



IFRS Practice Issues: Fair Value Hierarchy

International Financial Reporting Standards
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About this publication

Our IFRS Practice Issues publications address practical application issues that an entity may encounter when applying International Financial Reporting Standards (IFRSs). They may include discussion of selected requirements, and interpretative guidance and illustrative examples to elaborate and clarify the practical application of the requirements.

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Content

This issue of IFRS Practice Issues considers the requirements in *Improving Disclosures about Financial Instruments – Amendments to IFRS 7 Financial Instruments: Disclosures* (hereafter referred to as “amendments to IFRS 7”) issued in March 2009. The amendments require enhanced disclosures about fair value measurements and liquidity risk. This publication considers the requirements in the amendments that relate to disclosure of fair value measurements for financial instruments. Other aspects of financial reporting for financial instruments are dealt with in *Insights into IFRS*, our practical guide to IFRSs.

The text of this publication is referenced to IFRS 7 and to selected other IFRSs in issue at 1 December 2009 as well as to the educational guidance provided by the IASB Expert Advisory Panel that was formed to discuss measurement of fair values in markets that are no longer active. References in the left-hand margin identify the relevant paragraphs.

Whilst considering some of the key issues that an entity may encounter when applying the requirements of IFRS 7 as they relate to the fair value hierarchy, this publication is not a comprehensive analysis of the requirements of IFRSs for financial instruments or fair value measurement. In most cases further analysis will be necessary in order for an entity to apply the requirements to its own facts, circumstances and individual transactions.

When preparing financial statements in accordance with IFRSs, an entity should have regard to its local legal and regulatory requirements. This publication does not consider any requirements of a particular jurisdiction.

IFRSs and their interpretation change over time. Accordingly, neither this publication nor any of our other publications should be used as a substitute for referring to the standards and interpretations themselves.

Other KPMG publications

A more detailed discussion of the general accounting issues that arise from the application of IFRSs can be found in our publication *Insights into IFRS*.

In addition to *Insights into IFRS*, we have a range of publications that can assist you further, including:

- IFRS compared to U.S. GAAP
- Illustrative financial statements for interim and annual periods
- IFRS Handbooks that includes extensive interpretative guidance and illustrative examples to elaborate or clarify the practical application of a standard
- New on the Horizon publications that discuss consultation papers

- First Impressions publications that discuss new pronouncements
- Disclosure checklist.

IFRS-related technical information is available at www.kpmgifrg.com.

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1. Overview of major changes

- Amendments to IFRS 7 require an entity to classify fair value measurements into a fair value hierarchy by reference to the observability and significance of the inputs used in measuring fair value.
- Fair value hierarchy disclosures are required only in respect of financial instruments that are measured at fair value in the statement of financial position.
- A fair value measurement for a financial instrument is classified in Level 1 of the fair value hierarchy if the fair value is determined as the unadjusted quoted price for an identical instrument in an active market.
- A fair value measurement determined using observable inputs other than unadjusted quoted prices for an identical instrument, and that does not use significant unobservable inputs, is classified in Level 2 of the fair value hierarchy.
- If a fair value measurement uses significant unobservable inputs, including using observable inputs that require significant adjustments based on unobservable inputs, then the resulting fair value measurement is classified in Level 3 of the fair value hierarchy.
- Fair value measurements determined using valuation techniques are classified in their entirety as either Level 2 or Level 3 measurements based on the lowest level input that is significant to the measurement.
- Prices obtained from third parties such as a broker or a pricing service are not considered observable simply because they are obtained from a third party. An entity using a price quote from a broker or a pricing service in measuring fair value should, in determining the classification within the fair value hierarchy of the fair value measurements based on those inputs, obtain an understanding of the inputs used by the broker or pricing service in providing the price quote.
- Additional disclosure requirements include a reconciliation of the change in the fair value of Level 3 instruments, transfers between Level 1 and Level 2, and, if significant, for Level 3 fair value measurements the effect of changing one or more of the inputs to reasonably possible alternative assumptions.
- The new requirements are effective for annual periods beginning on or after 1 January 2009. In the first year of application, comparative information is not required.

2. Introduction and background

Recent market conditions have increased the focus on fair value measurements of entities' financial instruments and the significance of those instruments to an entity's financial performance and position.

In March 2009 the International Accounting Standards Board (IASB or the Board) issued amendments to IFRS 7. The amendments require enhanced disclosures about fair value measurements and liquidity risk. The amendments form part of the IASB's response to the financial crisis and to recommendations from the Financial Stability Board (formerly Financial Stability Forum), discussions with users and preparers of financial statements, and discussions of the IASB Expert Advisory Panel (the Panel). The Panel was formed to discuss fair value measurements when markets are no longer active and issued its report *Measuring and disclosing fair values of financial instruments when markets are no longer active* (the Panel Report or EAPR) in October 2008.

The amendments to IFRS 7 require entities to classify fair value measurements for financial instruments using a three-level fair value hierarchy that reflects the significance of inputs used in the measurements. For entities that report in accordance with U.S. generally accepted accounting principles (U.S. GAAP), Statement of Financial Accounting Standards No. 157 *Fair Value Measurements* (SFAS 157) (now ASC Topic 820) issued by the U.S. Financial Accounting Standards Board (FASB) also requires disclosures based on a three-level fair value hierarchy.

IFRS 7.44G

Whilst the amendments to IFRS 7 also modified the disclosure requirements in respect of liquidity risk, in this publication we explore only the fair value disclosures required under the amendments. The amendments are effective for annual periods beginning on or after 1 January 2009. In the first year of application, comparative information for the disclosures required by the amendments need not be provided. Earlier application is permitted.

We hope that this publication will serve as useful educational guidance in understanding and complying with these requirements.

3. Fair value hierarchy

IFRS 7.27A

For fair value measurements recognised in the statement of financial position, IFRS 7 requires certain fair value disclosures for each class of financial instruments. For this purpose, IFRS 7 requires an entity to classify fair value measurements into a fair value hierarchy, with the following levels, by reference to the observability and significance of the inputs used in making the measurement:

- Level 1 – quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 – inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices); and
- Level 3 – inputs for the asset or liability that are not based on observable market data (unobservable inputs).

For a fair value measurement of a financial instrument to be classified in Level 1 of the hierarchy, it should be observable directly in an active market for the same instrument.

Fair value measurements in Levels 2 and 3 of the hierarchy are determined using valuation techniques. The level in the hierarchy into which a financial instrument's fair value measurement is classified in its entirety is determined by reference to the observability and significance of the inputs used in the valuation model. Valuation techniques often incorporate both observable inputs and unobservable inputs. Fair value measurements determined using valuation techniques are classified in their entirety in either Level 2 or Level 3 based on the lowest level input that is significant to the measurement. That is, if the model uses both observable and unobservable inputs, the fair value measurement is classified in Level 3 if the unobservable inputs are significant to the fair value measurement in its entirety. This assessment is made independently of the number or quality of the Level 2 inputs used in the model.

Differentiating between Level 2 and Level 3 fair value measurements, i.e., assessing whether inputs are observable and whether the unobservable inputs are significant, may require judgement and a careful analysis of the inputs used to measure fair value, including consideration of factors specific to the asset or liability.

3.1 Scope

IFRS 7.27B, BC39G

Whilst disclosure of fair values by class of instruments is required for all financial instruments within the scope of IFRS 7, the fair value hierarchy disclosures are required only in respect of financial instruments that are measured at fair value in the statement of financial position. Fair value hierarchy disclosures do not apply to financial instruments that are (i) not recognised in the statement of financial position, e.g., unrecognised loan commitments, or (ii) are recognised in the statement of financial position, but are not measured at fair value, e.g., assets and liabilities measured at amortised cost. Hence these disclosure requirements apply to:

- financial assets and financial liabilities that are classified or designated at fair value through profit or loss;
- all derivatives within the scope of IAS 39 *Financial Instruments: Recognition and Measurement* (IAS 39), that are measured at fair value, including hedging instruments, contracts to buy or sell non-financial items that can be net settled and do not meet the "own use" exemption, and embedded derivatives that are accounted for separately from their host contract; and
- for entities applying IAS 39, available-for-sale financial assets.
- for entities applying IFRS 9 *Financial Instruments*, investments in equity instruments that are measured at fair value through other comprehensive income.

All financial instruments are recognised initially at fair value (plus, in the case of an instrument not at fair value through profit or loss, directly attributable transaction costs). However, in our view, the fair value hierarchy disclosure requirements apply only to those financial assets and financial liabilities whose ongoing measurement basis is fair value.

For example, fair value hierarchy disclosures are not required for:

- financial assets and financial liabilities that are measured at amortised cost even if, at the reporting date, their amortised cost is equal to fair value. This could occur as a matter of chance or because the financial instrument is recognised initially close to or on the reporting date;
- financial instruments whose measurement basis is not fair value and that are hedged items in a fair value hedge and whose carrying value is adjusted for changes in fair value attributable to the risk being hedged during the period of the hedge;
- cash balances that are measured at amortised cost even though amortised cost may equal fair value.

3.2 Comparison with U.S. GAAP fair value hierarchy

As noted in section 2, SFAS 157 requires certain disclosures in respect of fair values that are based on a three-level fair value hierarchy. In comparison to IFRS 7, SFAS 157 offers more detailed discussion and application guidance on the fair value hierarchy.

Similar to IFRSs, under SFAS 157, the level in the fair value hierarchy within which a fair value measurement in its entirety falls is determined based on the lowest level input that is significant to the fair value measurement in its entirety.

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3 inputs are unobservable inputs for the asset or liability.

U.S. GAAP, like IFRSs, groups fair value measurements based on the observability and significance of the inputs.

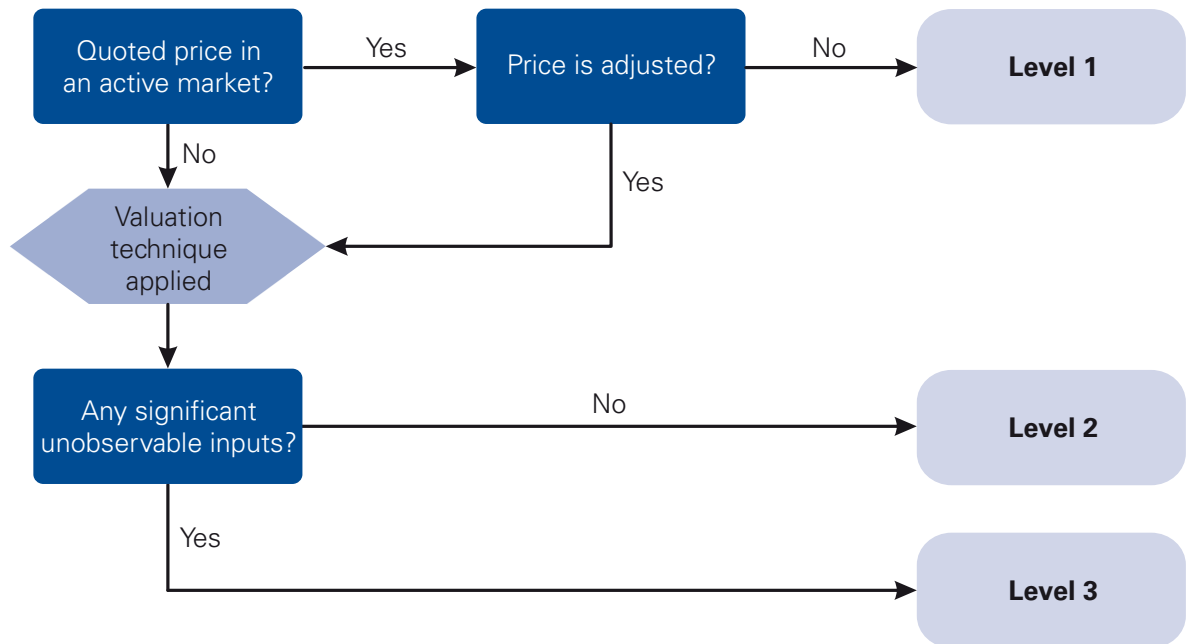
IFRS 7.BC39B In the basis for conclusions to IFRS 7 the Board states that “the fair value hierarchy for disclosures is the same as that in SFAS 157 but uses IFRS language pending completion of the fair value measurement project.” [Emphasis added]

IFRS 7.BC39A, B When drafting the amendments to IFRS 7, the IASB decided to include a fair value hierarchy, for disclosure purposes only, that is based on the SFAS 157 hierarchy. The IASB concluded that such a hierarchy would improve comparability between entities about the effects of fair value measurements as well as increase the convergence of IFRSs and U.S. GAAP. However, as its own fair value measurement project was not yet completed, the IASB decided not to adopt the fair value hierarchy for measurement purposes under IAS 39. Accordingly, the amendments to IFRS 7 do not change in any way the guidance in IAS 39 on how to determine the fair value of a financial instrument.

As part of its fair value measurement project the Board has published Exposure Draft 2009/5 (ED) *Fair Value Measurement*. The ED is based on SFAS 157, although with certain differences, and proposes a fair value hierarchy for both measurement and disclosure purposes similar to that in SFAS 157 and the amendments to IFRS 7.

3.3 Fair value hierarchy decision tree

The flowchart below outlines an approach to determining the classification of fair value measurements within the fair value hierarchy.



3.4 Level 1 fair value measurements

IFRS 7.27A(a), IAS 39.AG71 A fair value measurement for a financial instrument is classified in Level 1 of the fair value hierarchy if the fair value is determined as the unadjusted quoted price for an identical instrument in an active market. IAS 39 states that the existence of published price quotations in an active market is the best evidence of fair value and, when they exist, they are used to measure fair value.

3.4.1 Quoted prices in an active market

The application guidance to IAS 39 and the Panel Report provide guidance on quoted prices in active markets.

IAS 39.AG71 Under IAS 39, a financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis.

EAPR 17, 18 The Panel Report concluded that there is no bright line between active markets and inactive markets. It also states that characteristics of an inactive market include a significant decline in the volume and level of trading activity, the available prices vary significantly over time or among market participants or the prices are not current. However, these factors alone do not necessarily mean that a market is no longer active.

Hence, for there to be a quoted price in an active market:

- there should be actual and regularly occurring market transactions in identical instruments; and
- the prices of those transactions should be readily and regularly available.

Determining whether the market for a financial instrument is active on the measurement date requires judgement based on all available facts and circumstances.

For many instruments traded on exchanges, e.g., listed equity shares and exchange-traded options, for which there are frequent ongoing transactions and rapid reporting of transaction prices, it may be relatively straightforward to determine whether there is a quoted price in an active market. However, the determination may be more difficult for instruments that are transacted outside of organised trading mechanisms.

Example

Company A holds units in an open-ended unlisted investment fund. The units in the fund are often bought and sold but only by or to the fund or fund manager, i.e., the units are not traded on a stock exchange and cannot be sold to third parties. As the fund is not listed, the fund calculates the price of the units only at a specific time each day to facilitate the purchase and sale of the units. The transactions take place only at this time on each day and at the price so determined by the fund manager. The fair value of the units is determined to be the price calculated by the fund manager.

Whether this is a Level 1 measurement will depend upon the number of trades that occur in the units and whether this qualifies as “regularly occurring transactions”, and on whether the fund manager’s daily pricing is sufficient to meet the “regularly available” criterion.

Daily pricing is likely to constitute evidence of regularly available prices. If the number of trades occurring is sufficient for the market in these units to be considered an active market then, notwithstanding that the units are being purchased and sold by the fund and are not being traded between unrelated third party market participants, a fair value measurement of the units using the unadjusted daily price for the reporting date would be a Level 1 measurement.

It is important to note that to be classified as a Level 1 measurement, the measurement should be the quoted price of an identical instrument and not a measurement based on a quoted rate or index to be used as an input into a valuation model to calculate the fair value of the instrument. IAS 39 paragraph AG73 states that if a rate (rather than a price) is quoted in an active market, the entity uses that market-quoted rate as an input into a valuation technique to determine fair value. It is explicit in the concept of a Level 1 measurement that the instrument being valued is the same as other existing instruments of the same type. Over-the-counter (OTC) derivative contracts are individual agreements between specific counterparties and therefore cannot be the subject of a Level 1 measurement as there is unlikely to be an active market for an “identical” instrument.

Example

Company B has purchased an exchange-traded option on a foreign currency for which there is a quoted market price in an active market at the measurement date. B also has entered into a forward exchange contract on the same foreign currency with a bank which is valued using observable forward exchange rates and yield curve data.

The fair value measurement of the exchange-traded option would qualify as Level 1. The fair value measurement of the OTC forward contract would not qualify as Level 1 as there is not a quoted price for the actual contract, even though data used to value the contract may be derived entirely from active foreign-exchange and interest-rate markets.

3.4.2 Adjustments to quoted prices in an active market

In order to be classified as a Level 1 measurement, the fair value should be the unadjusted quoted price observed in an active market. If for some reason the quoted price does not represent fair value at the measurement date, e.g., because significant events occur after the close of the market

but before the measurement date, then the quoted price is adjusted to arrive at fair value and the fair value measurement is not a Level 1 measurement.

Example

Company C invests in shares of Company D that are listed on the national stock exchange. On the reporting date, C obtains the closing price of the shares from the exchange. However, subsequent to the close of the market, D makes a public announcement that has an impact on the fair value of the shares as evidenced by prices for a small number of aftermarket transactions in depository receipts on the shares of D that are traded in another jurisdiction. In this case, C uses the aftermarket prices to make appropriate adjustments to the closing price from the exchange to arrive at the fair value of the shares at the measurement date. As the adjustment is derived from observed market prices, the resulting fair value measurement will be a Level 2 measurement.

In some cases, conditions attached to a financial instrument may not be reflected in the quoted active market price and, in our view, this may justify an adjustment to the quoted price to arrive at the instrument's fair value. For example, assume that an investor is contractually bound by lock-up provisions that prohibit or restrict the sale of the instrument for a specified period. If, in light of these restrictions, the investor determines that the instrument held is not the same as the one with the quoted market price due to the contractual lock-up provisions (i.e., the instruments are not identical), then a valuation technique may be required in order to make adjustments to the quoted active market price to arrive at fair value. As the investor has concluded that the instruments are not identical, the fair value measurement would not qualify as a Level 1 measurement.

3.5 Level 2 and Level 3 fair value measurements

IAS 39.48A

Level 2 and Level 3 fair value measurements for financial instruments are determined using valuation techniques. This includes valuing an instrument using a current price for an identical instrument if there is not an active market for that instrument.

If a valuation technique uses observable inputs that require no significant adjustment based on unobservable inputs, then the resulting fair value measurement is classified as a Level 2 measurement. If the fair value measurement uses unobservable inputs that are significant, including using observable inputs that require significant adjustments based on unobservable inputs, then the resulting fair value measurement is classified as a Level 3 measurement.

3.5.1 Observable and unobservable inputs

An input is observable if it can be observed as a market price or can be derived from an observed market price. In each case, it is not necessary that the market is active.

Examples of observable inputs might include:

- Transaction prices in markets that are not active for identical instruments.
- Quoted prices in active markets for similar, but not identical, instruments.
- Transaction prices in markets that are not active for similar, but not identical, instruments.
- Interest rates derived from quoted bond prices.
- Quoted foreign exchange and interest rates (e.g., forward currency rates and swap rates).
- Implied volatilities derived from quoted option prices.
- Credit spreads derived from quoted credit default swap prices.

Examples of unobservable inputs include:

- Interest rates in a currency that are not observable and cannot be corroborated by observable market data for the term of the financial instrument being valued.
- Volatility for a share option derived from the share's historical prices, as it does not generally represent current market expectations about future volatility.
- A credit risk adjustment based on historical data on credit losses.

3.5.2 Significance of unobservable inputs

IFRS 7.27A

IFRS 7 requires a fair value measurement to be classified within the three-level hierarchy based on the lowest level input that is significant to the measurement in its entirety. The standard notes that assessing significance requires judgement, considering factors specific to the asset or liability, but does not provide further detailed guidance. When a fair value measurement is developed using inputs from multiple levels of the fair value hierarchy, the inclusion of a lower level input in an entity's measurement may indicate that the input is significant because the entity's decision to include the lower level input provides evidence that the entity considers the input to be significant to the overall measurement of fair value. However, the final determination of whether inputs are significant is a matter of judgement that will require entities to consider the importance of an input to the overall fair value measurement, including the quantitative effect of an input on the overall fair value measurement.

In instances where multiple unobservable inputs are used, in our view, the unobservable inputs should be considered in total for purposes of determining their significance. In instances where factors such as volatility inputs are used, an entity could apply some form of comparability methodology (for example, a stress test on an option's volatility input) to assist in determining significance.

3.5.3 Prices obtained from pricing services and brokers

EAPR 52-74

An entity may obtain prices from a third-party pricing service or broker as inputs to a fair value measurement. Whether those prices represent observable or unobservable inputs depends on their nature or source. As discussed by the Panel, before relying on prices obtained from pricing services and brokers, an entity obtains an understanding of how the prices were determined to assess whether they are consistent with the fair value measurement objective.

The use of a pricing service does not change the analysis of the categorisation of the inputs in the fair value hierarchy. Also, prices obtained from a pricing service are not considered observable simply because they were obtained from a third party. Rather, an entity using a pricing service should obtain an understanding of the source of the inputs received by the pricing service to properly classify any fair value measurements based on those inputs. To illustrate: if a pricing service provides a quoted price (unadjusted) from an active market for an identical instrument, then a fair value measurement based only on that price would be a Level 1 measurement. Alternatively, if the pricing service provides prices based on models generated by the pricing service, any resulting fair value measurement would be a Level 2 or Level 3 measurement.

Consensus pricing services obtain information from multiple subscribers who each submit prices to the pricing service. The pricing service returns consensus prices to each subscriber based on the data received. As noted by the Panel, when assessing consensus data it is important to understand what the prices submitted represent. If the estimates provided to the service do not represent executable quotes or are based on observable prices, then a fair value measurement derived from the consensus price would be a Level 3 measurement. However, if the inputs to the price received from the pricing service are Level 1 or Level 2 inputs, then the use of those prices may result in a higher level measurement than Level 3.

Similar considerations apply to prices obtained from brokers. A broker quote generally is not a binding offer. Even if it is, it may not represent the price at which an orderly transaction would take place between market participants. Where a broker quote reflects actual current market transactions in an identical instrument, it may represent a Level 1 or Level 2 input. However, where a broker quote is an indicative price based on the broker's valuation models, then it may represent a Level 2 or Level 3 input.

3.5.4 Day one profit or loss

IAS 39.AG76 IAS 39 states that the transaction price is the best evidence of the fair value of a financial instrument at initial recognition, unless a different estimate of fair value is evidenced by other current market transactions in the same instrument or based on a valuation technique whose variables include only data from observable markets. When the presumption that the transaction price equals fair value applies, any apparent "day one profit" based on the difference between the transaction price and the results of the entity's valuation technique is not recognised immediately, but only after initial recognition based on changes in factors, including the passage of time, that a market participant would consider in setting a price in accordance with paragraph AG76A.

IFRS 7.BC39D, 27A In the basis for conclusions to IFRS 7, the Board explained that the application of IAS 39 paragraph AG76A might result in no gain or loss being recognised on the initial recognition of a financial instrument that is in Level 2 for disclosure purposes. This may arise when the fair value measurement uses some unobservable inputs that preclude recognition of an initial profit but which are not significant to the fair value measurement in its entirety.

3.5.5 Selecting valuation techniques

IAS 39.AG75 IAS 39 establishes principles for the selection and use of valuation techniques in measuring fair values of financial instruments. This is supplemented by the educational guidance in the Panel Report. If the market for a financial instrument is not active, then fair value is estimated on the basis of the results of a valuation technique that makes maximum use of market inputs, and relies as little as possible on entity-specific inputs.

IAS 39.AG75 The objective when choosing and developing an appropriate valuation technique is to establish what a transaction price would have been on the measurement date in an arm's length exchange motivated by normal business considerations. In our view, the valuation technique used should reflect current market conditions and appropriate risk adjustments that market participants would make for liquidity risks, credit risks or other risks on the measurement date. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available; reference to the current fair value of another instrument that is substantially the same; discounted cash flow analysis; and option pricing models.

IAS 39.AG74 If there is a valuation technique commonly used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions, the entity uses that technique.

EAPR 42 Recent transactions for similar instruments might provide evidence of fair value, although an entity might need a model to adjust for any differences between the instrument being measured at fair value and the instrument with an observable transaction price. What constitutes a "similar instrument" is a matter of judgement and requires an understanding of the terms of the instruments.

EAPR 99 Any value calculated using a model should be adjusted for any factors that market participants would consider in setting a price if those factors are not captured by the model used. Depending on the model used, different adjustments might be required to estimate the price at which an orderly transaction would take place between market participants at the measurement date. Valuation adjustments include, for example:

- Liquidity adjustments: if the model calculates a mid-market price, it is adjusted to take into account the relevant bid-offer spread.
- Credit risk adjustments: if the model does not take into account, where relevant, counterparty or own credit risk, it is adjusted accordingly.
- Other risk adjustments: if the model does not take into account a risk premium that market participants would take into consideration in pricing the transaction (e.g., a risk premium relating to the complexity of valuation of an instrument), it is adjusted accordingly.

Adjustments are appropriate only to the extent that they are consistent with the objective of a fair value measurement. In our view, it would not be appropriate to adjust further the results of a model-based valuation for entity-specific factors such as uncertainty in estimated cash flows, liquidity or administration costs. In our view, such factors should be incorporated into a valuation model based on the amounts that market participants as a whole would consider in setting a price. Furthermore, it is not appropriate to adjust the result of a valuation technique to reflect the model risk of the model used, unless other market participants would make similar adjustments.

4. Disclosures

4.1 Fair value hierarchy disclosures

IFRS 7.27B As discussed in section 3, IFRS 7 requires an analysis of fair value measurements by class of financial instruments between the different levels in the hierarchy. In addition, the amendments require also the following disclosures for each class of financial instruments:

- Significant transfers between Level 1 and Level 2, with separate disclosure of transfers in and transfers out.
- A reconciliation of Level 3 measurements from the beginning balances to the ending balances, including separate disclosure of transfers into or out of Level 3 and the reasons for those transfers (e.g., transfers attributable to changes in the observability of market data). The reconciliation should show separately gains or losses recognised in profit or loss and in other comprehensive income, purchases, sales, issues and settlements. An entity also should disclose the amount of gains or losses recognised in profit or loss in the period that relates to instruments held at the end of the period.
- For Level 3 measurements, the effect, if significant, of changing one or more of the inputs used in the fair value measurement to reasonably possible alternative assumptions. An entity should disclose how it has calculated this effect.

IFRS 7.27B Prior to the amendments, IFRS 7 required general disclosure of the methods and assumptions used to measure fair values of financial instruments. The amendments require this explanation to be given for each class of financial instruments, along with disclosure of any changes in valuation techniques and the reasons for changing.

IFRS 7.44G The compilation of these disclosures may require analysis of a large number and wide range of different instruments and thus require significant effort. Whilst the amendments to IFRS 7 exempt entities from providing comparative information for the disclosures required by the amendments for the first year of application, the requirement to provide a roll-forward of Level 3 measurements for the entire first year means that Level 3 measurements as at the start of the year of adoption need to be identified. A similar issue arises with respect to identifying significant transfers between Level 1 and Level 2 during the first year of application.

4.1.1 Classes of financial instruments

IFRS 7.6.B1-B3 The disclosures discussed above are required for each class of financial instruments. Classes of financial instruments for IFRS 7 are distinct from the categories of financial instruments defined by IAS 39 and IFRS 9 for measurement purposes. IFRS 7 states that financial instruments should be grouped into classes that are appropriate to the nature of the disclosure and that take into account the characteristics of those financial instruments. In this regard, an entity is required to balance, avoiding both overburdening users with excessive detail and obscuring important information through too much aggregation.

EAPR 123-127 The Panel observed that entities determine the most appropriate way to aggregate the information given “for each disclosure.” The level of detail might vary depending on the nature of the instruments or risks and the focus on particular instruments might change over time. In particular, when aggregating information into classes, it is important to consider whether the instruments have similar characteristics, such as the valuation techniques or inputs that are the focus of the disclosure.

4.1.2 Significant transfers between Level 1 and Level 2

IFRS 7.27B(b) Significant transfers between Level 1 and Level 2 are to be disclosed and discussed separately on a gross basis. For this purpose, significance is judged with respect to profit or loss, and total assets or total liabilities.

4.1.3 Transfers into or out of Level 3

IFRS 7.27B(c) If an instrument moves into or out of Level 3 during the year, the transfer should be disclosed in the roll-forward. Instruments may transfer into or out of Level 3 for a number of reasons, e.g., changes in the inputs used in a valuation, refinements in modelling techniques, the initiation or cessation of market transactions in similar instruments or the passage of time.

Example

Company E has an over-the-counter contract to purchase natural gas every month for the next 30 months. The contract is being accounted for as a derivative instrument and is measured at fair value on the statement of financial position. Quoted natural gas prices are available for the next 24 months after the current reporting date. For the remaining six months of the term, the company uses internally developed estimates of future natural gas prices.

As market prices are not available for substantially the entire term of the contract and the impact of the unobservable inputs is significant, the fair value measurement of this contract is classified as a Level 3 measurement.

In the following year, if quoted natural gas prices continue to be available for the following 24 months, the fair value measurement might be classified as a Level 2 measurement.

IFRS 7 does not discuss at what amount the transfer into or out of a level in the fair value hierarchy should be recorded. Where practicable, we believe it would be preferable for an entity to record the transfer at the fair value on the date of transfer. However, it may be difficult for entities to identify the precise date at which non-observable inputs for a fair value measurement of an instrument became or ceased to be significant, particularly as they might not perform fair value measurements on a daily or weekly basis. In our view, it would be acceptable for an entity to adopt a policy of recording transfers based on the fair value measurement at the start of the relevant interim or annual period.

4.1.4 Gains or losses for Level 3 measurements

IFRS 7.27B(d) IFRS 7 requires disclosure of the changes in fair value of Level 3 instruments recognised in profit or loss and in other comprehensive income. The requirement is to disclose the total fair value changes irrespective of whether the change is due to the effect of changes in observable inputs or unobservable inputs.

Entities may disclose additional information if they consider the information helpful to users of the financial statements. For example:

- Separating the Level 3 fair value gains and losses into amounts due to changes in observable inputs and amounts due to changes in unobservable inputs.
- If a Level 3 instrument is economically hedged by an instrument with a fair value measurement in Level 1 or Level 2, the extent to which the fair value movements offset or correlate.

4.1.5 Reasonably possible alternative assumptions

IFRS 7.27B(e) The IASB noted that Level 3 measurements use "the most subjective inputs". IFRS 7 therefore requires disclosure, by class of financial instruments, if the effect of changing one or more inputs to reasonably possible alternative assumptions would result in a significant change to the fair value

measurement. An entity should disclose how these effects have been calculated. Prior to the amendments, IFRS 7 required disclosure of the total effects, rather than for each class, and did not specify disclosure of the method of calculation. For the purpose of this disclosure, significance is judged with respect to profit or loss, and total assets or total liabilities, or, when changes in fair value are recognised in other comprehensive income, total equity.

In our view, reasonably possible alternative assumptions are assumptions that could reasonably have been included in the valuation model at the reporting date based on the circumstances at the reporting date. We do not believe that this disclosure is intended to be a forward looking sensitivity analysis like that required by IFRS 7 paragraph 40 for market risk variables or otherwise intended to describe the effect of possible future changes in market conditions.

4.2 Illustrative financial statement disclosures

The following example illustrates the fair value hierarchy disclosures required by IFRS 7. As is permitted in the year of adoption, comparative information is not included.

Valuation of financial instruments

The Group measures fair values using the following fair value hierarchy that reflects the significance of the inputs used in making the measurements:

- Level 1: Quoted market price (unadjusted) in an active market for an identical instrument.
- Level 2: Valuation techniques based on observable inputs, either directly (i.e., as prices) or indirectly (i.e., derived from prices). This category includes instruments valued using: quoted market prices in active markets for similar instruments; quoted prices for identical or similar instruments in markets that are considered less than active; or other valuation techniques where all significant inputs are directly or indirectly observable from market data.
- Level 3: Valuation techniques using significant unobservable inputs. This category includes all instruments where the valuation technique includes inputs not based on observable data and the unobservable inputs have a significant effect on the instrument's valuation. This category includes instruments that are valued based on quoted prices for similar instruments where significant unobservable adjustments or assumptions are required to reflect differences between the instruments.

The table below analyses financial instruments, measured at fair value at the end of the reporting period, by the level in the fair value hierarchy into which the fair value measurement is categorised:

IFRS 7.27B(a) In millions of euro

	Level 1	Level 2	Level 3	Total
31 December 2009				
Trading assets	10,355	5,627	680	16,662
Derivative assets held for risk management	26	832	-	858
Loans and advances to customers	389	3,438	159	3,986
Investment securities	2,606	2,886	709	6,201
	13,376	12,783	1,548	27,707
Trading liabilities	5,719	1,237	70	7,026
Derivative liabilities held for risk management	41	787	-	828
Debt securities issued	1,928	481	-	2,409
	7,688	2,505	70	10,263

IFRS 7.27B(b) During the current year, due to changes in market conditions for certain investment securities, quoted prices in active markets were no longer available for these securities. However, there was sufficient information available to measure fair values of these securities based on observable

market inputs. Hence, these securities, with a carrying amount of €369 million, were transferred from Level 1 to Level 2 of the fair value hierarchy.

The following table shows a reconciliation from the beginning balances to the ending balances for fair value measurements in Level 3 of the fair value hierarchy:

IFRS 7.27B
(c)(i)-(iv)

	Loans and				Total
	Trading assets	advances to customers	Investment securities	Trading liabilities	
<i>In millions of euro</i>					
Opening balance	332	119	580	(69)	962
Total gains or losses:					
in profit or loss	12	(4)	(71)	5	(58)
in other comprehensive income	-	-	(81)	-	(81)
Purchases	41	44	-	-	85
Issues	-	-	-	(6)	(6)
Settlements	(51)	-	(6)	-	(57)
Transfers into Level 3	411	-	293	-	704
Transfers out of Level 3	(65)	-	(6)	-	(71)
Closing balance	680	159	709	(70)	1,478

IFRS 7.27B
(c)(iv)

During 2009 certain trading assets and investment securities were transferred out of Level 3 of the fair value hierarchy when significant inputs used in their fair value measurements such as certain credit spreads and long-dated option volatilities which were previously unobservable became observable.

During 2009 there was considerable dislocation in asset-backed securities markets. For many securities this has meant greatly reduced or nil trading volumes and severe falls in transaction prices and quotes. As a result certain securities that were previously valued using a quoted market price in an active market must now be valued using a valuation technique that incorporates significant unobservable data.

Total gains or losses included in profit or loss for the period in the above table are presented in the statement of comprehensive income as follows:

IFRS 7.27B(c)(i), 2009
(d)

	Loans and				Total
	Trading assets	advances to customers	Investment securities	Trading liabilities	
<i>In millions of euro</i>					
Total gains or losses included in profit or loss for the period:					
Net trading income	12	-	-	5	17
Net income from other financial instruments carried at fair value	-	(4)	(71)	-	(75)
Total gains or losses for the period included in profit or loss for assets and liabilities held at the end of the reporting period:					
Net trading income	9	-	-	3	12
Net income from other financial instruments carried at fair value	-	(2)	(65)	-	(67)

IFRS 7.27B(e) Although the Group believes that its estimates of fair value are appropriate, the use of different methodologies or assumptions could lead to different measurements of fair value. For fair value measurements in Level 3 of the fair value hierarchy, changing one or more of the unobservable inputs used to reasonably possible alternative assumptions would have the following effects:

<i>In millions of euro</i>	Effect on profit or loss		Effect on other comprehensive income	
	Favourable / (Unfavourable)		Favourable / (Unfavourable)	
31 December 2009				
Asset-backed securities – trading	38	(41)	-	-
Asset-backed securities – investment	28	(42)	44	(53)
OTC structured derivatives – trading assets and liabilities	36	(16)	-	-
Other	12	(13)	-	-
Total	114	(112)	44	(53)

The favourable and unfavourable effects of using reasonably possible alternative assumptions for asset-backed securities have been calculated by recalibrating the model values using expected losses and risk-adjusted discount rates based on averages of the upper and lower quartiles respectively of the Group's ranges of possible estimates.

Key inputs and assumptions used in the models at 31 December 2009 include expected declines in house prices of 10 percent (with reasonably possible alternative assumptions of 7 percent and 16 percent) and an average discount rate of 3 percent above LIBOR (with reasonably possible alternative assumptions of 2 percent and 5 percent).

The favourable and unfavourable effects of using reasonably possible alternative assumptions for OTC structured derivatives have been calculated by adjusting unobservable model inputs to the averages of the upper and lower quartile of consensus pricing data or by two standard deviations in the level of such inputs (based on the last two years' historical daily data).

The most significant unobservable inputs relate to correlations of changes in prices between different equity indices; the weighted average of the correlations used in the models at 31 December 2009 is 0.47 (with reasonably possible alternative assumptions of 0.30 and 0.58).

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