

ALTERNATIVE INVESTMENT SOLUTIONS

HEDGE FUND ELEMENTS

Valuation, Materiality and Pricing

As our friends in the audit profession often say, "Accounting is an art, not a science." What does that mean? Aren't numbers, numbers? Shouldn't they always add up?

Valuations: the Components of the NAV

It might be interesting to first consider the point of determining the Net Asset Value – NAV – of a fund. What does it tell those who have a beneficial interest in the fund? Is it a precise report of the fund's liquidation value as of a given date? Or is the NAV merely an approximation of what the liquidation value might be? Is the NAV even intended to be a report of the fund's liquidation value, or is it something entirely different?

Let's consider first the argument that the NAV is intended to report the fund's liquidation value. If so, the expectation would be that, on a given date, the NAV tells the beneficial holders that should all assets be liquidated, all obligations met, that the value to be paid to beneficial holders is "x." Unfortunately, in a hedge fund, there are myriad pieces to the accounting puzzle many of which are not simple absolutes. Questions often arise prompting the hedge fund manager to establish an accounting policy specific to the fund.

"Normal" valuations. Publicly traded securities are usually valued at the price of the last trade on the "Valuation Date" (generally the last business day of the month). But, could a fund have actually sold 10,000 or 100,000 or a million shares at that price? The answer is, at best, "Maybe." Maybe the difference is only a dime or a quarter a share; however, it could be dollars depending on conditions on a particular date. And even if the block could have been executed at the "closing price" used for that day, wouldn't there have been costs to execute the trade? Fund net asset values do not normally attempt to estimate brokerage commissions. What would those costs amount to in an actual liquidation scenario?

Valuations of restricted securities. In addition to the ordinary question of whether a market price reflects what a marginal buyer or seller would actually experience, some securities (such as PIPEs ("Private Investments in Public Equities")) may be restricted from sale and have formulaic price adjustments until registration.

Valuations of illiquid blocks. With regard to illiquids, many paths may be taken, the choice dependent on the situation at hand. Consistency and fairness is key. Should a block of shares that is large compared to average volume be discounted? Can some large positions command a premium in some situations where others are trying to accumulate the stock? While a premium would be rare, one should consider whether a discount is fair to existing investors if the fund is experiencing capital additions or redemptions.

Valuations known to be estimates when received. In the fund-of-funds space, valuations from underlying hedge funds are frequently estimates which are updated and finalized at a later time. Since investors like to finalize their own records, when does the fund-of-funds declare its results final?

Accruals for expenses. Due to changes in fund activity or a revised bid, an estimate for audit and tax preparation expenses that has been accruing often has to be adjusted late in the year or partial year in the event that the fund is closing.

Error corrections. All funds will have trade errors that aren't discovered or repaired immediately. In the interim, there can be effects on portfolio valuation.

Valuation, Materiality and Pricing continued

The bottom line is that, even in a fund comprised of highly liquid stocks, it is unlikely that it could have liquidated on the valuation date with net proceeds within ¼% or ½% (or more) of the NAV determined. Clearly, at best, the valuation of a fund at any month-end can only be considered an approximation of liquidation value.

For a moment, shift to the perspective of a new fund, all in cash, that is looking to create a similar portfolio. Just as the portfolio could not be liquidated at the determined NAV, it could not be purchased in full at those values either. A fund that is a continuing business sells and buys back its portfolio each time new capital is added or redeemed. Practically speaking, therefore, the objective of fund management, the administrator and the auditor is the creation and validation of a reasonable fund net asset value that fairly balances the interests of buyers and sellers – existing static investors plus those who are adding or redeeming capital interests in the fund.

Qualitative Factors relating to Valuation

How is a fair and as-close-as-practical valuation achieved? We believe there are four basic ingredients:

It is based on reason. For example, we think “last price” is reasonable because it provides a point in time for measurement, plus the last price does reflect a real-world purchase and sale – at least some shares could realistically have been bought or sold by the fund at that price.

Unbiased. While last prices reflect the serendipity of the mix of bids and offers at today's close, they are independent of the fund and therefore unbiased. What if quotations of last price differ depending on the source? This may occur, for example, when a brokerage firm price feed differs from that obtained directly from a pricing vendor. If similar, is either more accurate? For practical purposes, what might be important is that pricing all securities from the same source will generally provide the most unbiased number. Conversely, bias can be introduced when someone goes through two price files, picking prices based on which is higher.

Not known to be significantly inaccurate. A last price that is stale, let's say a week or two old, would be known to be inaccurate. Such a price should be validated using current bids or offers, or some other independent source of likely valuation.

Consistent. While pricing methods can change over time as new information is gathered, the general rule is consistency. Again, using the example of last price: on any given day, the last price can be an uptick, downtick, or the same as a previous uptick or downtick. Thus it reflects the valuation decision of either a marginal buyer or a marginal seller. Over time, last price will reflect an aggregation of both marginal buys and marginal sells and thus can be considered a fair representation of market value over time.

Changes and Use of Estimates

As mentioned, it is commonly accepted that investors don't like numbers to change, even when that change reflects increasing accuracy. So, when should numbers become “final?” In exploring this question, it is useful to consider the types of changes that can happen:

A report believed to be accurate is later revised.

Examples might include:

- Broker issues such as trade corrections, incorrect prices, etc.
- Final reports from underlying managers in a fund of funds that are changed.
- A PIPE registration deadline is extended.

Valuation, Materiality and Pricing continued

A number known to be an estimate is later finalized.

Examples might include:

- Accruals for estimated tax and audit preparation costs.
- Estimates from underlying managers in a fund-of-funds that are finalized.

A calculation believed to be correct is later discovered to be an error.

Examples might include:

- A complex valuation worksheet is discovered to have improper comparative data or follows a pricing policy for a different category of security.
- Final reports from underlying managers in a fund-of-funds that are changed.

A report is received that was earlier presumed to have zero impact.

Examples might include:

- A fund-of-funds manager is late in reporting; to accelerate reports, in the absence of information, the return is assumed to be zero.
- A bill for legal services is expected, but the amount is unknown.

Materiality

A critical component in this discussion is materiality. As noted above, the NAV of a fund is only an estimate of liquidation value and would differ from actual liquidation proceeds, had it actually occurred. If the possible variance in a highly liquid fund might be plus or minus one quarter percent (0.25%) or one half percent (0.50%), then a reasonable materiality threshold is likely in that range. Certainly, for most funds, a materiality threshold of one-tenth of one percent (0.10%) would be a conservative "safe harbor" level. The materiality threshold of the fund provides to the fund manager, participants and service providers a consistent guideline for reasonable course of action. No matter what the circumstance, the materiality threshold helps in making a decision that is not arbitrary or could be construed as providing favoritism.

For example, if the current period valuation is based on reports that have the four basic ingredients mentioned earlier, and the difference is a 0.1% materiality threshold, ALPS would suggest that a fund consider adopting a policy where subsequent changes need not be carried back to the original period. One option is to have a threshold that applies to periods when there is investor capital activity, say 0.1%, and another for when there is no activity, such as 0.5%. You can imagine a case of a timing difference for something such as accrued interest between two periods. If there was no capital activity, the investors might appreciate not seeing a revised statement for the prior period if it changed by less than 0.5%. Ultimately the materiality threshold is the decision of the fund manager with his or her understanding of the needs of the investors in the fund.

Exceptions to the safe harbor adjustment concept would be changes or errors involving just one fund participant. In general, an adjustment pertaining to only one participant would have a materiality test relating to the participant. A change that would affect that participant by more than the agreed upon materiality threshold should carry back to the original period.

Pricing – PIPEs, Privates and Market Liquidity

Generally accepted accounting principles require that all investments held by a hedge fund be recorded at fair market value. For most securities, long or short, this is as simple as recording the last trade price on a national exchange. However, there are a number of security types that are not so straightforward. This discussion addresses PIPEs – securities having market quotes but which are restricted from sale for a period of time; Privates – securities that are non-public and have no market quotes; and securities which have Market Liquidity issues due to position size relative to market volume.

Pricing Policies

Most due diligence processes will include questions about pricing practices and use of independent sources. Accordingly, fund managers often create a written “Pricing Policy” specific to the fund that establish objective processes for determining “fair value” when a quoted market price is not independently available or deemed inaccurate due to liquidity. Pricing Policies usually address problematic security types – listing pricing factors and stating their expected application. In some cases, a policy may take the form of a memorandum specific to a certain security. The intent, in both cases, is to create a document that guides an objective pricing process.

In general, the factors identified in the Pricing Policy should be quantifiable and documented. Note that a Pricing Policy should be reviewed with counsel and the auditor and updated over time. Most should be considered dynamic documents which can evolve to reflect new issues as they arise.

Identification flow chart

Is the security publicly traded?

- Yes > Are securities registered and saleable?
 - Yes > Is position size large relative to average daily volume?
 - Yes > See “Market Liquidity” section below.
 - No > Market quotes are probably appropriate – not a PIPE or Private and does not have Market Liquidity issues.
 - No > Considered a PIPE for purposes of this discussion (see PIPEs on page 5).
- No > This is a Privately Offered Security (see Privates on page 6).

Market Liquidity

When a portfolio position is large relative to average daily volume, it may be difficult for a fund to sell the position at current quotations, and there is justifiable concern that a market price may not actually be fair to investors. However, in 2006, FASB 157 contributed this proscription to the discussion:

“27. If the reporting entity holds a position in a single financial instrument (including a block) and the instrument is traded in an active market, the fair value of the position shall be measured within Level 1 as the product of the quoted price for the individual instrument times the quantity held. The quoted price shall not be adjusted because of the size of the position relative to trading volume (blockage factor). The use of a blockage factor is prohibited, even if a market's normal daily trading volume is not sufficient to absorb the quantity held and placing orders to sell the position in a single transaction might affect the quoted price.”

Valuation, Materiality and Pricing continued

In years past, simple liquidity haircuts were fairly common, although there were a number of nuances that required good documentation. Now, a number of questions arise. What are the consequences to an audit report of ignoring FASB 157 and discounting anyway? What constitutes an “active” market? On the latter question, FASB continues with the following:

“An active market for the asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis.”

Valuation becomes truly relevant when it has significant economic effects or contributes to a track record that investors rely upon in their decisions to add, withdraw or maintain capital in a fund. If no person adds or withdraws on the valuation date and it doesn't coincide with an incentive calculation date, the valuation affects only the amount of a management fee and the reported track record. However, if there are significant inflows or outflows and it is the date that incentives are calculated, a manager may wish to explore options. The bottom line is that managers need to consult with the experts: their auditors. There are a number of questions that may be relevant:

- Is the market “active” – basically, is trading volume high enough that the market price is reasonably believed to reflect the current value of the security?
- Is there significant capital inflow or outflow as of the valuation date?
- How much does the valuation affect manager compensation or fund track record?

If it is determined that adjustments to market valuations are appropriate, they should be noted in a manager memo or “finding” at the time. If possible, a valuation matrix or explanation of the method of determination of a discount should be memorialized and used consistently in subsequent valuations; subject to the caveat that new information should not be ignored. Such documentation should record such things as average volume, patterns of price and volume, plus the narrowness of spreads that may be relevant in determining an “active” market.

Note that one way funds can end up with large positions in relatively illiquid stocks is via PIPE transactions as described below. PIPEs are often issued in large size and once they no longer have legal sale restrictions there may still be market liquidity issues. In addition, since there are often other hedge fund buyers of the same PIPE issues, it is often true that there are more natural sellers than buyers once shares have become registered and are free to trade. Thus, an understanding of the other participants in the round of financing may be useful in establishing a pricing policy for those securities.

PIPEs

PIPEs are non-registered securities of public companies issued at a discount to the market price and which are not permitted to be sold for a period of time. The issuing company promises to register the securities for sale within some period of time, possibly 3 to 12 months, during which time the absence of liquidity requires a price discount. The justification for issuing securities at a discount to market price is that private placements can often be effected with less expense than a public offering.

Valuation, Materiality and Pricing continued

The major valuation concerns on PIPEs are the illiquidity of the restriction period plus the possible effects of “overhang” – the not uncommon situation where there are a number of other PIPE purchasers who may be waiting to sell their shares when they register. FASB 157 provides this guidance:

“The restriction [on sale] is specific to (an attribute of) the security and, therefore, would transfer to market participants. In that case, the fair value of the security would be based on the quoted price for an otherwise identical unrestricted security of the same issuer that trades in a public market, adjusted to reflect the effect of the restriction. The adjustment would reflect the amount market participants would demand because of the risk relating to the inability to access a public market for the security for the specified period. The adjustment will vary depending on the nature and duration of the restriction, the extent to which buyers are limited by the restriction (for example, there might be a large number of qualifying investors), and factors specific to both the security and the issuer (qualitative and quantitative).”

Commonly, the basic illiquidity of the restriction period is reflected in a market discount using a formula that recognizes the passage of time. One logical model for pricing amortizes the percentage discount at the time of purchase in a straight-line method over the expected illiquidity period. Verbiage something like the following would describe a general time-oriented approach for a simple common stock PIPE:

- Once purchased, PIPEs must be retained for a period of time until a registration statement becomes effective that would permit a public sale. At the time of purchase, the dollar difference between the private purchase price and the market price shall be divided by the market price to determine a purchase discount percentage. That percentage discount shall generally be applied to the market price of the security for subsequent valuations, with the percentage discount being reduced in a straight-line method over the period of time that the PIPE purchase is expected to be non-saleable.
- Note that amortizing the percentage discount is more effective than amortizing the dollar discount; using dollar discount can create some illogical valuations in the event of high volatility. Also note that a Pricing Policy should address the possibility that the PIPE common may trade below acquisition cost; in this example, the discount would continue to apply if the stock declined.
- A Pricing Policy for PIPEs should also include language that permits other adjustments for other factors: In addition, the General Partner may adjust for registration delays or other special circumstances related to the security.
- Note that “overhang” is a tangential concept to a “blockage factor.” Part 27 of FASB 157 is addressing blocks controlled by the fund manager; whereas “overhang” comprises blocks held by others. It might be argued that overhang is a reason why the current prices don’t truly reflect an “active market,” or that it is a relevant factor specific to the security; however, that is a subject to be discussed with your auditor.
- If the PIPE transaction includes warrants or other convertible securities, the Pricing Policy will require added detail. Some funds use intrinsic value of warrants and convertible securities, again discounting for non-marketable periods; others attempt to value optionality by adopting a Black-Scholes or similar mathematical model used for pricing derivatives. However, caution is advised with such models, since volatility can be extreme in small companies with low stock prices, producing sometimes unexpected and unjustifiable results.
- Managers should keep in mind that if the PIPE issuer misses a registration deadline, an amended Pricing Policy or “finding” would be appropriate. Does the failure to register simply trigger a new discount amortized over a new period? Does it indicate company problems that should cause a complete reevaluation? What belief exists that the security will ever be registered? If the company issues the fund additional securities as a penalty for not registering, does that offset a perceived loss of value, increase value, or make the company look really desperate? In addition, it should be noted that the receipt of additional securities may involve tax considerations.

Valuation, Materiality and Pricing continued

Keep in mind that the presence of PIPEs will usually result in additional questions by investors in their due diligence process. There are several possible objections:

- PIPEs may be associated with companies who can't raise money via a normal process, so investment quality may be a concern.
- PIPEs often pose conflicts between existing shareholders (of the issuing company) and the ones buying at a discount via the PIPE.
- The SEC has taken legal action against several PIPEs buyers who were short-selling the common in the open market (although several of these have been reversed on appeal).
- Pricing is complex and can pose manager conflicts of interest.

Privates

Privates are particularly challenging to value since there is no direct relationship to publicly available prices. Generally, fund documents suggest that such securities are valued at cost until there is reason to believe that the value has changed. However, either over- and under-valuation is problematic, as it will affect fees and will cause fairness issues when new capital is added to the fund. Accordingly, managers should ensure that non-marketable securities are reviewed at least quarterly for possible revaluations.

Following is a list of factors that might be considered in such a quarterly evaluation of the "fair price" of a non-marketable security:

Has the company:

- Issued additional identical (or substantially similar) securities at a different price?
- Issued other new debt or equity?
- Experienced changes in sales?
- Encountered new competitive pressures?
- Acquired or disposed of assets?
- Engaged an investment bank to explore a public offering or for other financing or for asset sales?
- Had significant personnel changes?
- Failed to pay any expected dividends or service debt?
- Failed any specific terms or representations related to the Fund's securities purchase?
- Have there been any factors that have affected overall security valuations within the industry?
- Has the stock market declined significantly to a point that all securities values have declined?
- Have market or industry factors negatively affected access to the capital markets for the company or its industry?

A manager, working with the fund's auditor, should prepare a document that sets forth a Pricing Policy for non-marketable securities. In some cases, a separate Pricing Policy would be appropriate for each such security. The auditor would provide guidance on valuation frequency and when auditor review is appropriate. Normally, the manager would use those policies to prepare a quarterly evaluation of each non-marketable security for its files and for the Administrator.

Appropriateness

Needless to say, the presence of the types of positions in this discussion can be red flags for both current and prospective investors. In addition to possible concern about the accuracy of fund values, having securities with diminished liquidity can also diminish the liquidity for investor withdrawals.

In most cases, aggregate size is the primary concern. The larger the allocation to illiquid (and therefore possibly imperfectly priced) securities, the greater the concern. Lastly, regardless of size, positions with impaired liquidity require added levels of attention by fund management and service providers. The valuation process for non-conventional positions is rarely routine.

Responsibilities

Please note that administrators are not the valuation experts in the hedge fund vendor circle. Few, if any, hold themselves out as specialists in securities valuation. While administrators are sometimes said to “price” “normal” marketable securities, those prices are sourced from third parties such as brokerage firms, pricing services, and electronic and print media. The values assigned to other securities are usually those provided by the fund manager, in concert with, and subject to the approval of, the fund's auditor. Some funds may elect to engage independent valuation experts with respect to certain securities.

Where securities are traded over-the-counter and sales are not reported by a service, managers may solicit bids from dealers and use average or median prices. Such pricing processes should be documented and retained. While an administrator may review such documents, in most cases they are unable to solicit such bids firsthand due to the lack of a direct business relationship with the dealers.

While an administrator can help in evaluating the thoroughness of pricing policies, the creation of a Pricing Policy and its maintenance over time is the responsibility of the fund manager. Note also that the final arbiter in any valuation metric is the auditor; accordingly, a manager considering price adjustments for illiquid positions or considering PIPEs should contact the fund's auditor and review pricing policies before implementation.

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