TYPES OF VALUE

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An important action is establishing the type of value required, such as: Fair Market Value, investment value, intrinsic value, legal fair value and GAAP fair value. This later has been established by FASB over the past decade and codified by SFAS 157; in this course it is referred to as Fair Value. Understanding it is essential in applying SFAS 141, 142 or 144 and in auditing any Fair Value conclusion.

Fair Market Value

In the U.S., the best-known type is Fair Market Value. For over 40 years, valuation analysts, accountants, investment bankers, lawyers and taxation authorities have relied on a definition, developed from IRS Revenue Ruling 59-60. The version in the International Glossary of Business Valuation Terms ("International Glossary") is:

> "The price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts."

This implicitly assumes the sale occurs as of a specified date and the passing of title is under conditions, whereby:

a) Buyer and seller are similarly motivated;
b) Both parties are well-informed or well-advised and acting in what they consider their best interests;
c) A reasonable time is allowed for exposure on the open market;
d) Payment is made in cash or comparable financial instruments, and;
e) The price represents the normal consideration for the property sold and is unaffected by special or creative financing or concessions granted by anyone associated with the transaction.

Fair Market Value, where the adjective "fair" relates to the noun "market" rather than to "value", is subject to a well-established body of rules, regulations, judicial decisions and commentaries. It is intended to represent the activities of hypothetical, conventional buyers and sellers and, as such, to reflect a consensus price of a transaction in the asset or security after it has been exposed to a broad market. All generally accepted valuation methods were developed to establish Fair Market value and have been adapted to the determination of Fair Value.

Types of Value

Going Concern Element

Normally, the Fair Market Value of an entity is determined as a going concern (see Premise of Value), assuming it is operating viably with no imminent threat of discontinuance. The is greater than the total of the Fair Market Values of the individual financial, physical and Intangible Assets, less the liabilities. The difference is the going element which is accepted by FASB.

Fair Valuation

The phrase "fair valuation", although used in the Bankruptcy Code, is not defined. The courts have normally applied a two-step process to obtain it. The first is to determine if the debtor is a going concern or "on its death bed". If the debtor is deemed a going concern, its assets are valued at Fair Market Values, if not, at liquidation values.

Liquidation Value

Under certain circumstances such as bankruptcy or establishing the collateral for a loan, a liquidation value (in exchange) must be determined. This is normally less than Fair Market Value because it usually is in an environment where there is a compulsion to sell. Also, in liquidation, assets are normally sold piecemeal rather than as a going concern.

There are two methods of liquidation—orderly and forced. An orderly liquidation assumes the assets will be sold over a period long enough to permit normal exposure in an appropriate secondary market. For bankruptcies, periods of up to 18 months have been allowed in establishing orderly liquidation values. Forced liquidation is based on a lower level of exposure over a shorter period and is sometimes referred to as "auction value".

Orderly liquidation value has not been judicially defined, but for assets, the traditional view may be paraphrased as follows.

> The most likely price, expressed in terms of money, realizable in a market in which similar property is regularly sold to willing buyers. The seller is compelled to sell, but in an orderly and advertised manner over a reasonable period on an 'as is, where is' basis, with the buyer being responsible for removal costs.

This definition can be used when applying SFAS 144 to assets that are to be sold. In such an event, the expenses connected to the sale, including marketing and disposal costs, are to be deducted.

For an entity, the comparable definition would be:

> The net amount expected to be realized if the business is terminated, the assets sold on an orderly basis and the creditors paid off as part of the winding up. This is after paying all the expenses connected with liquidation such as legal, accounting and certain holding and disposal costs.

Types of Value

The orderly liquidation value of any asset is always less than its Fair Market Value, not only because of the compulsion to sell, which is specifically excluded from the fair market definition, but also due to the absence of a going concern element. These two factors must be reflected by discounts when estimating the selling prices of all types of assets. In particular, Intangible Assets, whether purchased and recognized or internally generated, must be examined, as this group will tend to have the largest reductions.

No professional or regulatory body has defined the concept of a forced sale value. However, it is has been described as:

> The most likely price, expressed in terms of money, realizable in a market in which similar property is regularly sold for immediate cash to willing buyers. The seller is compelled to sell within a very limited time, as of a specific date, on an 'as is, where is' basis with no warranty implied or expressed with the buyer being responsible for removal costs.

Most Common Methods

Traditionally, in determining the Fair Market Values of privately owned or closely held companies, due to the difficulty of obtaining suitable comparables and the complications of the Cost Approach, the practice has been developed to concentrate on the Income Approach. As such, both earnings and Cash Flows based methods are employed for operating entities.

Methods under the Cost Approach are more useful for holding companies or multi-business enterprises in which a purchaser looks mainly to the underlying assets and businesses or when liquidation is contemplated. This may be because alternative uses of the assets could provide a higher return than continuation of the existing enterprise or because operations in different industries have greater appeal to different purchasers.

There are no specific formulae for any of the valuation methods under the Market, Cost and Income Approaches. The facts and circumstances of each situation will determine the most suitable method to be applied.

Value Adjustments

Fair Market Value also takes into account three characteristics of real, rather than notional markets, in which buyers are willing to pay a premium for:

- Control;
- The ability to re-sell quickly, and;
- Any available synergies.

The number of mergers and acquisitions that took place among publicly traded companies in the past century demonstrates that executives, if not investors, are often prepared to pay substantially more for shares that represent control of an entity than for a minority stake. Therefore, the Fair Market Value of a block of shares reflects its position as either a controlling or a minority interest.

Similarly, purchasers will pay a higher price for securities that can quickly be converted into cash in an active market than for those with similar attributes that are slower to find a buyer. Therefore Fair Market Value also takes into account the degree of liquidity of the item being valued.

However, it excludes special purchasers who often are prepared to offer a higher amount (Investment Value) than the consensus price because of particular benefits or synergies they can obtain. This subject is discussed in detail in the sections "Levels of Value" and "Lack of Marketability Discounts" in Chapter xx.

Investment Value

The investment value of an entity is the maximum amount a particular prospective owner would pay. The International Glossary defines it as:

> "The value to a particular investor based on individual investment requirements and expectations."

The Appraisal Institute adds:

> "As distinguished from the concept of market value (Fair Market Value) which is impersonal and detached."

Strategic (trade) buyers are nearly always prepared to offer a substantially greater amount than investors (financial buyers) who establish Fair Market Value. This is due to available synergies (the results of cooperation and combinations that increase the effectiveness or efficiency of one or more elements of the combined businesses), improved market access and other expected advantages. For Investment Value, the willing buyer is not a participant in a notional (hypothetical) market, but rather a special purchaser with specific expectations about future events.

These factors are likely to give strategic buyers, who are willing to pay Investment Value, a similar return, with comparable or lower risks, than investors paying Fair Market Value, who establish their purchase price solely on expected returns and probable risk.

Intrinsic Value

The term "intrinsic value" is applied to a generalized version of investment value that relates to a broad range of "trade" buyers, rather than one particular prospective owner. A judge defined it as "the value of an asset or firm based on an underlying concept, theory or model". It is used by many financial analysts to establish price targets for stocks they consider under- or, less frequently, over-valued.

Types of Value

Legal Fair Values

The phrase "fair value" is used in many state statutes relating to dissenting shareholders or shareholder oppression. Litigation under such laws arises, when a corporation, whether publicly traded or privately owned, engages in a specified transaction (e.g., a merger), which results in a change in the securities owned. In those circumstances, a shareholder who follows the proscribed procedures may dissent from the transaction and be entitled to be paid the fair value of his holding.

In some states, such fair value is defined by statute; for example, the Revised Model Business Corporation Act defines it as:

> "The value of the shares immediately before effectuation of the corporate action to which the dissenter objects, excluding any appreciation or depreciation in anticipation of the corporate action unless exclusion would be inequitable."

In other states, fair value is described, rather than defined, by the law and has to be determined by the courts. According to Dr. Shannon Pratt in" Valuing a Business", it refers to

> "An equitable, just and reasonable value for property determined without reference to a simulated or real market transaction since the property-holder has no interest in entering the market at all".

Based on judicial decisions in most states or countries where fair value is undefined, we believe it may be regarded as a "just and equitable amount based on the facts and circumstances". In general, this would be without any discounts for a minority interest or for lack of marketability. Some factors involved in establishing it include: (a) when and under what terms the shares were acquired; (b) how long they were held; (c) the size of the block; (d) what sort of market existed before the "taking"; and (e) the firm's results after the transaction.

The same term "fair value" is often used in family law (divorce) statues; again the definition varies from jurisdiction to jurisdiction, but is also normally based on Fair Market Value before discounts, generally following the concepts of shareholder fair value.

GAAP Fair Value

FASB and IASB have adopted the term Fair Value; the definition that, until late 2007, will continue to form part of US GAAP was set out initially by FASB in Concept Statement 7 and subsequently in SFAS 142 (paragraph 23):

> "The fair value of an asset (or liability) is the amount at which that asset (or liability) could be bought (or incurred) or sold (or settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale."

Types of Value

This is relatively straightforward; GAAP Fair Value is the price at which two parties would agree to a transaction. It is not too difficult to determine such an amount when there are established markets for comparisons, but in most situations no outsider stands ready to buy a reporting unit's assets or assume its liabilities. This makes determining Fair Values a complex task in notional markets.

SFAS 157

However, in 2006, with the issuance of SFAS 154, which is to be effective for fiscal years beginning after November 15, 2007 (2008 for calendar year entities) FASB proclaimed a new, but similar, definition;

> "5. Fair Value if 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."

Current practice will have to change as a result of SFAS 157's (1) new definition of Fair Value, (2) prescribed methods for measuring it, and (3) increased disclosure requirements, which are not covered in this course. When fully adopted worldwide, likely in 2011, the effect of SFAS 157 will be extensive in view of the pervasiveness of Fair Value measurements throughout both US and International GAAP.

Fair Value evokes a variety of meanings in everyday speech. Now the term is fairly precisely defined for financial reporting by establishing a frame of reference that everybody must follow The new, expanded definition (there are ten more paragraphs fleshing it out) affects no less than four APB Opinions, 37 of the 136 previously issued Statements, six Interpretations, six Technical Bulletins and fourteen staff positions. Those 67 key documents relating to US GAAP, all deal with when Fair Value measurements should be used. Now SFAS 157 covers the “how” and is intended to make the process more consistent and comparable. In many cases this new meaning will not be consistent with previous concepts about Fair Value and require changes in the methods applied to determine it.

Relates To Specific Items

The fleshing out starts with FASB’s next paragraph (6); this establishes that Fair Value must relate to a specific asset or liability

> "6. A fair value measurement is for a particular asset or liability. Therefore, the measurement should consider attributes specific to the asset or liability, for example, the condition and/or location of the asset or liability and restrictions, if any, on the sale or use of the asset at the measurement date. The asset or liability might be a standalone asset or liability (for example, a financial instrument or an operating asset) or a group of assets and/or liabilities (for example, an asset group, a reporting unit, or a business). Whether the asset or liability is a standalone asset or liability or a group of assets and/or liabilities

> depends on its unit of account. The unit of account determines what is being measured by reference to the level at which the asset or liability is aggregated (or disaggregated) for purpose of applying other accounting pronouncements. The unit of account for the asset or liability should be determined in accordance with the provisions of other accounting pronouncements, except as provided in paragraph 27."

Type of Transaction

In the next paragraph (7) FASB deals with the type of transaction (premise of value) and confirms that it is an ’exit” price (i.e. one at which the item might be sold) rather than, as is the current practice, the price paid to acquire it

> "7. A fair value measurement assumes that the asset or liability is exchanged in an orderly transaction between market participants to sell the asset or transfer the liability at the measurement date. An orderly transaction is a transaction that assumes exposure to the market for a period prior to the measurement date to allow for marketing activities that are usual and customary for transactions involving such assets or liabilities; it is not a forced transaction (for example, a forced liquidation or distress sale). The transaction to sell the asset or transfer the liability is a hypothetical transaction at the measurement date, considered from the perspective of a market participant that holds the asset or owes the liability. Therefore, the objective of a fair value measurement is to determine the price that would be received to sell the asset or paid to transfer the liability at the measurement date (an exit price)."

The Appropriate Market

The next two paragraphs (8 & 9) deal with the markets in which Fair Value is to be determined. FASB differentiates between the principal market (apparently that with the greatest volume) and the most advantageous (the one that results in the best price after transaction costs).

> "8. A fair value measurement assumes that the transaction to sell the asset or transfer the liability occurs in the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability. The principal market is the market in which the reporting entity would sell the asset or transfer the liability with the greatest volume and level of activity for the asset or liability. The most advantageous market is the market in which the reporting entity would sell the asset or transfer the liability with the price that amount that would be paid to transfer the liability, considering transaction costs in the respective market(s). In either case, the principal (or most advantageous) maximizes the amount that would be received for the asset or minimizes the market (and thus, market participants) should be considered from the perspective of the reporting entity, thereby allowing for differences between and among entities with different activities. If there is a principal market for the asset or liability, the fair value measurement shall represent the price in that market (whether that price is

> directly observable or otherwise determined using a valuation technique), even if the price in a different market is potentially more advantageous at the measurement date."
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> "9. The price in the principal (or most advantageous) market used to measure the fair value of the asset or liability shall not be adjusted for transaction costs. Transaction costs represent the incremental direct costs to sell the asset or transfer the liability in the principal (or most advantageous) market for the asset or liability. Transaction costs are not an attribute of the asset or liability; rather, they are specific to the transaction and will differ depending on how the reporting entity transacts. However, transaction costs do not include the costs that would be incurred to transport the asset or liability to (or from) its principal (or most advantageous) market. If location is an attribute of the asset or liability (as might be the case for a commodity), the price in the principal (or cost advantageous) market used to measure the fair value of the asset or liability shall be adjusted for the costs, if any, that would be incurred to transport the asset or liability to (or from) its principal (or most advantageous) market.

These paragraphs clarify that Fair Value is intended to be market-based, not an entity-specific measure. They are significantly influenced by marketable securities and give the highest priority to quoted prices in active markets; for most intangible assets there is virtually no market, much less an active one. Therefore FASB allows unobservable inputs (i.e. those derived from some source other than a market) to be used when there is little, if any, market activity for the asset being measured. Whether there is a significant market or not, the objective is to develop a market, rather than entity-based value.

SFAS 157 emphasizes that a valuation analyst should consider the risks inherent in a particular valuation technique (such as an option pricing model) as well as those inherent in the related inputs. Accordingly, every technique should include an adjustment for risk if market participants would make such an adjustment in pricing a specific asset or liability.

This is a significant change from current practice. Companies currently using only entity-specific methods and assumptions, without considering information available from market participants about inherent risks and other relevant factors will need to change their procedures.

Fair Value is based on an orderly transaction between market participants in the principal market, or, in the absence of one, the most advantageous market for the asset or liability. The principal market is the one with the greatest volume and level of activity. The most advantageous market is the market where the company would receive the highest selling price after considering transaction costs. The appropriate market is determined from the perspective of the company, thereby allowing for differences among them and the markets in which they deal. For example, the principal market for a manufacturing company that enters into an interest rate swap is the "retail" market, while the principal market for the investment bank on the other side is the "wholesale" market

If there is a principal market for the asset or liability, the price in that market should be used to measure Fair Value even if a different market is potentially more advantageous. FASB concluded that, where there is no principal market, the use of a "most advantageous market" is reasonable, since the goal of any business is to maximize its profits. While the most advantageous market may be different for different reporting entities, in most cases, the principal market is the most advantageous and FASB did not want an entity to be required to continuously seek multiple prices to determine the most advantageous market. Therefore, prices in the principal market should be used if one exists or whether or not it is the most advantageous for the entity; only when there is no principal market. May the price from the most advantageous market be used

An orderly transaction assumes that an asset or liability is exposed to the market for a reasonable period to allow for usual and customary selling activities. Accordingly, it is not based on a forced sale, a liquidation, or a distress seller. Rather, an orderly transaction reflecting market conditions on the valuation date. When there are no reported sales, Fair Value is based on a hypothetical transaction between market participants reflecting their assumptions.

Market Participants

The next two paragraphs (10 & 11) of this long definition deal with market participants:

> "10. Market participants are buyers and sellers in the principal (or most advantageous) market for the asset or liability that are:
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> a) Independent of the reporting entity; that is, they are not related parties;
> b) Knowledgeable, having a reasonable understanding about the asset or liability and the transaction based on all available information, including information that might be obtained through due diligence efforts that are usual and customary;
> c) Able to transact for the asset or liability;
> d) Willing to transact for the asset or liability; that is, they are motivated but not forced or otherwise compelled to do so."
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> "11. The fair value of the asset or liability shall be determined based on the assumptions that market participants would use in pricing the asset or liability. In developing those assumptions, the reporting entity need not identify specific market participants. Rather the reporting entity should identify characteristics that distinguish market participants generally, considering factors specific to (a) the asset or liability, (b) the principal (or most advantageous) market for the asset or liability, and (c) market participants with whom the reporting entity would transact in that market."

Those seem to be very close to the “willing buyers” of Fair Market Value, except “special purchasers” as a class are included.

Application to Assets

The next three paragraphs (12, 13 & 14) discuss its application to assets in them FASB takes up the "real estate appraisal" concept of "highest and best use" and ties it back to the Premise of Value to be adopted.

> "12. A fair value measurement assumes the highest and best use of the asset by market participants, considering the use of the asset that is physically possible, legally permissible, and financially feasible at the measurement date. In broad terms, highest and best use refers to the use of an asset by market participants that would maximize the value of the asset or the group of assets within which the asset would be used. Highest and best use is determined based on the use of the asset by market participants, even if the intended use of the asset by the reporting entity is different.
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> "13. The highest and best use of the asset establishes the valuation premise used to measure the fair value of the asset. Specifically:
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> a) In-use. The highest and best use of the asset is in-use if the asset would provide maximum value to market participants principally through its use in combination with other assets as a group (as installed or otherwise configured for use). For example, that might be the case for certain nonfinancial assets. If the highest and best use of the asset is in-use, the fair value of the asset shall be measured using an in-use valuation premise. When using an in-use valuation premise, the fair value of the asset is determined based on the price that would be received in a current transaction to sell the asset assuming that the asset would be used with other assets as a group and that those assets would be available to market participants. Generally, assumptions about the highest and best use of the asset should be consistent for all of the assets or the group within which it would be used.
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> b) In-exchange. The highest and best use of the asset is in-exchange if the asset would provide maximum value to market participants principally on a standalone basis. For example, that might be the case for a financial asset. If the highest and best use of the asset is in-exchange, the fair value of the asset shall be measured using an in-exchange valuation premise. When using an in-exchange valuation premise, the fair value of the asset is determined based on the price that would be received in a current transaction to sell the asset standalone.
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> "14. Because the highest and best use of the asset is determined based on its use by market participants, the fair value measurement considers the assumptions that market participants would use in pricing the asset, whether using an in-use or an in-exchange valuation premise."

Application to Liabilities

The final paragraph (15) deals with its application to liabilities

> "15. A fair value measurement assumes that the liability is transferred to a market participant at the measurement date (the liability to the counterparty continues; it is not settled) and that the non-performance risk relating to that liability is the same before and after its transfer. Non-performance risk refers to the risk that the obligation will not be fulfilled and affects the value at which the liability is transferred. Therefore, the fair value of the liability shall reflect the non-performance risk relating to that liability. Non-performance risk includes but may not be limited to the reporting entity's own credit risk. The reporting entity shall consider the effect of its credit risk (credit standing) on the fair value of the liability in all periods in which the liability is measured at fair value. That effect may differ depending on the liability, for example, whether the liability is an obligation to deliver cash (a financial liability), and the terms of credit enhancements related to the liability, if any."

An important point that previously had not been sufficiently emphasized is the effect of changes in credit risks on Fair Value: SFAS 157 clarifies that the measurement of the Fair Value of a liability, should take into account the effect of its credit standing. This can lead to counter-intuitive results. For example, if a company is performing poorly and its credit quality deteriorates, it could recognize a gain in the income statement, because the fair values of its liabilities would decrease due to a rise in the Discount Rate reflecting the credit risk.

Differences between SFAS 157 and Current Practice

The new definition retains the existing exchange price concept but clarifies it as the price in an orderly transaction, between market participants, to sell the asset in the principal or most advantageous market. It is a hypothetical one at the measurement date, considered from the perspective of a market participant that owns the asset. Therefore, the definition focuses on the amount that would be received (exit price) not that to be paid (entry price)

The exit notion is based on current expectations of market participants about the future inflows associated with the asset; Fair Value should reflect all their assumptions. Certain assets previously recorded at Fair Value may not reflect: (1) an exit price or the highest and best use; or (2) all the assumptions (e.g. risk premia) that market participants would use. Existing valuation techniques should be reviewed to ensure that they comply with the new requirements and objectives. It is important to note that Fair Values determined under SFAS 157 may not be consistent with the carrying amounts of Intangible Assets used for the Impairment Tests under SFAS 142 and SFAS 144,

SFAS 157 emphasizes that Fair Value is a market-based measurement, not an entity-specific calculation. Therefore, it should be determined using the assumptions that market participants would use to price an asset. Determining such assumptions will require managements to apply a significant amount of judgment. As a basis for this activity SFAS 157 establishes the Fair Value Hierarchy discussed later in this Chapter. This distinguishes between (a) assumptions based on independent market data (observable inputs) and (b) those relying on the best information available in the circumstances (unobservable inputs). The later covers situations where there is little market activity at the measurement date. In such circumstances, the reporting entity need not undertake all possible efforts to obtain suitable information, but must not ignore data that is reasonably available without undue cost and effort.

The price in the principal (or most advantageous) market should not be adjusted for transaction costs (e.g. commissions or fees. It should however be adjusted to reflect transportation costs if the location of the asset is a characteristic of it. For example, the cost of transporting a physical commodity from its current location to the market should be deducted in a calculation of Fair Value based on a price in that market, but commission to access a market should not be taken into account.

Companies will soon need to begin gathering the necessary information in order to comply with the new standard's disclosure requirements. This may entail modifying information systems and developing new reports. To allow adequate lead time for calendar year-end companies, SFAS 157 will be effective on January 1, 2008.

Fair Value Hierarchy

To increase consistency and comparability SFAS 157 establishes a Fair Value hierarchy to prioritize the inputs used but not the valuation techniques adopted. The selection may be affected by the availability of relevant inputs, as well as their relative reliability.

The Fair Value hierarchy has three broad levels of inputs (Level 1 being the highest):

Level 1: Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2: Inputs other than quoted prices included in Level 1 that are observable for the asset or liability through corroboration with observable market data.

Level 3: Unobservable inputs (e.g., a company's own data).

By distinguishing between more objective inputs observable in a marketplace the more subjective ones and that are unobservable, this hierarchy is designed to indicate the relative reliability of Fair Values.

Types of Value

In some cases, the resulting inputs for valuation techniques may fall into different levels of the hierarchy. The lowest level of significant input determines the placement of the resulting Fair Value. Assessing the significance of a particular input to the Fair Value requires judgement, considering factors specific to the asset or liability. Determining whether a fair value measure is based on Level, level 2 or Level 3 inputs is important because certain disclosures under SFAS 157 are applicable only to those using Level 3 inputs.

Level 1 Inputs

Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets. A quoted price for an identical asset or liability in an active market (e.g., an equity security traded on the New York Stock Exchange) provides the most reliable fair value measure and, whenever available, should be used provided that (1) the market is the principal (or the most advantageous) market and (2) the company has the ability to access it.

This ability to access a particular market is relevant only for Level 1 inputs. For example, if the entity is a retail customer and does not have access to wholesale markets, their quoted prices will not qualify as Level 1 inputs for that company.

Market Places That Might Not Be Readily Available or Representative of Fair Value: Generally, whenever a quoted price for an identical asset or liability in an active market is available, it should be used. If, however, it is not readily available, or representative of Fair Value, the available quoted price may need to be adjusted. In some situations, significant events (e.g., principal-to-principal transactions, brokered trades, or announcements) might occur after the close of a market but before the valuation date. In that case the quoted market price might not be representative. Companies should establish and consistently apply a policy for determining how such events affect Fair Value. If a company adjusts the quoted price, the result will be a Level 2 input.

Blocks: If a company holds a block of a financial instrument that has a quoted price in an active market, the fair value of the position should be a Level input and computed as the quoted price for an individual trading unit multiplied by the quantity held. The quoted price should not be adjusted to reflect a blockage factor. This is a significant change in current practice for investment companies and broker-dealers.

Matrix Pricing: If a company holds a large number of similar assets and liabilities to be measured at Fair Value a quoted price in an active market (e.g. debt securities) may not be readily accessible for each of them. In that case, Fair Value may be established by using an alternative method (for example, matrix pricing) as a practical expedient, provided that the company demonstrates that the method replaces actual prices. Matrix pricing is a mathematical technique often used to value debt securities by relying on the relationship to other benchmark quoted prices. That use is limited to situations in which a company chooses, for practical reasons, not to use obtainable, individual quotes. This method is a very common approach to valuing bond portfolios. As specified in SFAS 157, it will be considered a Level 2 input.

Level 1 Estimates

Fair Value is to be estimated using quoted prices for identical assets or liabilities in a reference market whenever that information is available. Quoted prices used for a Level 1 estimate shall not be adjusted. A Level 1 reference market is the active market to which an entity has immediate access (in many cases, the principal trading market for the asset or liability being measured). Immediate access means that an entity could exchange the asset or liability in its current (“as-is”) condition at the quoted price within a usual and customary period.

If the entity has immediate access to more than one active market with different prices, the Level 1 reference market is the most advantageous market. That is, the market with the price that maximizes (or minimizes) the net amount that would be received (or incurred) in a current transaction for an asset (or liability). For purposes of determining the most advantageous market, transaction costs shall be considered. However, the price in the most advantageous market shall not be adjusted for those costs; transaction costs shall be accounted for in accordance with other applicable pronouncements, generally in the period incurred.

In an active market where bid and asked prices are more readily and regularly available than closing prices, Fair Values shall be estimated using bid prices for long positions (assets) and asked prices for short positions (liabilities). For offsetting positions, mid-market prices are to be used for the matched portion with bid and asked prices for the net open position, as appropriate.

In some cases in which significant events (for example, principal-to-principal or brokered trades or significant announcements) occur after the close of the market but before the end of the reporting period, the closing price in that market might not be representative of Fair Value. An entity should establish and consistently apply a policy for determining how those events affect estimates of Fair Value.

Level 2 Inputs

Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable, either directly or indirectly. If the asset or liability has a specified (contractual) term, a Level 2 input should be observable for substantially the full term of the asset or liability. They include the following:

- Quoted prices for similar assets or liabilities in active markets.
- Quoted prices for identical or similar assets or liabilities in markets that are not active - that is those in which (1) there are few transactions; (2) the prices are not current; (3) quotations vary substantially either over time or among markets; or (4) little information is publicly available.

- Inputs other than quoted prices that are observable for the asset or liability (e.g. interest rates and yield curves available at commonly quoted intervals, volatilities, prepayment speeds, and default rates).
- Inputs that are derived principally from or corroborated by other observable market data through correlation or by other means.

Adjustments of Level 2 inputs should reflect factors specific to the transaction or the asset or liability, including the condition or location of the assets as well as the volume and level of activity in the markets from which the inputs are obtained. An adjustment that is significant to the Fair Value measurement may place it at Level 3. Certain inputs derived through extrapolation or interpolation may be corroborated by observable market data (e.g. extrapolating observable 1 and 2 year yields to derive those for the third year and would be considered a Level 2 input. For example, assume that the Argentinean interest rate yield is correlated to that of Chile. It the Argentinean yield curve is observable for three years, but the Chilean is based on its extrapolation from years one and two and the correlation with the third year Argentinean yields. This Chilean yield for hear 3 would be a Level 2 input. However, extrapolating short term data to measure longer term inputs requires assumptions and judgement that cannot be corroborated by observable market data and therefore, may represent a Level 3 input.

Level 2 Estimates

If quoted prices for identical assets or liabilities in active markets are not available, Fair Values shall be estimated using quoted prices for similar assets or liabilities in active markets, adjusted as appropriate for differences whenever that information is available.

For a Level 2 estimate, the price effect of the differences must be objectively determinable. For example, an observed price of securitized receivables can be used as a basis for estimating the Fair Values of un-securitized receivables of the same type, but only if the price effect of the liquidity, security and other benefits added by securitization is objectively determinable. Otherwise, it is a Level 3 estimate.

Level 3 Inputs

Level 3 inputs are unobservable inputs, for example, those through extrapolation or interpolation that cannot be corroborated by market data. Companies should use unobservable inputs only if observable inputs are not available. However, the objective of the Fair Value remains to determine an exit price from the perspective of a market participant. Therefore, Level 3 inputs should consider the assumptions they would use in pricing the asset or liability, including those about risk. Unobservable inputs should be developed based on the best information available in the circumstances, which may include the company's own data. In developing Level 3 inputs, a company need not undertake all possible efforts to obtain information about market participant assumptions. However, it should not ignore assumptions that are reasonably available without undue cost and effort. Therefore, its own data used for Level 3 inputs should be adjusted if information is reasonably available that indicates that market participants would use different assumptions.

Market Inputs Based on Bid and Asked Prices: If an input is based on bid prices and asked prices, Fair Value should represent the price within that spread at which market participants would transact. SFAS 157 allows a practicability exception, specifying that current valuation practices (including mid-market pricing and other conventions) of investment companies and broker-dealers under the guidance in SEC Accounting Series Release 118 (ASR 118) are acceptable under SFAS 157, provided that they are applied on a consistent basis. Accordingly, the use of bid prices for long positions (assets) and asked prices for short positions (liabilities) is permitted.

Restricted Securities: If a company holds a security that has restrictions on its sale or transferability (i.e. a restricted security) the Fair Value should be based on the amount that a marketplace participant would demand to assume the lack of marketability risk. This general principle applies regardless of when the restriction ends. As a result, current practice under SFAS 115 for securities with sale restrictions of less than one year will change.

Level 3 Estimates

Level 3 estimates require judgment in the selection and application of valuation techniques and relevant inputs. Those used for Level 3 estimates should emphasize market inputs, including quoted prices generated by actual transactions, adjusted as appropriate. If more than one technique is used, the respective indications of Fair Value shall be evaluated, considering the relevance and reliability of the inputs used. If information necessary to apply more than one technique is not available without undue cost and effort, the one that best approximates what an exchange price would be in the circumstances should be used.

In some cases, market inputs may not be easily available and require the use of significant inputs derived from an entity's own internal estimates and assumptions. Such inputs may be used for Level 3 estimates only as a practical expedient to the extent that they are not precluded under other applicable pronouncements.

Unit of Account: An item, whether an asset or liability to be measured at Fair Value is either (1) a stand-alone or (2) a group depends on the unit of account which is determined in accordance with other applicable accounting standards. A blockage factor is not to be applied regardless of the Unit of Account.

Valuation Date: The measurement date, as specified in each accounting standard requiring or permitting fair value measures, is the "effective" valuation date. Accordingly, a valuation should reflect only facts and circumstances that exist at that time (these include events occurring before it or that were then reasonably foreseeable on that date so that the valuation is appropriate for a transaction then on that date.

Types of Value

Assets: The fair value premise for an asset is its highest and best use from the perspective of market participants which would maximize an entity's future cash inflows; the company's intended use of an asset is not necessarily indicative. Fair Value is not an entity-specific measure that reflects only the company's expectations. For example, management might intend to operate a property as a bowling alley, while market participants would consider a parking lot the highest and best use of the property. In that case, the property's fair value should be based on it being a parking lot.

Fair Value in Use: The highest and best use of an asset is in-use if it would provide maximum value to market participants through its combination with other assets in a group. That is often the case of an operating (nonfinancial) asset that provides maximum value in combination with all (or some) of the other operating assets of the company as a group. In that case, the Fair Value of the asset group is determined using the in-use valuation premise SFAS 157 claims that even in such situations.

Fair Value is still determined based on the use of the asset by market participants, not solely on the use of the asset by the company (i.e. it is not entity-specific).

Fair Value In-exchange: The highest and best use of an asset is in-exchange if the asset would provide maximum value to market participants principally on a stand-alone basis. That may be the case for an item that provides maximum value separate and apart from the other assets of the company; in other words, the asset is separable or substitutable with other equivalent assets (for example, some financial assets).

Observable and Unobservable Inputs

Inputs broadly refer to the assumptions that market participants use to make pricing decisions, including those about risk SFAS 157 distinguishes between (1) observable inputs, which are based on market data obtained from independent sources, and (2) unobservable inputs, which reflect the company's own views about the assumptions of market participants.

The use of unobservable inputs is intended for situations in which there is little, if any, market activity for the asset or liability. However SFAS 157 emphasizes the valuation technique adopted should maximize observable inputs and minimize unobservable ones, regardless of which market is adopted.

Different Types of Markets with Observable Inputs

Markets in which inputs might be observable for some assets and liabilities (e.g. financial instruments) include the following:

- Exchange Market: In an active exchange market, closing prices are both readily available and representative of Fair Value, for example, the New York Stock Exchange.

Types of Value

- Dealer Market: In a dealer market, a number of dealers stand ready to trade for their own account, thereby providing liquidity. Typically, bid prices and asked prices are more readily available than closing prices. Dealer markets exist for many assets and liabilities, such as financial instruments, commodities, and physical assets.
- Brokered Market: In a brokered market, a selected broker attempts to match buyers and sellers, they do not trade for their own account nor use their own capital to hold an inventory. A typical brokered market is real estate where prices are available after the transactions have closed. Small businesses are another brokered market where some information is available in property databases.
- Principal-to-Principal Market: Principal-to-principal transactions (both originations and resales) are negotiated independently, with no intermediary. Normally very little information is publicly available.

Disclosures

For every interim and annual period for which a balance sheet is presented, an entity shall disclose the following information.

- For assets and liabilities that are re-measured at Fair Value on a recurring (or ongoing) basis during the period (e.g., trading securities):
  1) The Fair Values at the end of the period, in total and as a percentage of total assets and liabilities;
  2) How those Fair Values were determined (whether quoted prices in active markets or other valuation techniques, indicating the extent to which market inputs were used), and;
  3) The effect of the re-measurements on earnings for the period (unrealized gains or losses) relating to those assets and liabilities still held at the reporting date.
- For assets and liabilities that are re-measured at Fair Value on a nonrecurring (or periodic) basis during the period (e.g., impaired assets):
  1) A description of the reason for the re-measurements;
  2) The Fair Value amounts;
  3) How those Fair Value amounts were determined (whether based on quoted prices in active markets or on the results of other valuation techniques, indicating the extent to which market inputs were used), and;
  4) The effect of the re-measurements on earnings for the period relating to those assets and liabilities still held at the reporting date.

Disclosures about other similar re-measurements (for example, inventories re-measured at "market value" under ARB 43 are encouraged but not required.

- SFAS 157 requires an entity to disclose information about (1) the extent to which it has measured assets and liabilities at Fair Value, (2) the methods and assumptions used and (3) the effect on earnings. Quantitative disclosures should be presented using a tabular format and are required in all interim and annual periods. Descriptions of the valuation techniques used are required annually. For public companies, the interim financial statements filed on Form 10-Q in the year SFAS 157 is adopted should include all the required annual disclosures.

The disclosure requirements vary depending on whether the asset or liability is measured on a recurring or non-recurring basis.

- Recurring Basis: Quantitative disclosures about Fair Value measures are required separately for each major category of assets and liabilities. They should include the Fair Values in total and segregated between Level 1, Level 2 and Level 3. For fair value measures using Level 3 inputs, a reconciliation of the beginning and ending balances including total gains and losses (realized and unrealized) for the period is required, except for derivative assets and liabilities which may be presented. In annual periods, companies should disclose the valuation techniques used to measure Fair Value and include a discussion of changes in the techniques employed, if any.
- FASB added the above detailed disclosure requirements regarding Level 3 inputs to address some constituents' concerns about the reliability of fair value measures developed using Level 3 (i.e. unobservable) inputs. These disclosures are intended to provide users with information to assess the quality of reported earnings by segregating the unrealized gains and losses recorded in the income statement that relate to Level 3 inputs.
- Disclosure requirements for assets and liabilities measured on a nonrecurring basis subsequent to initial recognition should include the Fair Values recorded during the period and the reasons for the measurements. For assets and liabilities measured using level 3 inputs, a description of the inputs and the information used to develop them is required.

Frame of Reference

Understanding the Issues (a FASB publication), volume 3, series 1, suggests a frame of reference about how a notional market might operate. In it, a buyer or an entity willing to assume a liability, would:

- Have a use for the item in its current state and the ability to put it to work. Buyers who are not capable of doing so, (e.g., small investors) are not marketable participants;
- Put the item to its highest and best use; this supposition is especially important for physical assets such as real estate. Where appropriate, Fair Value should incorporate assumptions about future developments rather than merely a continuance of existing activities;
- Obtain reasonable information about the item's physical and technological condition and any uncertainties affecting its potential Cash Flows;
- Be interested in the specific model, age and condition rather than a "market average" example of the type of item, and;
- Deal with the seller or the entity seeking to extinguish a liability in the primary market or if one does not exist in the one that is most advantageous to it. This is especially important when considering the Fair Value of groups of assets or liabilities. An entity can often obtain

a better price or incur lower costs by a sale or purchase of a group as opposed to an individual item.

The article acknowledges that this frame of reference contains significant simplifications and that the give-and-take of real transactions will often result in an advantage to the buyer or to the seller. However, as there is no market to observe, it is not possible to know the impact those factors might have. Therefore, they should not be considered in establishing Fair Value.

Comparison of Fair Market Value and Fair Value

The similarities and differences between the two definitions are:

Criteria	**Fair Market Value**	**Fair Value**
Transaction	Hypothetical	Implied hypothetical Exit price
Parties	Hypothetical willing buyer & willing seller	Known seller of Reporting Unit; implied generalized strategic buyer with reference to "marketplace participants"
Knowledge	Both parties have reasonable knowledge of the relevant facts	SFAS 142 makes no reference to this, but Fair Value implies a strategic transaction
Financial ability	Implied for buyer	Implied for buyer
Timing	Any specified valuation date	Current only
Parameters	Established as consensus price by precedents; no synergies	Ability to include synergies implies at least intrinsic value adjusted for control
Compulsion (a most important difference)	Excludes any pressure on either party, both negative and positive, such as extra returns and benefits available to special purchasers	Excludes forced or liquidation sales(negative compulsion), but specifically includes potential special purchasers

Types of Value

Fair Value only reflects benefits available to market participants in general. It is different from investment value that includes any additional advantages expected by a particular buyer. Tax benefits not specifically included should be reflected in the Discount or Capitalization Rates. Amortizable benefits to cash flows must also be added.

Guidance from Canada

The Canadian Institute of Chartered Accountants (CICA) publishes Canadian GAAP in its Handbook; section 3062 (equivalent to SFAS 142), defines "fair value" (paragraph 3062.05) as:

> "The amount of consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act".

In February 2003, the Canadian Institute of Chartered Business Valuators (CICBV) issued a Goodwill Impairment Discussion White Paper (the "CICBV Paper"); in it, Fair Value is generally agreed to be the equivalent of the Canadian definition of fair market value.

> "The highest price available in an open and unrestricted market between informed and prudent parties acting at arm's length and under no compulsion to act, expressed in terms of money or money's worth."

This differs from Revenue Ruling 59-60 in that it is the "highest" rather than the most likely price.

The CICBV Paper follows the AICPA Practice Aid, Assets Acquired in a Business Combination to be used in Research and Development Activities: A Focus on Software, Electronic Devices and Pharmaceutical Industries (the Aid) which states that:

> "Fair value should reflect the hypothetical market price based on the assumptions market participants would use in arriving at an estimate of value. This estimate of value by market participants might not be the highest possible price, since the specific synergistic benefits and strategic advantage should not be included if they are specific to a single purchaser".

The Aid continues to say that the market for potential purchasers should include all those that appear to have the ability to acquire the asset or business, whether or not they are engaged in discussions with the seller. In addition, company specific benefits or cost savings should not be taken into account because Investment Values do not conform to the concept of Fair Value.

This does not include synergistic benefits or strategic advantages only available to a specific buyer, but reflects a hypothetical market price based on assumptions marketplace participants would use. To the extent the hypothetical market includes strategic purchasers, the Fair Value of a reporting unit would include some synergistic benefits and strategic advantages, but not those specific to a particular purchaser.

Types of Value

If a buyer pays a premium for particular synergistic or strategic benefits, the valuation analyst should identify and remove them from the Fair Values of the acquired assets. The assumptions to establish Fair Values of individual items should reflect best estimates of how market participants would benefit from them; the particular (excess) benefits form part of Goodwill.