant when measuring Fair Value.

Measuring Fair Value

Accounting Standard	Fair Value : Measurement
IFRS 13 (continued)	• An entity shall use valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs. • Three widely used valuation techniques are ➢ Market Approach ➢ Cost Approach ➢ Income Approach • Market Approach: ➢ Use of market multiples derived from a set of comparables ➢ Matrix pricing for valuation of instruments such as debt securities without exclusively relying on quoted prices

Measuring Fair Value

Accounting Standard	Fair Value : Measurement
IFRS 13 (continued)	• Cost Approach: Replacement Cost • Income Approach ➢ Present Value Techniques ➢ Option Pricing Models such as Black-Scholes-Merton Formula or a Binomial Model • Present Value Techniques ➢ Discount Rate Adjustment Technique: Use a discount rate derived from market data for comparable assets and the contractual or promised or most likely cash flows on the asset ➢ Expected Present Value Technique uses risk-adjusted expected cash flows and a risk free rate

Measuring Fair Value

Accounting Standard	Fair Value : Measurement
AS 30[Financial Instruments: Recognition and Measurement]	• Quoted prices in an active market provide the primary source of evidence of fair value. 'Ask' price for assets, and 'Bid' price for liabilities be considered. • In the absence of an active market, the fair value is generally established by adopting an appropriate valuation technique, namely, using the prices available in recent arm's length transactions in the market, reference to current fair value of another similar instrument usage of discounted cash flow analysis, or option pricing models.

Fair value: Actuarial View Point

- As actuaries, our key concern is about "consistency"
  a. An actuarially assessed value of assets to be compared with an actuarially assessed value of liabilities
  b. Market value of assets to be compared with a market related value of liabilities

  The traditional actuarial approach to pension fund valuations has developed more on the lines of (a) with significant interest being placed on (b) being a more recent phenomenon.

- Given that assets are taken at market values, what are the approaches available for determining a market related value of liabilities ?

Source : S.J Head, D.R Adkins, A.J.G Cairns, A.J. Corversor, etal(2000) "Pension Fund Valuations and Market Values", B.A.J. Value 6, Part1

FAIR VALUE: ACTUARIAL VIEW POINT(continued)

- Asset based Discount Rate Approach:

  We first derive an implied market discount rate for each asset class. For example, for gilt investments this is simply the gross redemption yield. For equity investments this involves determining the discount rate implied by the current market price and expected dividend and/or sale proceeds.

  The overall valuation discount rate is then determined as a weighted average of these individual discount rates, based on the proportions invested in each asset class.

- Economic Valuation Approach

  This is the method derived from financial economics. The inflation rate, discount rate and related assumptions are derived directly from market information

  For example the discount rate for gilt investments will be the gross redemption yield on a portfolio of conventional gilts with appropriate duration and convexity.

Where do we stand: Indian Employee Benefit Plans Context

- Problem of Inconsistency
  - Accounting Valuations of Insurer Managed (Non-Linked) Plans where the problem is one of non availability of fair (market) values of assets

    This is a key concern because it introduces an <u>unintended</u> balance sheet and income statement volatility.
- Fair value methodologies – Harmonization between AS15R and IAS19R.
- Pro-Cyclicality Issues connected with the Use of Market Values.
  - Not an immediate concern in the context of Indian Employee Benefit Plans

Questions

Thank You