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VALUATION AND LIQUIDITY ISSUES FOR MUTUAL FUNDS

2002 SUPPLEMENT

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This paper is designed to inform and assist Institute members generally with respect to mutual fund valuation issues. It is not intended, nor should it be relied upon, as a substitute for appropriate professional advice with respect to the applicability of laws and regulations in particular circumstances, nor is it intended to express any legal opinion or conclusion concerning any specific action, policy or procedure.

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I. INTRODUCTION

In February 1997, the Institute published a paper to provide practical information to Institute members about the process of valuing portfolio securities and assessing their liquidity.[1] Since that time, the staff of the Securities and Exchange Commission's Division of Investment Management has issued two letters providing general guidance on the valuation of investment company portfolio securities.[2] This paper is intended to supplement the 1997 ICI Valuation Paper to take into account this recent guidance from the staff, particularly as it relates to the fair valuation of portfolio securities.

This supplement briefly reviews the statutory and regulatory framework for valuation described in greater detail in the 1997 ICI Valuation Paper and summarizes the 1999 and 2001 letters. The supplement then discusses the valuation of foreign and domestic portfolio securities in light of the recent guidance and the review of fair valuation methodologies used in that process. Finally, the supplement describes the responsibilities of fund boards in the valuation process.

The fair valuation process requires funds to make determinations as to the value of a particular security or group of securities depending on the particular facts and circumstances involved. As the SEC has recognized, there is no single standard for determining fair value in good faith.[3] Indeed, "different fund boards, or funds in the same complex with different boards, when fair value pricing identical securities, could reasonably arrive at prices that were not the same."[4] As a result, the SEC and the staff have refrained from prescribing standard valuation procedures and have focused instead on the need for funds to adopt and consistently

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[1] Investment Company Institute, "Valuation and Liquidity Issues for Mutual Funds" (Feb. 1997) (the "1997 ICI Valuation Paper").

[2] Letter to Craig S. Tyle, General Counsel, Investment Company Institute, from Douglas Scheidt, Associate Director and Chief Counsel, Division of Investment Management, U.S. Securities and Exchange Commission, dated April 30, 2001 (the "2001 letter") and Letter to Craig S. Tyle, General Counsel, Investment Company Institute, from Douglas Scheidt, Associate Director and Chief Counsel, Division of Investment Management, U.S. Securities and Exchange Commission, dated December 8, 1999 (the "1999 letter"). These letters are available on the SEC's web site, *www.sec.gov*.

[3] Accounting Series Release No. 118, Inv. Co. Act Rel. No. 6295, [1937-1982 Accounting Series Release Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶72,140 (December 23, 1970) ("ASR 118"), at 62,296. *See also* 1999 letter at 5.

[4] 2001 letter, at n.22 (quoting the 1999 letter).

apply valuation procedures reasonably designed to ensure appropriate valuations for portfolio securities.

Reflecting this approach, this paper describes circumstances under which a fund may be required to fair value portfolio securities, the information that may be available to detect those circumstances and the factors that should be considered in developing valuation procedures. The paper does not attempt to set forth standard approaches or model procedures, given that the determination of what is appropriate for each fund rests with each fund and its officers and directors. Individual fund complexes should establish valuation policies and procedures that conform to their own particular circumstances and needs.

II. BACKGROUND

A. The Statutory Framework for Valuation

The fundamental rules governing valuation of fund portfolio securities are set forth in Section 2(a)(41) of the Investment Company Act of 1940 (the "1940 Act"), which defines the "value"[5] of fund assets in terms of a simple dichotomy:

- securities "for which market quotations are readily available" are to be valued at "market value;"

- all other securities are to be valued at "fair value as determined in good faith by the board of directors."

This statutory dichotomy recognizes that market prices generally are objective and accurate reflections of a security's value. It is only when market prices are not available that fair valuation must be considered.[6]

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[5] Section 2(a)(41) of the 1940 Act and Rule 2a-4 thereunder give meaning to the term "value" for these purposes.

[6] The 2001 letter notes that the 1940 Act's definition of "value" does not permit funds to ignore readily available market quotations where they exist. The staff believes funds must "exercise reasonable diligence to obtain market quotations for their portfolio securities before they may properly conclude that market quotations are not readily available." For example, if market quotations from one source are determined to be unreliable, the fund should

B. General SEC Guidance on Valuation

1. ASRs 113 and 118

In 1969 and 1970, the SEC issued two accounting series releases that offered guidance on proper valuation methodologies. ASR 113[7] principally addressed valuation practices with respect to restricted securities, but also offered guidance on certain other aspects of the valuation process. ASR 118 expanded upon ASR 113 and provided more general guidance. Notably, in addition to its other guidance, ASR 118 dealt with the use of fair value methodologies to price securities and set forth the general principle that the fair value of securities "would appear to be the amount which the owner might reasonably expect to receive for them upon their current sale."[8] ASRs 113 and 118 remain the primary SEC authority on permissible valuation practices.

2. Putnam No-Action Letter

In 1981, the staff issued a no-action letter to two funds with respect to the valuation of portfolio securities that were principally traded on foreign exchanges.[9] As described in the no-action request, the funds calculated their NAVs at 4 p.m. Eastern time and used the closing market prices established earlier in the foreign markets to value their foreign portfolio securities. The request letter noted, however, that if "some extraordinary event were to occur after the close" and the funds' pricing personnel determined that the securities' closing prices were "no longer a reasonable estimate of such securities values as of 4:00 p.m.," the funds would determine the fair value of those securities as of 4:00 p.m. "using other appropriate indicia of value," which may include the next day's opening market prices.

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diligently seek to obtain market quotations from other sources before determining that market prices are not "readily available." 2001 letter at 9-10.

[7] Accounting Series Release No. 113, Inv. Co. Act Rel. No. 5847, [1937-1982 Accounting Series Release Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶72,135 (October 21, 1969) ("ASR 113").

[8] ASR 118 at 62,296.

[9] Putnam Growth Fund and Putnam International Equities Fund, Inc., 1981 SEC No-Act. LEXIS 3088 (pub. avail. February 23, 1981) ("Putnam Growth Fund").

In its response, while not using the term "extraordinary event," the staff stated that it would not recommend any enforcement action to the SEC under Rule 2a-4 if the funds value their foreign securities at 4:00 p.m. New York time using the earlier-established foreign closing market prices "except when an event has occurred since the time [those prices were] established that is likely to have resulted in a change in [their] value."[10] This no-action position, in effect, recognized that the 1940 Act's mandate to use market value as determined by readily available market quotations applies equally to securities traded principally on domestic and foreign exchanges.

The SEC has twice made reference in its releases to the staff's position in *Putnam Growth Fund*. First, in a footnote in a 1984 release proposing amendments to Rule 22c-1(b), the SEC stated:

> If the foreign exchange on which a portfolio security is principally traded is closed at the time a fund computes its current net asset value, then the fund may use the previous closing price on the foreign exchange to calculate the value of the security, except when an event has occurred since the time the value was established that is likely to have resulted in a change in such value. If an event does occur which will affect the value of portfolio securities after the market has closed, the fund must, to the best of its ability, determine the fair value of the securities, as of the time pricing is done under Rule 22c-1, by using appropriate indicia of value, which, in certain cases, may include the opening price at which trading in the securities next begins.[11]

Second, in 1998, in discussing the need for appropriate disclosure of fair valuation practices, the SEC stated that in fair valuing certain securities in response to volatility in Asian markets:

> [F]unds appear to have relied on a long-standing position of the SEC's staff that a fund may (but is not required to) value portfolio securities traded on a foreign exchange using fair value, rather than the closing price of the securities on the exchange, when an event occurs after the close of the exchange that is likely to have changed the value of the securities.[12]

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[10] *Id.* at *12.

[11] *Pricing of Redeemable Securities for Distribution, Redemption and Repurchase,* Inv. Co. Act Rel. No. 14244, [1984-85 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 83,711 (Nov. 21, 1984), at n.7 (the "Rule 22c-1 Release").

[12] *Registration Form Used by Open-End Management Investment Companies,* Inv. Co. Act Rel. No. 23064 [1998 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶86,014 (Mar. 13, 1998), at 80,318, *citing* Putnam Growth Fund.

C. Recent SEC Staff Guidance

Recent staff guidance in 1999 and 2001 has focused on funds' obligations to monitor events and determine when market quotations are not "readily available," thereby triggering the obligation to employ fair value pricing procedures in determining the value of portfolio securities.

1. The 1999 Letter

The staff issued the 1999 letter to provide guidance relating to funds' pricing responsibilities during emergency or unusual situations. The letter included guidance on valuing fund portfolio securities, both foreign and domestic, in situations where the exchanges or markets on which the securities trade do not open for trading for an "entire trading day" and no other market prices are available.[13] The 1999 letter also provided guidance on the fair value pricing process, particularly with respect to factors that may be taken into consideration when fair valuing a security, and the obligations of the fund's board with respect to that process.

2. The 2001 Letter

The staff followed the 1999 letter with a second letter that discussed the obligations of funds and their directors to determine, in good faith, the fair value of portfolio securities when market quotations are not readily available because of "significant events" that occur after closing market prices are established, but before the time set for the calculation of the fund's NAV. The 2001 letter focused primarily on the valuation of securities traded on foreign exchanges, but also provided guidance on the valuation of domestic securities, the good faith obligations of the fund's board with regard to fair value pricing and the inappropriate use of fair value pricing for securities for which market quotations are available.

[13] The staff noted that neither these types of situations nor situations involving market breaks, trading restrictions, internal fund failures, or natural disasters would allow a fund to suspend redemptions in the absence of certain determinations by the SEC. 1999 letter at n. 2 and accompanying text.

Although the SEC and staff previously had expressed the general concept that events that occur after the close of a foreign market but before the time set for the calculation of the fund's NAV may warrant fair valuation of fund portfolio securities,[14] the 2001 letter provided more detail on the staff's views in this area than had earlier been available. For example, the 2001 letter for the first time articulated in writing the staff's view that market volatility could constitute a "significant event" for valuation purposes.[15] As a result, funds should review their own valuation procedures in light of this most recent guidance, as described below.

III. VALUATION OF FOREIGN SECURITIES IN LIGHT OF RECENT GUIDANCE

A. In General

In issuing the 2001 letter, the staff sought to address, among other things, whether under certain circumstances the closing market prices for securities trading in overseas markets may no longer be "readily available" market quotations by the time a fund investing in those securities calculates its NAV. As noted in the 2001 letter, most funds calculate their NAVs once each day as of the close of the major U.S. securities exchanges, usually 4:00 p.m. Eastern time.[16] Many foreign markets close earlier than that, sometimes by as much as fifteen hours.[17] As stated in the 2001 letter, "the closing prices of foreign securities may not reflect their market values at a fund's NAV calculation if an event that will affect the value of those securities (a 'significant

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[14] *See* the discussion of Putnam Growth Fund and the SEC's 1984 and 1998 releases *supra* Section II.B.2 (Putnam No-Action Letter), pp. 3-4.

[15] 2001 letter at p.5. *See infra* Section III.B.2.b (Events Relating to Multiple Issuers), pp. 14-18.

[16] In general, Rule 22c-1 under the 1940 Act requires funds to compute their NAVs at least once daily at a specific time or times as determined by their boards and to sell and redeem shares at a price based on the NAV that is next computed after receipt of a purchase order or redemption request. (The latter requirement is known as the "forward pricing" rule.)

[17] The Tokyo Stock Exchange, for example, closes at 3:00 p.m. local time (1:00 a.m. Eastern standard time). Selecting a time to price other than 4 p.m. Eastern time or the close of the major U.S. markets can reduce the period between the close of foreign markets and the time set for a fund's NAV calculation. However, there are a number of operational and practical issues that a fund should consider before making a decision to change the time for NAV calculation. For example, funds that offer exchange privileges would have to consider how exchange transactions will be handled if the fund group calculates the NAVs for different funds in the complex at different times. Funds, particularly those sold through intermediaries, also may face challenges with the implementation of multiple cut-off times for the receipt of purchase orders and redemption requests. As a result, most funds that have considered this option to date have not found it viable. Nevertheless, as back office and distribution systems evolve, this may become a more practical option for certain types of funds.

event') has occurred since the closing prices were established on the foreign exchange or market, but before the fund's NAV calculation."[18]

The 2001 letter also states that the use of closing prices that were established before a "significant event" occurred may cause dilution in the value of the interests of shareholders that remain in the fund.[19] It indicates that under these circumstances fair value pricing can protect long-term fund investors from short-term investors who seek to take advantage of funds as a result of significant events occurring after a foreign exchange or market closes, but before the funds' NAV calculation.

While this may be true, nothing in the 2001 letter warrants a conclusion that the elimination of arbitrage and the dilution that can result is an appropriate reason, in and of itself, to fair value fund portfolio securities.[20] Indeed, as noted above, the 1940 Act does not permit funds to use fair values unless market quotations are not "readily available." The existence of any particular market timing strategy involving a fund does not necessarily call into question the ready availability of market quotations for that fund's portfolio securities.

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[18] 2001 letter at 2. For purposes of the 2001 letter, the term "NAV calculation" is defined as the specific time or times each day, as determined by a fund's board, at which the fund computes its NAV (usually 4:00 p.m. Eastern time). Significant events that occur after that specific time (*e.g.*, 4:00 p.m. Eastern time) but before the actual calculation of the fund's NAV (which typically occurs one to two hours later) should not be taken into account in that day's NAV. *See* "Paul Roye Speaks on Fund Valuation," THE INVESTMENT LAWYER, August 2001, at 11 (the "Roye Interview"). The same analysis would apply to trading that occurs after the time set for a fund's NAV calculation.

[19] The 2001 letter includes an exhibit with a hypothetical scenario designed to illustrate that fair value pricing can protect long-term shareholders from short-term investors who seek to take advantage of arbitrage opportunities when significant events occur after a foreign exchange or market closes but before the time set for a fund to calculate its NAV. While the hypothetical example is useful to demonstrate the dilution caused by a successful market timing transaction, the example makes a number of assumptions that are unlikely to apply in many instances. First, the example describes a major after-hours movement (more than 10%) in a foreign market that is evidenced by trading in financial instruments in the U.S. Those types of financial instruments may not exist or be traded in sufficient volume to be useful indicators for all markets. Second, the example describes an unusually large market timing transaction ($10 million) in a small fund ($45 million in total net assets at the time the purchase order is received). As a result, the example assumes that the fund receives a purchase order equal to 22.2% of its total net assets, and does not reject it as a market timing transaction or for some other reason. Funds often reject transactions of that magnitude for any of several reasons, including to prevent market timing abuses. Finally, the example assumes that the foreign market closes the next day in perfect correlation with the trading in the financial instruments in the U.S. This assumption led the staff to describe the market timing transaction as involving "no risk to [the market timer's] investments," but ignores any market activity that may have occurred during the next trading day in the foreign market. For example, U.S. markets on January 3, 2001 were significantly higher in response to a reduction in U.S. interest rates. The Japanese market opened higher the next day, but traded down throughout that day, ending slightly lower than its previous close. The possibility that the foreign market would reverse course during that next trading day introduces a significant degree of risk into this type of timing transaction.

[20] By the same token, a fund that is not the victim of arbitrage and the resulting dilution cannot, solely on that basis, avoid the need to fair value portfolio securities for which market prices are not readily available.

Moreover, while fair value pricing has the potential to reduce opportunities for short-term traders to take advantage of long-term fund investors, it cannot entirely eliminate the possibility that this will occur.[21] Arbitrageurs and other short-term traders attempt to predict whether a fund's NAV is likely to rise or fall the next day. For example, an arbitrageur may seek to take advantage of a perceived correlation between movements in different markets (*e.g.*, the theory that an increase in the U.S. market on Day 1 may suggest that a particular foreign market will rise on Day 2). Such a correlation does not necessarily indicate, however, that the value of fund portfolio securities trading on that foreign market has changed *as of the time the fund calculates its NAV* on Day 1, which is the critical factor in determining whether a "significant event" has occurred. Moreover, fair valuation is an inherently subjective process. By making clear that different funds could reasonably arrive at different prices for the same security, the staff has recognized that judgment is involved and that there is no one, "right" answer. This subjectivity makes it unlikely that fair valuation, in and of itself, can completely eliminate arbitrage opportunities.

Thus, while the use of fair valuation procedures can reduce a fund's exposure to arbitrage activities, a fund's decision to employ such procedures should be based upon the need to take reasonable steps to ensure that the prices of fund portfolio securities reflect their value as of the time set for NAV calculation. The resulting fund share prices, in turn, will be fair to purchasing, redeeming and existing shareholders, regardless of whether they have long-term or short-term investment horizons.[22]

B. "Significant Events"

The concept of a "significant event" is central to the 2001 letter. The letter provides that if a fund determines that the closing market prices of one or more of its portfolio securities no longer represent their current value at the time of the fund's NAV calculation because of an intervening "significant event," then that market quotation is no longer deemed to be "readily

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[21] With this in mind, many funds have put in place other mechanisms designed to discourage or prevent abusive short-term trading practices, such as redemption fees and / or restrictions on exchange transactions.

[22] *See* 1997 ICI Valuation Paper at 1.

available" and the fund should value those securities using a fair value methodology. This section of the paper discusses various activities related to identifying significant events through the monitoring of external data, as well as a variety of fair valuation procedures that may be followed after a determination has been made that a significant event has occurred.

1. Definition of "Significant Event"

"Significant event" is defined in the 2001 letter as "an event that will affect the value" of a fund's portfolio securities. The 2001 letter does not elaborate on the precise meaning of the words "will affect." Consequently, funds will need to employ a degree of judgment in determining whether a significant event has occurred.

In some cases, it will be reasonably clear that an event has changed the value of fund portfolio securities from their closing market prices. For example, assume that a fund that holds stock in a Taiwanese company learns that, after the close of the Taiwanese market but before the time set for the calculation of the fund's NAV, the company unexpectedly announced that earnings had been substantially overstated in prior periods due to accounting irregularities. This likely would be a significant event with respect to that company, since this type of announcement, absent other news, generally will adversely affect a company's share price. By contrast, assume that (after the close of the foreign market but before the time set for calculation of the fund's NAV) the prime minister of a country in which a fund is invested resigns. Based on information reasonably available to it under its procedures to monitor for significant events,[23] the fund may not have an adequate basis to determine whether this event has affected the value of its portfolio securities as of the time of its NAV calculation. In such a circumstance, the resignation likely would not be a significant event in the sense contemplated by the 2001 letter.

Of course, events may occur that fall somewhere in between these two examples. In such cases, funds will need to make judgments regarding whether the events have affected the value of their portfolio securities. Funds should follow the parameters established under

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[23] *See infra* Section III.B.2.a.2) (Monitoring), pp. 11-12.

authority of their boards in making these judgments,[24] and should consider documenting their determinations. Because of the degree of judgment involved, different fund groups may come to different conclusions about whether certain types of events require the use of fair valuation.

In addition, funds should periodically review these "significant event" determinations (for example, by examining next-day opening prices of the portfolio securities in question). Based on these reviews, funds may conclude that they should revise the criteria or standards they use for determining when an event would be considered a "significant event" for purposes of the 2001 letter.[25]

2. Types of Significant Events

As the staff notes in the 2001 letter:

> [Significant] events may relate to a single issuer or to an entire market sector. Moreover, significant fluctuations in domestic or foreign markets may constitute a significant event. Significant events also may stem from occurrences not tied directly to the securities markets, such as natural disasters, armed conflicts, or significant governmental actions.[26]

The following two sections of the paper discuss single issuer and multiple issuer events, respectively.

a. Events Relating to Single Issuers

1) Identification

The 2001 letter states that a significant event may relate to a single issuer. Depending on the facts and circumstances involved, any of the following single issuer events could be

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[24] *See infra* Section VI (Responsibilities of the Board in Light of Recent Guidance), pp. 23-26.

[25] *See infra* Section V (Reviewing Fair Methodologies), p. 22. As noted therein, next-day prices can be affected by events that occur in the period between the time for NAV calculation and the opening of the foreign market.

[26] 2001 letter at 5, n.11 and accompanying text.

significant in the sense contemplated by the 2001 letter: (i) corporate actions such as reorganizations, mergers, spin-offs, liquidations, acquisitions, and buyouts; (ii) corporate announcements on earnings; (iii) corporate announcements relating to products such as new product offerings, product recalls, or other product-related news; (iv) regulatory news such as government approvals (such as new patents or drug approvals); (v) news relating to natural disasters affecting the issuer's operations; or (vi) events relating to significant litigation involving the issuer. Of course, the need to assess the impact of events such as these on valuation arises only when the event occurs after the close of the relevant market or cessation of trading in the particular security but before time set for the calculation of a fund's NAV.

2) Monitoring

The 2001 letter states that "consistent with their obligations under the 1940 Act, funds should continuously monitor for events that might necessitate the use of fair value procedures."[27] The staff notes, however, that "monitoring should not be unduly burdensome because funds and their investment advisers typically monitor such data on a continuous basis in determining whether to buy, sell, or continue to hold portfolio securities."[28] This suggests that significant events often would be readily ascertainable by a fund in the course of the management of its portfolio, and that there is no duty to exhaust all possible sources of information in determining whether a significant event has occurred.[29] Nevertheless, monitoring in making investment decisions may differ in certain respects from monitoring for significant events. Consequently, funds should adopt procedures reasonably designed to monitor for significant events as part of the pricing process and employ reasonable diligence in monitoring sources of information.

In designing monitoring procedures, funds should consider using the general news and financial market information sources currently utilized in making investment decisions. To the extent practicable, funds also could consider using other sources of information, particularly with respect to foreign securities, such as trading and investment personnel located abroad,

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[27] *Id.* at 5.

[28] *Id.* at n.12.

[29] *See also* 1999 letter at 5 ("during emergency situations, fund boards should evaluate as many relevant factors as they are able to under the circumstances").

foreign regional brokers, and / or foreign custodians.[30] Funds also should review their monitoring procedures periodically to satisfy themselves that the information sources being utilized remain appropriate and consider whether any new or different sources should be used. Funds should recognize that it is unlikely that any set of monitoring procedures will alert a fund to every significant event.

Although they may or may not have primary responsibility for monitoring for pricing-related developments, portfolio managers, traders, and global custodians most directly involved with a fund's portfolio securities often may be the first to learn that a significant event with respect to a single issuer has occurred. As a result, funds should encourage these persons to report significant post-close developments that come to their attention to designated fund pricing personnel.[31]

Regardless of the sources used, funds should take appropriate steps to ensure that the information they are receiving is reliable and timely. Procedures should retain the flexibility to determine that particular sources of information may not be reliable under all circumstances and need not be monitored and / or used.

3) Fair Valuation

If a fund determines that a significant event has occurred after the close of the foreign exchange or market, but before the fund's NAV calculation, then the closing prices for any security or securities affected by that event would not be considered "readily available" market quotations, and the fund must value those securities pursuant to a fair value pricing methodology.[32] However, funds may wish to consider the need for their valuation procedures to preserve flexibility to use closing market prices in situations where the impact of any fair

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[30] There may be practical limitations on the use of trading and investment personnel located abroad, foreign regional brokers, and foreign custodians. These persons, for example, may be asleep or otherwise unable to be reached at or near the time set for a fund's NAV calculation. In addition, while foreign custodians may provide news alerts relating to market events, they may be less likely to do so with respect to events affecting individual issuers.

[31] Third-party service providers such as subadvisers and global custodians may have their own monitoring procedures in this regard to use as a basis for communication with their fund clients. Funds may wish to inquire whether their service providers have such procedures.

[32] 2001 letter, text accompanying n.9. As noted in the 2001 letter, this is consistent with the views expressed by the SEC in the Rule 22c-1 Release.

valuation determinations would not materially affect the fund's NAV. As the Director of the SEC's Division of Investment Management has confirmed, there is a materiality standard implicit in the 2001 letter.[33] If a fund determines that a significant event occurred but that the impact of that event on the affected portfolio securities would not materially affect the fund's NAV, as a practical matter, the fund could value those securities using their closing market prices.[34] If the cumulative impact of all fair valuation determinations made on a given day would materially affect the fund's NAV, however, then the fund would need to use those fair values.

The SEC consistently has recognized that no single standard exists for determining fair value in good faith. Instead, the SEC has adopted a more flexible standard, which requires fund directors to "satisfy themselves that all appropriate factors relevant to the value of securities for which market quotations are not readily available have been considered and to determine the method of arriving at the fair value of each such security."[35] ASR 118 further states that "directors should take into account all indications of value available to them in determining the 'fair value' assigned to a particular security."[36]

The "factors relevant to the value of securities" and "indications of value" when a significant event has occurred will depend upon the particular fund and the facts and circumstances of the situation. The SEC has suggested a number of methodologies that can be used, and a number of factors that can be considered in making fair value determinations.[37] However, other factors also could be relevant in valuing securities as the result of a significant

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[33] Roye Interview, *supra* note 18, at 11.

[34] *Id.*

[35] ASR 118, *supra* note 3, at 62,295-96.

[36] *Id.* at 62,296.

[37] *Id.* ASR 118 indicates that methodologies could be based upon: (1) a multiple of earnings; (2) a discount from market of a similar freely traded security; (3) with respect to debt instruments, the yield to maturity; or (4) a combination of the foregoing. The factors that ASR 118 indicates are among those that should be considered in determining fair value methods include: (a) fundamental analytical data; (b) the nature and duration of restrictions on disposition; (c) an evaluation of the forces that influence the market in which the securities are purchased and sold; and (d) specific factors, including (among others) the type of security, financial statements, cost, size of holding, analysts' reports, transactional information or offers, and public trading in similar securities of the issuer or comparable companies.

See also infra note 43, which discusses other factors that funds may need to consider, if relevant, when fair value pricing portfolio securities.

event. Fair valuation procedures should describe factors to be considered but should not preclude consideration of additional or different factors where warranted.

b. Events Relating to Multiple Issuers

1) Identification

The 2001 letter states that a significant event may relate to more than one issuer. These events could include, for example: (i) governmental actions that affect securities in one sector, country or region in a particular way; (ii) natural disasters or armed conflicts that affect a country or region; or (iii) significant market fluctuations. As with events relating to single issuers, whether such an event will be "significant" in the sense contemplated by the 2001 letter depends on the facts and circumstances involved.

Governmental Actions. An example of a governmental action that affected securities in one country occurred in September 1999, when the Malaysian government banned the repatriation of the proceeds from the sale of Malaysian securities by foreign investors, effectively trapping foreign investments in Malaysia. This action had the same effect on the value of all Malaysian securities, and many funds fair valued Malaysian securities in a "top down" manner, reducing the Malaysian ringgit/U.S. dollar exchange rate used in their NAV calculation.[38]

Natural Disasters, Armed Conflicts and Similar Situations. Significant events may stem from occurrences not tied directly to the securities markets, such as natural disasters, armed conflicts, or other similar situations. These types of events could affect multiple issuers directly (*e.g.*, by disrupting business operations or causing damage to property) or indirectly (*e.g.*, by causing a stock market to close for an entire trading day or longer).[39]

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[38] *See infra* Section III.B.2.b.3) (Fair Valuation), pp. 17-18.

[39] *See* 1999 letter at 3 (discussing a 1999 earthquake in Taiwan and other similar events that cause markets to be closed for an entire trading day).

Significant Market Fluctuations. The 2001 letter states that a significant fluctuation in domestic or foreign markets may constitute a significant event, and, thus, may require a fund to fair value some or all of its portfolio securities if the fluctuation occurs after the close of the markets on which those securities trade but before the time set for NAV calculation.[40] Although not specified in the letter, such fluctuations presumably could be evidenced by, among other things, changes in the value of:

- baskets of depository receipts relating to securities in the foreign market;
- futures contracts or other derivative securities based on indexes representative of the foreign market;
- baskets of securities from the foreign market or funds that are comprised of those securities, such as exchange-traded funds (ETFs) or closed-end country funds;[41] and / or
- the U.S. market, to the extent that the U.S. market may bear a correlation to the particular foreign market.

In light of the reference to market fluctuations in the 2001 letter, funds should consider whether their valuation procedures for foreign portfolio securities should treat movements in the values of one or more of these items as a significant event.

In making this determination, funds may wish to consider the extent to which, over a period of time, such movements on any given day are correlated with movements the following day in the foreign markets to which the item relates. Funds should take into account a number of factors regarding the use of historical correlations in this regard. First, while correlations between a change in either a financial instrument or the U.S. market and the next day's foreign market could indicate that the price of securities trading on that market has changed as of the time a fund calculates its NAV, this is not necessarily the case. Even if *future* prices in a foreign market tend to be correlated with either a particular financial instrument or the U.S. market, this

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[40] For example, a significant fluctuation in the U.S. market that occurs prior to the close of the London market (typically 11:30 a.m. Eastern time) should not require fair valuation of securities principally traded in London, since it occurs *before* the time that the values of those securities were established.

[41] The staff noted in the 1999 letter that changes in the value of depository receipts, index futures contracts and other derivatives, and baskets of securities could possibly assist funds in valuing portfolio securities. *See infra* note 43. In the 2001 letter, the staff stated that it believes that the same factors it had described in the 1999 letter also can assist funds in determining whether a significant event has occurred. 2001 letter at n.13.

does not necessarily mean that prices in the foreign market as of the close of the U.S. market are similarly correlated. Second, correlations change over time. The fact that movements in a particular foreign market recently have followed the U.S. market or trading in certain financial instruments does not necessarily mean that they will do so in the future, or that they will do so on any given day.

Funds also should note other limitations in using movements in the value of a particular financial instrument or the U.S. market. For example, ADRs, index futures contracts, closed-end funds and ETFs each have their own ownership and trading characteristics, and may change in value for reasons unrelated to the value of securities in the foreign market (*e.g.*, differences in liquidity, ex-dividend dates, etc.). Nevertheless, movements in these instruments may be more probative of a change in the value of a fund's portfolio securities than broad market correlations. For example, changes in the price of a country-specific ETF may provide a better indication that the value of securities trading on the markets in that country has changed than movements in a broad market index, such as the S&P 500, even if the country's markets have tended to correlate to the S&P 500. Similarly, a fund may invest in specific securities whose prices are not necessarily correlated with those of other securities in the relevant foreign market, making correlations between the U.S. market and the foreign market less meaningful with respect to the value of the fund's portfolio securities.

To the extent that a fund decides to employ one or more of the items listed above to determine when a significant market fluctuation has occurred, it should consider the magnitude of a movement that will be deemed significant. The staff's guidance does not specifically define how large a market movement should be to be considered significant for these purposes.[42]

Given the many considerations and variables, different funds may reach different conclusions about whether and when to treat fluctuations in the value of a particular financial instrument or market as significant events, requiring the use of fair valuation procedures. Some funds may wish to treat these types of fluctuations as *indicators* that closing market prices for certain portfolio securities may no longer be reliable. Under this approach, designated pricing

[42] The 1999 and 2001 letters make reference to extreme market fluctuations, such as those experienced in Asia in 1997. However, neither letter suggests that these are the only types of market fluctuations that will affect the value of a fund's portfolio securities.

personnel would then be required to take additional steps to determine whether a significant event had occurred with respect to the affected securities and therefore whether fair valuation of those securities is warranted.

2) Monitoring

Procedures designed to monitor for significant events such as government actions, natural disasters, or armed conflicts should be similar to those designed for monitoring for significant events relating to single issuers discussed above.

Procedures to monitor for significant market fluctuations are likely to vary considerably from fund to fund. In general, such procedures should assign responsibility for monitoring for significant market fluctuations to appropriate personnel, which may include pricing personnel, portfolio managers or traders, depending on the fund's particular circumstances. If pricing personnel are not assigned this responsibility, the procedures should designate pricing personnel to be alerted when there is a market fluctuation that is considered significant under the fund's valuation procedures. The procedures also should specify the process to be followed in such an event.

3) Fair Valuation

Once a fund has determined that a significant event affecting multiple issuers has occurred, the fund may value each security pursuant to the methodologies described above with respect to significant events affecting single issuers[43] or, in appropriate circumstances, may make a uniform "top down" adjustment to the value of the affected securities (*i.e.*, apply a

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[43] *See supra* Section III.B.2.a.3) (Fair Valuation), pp. 12-14. In addition to the factors in ASR 118, the staff listed a number of factors in the 1999 letter that funds may need to consider, if relevant, when fair value pricing portfolio securities including: the value of other financial instruments, including derivative securities, traded on other markets or among dealers; trading volumes on markets, exchanges, or among dealers; values of baskets of securities traded on other markets, exchanges, or among dealers; changes in interest rates; observations from financial institutions; government (domestic or foreign) actions or pronouncements; and other news events. With respect to securities traded on foreign markets, the staff noted that factors also might include the value of foreign securities traded on other foreign markets, ADR trading, closed-end fund trading, foreign currency exchange activity, and the trading prices of financial products that are tied to baskets of foreign securities, such as exchange-traded funds. The staff noted that these factors are merely illustrative and are not intended to preclude consideration of any other relevant factors. 1999 letter at text accompanying n.14.

percentage increase or decrease to every security). As noted above, however, if the impact of that event on the affected portfolio securities would not materially affect the fund's NAV, as a practical matter, the fund could value those securities using their closing market prices.[44]

A fund may wish to employ a "top down" approach if, having followed its procedures to monitor for significant events,[45] it has obtained no information leading it to conclude that individual portfolio securities have been affected differently by the event in question.[46] The "top down" approach could be applied to an entire portfolio or to any subset of portfolio securities, such as those from a particular region, country, exchange or market sector. The staff has stated, however, that at least with respect to certain types of significant events, such as natural disasters, funds should pay particular attention to whether all issuers are affected by these types of significant events similarly and should, to the extent possible, make efforts to determine whether a particular issuer has been affected by that event differently from the damage inflicted generally.[47] It should be noted that specific information often may be difficult to obtain in these situations, particularly in the first few days following the event, despite diligent efforts to do so.

C. Fair Valuation of Foreign Securities for Other Reasons

1. Low Trading Volume

The 2001 letter states that "low trading volume of securities in some foreign markets raises issues as to the reliability of the market quotations" (and, therefore, whether those market quotations are readily available) and "can trigger the requirement to fair value price those

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[44] *See supra* text accompanying notes 33-34.

[45] *See supra* Section III.B.2.b.2) (Monitoring), p. 17.

[46] The Director of the SEC's Division of Investment Management recently noted that the staff takes the view that "it may be appropriate to employ a top down approach in certain instances, such as when there is a market event that indicates that stock prices in a foreign market generally would be significantly higher or lower at 4:00 p.m. as compared to the close of the foreign market because the event would widely impact securities held by the fund in that market. On the other hand, not all significant events will affect all portfolio securities equally, so a top down adjustment may not be appropriate." Roye Interview, *supra* note 18, at 10.

[47] 1999 letter at n.6.

securities."[48] This is the same principle that the SEC applies to thinly traded domestic securities.[49]

In light of this guidance, funds should consider adopting procedures to detect, where possible, instances where a foreign security is thinly traded, sales are infrequent, or other data exists that may call into question the reliability of market quotations. These procedures could include "stale price reports" or "stratification reports." Stale price reports identify securities whose last sale price has not changed from day to day, or over a period of several days. Stratification reports identify securities whose last sale price changed significantly from the prior day, or whose last sale price change from the prior day deviated significantly from the change in an appropriate benchmark index.

It should be noted, however, that neither low trading volume nor a report such as a stale price report or a stratification report, standing alone, implies that funds should disregard quotes that reflect actual transactions or pricing service evaluations.[50] In most cases, there should be other clear circumstances evidencing that prices are not reliable *in addition* to low volume or a significant fluctuation in a security's closing market prices before a fund employs fair valuation.[51] Moreover, the 2001 letter makes clear that a determination that market quotations are not "readily available" would not preclude a fund's board from concluding that the most recent closing market prices represent fair value; closing prices generally should be considered along with other appropriate factors when making fair value determinations.[52]

2. Trading Limits

The 2001 letter also addresses the valuation of securities that are subject to trading limits or "collars." If a security subject to a trading limit or "collar" on the exchange or market on

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[48] 2001 letter at 4.

[49] ASR 118 at 62,295.

[50] *See* 2001 letter at 9-10 and *supra* note 6.

[51] *See* Roye Interview, *supra* note 18, at 11 (confirming that low volume, in and of itself, does not require funds to disregard quotes that reflect actual transactions and recommending that funds employ flagging mechanisms such as stale price reports to identify securities as to which further investigation may be warranted to determine the reliability of quotes).

[52] 2001 letter at n.9.

which it primarily trades reaches the “limit up” or “limit down” price and no trading has taken place at that price, the 2001 letter states that funds must determine the fair value of that security.[53] If trading has taken place at that price, funds must consider whether market quotations are “readily available” for that security. If a fund reaches the conclusion that, despite that trading, the “limit up” or “limit down” price does not represent a readily available market quotation for purposes of Section 2(a)(41) of the 1940 Act, then the fund must fair value price the security.[54]

With many foreign securities, information as to whether trading limits have been reached can be difficult or impossible to obtain. Nevertheless, funds should take reasonable steps to gain access to this information, which may include encouraging their portfolio managers and local traders to report instances where securities for which they are responsible have reached these types of trading limits.

IV. VALUATION OF DOMESTIC SECURITIES IN LIGHT OF RECENT GUIDANCE

The obligation to implement and maintain pricing procedures to identify whether a significant event has occurred, which would cause the closing market price of a security to no longer be a readily available market quotation, applies to domestic securities as well as foreign securities. In the 2001 letter, the staff indicated that this may occur with respect to scheduled market closings (*i.e.*, when domestic markets close earlier than the NAV calculation pursuant to advance notice, such as on or in advance of a holiday) and unscheduled market closings (*i.e.*, when market disruptions cause domestic markets to close early on a given day or when trading is halted in a domestic security).[55]

Many funds disclose in their prospectuses that their NAV is calculated as of the close of a major market, such as the NYSE, rather than stating a specific time for the NAV calculation. In such a case, the early close of that market (scheduled or unscheduled) automatically would cause the fund to calculate its NAV as of the earlier time. As a result, with respect to securities

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[53] *Id.* at 9.

[54] *Id.*

[55] *Id.* at 4.

traded on that market, there would be no interim period between the market close and the NAV calculation and therefore no period of time during which a significant event could occur.

A. Scheduled Market Closings

The scheduled close of some domestic markets may be earlier than the time set for the calculation of a fund's NAV. Funds that are likely to hold portfolio securities that primarily trade on such markets should consider whether to implement procedures to monitor for significant events that occur with respect to those securities during the period between the close of those markets and the time specified for the calculation of the fund's NAV. The procedures also should address the fair valuation of those securities if a significant event occurs.

B. Unscheduled Market Closings

The unscheduled cessation of trading, either in the form of unscheduled market closings or trading halts in individual securities, can create a period between the closing (or last) market price and the calculation of a fund's NAV. Valuation procedures should address this possibility. Funds could consider, for example, implementing procedures that include mechanisms to alert the fund's pricing personnel that a market has closed early or that trading has been halted in a particular portfolio security.[56] Funds also should take steps to determine whether a significant event has occurred with respect to the security or securities whose trading is affected by the unscheduled closing or trading halt and, if so, to assess whether to value the security or securities using fair valuation methodologies.[57]

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[56] An early market close does not necessarily require funds to fair value portfolio securities traded on that market. For example, funds should consider whether those securities continue to trade on other markets. *See* 1997 ICI Valuation Paper at n.7 and accompanying text.

[57] For example, suppose that a fund owns securities of a company that is involved in major litigation, and trading in those securities is halted on the primary exchange on which the securities trade in advance of an important ruling in the case. The fund would need to consider whether the ruling was a "significant event" for purposes of valuing that company's securities, requiring the implementation of a fair value pricing methodology. Depending on the nature of the litigation and the court's decision, the fund might not be able to assess whether the decision has affected the value of the securities as of the time of pricing. In these circumstances, the fund may determine that the last sale price of the securities is still the best indication of their value at that time. *See supra* Section III.B.1 (Definition of "Significant Event"), pp. 9-10.

V. REVIEWING FAIR VALUATION METHODOLOGIES

The 2001 letter states that "funds should regularly evaluate whether their pricing methodologies continue to result in values that they might reasonably expect to receive upon a current sale."[58] In order to do this, the staff suggests that funds should compare their fair value prices with values that are available from other sources (if there are any).

The next actual sales price of a security (foreign or domestic) might be one such source. With respect to foreign securities, fair value prices also might be compared to the next-day opening prices of the securities on the foreign exchange or market.[59] However, the next-day opening prices or next actual sales prices for a security may differ from the fair value of that security as of the time for NAV calculation, given the subjectivity inherent in fair valuation and the fact that events could occur in the intervening period between the time for NAV calculation and the opening of the foreign market.[60] Thus, discrepancies between fair values and next-day opening prices or next actual sales prices may occur on a regular and recurring basis. These discrepancies do not necessarily indicate that the fund's fair value procedures are inappropriate.

Nonetheless, systematic comparisons of fair values to the next-day opening prices or next actual sales prices may be useful to assist fund personnel with ongoing monitoring and evaluation of the appropriateness of the fund's fair value methodologies. Fund personnel may want to document the comparison of fair value prices to next-day opening prices or next actual sales prices so that this information can be considered in assessing the reliability of the fund's fair value methodologies and whether any changes in the methodologies should be considered.

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[58] 2001 letter at 7.

[59] Indeed, the SEC has suggested that, in appropriate circumstances, funds may use the next day's opening price on the foreign exchange on which the security trades as an indicium of the fair value of the security. *See* Rule 22c-1 Release, *supra* note 11. Funds should note some of the practical consequences of using next day opening prices. For example, delaying the calculation and dissemination of an NAV to shareholders and third parties such as distributors, intermediaries and the media to wait for the open of a foreign market may cause processing and other systems problems and would cause the fund's NAV to appear as "not available" in newspapers the next day.

[60] For a fund that calculates its NAV at 4:00 p.m. Eastern time, the lag between the NAV calculation and the opening of the foreign markets ranges from three hours for securities traded on the Tokyo Stock Exchange, which opens at 9 a.m. local time (7 p.m. Eastern time) to twelve hours for securities traded on Euronext Paris, which opens at 10 a.m. local time (4 a.m. Eastern time). Fundamental economic developments or issuer specific developments during this gap in time may cause the value of securities traded on these markets to change.

VI. RESPONSIBILITIES OF THE BOARD IN LIGHT OF RECENT GUIDANCE

A. In General

Fund boards of directors or trustees have responsibilities under the 1940 Act with regard to the fair value pricing process. In setting forth the staff's views concerning the 1940 Act requirement that the board determine, "in good faith," the fair value of portfolio securities for which market quotations are not readily available, the 1999 and 2001 letters recognize three important, general points. First, there are practical limitations on the ability of fund boards to be involved in the day-to-day administration of pricing procedures. Second, fair value pricing necessarily involves making judgments. There is not one "right" way to fair value securities, and different funds (with different boards), consistent with the good faith standard, could arrive at different prices for the same security. Third, the letters underscore the importance of having well-considered, reasonable valuation procedures that have been approved by a fund's board, are consistently applied, and are reviewed on a regular basis.

Boards should examine whether valuation procedures for securities traded on foreign markets will reasonably ensure that that the prices of those securities will not be "stale" because they do not take into account significant events that occur subsequent to the time those foreign markets close. At the same time, boards should recognize that closing market prices generally provide an objective measure of the value of fund portfolio securities, whereas fair value prices necessarily involve some degree of subjectivity.[61] In the case of events whose effects upon the value of portfolio securities may be unclear, the objectivity provided by closing market prices may result in fairer and more accurate valuations. Conclusions regarding which valuation procedures appropriately balance these considerations, like other board determinations, ultimately are matters of business judgment.

The staff's specific guidance, as it relates to delegation and oversight by fund boards, is discussed below.

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[61] Presumably, this is why funds are required to use market prices when they are readily available. *See supra* note 6 and accompanying text.

B. Board Delegation of Fair Value Pricing Responsibilities

In discussing the board's "good faith" responsibilities, the 1999 letter notes that fund boards typically are only indirectly involved in the day-to-day pricing of a fund's portfolio securities, and states that most boards fulfill their obligations by reviewing and approving pricing methodologies.[62] The letter indicates that while the board may formulate these methodologies, more typically they are recommended and applied by fund management.

The board practices described in the 1999 letter are used because of the practical reality that most fund directors (particularly independent directors) do not have the expertise to devise specific pricing methodologies themselves and cannot reasonably be expected to be available every time a valuation issue arises.[63] Likewise, although fund boards are generally apprised of the formulas or other methodologies that may be used by third party pricing sources, such as pricing services or dealers, they typically do not approve each specific formula or other methodology.[64]

The letter mentions that there are a number of techniques that funds may use to minimize the burdens of fair value pricing on directors, such as delegating certain responsibilities for fair value pricing decisions to a valuation committee.[65] As described in the 1997 ICI Valuation Paper, such committees may consist of designated fund management personnel.[66] Fund groups that have not already formed valuation committees may wish to consider whether the use of such a committee would facilitate or enhance their current pricing processes. Regardless of whether a committee is used, or whether that committee includes directors as members, the board retains oversight responsibilities with respect to fair valuation determinations.

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[62] 1999 letter at 7.

[63] *See* 1997 ICI Valuation Paper at 10-11.

[64] *See id.* at 12-13.

[65] 1999 letter at 7. Along the same lines, the 2001 letter states that "[c]onsistent with the good faith requirement, boards may appoint persons to assist them in determining fair values and to make actual fair value calculations." 2001 letter at 8, n.23.

[66] *See* 1997 ICI Valuation Paper at 28-29 for a discussion of the possible functions of fund management valuation committees.

According to the 1999 letter, the degree of fund board involvement in the fair value pricing process necessary to satisfy the "good faith" standard depends on the comprehensiveness of the pricing procedures adopted for the fund. If a fund's board has approved comprehensive procedures governing the process by which fund management should fair value price portfolio securities, it would need to have comparatively little involvement in the day-to-day valuation process in order to satisfy its good faith obligation.[67] On the other hand, the board's involvement may need to be "greater and more immediate" when pricing procedures are relatively less comprehensive.[68]

Based on the foregoing, funds and their boards may wish to adopt pricing procedures that are as comprehensive as is feasible,[69] and that are implemented by fund management or a qualified third party. However, because it is not possible to anticipate every valuation issue that might arise, procedures should remain flexible enough to allow pricing personnel to take appropriate action in a timely manner in fair value pricing situations not specifically covered by the fund's valuation procedures. Thus, the board-approved valuation procedures should set out procedures to be followed by pricing personnel in such situations, including when it may be appropriate to seek board ratification promptly following any fair value determination.

C. Board Oversight Responsibilities

Fund boards retain ongoing oversight responsibility for the valuation of fund assets, whether they delegate valuation functions or not. Accordingly, citing earlier SEC guidance, the 2001 letter reminds fund boards that they must "continuously review the appropriateness of the method used in valuing" portfolio securities.[70] In the context of this review, fund boards should receive periodic reports from fund management or a qualified third party that discuss the

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[67] Some fund boards follow a practice of reviewing periodically (*e.g.* quarterly) determinations made by fund management.

[68] 1999 letter at 8.

[69] In this regard, funds may wish to consider whether their procedures should specifically reference factors to be considered in fair value pricing situations. *See* 1999 letter at 5; 2001 letter at 8 (discussing the need for fund boards, in making fair value determinations consistent with the good faith standard, to consider all of the appropriate factors that are available to them). *See also supra* notes 35-37 and accompanying text.

[70] 2001 letter at 7 and 8.

functioning of the valuation process and that focus on issues and valuation problems that have arisen.[71] Regular communication between fund management and a fund's board on valuation issues – particularly issues involving fair value pricing – should minimize the possibility of a finding that the board failed to act in good faith in connection with a fair value determination for a fund portfolio security.

VII. CONCLUSION

The critical role that daily pricing plays in the mutual fund business makes valuation a continuing subject of regulatory and public focus. The staff's recent guidance reconfirms the importance of adopting and implementing reasonable procedures for valuing fund portfolio securities, including in particular securities for which market quotations are not "readily available." Fund groups should continue to devote careful attention and adequate resources to the appropriate handling of these matters.

[71] 1999 letter at 8.