To assist you to prepare for the implementation of IFRS 13 Fair Value Measurement, the IFRS Foundation will hold an intensive half-day session immediately before the IFRS conference, on the morning of 27 June 2012.

**Programme**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Registration and refreshments</td>
</tr>
<tr>
<td>09:30</td>
<td>Introduction</td>
</tr>
<tr>
<td></td>
<td>Sue Lloyd</td>
</tr>
<tr>
<td></td>
<td>Senior Director, Technical Activities</td>
</tr>
<tr>
<td></td>
<td>IASB</td>
</tr>
<tr>
<td>09:35</td>
<td>Technical update and IFRS Foundation implementation support</td>
</tr>
<tr>
<td></td>
<td>Mariela Isern,</td>
</tr>
<tr>
<td></td>
<td>Technical Manager</td>
</tr>
<tr>
<td></td>
<td>IASB</td>
</tr>
<tr>
<td>10:15</td>
<td>Valuing financial instruments</td>
</tr>
<tr>
<td></td>
<td>Karin Dohm</td>
</tr>
<tr>
<td></td>
<td>Chief Accounting Officer</td>
</tr>
<tr>
<td></td>
<td>Deutsche Bank AG</td>
</tr>
<tr>
<td>10:45</td>
<td>Valuing non-financial assets and liabilities</td>
</tr>
<tr>
<td></td>
<td>Yann Magnan</td>
</tr>
<tr>
<td></td>
<td>Managing Director, Valuation Advisory Services</td>
</tr>
<tr>
<td></td>
<td>Duff &amp; Phelps</td>
</tr>
<tr>
<td>11:15</td>
<td>Round-table Q&amp;A</td>
</tr>
<tr>
<td></td>
<td>Panellists:</td>
</tr>
<tr>
<td></td>
<td>• Mariela Isern</td>
</tr>
<tr>
<td></td>
<td>• Karin Dohm</td>
</tr>
<tr>
<td></td>
<td>• Yann Magnan</td>
</tr>
<tr>
<td>11:55</td>
<td>Concluding comments</td>
</tr>
<tr>
<td></td>
<td>Sue Lloyd</td>
</tr>
<tr>
<td></td>
<td>Senior Director, Technical Activities</td>
</tr>
<tr>
<td></td>
<td>IASB</td>
</tr>
<tr>
<td>12:00</td>
<td>Close session</td>
</tr>
</tbody>
</table>
Special Interest Session

Implementing IFRS 13
Fair Value Measurement

MARIELA ISERN
Senior Technical Manager
IASB

KARIN DOHM
Chief Accounting Officer
Deutsche Bank AG

YANN MAGNAN
Managing Director, Valuation Advisory Services
Duff & Phelps

Chair:
SUE LLOYD
Senior Director, Technical Activites
IASB
Agenda

- Why IFRS 13 was necessary
- Fair value measurement principles
- Answering what, where, who and how
  - Views from the external speaker, Yann Magnan
- Measuring the fair value of non-financial assets and financial and non-financial liabilities
  - Views from the external speaker, Yann Magnan
- Valuation techniques
  - Views from the external speaker, Yann Magnan
- Bid and ask, premiums and discounts and portfolios
  - Views from the external speakers, Yann Magnan and Karin Dohm
- Disclosures
  - Views from the external speakers, Yann Magnan and Karin Dohm
- Comparison with US GAAP
- Effective date
- Key points, external speakers
Why IFRS 13 was necessary

Dispersed and conflicting guidance

- IAS 36
- IAS 39/IFRS 9
- IAS 40
- IAS 41
- Etc.

Topic 820 in US GAAP (codified SFAS 157)

IFRS 13

- Single source of measurement guidance
- Clear measurement objective
- Consistent and transparent disclosures about fair value
When does IFRS 13 apply?

If you own a biological asset

**IAS 41**
A biological asset shall be measured on initial recognition and at the end of each reporting period at its **fair value** less cost to sell

**IFRS 13**
How

**What and when**
### What does IFRS 13 not apply to?

<table>
<thead>
<tr>
<th>Excluded from the scope</th>
<th>Disclosures in IFRS 13 not required for</th>
<th>Not required for measurement similar to fair value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFRS 2 and IAS 17</td>
<td>Plan assets (IAS 19)</td>
<td>IAS 2 (net realisable value)</td>
</tr>
<tr>
<td></td>
<td>Retirement benefit plan investments (IAS 26)</td>
<td>IAS 36 (value in use)</td>
</tr>
<tr>
<td></td>
<td>Assets for which recoverable amount is fair value less cost of disposal (IAS 36)</td>
<td></td>
</tr>
</tbody>
</table>

### The previous definition of fair value

<table>
<thead>
<tr>
<th>Fair value definition</th>
<th>Its weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>The amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arms length transaction.</td>
<td>It did not specify whether an entity is buying or selling the asset.</td>
</tr>
<tr>
<td></td>
<td>It was unclear about what settling meant because it did not refer to the creditor.</td>
</tr>
<tr>
<td></td>
<td>It was unclear about whether it was market-based.</td>
</tr>
<tr>
<td></td>
<td>It did not state explicitly when the exchange or settlement takes place.</td>
</tr>
</tbody>
</table>
IFRS 13’s ‘new’ definition of fair value

<table>
<thead>
<tr>
<th>New fair value definition</th>
<th>Its improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>… 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</td>
<td>It specifies that the entity is selling the asset.</td>
</tr>
<tr>
<td></td>
<td>It refers to the transfer of a liability.</td>
</tr>
<tr>
<td></td>
<td>It is not a forced or distressed sale.</td>
</tr>
<tr>
<td></td>
<td>It is clear it is market-based.</td>
</tr>
<tr>
<td></td>
<td>It states explicitly when the sale or transfer takes place.</td>
</tr>
</tbody>
</table>

Fair value at initial recognition

Transaction price (entry price) = Fair value (exit price) unless:

- Transaction takes place in different markets
- Transactions are for different units of account
- Seller is distressed or forced
- Transactions are between related parties
International Financial Reporting Standards

Answering what, where, who and how

The views expressed in this presentation are those of the presenter, not necessarily those of the IASB or IFRS Foundation

A hypothetical transaction price

Principal market (or most advantageous market)

Fair value of

\[ \text{Fair value of an asset at the measurement date} \]

\[ \text{Fair value of a liability at the measurement date} \]

Market participant buyer

Market participant seller

An asset

A liability
What is being measured?

- Unit of account
  - IAS 41: A biological asset shall be measured … at its fair value less costs to sell…

- Characteristics
  - Which characteristics would a market participant buyer take into account?
    - age and remaining economic life?
    - condition
    - location
    - restrictions on use or sale
    - contractual terms

Where would the transaction take place?

<table>
<thead>
<tr>
<th>Fair value is the price in the …</th>
<th>Or, if no principal market, the most advantageous market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal market</td>
<td>The market with the greatest volume and level of activity for the asset or liability</td>
</tr>
<tr>
<td>Or, if no principal market, the most advantageous market</td>
<td>The market that maximises the amount that would be received to sell the asset and minimises the amount that would be paid to transfer the liability</td>
</tr>
</tbody>
</table>

- In most cases, these markets will be the same
  - arbitrage opportunities will be competed away

- The entity must have access to the principal (or most advantageous) market
**Transaction and transportation costs**

<table>
<thead>
<tr>
<th>Description</th>
<th>Included in fair value?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transaction costs</strong></td>
<td>No (Although they are considered in the assessment of which market is most advantageous)</td>
</tr>
<tr>
<td>The costs to sell the asset or transfer the liability that are directly attributable to the disposal of the asset or the transfer of the liability</td>
<td></td>
</tr>
<tr>
<td><strong>Transport costs</strong></td>
<td>Yes</td>
</tr>
<tr>
<td>The costs that would be incurred to transport an asset from its current location to its exit market</td>
<td>Transportation changes a characteristic of the asset (its location)</td>
</tr>
</tbody>
</table>

**Who would transact for the item?**

- Market participants are buyers and sellers in the principal (or most advantageous) market who are:
  - Independent
  - Knowledgeable
    - Able to enter into a transaction
    - Willing to enter into a transaction

- Market participants act in their economic best interest
  - Maximise the value of the asset
  - Minimise the value of the liability
How do we arrive to a market-based measurement?

Is there a quoted price in an active market for an identical asset or liability?

- Yes
  - Use this quoted price to measure fair value (Level 1)
  - Must use without adjustment

- No
  - Replicate a market price through a valuation technique* (using observable+ and unobservable inputs: Levels 2 and 3)
  - No use of significant unobservable (Level 3) inputs‡ = Level 2 measurement
  - Use of significant unobservable (Level 3) inputs‡ = Level 3 measurement

* Valuation techniques include the market approach, income approach and cost approach.

+ Maximise the use of relevant observable inputs and minimise the use of unobservable inputs. Observable inputs include market data (prices and other information that is publicly available).

‡ Unobservable inputs include the entity's own data (budgets, forecasts) which must be adjusted if market participants would use different assumptions.

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Yann Magnan

Applying an exit price notion
Principal market and market participants
Fair value hierarchy
Fair value in newly inactive markets
Applying an Exit Price Notion

<table>
<thead>
<tr>
<th>Difference between entry and exit prices</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactions between related parties</td>
<td>Need to verify whether transaction was at arm’s length</td>
</tr>
<tr>
<td>Seller under duress</td>
<td>If seller is experiencing financial difficulties, need to verify whether price paid or received reflects an orderly transaction</td>
</tr>
</tbody>
</table>
| Unit of account                          | • Buy asset in one form, modify it and sell it in another form  
|                                          | • Buy group of assets, recognise an individual asset (eg business combination)  
|                                          | • Over or under payment relative to fair value (eg bargain purchase in business combination; may be entity-specific) |

<table>
<thead>
<tr>
<th>Different markets</th>
<th></th>
</tr>
</thead>
</table>
|                                          | • Retail versus dealer market  
|                                          | • Bid-ask spread differences |

Principal Market Question

A trader who is based in Paris has access to markets in London and New York. He usually sells his goods in London but on occasion has also traded in other locations. He has never transacted in New York, despite this market having the greatest volume and level of activity worldwide (within Europe, London has the greatest volume and activity). The prices and costs to trade in each market are as follows:

<table>
<thead>
<tr>
<th></th>
<th>London</th>
<th>New York</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Price Achieved</td>
<td>50</td>
<td>52</td>
</tr>
<tr>
<td>Transaction Costs</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Transport Costs</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Net Proceeds</td>
<td>44</td>
<td>42</td>
</tr>
<tr>
<td>Fair Value</td>
<td>46</td>
<td>48</td>
</tr>
</tbody>
</table>

Which market is the Principal Market and which the Most Advantageous?

1. Principal Market  | Most Advantageous Market
2. New York           | London
3. London             | New York
4. New York           | New York
5. London             | London
1. New York and London

- The Principal Market is the market with the greatest volume and level of activity for the asset. That is the market that will determine the FV of the trader’s goods.

- The Most Advantageous Market is the market that maximises the amount that would be received to sell the asset, after taking into account transaction costs and transport costs.

- In concluding on the FV, only transportation costs are considered.

Market participants

- Current definition refers to ‘knowledgeable, willing parties’ but doesn’t specify who those parties are

- Practical implications:
  - Greater emphasis on who the identified market participant is and how this assessment has been made, including support for that assessment
  - Analysis of alternative uses may be required in the assessment of the ‘highest and best use’
  - Likely increased audit scrutiny around the basis for assumptions made
Fair Value Hierarchy

Example

How would you categorise the measurement of the units in the following investment funds?

Unit 1:
A unit in an investment fund is quoted in an active market. However the underlying investments are in unquoted equities that would be categorised within Level 3 in the fair value hierarchy.

Unit 2:
A unit in a unquoted investment fund which only invests in financial assets quoted in active markets. No adjustments are made to the quoted prices when arriving at the value of the fund.

<table>
<thead>
<tr>
<th>Unit 1</th>
<th>Unit 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Level 1</td>
<td>Level 1</td>
</tr>
<tr>
<td>2. Level 1</td>
<td>Level 2</td>
</tr>
<tr>
<td>3. Level 2</td>
<td>Level 1</td>
</tr>
<tr>
<td>4. Level 3</td>
<td>Level 2</td>
</tr>
</tbody>
</table>

Fair Value Hierarchy (cont’d)

Answer

2. Level 1 and Level 2

Unit 1:
- Level 1.
- This is because the fund’s units are quoted in an active market.

Unit 2:
- Level 2.
- Although the fund’s investments are quoted, the fund’s own units are not.
Fair Value in Newly Inactive Markets: Has market activity declined?

- Indications a market is not active:
  - Few recent transactions
  - Price quotations not developed using current information
  - Wide bid-ask spreads or significant increases in spreads
  - Absence, or decline in, the market for new issues
  - Little public information

- A decrease in market activity does not mean that all transactions are not orderly
  - Must determine whether each observed transaction is orderly

Fair Value in Newly Inactive Markets: Are market transactions orderly?

- Indications a transaction is not orderly:
  - Inadequate exposure to market
  - Marketed to single market participant
  - Seller is distressed
  - Seller was forced
  - Transaction price is outlier
Practical Implementation Issue: Market (in)activity

- Helpful to have explicit guidance on determining market inactivity
- Likely to lead to increased scrutiny around the assessment
- Further analysis of the observed data may be needed and a significant adjustment to the transactions or quoted prices may be necessary to measure fair value

International Financial Reporting Standards

Measuring the fair value of non-financial assets and financial and non-financial liabilities

The views expressed in this presentation are those of the presenter, not necessarily those of the IASB or IFRS Foundation.
Highest and best use

• Fair value assumes a non-financial asset is used by market participants at its highest and best use
  – the use of a non-financial asset by market participants that maximises the value of the asset
    – physically possible
    – legally permissible
    – financially feasible

Highest and best use continued

• Highest and best use is usually (but not always) the current use
  – if for competitive reasons an entity does not intend to use the asset at its highest and best use, the fair value of the asset still reflects its highest and best use by market participants (defensive value)

• Does not apply to financial instruments or liabilities
Valuation premise

• A non-financial asset either:
  – provides maximum value through its use in combination with other assets and liabilities as a group
  – is its value influenced by it being 'operated' with other assets?
  – an example: equipment used in production facility
  – market participants are assumed to hold complementary assets
  – provides maximum value through its use on a stand-alone basis
  – is its value independent of its use with other assets?
  – an example: a vehicle or an investment property

• Does not apply to financial instruments or liabilities

Transfer notion

• Fair value assumes a transfer to a market participant who takes on the obligation. The transfer assumes:

  Liability or equity remains outstanding

  Restrictions on transfer are already reflected in inputs; no additional adjustment required

  Fair value of a liability reflects the effect of non-performance risk
Is there a corresponding asset?

- Yes
  - Is there an observable market price to transfer the instrument?
    - Yes: Fair value = observable market price of instrument
    - No: Fair value = another valuation technique
- No
  - Does somebody hold the corresponding asset?
    - Yes
      - Is there an observable market price for the instrument traded as an asset?
        - Yes: Fair value = fair value of the corresponding asset
        - No: Fair value = another valuation technique
    - No: Fair value = another valuation technique

No corresponding asset

Two possible ways to approach it:

1. Use the future cash flows that a market participant would expect to incur in fulfilling the obligation, including the compensation that a market participant would require for taking on the obligation. Such compensation includes:
   - the cost to fulfil the obligation plus return for undertaking the activity; and
   - a risk premium to compensate for the risk that actual cash flows might differ from expected cash flows.
Two possible ways to approach it:

2. Use the amount that a market participant would receive to enter into or issue an identical liability or equity instrument.
Highest and best use
Context

• Highest and best use is a well-established valuation context for real estate.

• Intangible and financial assets are unique assets that often have only one use: that for which they have been created.

• An intangible asset cannot be converted into something else without it becoming a different intangible asset.

Highest and Best Use (cont’d)
Example 1 – valuation premise/group of assets

• A company acquires land in a business combination, which is currently developed for industrial use as a site for a manufacturing facility (often times the current use is presumed to be the highest and best use).

• The facility is located in an area where current sites are being developed for residential use as sites for high-rise condominiums.

• Based on recent zoning and other changes, the company determines that the land currently used as a site for a manufacturing facility could potentially be developed as a site for residential use (for high-rise condominiums).
Highest and Best Use (cont’d)
Example 1 – valuation premise/group of assets

• In this example, the highest and best use of the land would be determined by comparing:
  – (a) the value of the land as currently developed for industrial use (that is, the land would be used in combination with other assets, such as the factory, or with other assets and liabilities); and,
  – (b) the value of the land as a vacant site for residential use, taking into account the costs of demolishing the factory and other costs (including the uncertainty about whether the reporting entity would be able to convert the asset to the alternative use) necessary to convert the land to a vacant site (that is, the land is to be used by market participants on a standalone basis).

• The highest and best use of the land would be determined based on the higher of those values.

Highest and best use (cont’d)
Example 2: biological assets

• How would HBU affect the valuation of biological assets?

<table>
<thead>
<tr>
<th></th>
<th>Current use</th>
<th>HBU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plantation value</td>
<td>1,200</td>
<td>1,500</td>
</tr>
<tr>
<td>Land</td>
<td>-780</td>
<td>-1,500</td>
</tr>
<tr>
<td>PP&amp;E improvements</td>
<td>-130</td>
<td>0</td>
</tr>
<tr>
<td>Biological asset</td>
<td>290</td>
<td>0</td>
</tr>
</tbody>
</table>

• IAS 41, paragraph 25:

• [...] An entity may use information regarding the combined assets to measure the fair value of the biological assets. For example the fair value of raw land and land improvements may be deducted from the fair value of the combined assets to arrive at the fair value of biological assets.
Valuing liabilities
Example taken from IFRS 13 – Decommissioning liability

• On January 20X1, Entity A assumes a decommissioning liability in a business combination. The entity is legally required to dismantle and remove an offshore oil platform at the end of its useful life, which is estimated to be 10 years.

• On the basis of paragraphs B23-B30 of the IFRS, Entity A uses the expected present value technique to measure the fair value of the decommissioning liability.

• If Entity A was contractually allowed to transfer its decommissioning liability to a market participant, Entity A concludes that a market participant would use market inputs, probability–weighted as appropriate, when estimating the price it would expect to receive.

Valuing liabilities
Example taken from IFRS 13 – Decommissioning liability

• Entity A estimates the compensation that a market participant would require for undertaking the activity and for assuming the risk associated with the obligation to dismantle and remove the asset:

<table>
<thead>
<tr>
<th>Expected cash-flows (CU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected labour costs</td>
</tr>
<tr>
<td>Allocated overhead and equipment costs (0.80 x CU 131,250)</td>
</tr>
<tr>
<td>Contractor’s profit mark-up [0.20 x (CU 131,250 + CU 105,000)]</td>
</tr>
<tr>
<td>Expected cash-flows before inflation adjustment</td>
</tr>
<tr>
<td>Inflation factor (4% for 10 years)</td>
</tr>
<tr>
<td>Expected cash-flows adjusted for inflation</td>
</tr>
<tr>
<td>Market risk premium (0.05 x CU 419,637)</td>
</tr>
<tr>
<td>Expected cash flows adjusted for market risk</td>
</tr>
<tr>
<td>Expected present value using discount rate of 8.5% for 10 years</td>
</tr>
</tbody>
</table>
Valuation techniques

Measure fair value using valuation techniques that are appropriate in the circumstances and for which sufficient data are available.

• Market approach
  – prices from market transactions for identical or similar assets or liabilities, for example:
    – using market multiples (eg of earnings or cash flows) from a set of comparable companies and applying those multiples to the earnings or cash flows of the company being valued
Valuation techniques continued

- **Cost approach**
  - the cost to acquire or reconstruct a substitute asset of comparable utility, adjusted for physical, functional and economic obsolescence
  - often used for PP&E and some intangibles

- **Income approach**
  - converts future amounts (e.g., cash flows) to a single current amount, for example:
    - discounted cash flow/present values
    - option pricing models
    - multi-period excess earnings method

---

Selecting a valuation technique

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Market approach</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Market price is available</td>
</tr>
<tr>
<td></td>
<td>Price is for an identical asset or liability and must be used</td>
</tr>
<tr>
<td></td>
<td>No adjustment is necessary or allowed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 2</th>
<th>Income approach (e.g., discounted cash flow)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Directly identifiable cash flows</td>
</tr>
<tr>
<td></td>
<td>Observable inputs</td>
</tr>
<tr>
<td></td>
<td>Rarely seen in practice</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 3</th>
<th>Cost approach (e.g., replacement cost)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not directly income producing</td>
</tr>
<tr>
<td></td>
<td>No identical market price</td>
</tr>
<tr>
<td></td>
<td>Price needs adjustment</td>
</tr>
</tbody>
</table>

|         | Observable inputs |
|         | Rarely seen in practice |

|         | Unobservable inputs |
|         | Unobservable inputs |
### Valuation techniques depending on the assets/liabilities being valued

<table>
<thead>
<tr>
<th>Asset/liability or Group of Assets/liabilities to value</th>
<th>Valuation context</th>
<th>FV Hierarchy</th>
<th>Valuation technique</th>
</tr>
</thead>
</table>
| • Cash-Generating Unit                                 | • IAS 36: impairment testing of Goodwill.  
• IFRS 3R: purchase price allocation.                 | • Level 1 if the CGU is listed  
• Level 2 if direct comparable companies are available.  
• Level 3: most frequent.                             | • Market Approach or Income Approach.  
• Income approach may be more appropriate since direct comparables might not be easily findable. |
| • Trade Name                                           | • IFRS 3R: purchase price allocation.     | • Level 2: there are observable inputs on comparable Trade Names: royalty rates. | • Income Approach: Royalty Relief |
| • Customer Relationships                               | • IFRS 3R: purchase price allocation.     | • Level 3: only non observable inputs available. | • Income approach: Excess Earnings |
| • Intellectual Property                                | • IFRS 3R: purchase price allocation.     | • Level 2 or 3: there can be observable inputs available on IP: royalty rates for comparable technologies. If not, only level 3 is applicable. | • Income approach: Excess Earnings or Royalty Relief  
• Cost Approach |
Bid and ask spread, premiums and discounts and portfolios

Pricing within a bid-ask spread

<table>
<thead>
<tr>
<th></th>
<th>The price at which the dealer will…</th>
<th>For an asset, the non-dealer entity’s…</th>
<th>For a liability, the non-dealer entity’s…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bid price</td>
<td>buy</td>
<td>exit price</td>
<td>entry price</td>
</tr>
<tr>
<td>Ask (offer) price</td>
<td>sell</td>
<td>entry price</td>
<td>exit price</td>
</tr>
</tbody>
</table>
Pricing within a bid-ask spread continued

• If an asset or a liability measured at fair value has a bid and an ask price, use the price within the bid-ask spread that is most representative of fair value

• Mid-market pricing or other pricing conventions can be used as a practical expedient for fair value measurements within a bid-ask spread if these conventions do not contravene the principle

Premiums and discounts

• Any premium or discount applied must be consistent with:
  – characteristics of asset or liability
  – the unit of account in the IFRS requiring fair value

• No block discounts
  – an adjustment to a quoted price for reduction that would occur if a market participant were to sell a large holding of assets or liabilities in one or a few transactions
### Premiums and discounts continued

<table>
<thead>
<tr>
<th>Is a level 1 input available?</th>
<th>Would market participants incorporate premium or discount in transaction?</th>
<th>Does fair value include premium or discount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>n/a</td>
<td>FV = Level 1 price x quantity held (P x Q)</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

### Portfolios of financial instruments

- IFRS 13 permits an entity to measure a group of financial assets and financial liabilities on the basis of the net risk exposure to either market risks or credit risks.
- This practice was already allowed in IAS 39/IFRS 9
- The “exception” was permitted because:
  - derivatives often cannot be sold, but management can mitigate risk exposure by entering into an offsetting position
  - portfolio composition is entity specific (depends on entity’s risk preferences)

...
Portfolios of financial instruments

continued

• Conditions that need to be met:
  – Entity must have documented risk management strategy
  – The entity provides information on the basis of the net risk exposure to key management personnel
  – Only for portfolios of instruments measured at FV

• Accounting policy decision

• Does not affect presentation in IAS 32.
  – Allocations shall be performed on a reasonable and consistent basis.

• Portfolio-level adjustments may need to be allocated to the unit of account for presentation purposes.

Portfolios of financial instruments

continued

• If there are offsetting market risks:
  – can apply bid-ask spread to net open risk position
  – offsetting risks must be “substantially the same”
  – duration of instruments leading to exposure to market risk must be “substantially the same”

Market risk: The risk that the price will fluctuate because of changes in market prices (currency risk, interest rate risk and other price risk).
Portfolios of financial instruments

• If the entity is exposed to the credit risk of a particular counterparty, an entity shall include the effect of:
  – its net exposure to the credit risk of the counterparty.
  – the counterparty’s net exposure to its credit risk.
  – any existing arrangements that mitigate credit risk exposure if market participants expect that such arrangements would be legally enforceable in the event of default.

Credit risk: The risk the entity or the counterparty will not pay or otherwise perform as agreed.

Yann Magnan

Premiums and discounts
Practical Implementation Issue: Premiums and Discounts

- Determining the unit of account when not clearly specified
- Avoiding inadvertently making adjustments for size when holding ≠ unit of account (e.g., empirical studies on DLOM relate to size to some extent)
- Puts pressure on views about whether market and income approaches are on a controlling or non-controlling basis

Premiums and Discounts (cont’d)

Questions

Stock 1:
Company A owns 15% of the shares in a stock which is regularly traded in small quantities in an active market. Taking the number of shares and multiplying by the share price results in a value for the holding of £100m. However, to sell such a large block would likely result in a 25% discount to the current price.

Stock 2:
Company A also owns 15% of a second stock which is a non-listed entity. The listed shares of a comparable company can be used as an observable input and the value of the holding is estimated at £100m. Again, to sell such a large block of similar shares indicates a 25% discount to the per share price.

What is the Fair Value of each stock (accounted for under IAS 39/IFRS 9)?

<table>
<thead>
<tr>
<th>Stock 1</th>
<th>Stock 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CU75m</td>
<td>CU75m</td>
</tr>
<tr>
<td>2. CU100m</td>
<td>CU75m</td>
</tr>
<tr>
<td>3. CU75m</td>
<td>CU100m</td>
</tr>
<tr>
<td>4. CU100m</td>
<td>CU100m</td>
</tr>
</tbody>
</table>
4. CU100m and CU100m

• Block discounts are prohibited.
• Stock 1: The listed share price is a level 1 input.
  • A blockage factor would not be relevant in this example because the unit of account is a single share and the Fair Value is therefore a straight Price x Quantity.

• Stock 2: The non-listed stock uses a level 2 input.
  • A blockage factor would not be relevant in this example because (a) it is a non-listed share, so there is no market price to depress and (b) the unit of account is a single share and the Fair Value is therefore a straight Price x Quantity. However, other discounts and premiums might apply.

Note that the fair value must be consistent with the unit of account, so any premiums or discounts applied must reflect that.
Significance of IFRS 13 to Deutsche Bank

• Deutsche Bank is a global financial institution engaged in business in 72 countries

• As a result of our trading business, a substantial portion of our balance sheet comprises financial instruments carried at fair value
  – Financial instruments carried at fair value on the DB Group balance sheet comprise Eur 1.3 trillion, or approx. 60% of total IFRS assets at 31/12/2011
  – Of the Eur 1.3 trillion of financial instruments at fair value, Eur 900mln (70%) attributable to derivative instruments

• Therefore IFRS 13 is a key accounting standard for our firm
Key Issues and Impacts - Portfolio Level Adjustments

- In practice dealers have historically valued groups of derivative instruments on a ‘portfolio basis’
  - Models utilising mid market prices are the starting point
  - Then pricing adjustments are applied to the net open risk position of the portfolio

- Whilst allowed under previously existing IAS 39, IFRS 13 restricts a portfolio based valuation methodology to those which meet specific criteria:
  - Entity must have documented risk management strategy
  - The entity provide information on the basis of the net risk exposure to key management personnel
  - Only for portfolios of instruments measured at FV

- Key Impacts:
  - DB must revise existing documentation for portfolios of instruments valued on a portfolio basis, to demonstrate how portfolios specifically meet the criteria above
  - As portfolio valuations are an accounting policy choice, need to ensure that consistency in the application of the portfolio exemption is maintained
Key Issues and Impacts – Block Discounts

• Under current IAS 39 block discounts are not permitted if a financial instrument is actively traded
• IFRS 13 prohibits block discounts at all levels of the fair value hierarchy, with limited exceptions
• Key Impact: Firm wide review is being undertaken of all instances where block discounts have been applied

Key Issues and Impacts – Bid / Ask Prices

• Previously, fair value was defined as "The amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arms length transaction."
  ▪ For markets where there are quoted bid prices and ask prices, DB has interpreted this to mean that bid price would represent the fair value of assets and ask price would represent the fair value of liabilities
• IFRS 13 defines fair value as an exit price. I.e. "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."
  ▪ IFRS 13 now states that if an asset or a liability measured at fair value has a bid price and an ask price, the price within the bid-ask spread that is most representative of fair value in the circumstances shall be used to measure fair value.
  ▪ DB does not expect to change our current policy of pricing instruments at bid price for assets (or ask price for liabilities) as they are most representative of fair value.
  ▪ Certain preparers (e.g. broker dealers) may be able to exit within the bid-ask spread and provided this is the most representative exit price, this is permitted under IFRS 13
  ▪ Overall this is not a significant area of contention for us
Key Issues: Challenges in Achieving Exit Price In Today’s Markets

• In arriving at fair value, IFRS 13 requires:
  • Maximum use of observable market parameters, where applicable
  • Symmetry between assets and liabilities

• Challenges in application to derivatives
  • Ongoing industry discussions on how to measure own credit valuation adjustments (Debit Valuation Adjustments or DVA)
    • Analysts generally disregard DVA
  • Divergent practices in measuring own credit (DVA) exist between US and IFRS banks
  • Regulatory regimes are moving in direction of excluding DVA on derivatives in calculation of regulatory capital, leading to an inconsistency between accounting and regulatory definition of fair value
  • The impact of funding is becoming increasingly important to market participants in pricing (and therefore fair value) of derivatives

• Counterparty credit, own credit and cost of funds adjustments are likely to be required to achieve fair value
  • The industry faces a challenge on how to implement these under IFRS 13
  • Potential interaction between these parameters needs to be considered
General

• Fair value at end of reporting period
• Level in hierarchy
• Transfers between levels
• Valuation techniques and inputs used
• If highest and best use is different from current use

General continued

• Disclosures also required for disclosed (but not recognised) fair values, even if on SFP at different amount
  – eg financial asset at amortised cost, but IFRS 7 requires disclosure of asset’s fair value
• Quantitative disclosures in a table unless another format is better
More information about Level 3

- Quantitative disclosure of unobservable inputs and assumptions used
- Reconciliation of opening to closing balances
- Description of valuation process in place

More information about Level 3 continued

- Sensitivity analysis:
  - narrative discussion about sensitivity to changes in unobservable inputs, including inter-relationships between inputs that magnify or mitigate the effect on the measurement
  - quantitative sensitivity analysis for financial instruments
- More granularity in determining classes
An example of Fair Value disclosures

### Level 3 quantitative inputs table example

Paragraph 93(d) of IFRS 13

<table>
<thead>
<tr>
<th>Description</th>
<th>Fair value at 12/31/X9</th>
<th>Valuation technique(s)</th>
<th>Unobservable input</th>
<th>Range (weighted average)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equity securities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare industry</td>
<td>53</td>
<td>Discounted cash flow</td>
<td>weighted average cost of capital</td>
<td>11% - 13% (12%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>long-term revenue growth rate</td>
<td>2% - 5% (4.2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>long-term pre-tax operating margin</td>
<td>3% - 20% (10.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>discount for lack of marketability</td>
<td>5% - 20% (17%)</td>
</tr>
<tr>
<td><strong>Market comparable companies</strong></td>
<td></td>
<td></td>
<td>EBITDA multiple</td>
<td>10 - 13 [13.3]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>revenue multiple</td>
<td>1.5 - 2.0 (1.7)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>discount for lack of marketability</td>
<td>5% - 20% (17%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>control premium</td>
<td>10% - 30% (20%)</td>
</tr>
</tbody>
</table>
Key Issues – Disclosures (Effective 1 January 2013)

• Many disclosures that are currently required annually by IFRS become quarterly under IFRS 13 (see next slide)
  • This is an issue for preparers since the timelines for the issuance of the annual report is typically much longer than that for the quarterly report
  • Most likely will need to accelerate processes and significantly reduce the time taken to report. Need to start early and consider strategic solutions (if not already established)
  • Important to have clear timelines and roles and responsibilities agreed between the functions involved

• New disclosures required by IFRS 13.93(d)
  • quantitative analysis of unobservable parameters
  • description of level 3 valuation techniques
### Significant New Disclosure Requirements

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5(b)</td>
<td>Level 1, 2, 3 table</td>
<td>Annual disclosure</td>
</tr>
<tr>
<td>5(c)</td>
<td>Transfers in and out of level 1 and 2</td>
<td>Annual disclosure</td>
</tr>
<tr>
<td>5(d)</td>
<td>Level 3 roll forward table</td>
<td>Annual disclosure</td>
</tr>
<tr>
<td>5(e)</td>
<td>Sensitivity analysis on level 3 instruments</td>
<td>Annual disclosure</td>
</tr>
<tr>
<td></td>
<td>IFRS 37 para.27</td>
<td>Annual disclosure</td>
</tr>
<tr>
<td></td>
<td>Day 1 P&amp;L reconciliation</td>
<td>Annual disclosure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Changes to existing disclosures</td>
<td></td>
</tr>
<tr>
<td>6(f)</td>
<td>Unrealized P&amp;L on level 3 instruments held at quarter end</td>
<td>Unrealized P&amp;L, not disclosed. Total P&amp;L on level 3 instruments disclosed annually.</td>
</tr>
<tr>
<td>6(g)</td>
<td>Narrative regarding interrelationships between unobservable parameters when considering sensitivity analysis</td>
<td>Not currently disclosed.</td>
</tr>
<tr>
<td></td>
<td>New disclosures</td>
<td></td>
</tr>
<tr>
<td>9(d)</td>
<td>Provide a description of the valuation techniques and unobservable parameters for each level 3 instrument class, including a range for our unobservable parameters</td>
<td>The requirement to provide range of unobservable parameters is a new requirement</td>
</tr>
<tr>
<td>97</td>
<td>A level 1, 2, 3 table for financial instruments measured at amortized cost (ANNUAL).</td>
<td>None required</td>
</tr>
</tbody>
</table>

### International Financial Reporting Standards

Comparison with Topic 820 in US GAAP

The views expressed in this presentation are those of the presenter, not necessarily those of the IASB or IFRS Foundation.
## Remaining differences

<table>
<thead>
<tr>
<th>Topic</th>
<th>Reason for difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net asset value</td>
<td>Different accounting for investment companies (which in IFRSs may or may not mean investments are measured in accordance with IFRS 13) means IASB cannot yet allow a practical expedient</td>
</tr>
<tr>
<td>Deposit liabilities</td>
<td>Different requirements in IFRSs and US GAAP (in different locations) for measuring fair value of deposit liabilities</td>
</tr>
<tr>
<td>Disclosures</td>
<td>• IFRS 13 does not allow net presentation of derivatives</td>
</tr>
<tr>
<td></td>
<td>• IFRS 13 requires quantitative sensitivity analysis for financial instruments</td>
</tr>
<tr>
<td></td>
<td>• In IFRSs non-publicly accountable entities are covered by SME standard</td>
</tr>
</tbody>
</table>

---

International Financial Reporting Standards

Effective date
Effective date

- Effective 1 January 2013
- Earlier application permitted
- Prospective application, no comparatives
Key learnings

- More importance given to the concept of Market;
  - In practise, it will not change a lot methodologies employed for non-financial assets
- More attention given to disclosures;
- More scrutiny to be expected from auditors.
Summary – Lessons Learned

- Ensure that a robust IFRS Project governance structure is in place to manage the implementation of new IFRSs
- Start early!
  - Identify specific differences to current policies and disclosures
  - Documentation of portfolios and review of block discounts takes time
- Do not underestimate the time, effort and process changes required for the new IFRS 13 disclosures

Questions or comments?

Vielen Dank
Thank you

Expressions of individual views by members of the IASB and its staff are encouraged. The views expressed in this presentation are those of the presenter. Official positions of the IASB on accounting matters are determined only after extensive due process and deliberation.