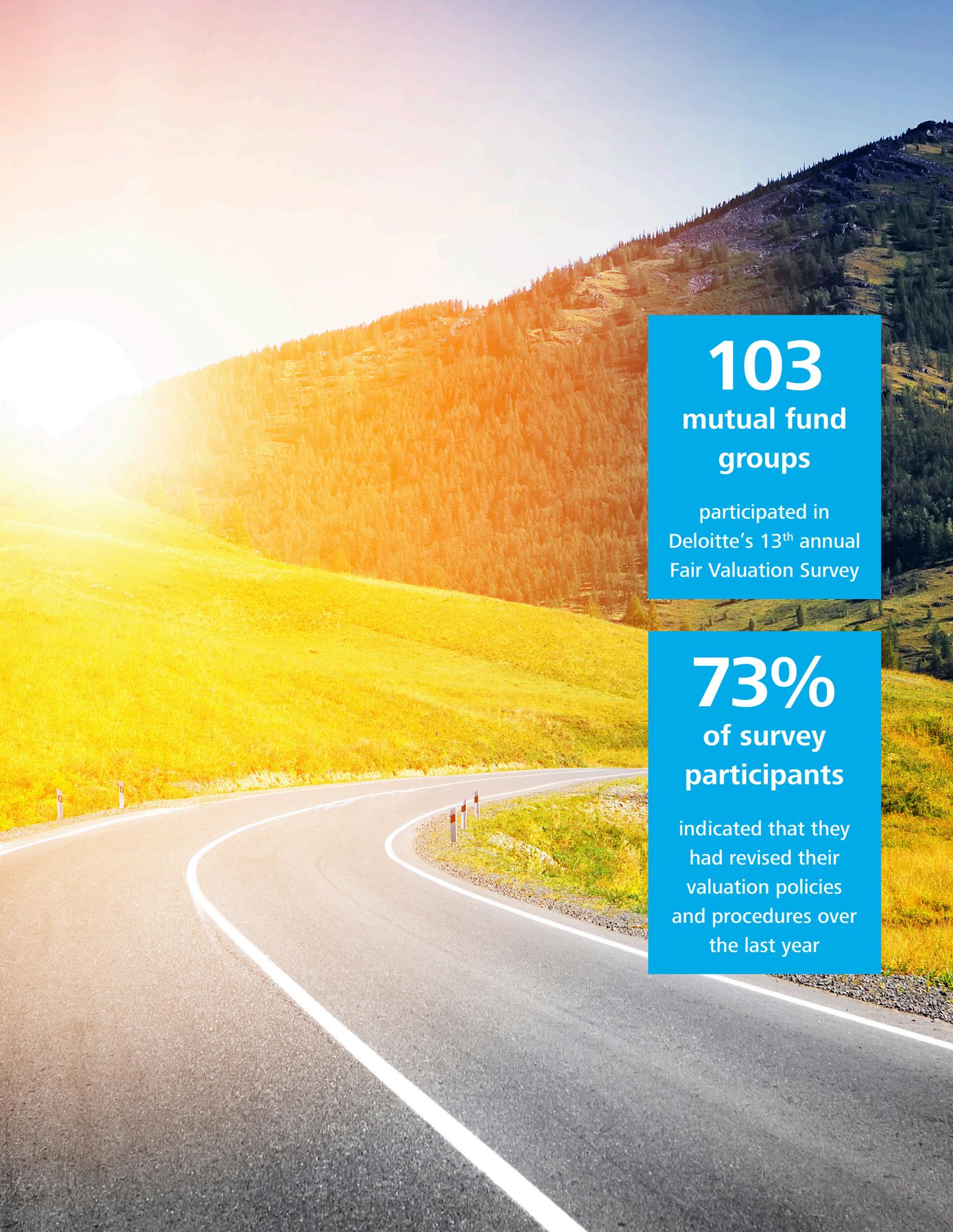


Deloitte.

Fair Valuation Pricing
Survey, Thirteenth Edition
Managing valuation risk for
what is around the corner

Contents

| | |
|--|----|
| Executive summary | 1 |
| Proactive Board governance | 2 |
| Use of market data and the challenge process | 4 |
| Liquid, liquid, illiquid — what now? | 5 |
| Managing valuation risk | 6 |
| Looking ahead | 7 |
| Key findings | 8 |
| Contacts | 10 |



103
mutual fund
groups

participated in
Deloitte's 13th annual
Fair Valuation Survey

73%
of survey
participants

indicated that they
had revised their
valuation policies
and procedures over
the last year

Executive summary

Governance, use of market data, liquidity, and managing valuation risk top the agenda for 2015 survey participants

We are pleased to provide the summary results of the Deloitte Fair Valuation Pricing Survey, 13th Edition (the “FV Survey”). Certainly, the number 13 is often associated with being unlucky, and this year’s FV Survey release lands in the aftermath of some fairly inauspicious developments for mutual fund companies. In a period of a few short weeks, we experienced computer glitches such as the NYSE suspension of trading, technology challenges, significant volatility in both US and global markets such as China, and the suspension of trading on the Greek Stock Exchange. In addition, regulators have ratcheted up their scrutiny of the mutual fund valuation process, adopting new rules that promise to make an already challenging operating environment even more so.

Fortunately, our FV Survey results indicate that the mutual fund industry continues to improve its procedures in an effort to better manage valuation risk, enhance the governance process, and expand time and resources to strengthen the valuation process. If past is prologue, developments this summer may indicate that mutual fund companies need to double down on this front, as it is conceivable that the recent bouts of volatility may be more a feature than an abnormality over the coming months.

One thing is clear: With more than 100 FV Survey participants — a new record for the Deloitte FV Survey — interest in the valuation process and the desire to advance the valuation process has never been greater. Recognition is growing that the dynamic nature of markets, events, and regulators demand a valuation process that is constantly evolving, incorporating lessons learned and new experiences as well.

This means mutual fund groups need to constantly be prepared for managing what is around the next corner. This year’s findings demonstrate that investment managers, Boards, and their stakeholders appreciate this reality. As anticipated, nearly three-quarters of the participants — 73 percent — indicate they have revised their valuation policies and procedures over the past year, finding opportunities to evaluate and enhance their valuation processes. The most common changes relate to the addition of more pricing sources and investment types, enhancing language for certain hard-to-value investments, and updates and changes to pricing committee composition, responsibilities, frequency of meetings, and due diligence procedures over pricing vendors.

Proactive Board governance

When we reported the survey results last year, there was considerable focus within the industry on the surprise July 2014 valuation guidance by the US Securities and Exchange Commission (“SEC”) included in the Money Fund Rule.¹ In the prior year’s survey, only 5 percent of our participants expected the SEC to issue valuation guidance in 2014. Subsequently, the agency provided additional guidance and assistance — by way of frequently asked questions (“FAQs”) surrounding the Fair Valuation and Money Fund Rule² — that mutual fund directors could continue to delegate certain tasks within the valuation policies and procedures. The FAQs helped reiterate to the industry that the Board has the ability to delegate to others (such as management) the process of assessing the inputs, methods, models, and assumptions of a pricing vendor. This allows Boards to leverage management in the execution of due diligence and oversight of pricing vendors so long as they ultimately are comfortable with the results of those activities.

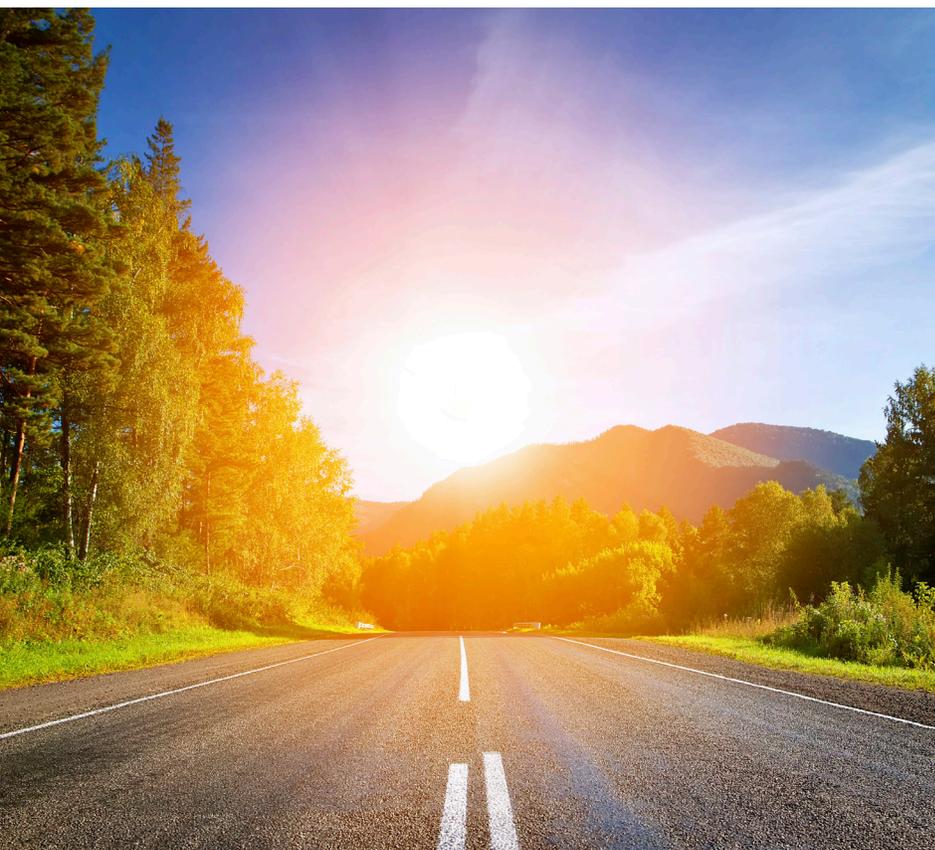
These regulatory developments were reflected in the current FV Survey findings. Nearly a third — 32 percent — of FV Survey participants believe that, of all recent guidance and regulatory activities, the Money Fund Rule guidance will have the greatest impact on the industry’s valuation process, while 19 percent thought the FAQs would be the predominant force for change. The fact that more than half of the participants pointed to the Money Fund Rule and related guidance shows the potential impact this may have over the long run. We fully support the fact that mutual fund Boards need to be aware of this guidance and the related valuation considerations, along with future SEC Division of Enforcement valuation cases, which 35 percent of participants still see as having the greatest impact on the valuation process. Almost a third - 32 percent - of FV Survey participants indicate that they would find additional SEC guidance on the clarification of the delegation responsibilities between the mutual fund Board and the mutual fund management most helpful.

We asked FV Survey participants what percentage of the Board agenda is spent on valuation matters; 57 percent said 6 percent to 15 percent, while 34 percent indicated less than 5 percent. Also, only 1 percent of FV Survey participants indicated that the percentage spent has decreased, while 52 percent said it increased and 47 percent thought it remained about the same. We would have expected the percentage to increase given the regulatory focus on valuation, newly proposed and final rules, and enforcement actions.

As in prior years’ surveys, most participants favored the delegation of valuation oversight to a separate committee as the preferred valuation Board governance model, but their numbers are declining (69 percent this year vs. 74 percent last year). This drop coincides with the increase in the number of full mutual fund Boards that oversee all valuation matters, up to 21 percent from 16 percent in 2014. This shift in attitude about valuation governance is potentially illustrative of previous public debate over where risk management should be “housed.”

¹ <http://www.sec.gov/rules/final/2014/33-9616.pdf>

² <https://www.sec.gov/divisions/investment/guidance/2014-money-market-fund-reform-frequently-asked-questions.shtml>



Another discussion point involves the participation of non-interested mutual fund Board members. While their real-time involvement is little changed, the results show non-interested mutual fund Board members' involvement in specific circumstances has changed. Instances in which they must be involved include:

- The first day a holding is valued using a new pricing source or methodology that was not previously included in the valuation policies and procedures (17 percent this year vs. 7 percent in 2014)
- When an unforeseen country, industry, or issuer event occurs that requires management to challenge the validity of the existing valuation policies and procedures (25 percent vs. 14 percent in 2014)

Also, for those circumstances whereby a mutual fund Board member must be notified, the survey picks up a number of notable changes:

- Daily, for the pricing of any holdings internally fair valued (17 percent vs. 11 percent a year ago)
- When an unforeseen country, industry, or issuer event occurs that requires management to challenge the validity of the existing valuation policies and procedures (19 percent vs. 26 percent 2014)

The FV Survey results suggest that mutual fund Boards continue to look for opportunities to be part of the valuation process when price uncertainty enters the market. The trends indicate mutual fund Board members want to be more than just notified — they want to be actively aware when events occur that are not addressed in the current valuation policies and procedures. This is a topic that the SEC had been focused on for well over a year, suggesting in public forums that mutual fund companies have a plan in place to address changes in market conditions and the impact on securities between regularly scheduled Board meetings as well as formal changes to valuation policies and procedures.

The trends indicate mutual fund Board members want to be more than just notified — they want to be actively aware when events occur that are not addressed in the current valuation policies and procedures.

The industry seems to be listening. In fact, some FV Survey participants noted the following issues prompted a discussion between a member of management and a mutual fund Board member outside of regularly scheduled meetings over the past year:

- Trading halts, suspensions, or other market disruptions; 46 percent
- Credit crisis in Greece; 36 percent
- Use of a new pricing methodology, pricing vendor, or broker; 34 percent
- SEC enforcement actions; 31 percent
- Civil and political concerns in Russia; 21 percent

The bottom line is that mutual fund Boards continue to be proactive in their governance of the valuation process.

Use of market data and the challenge process

Price challenges continue to be an issue of significant interest in the FV Survey. It is easy to understand why; the challenge process is highly judgmental and one in which potential conflicts of interest can arise. The process calls for strong controls to ensure that management bias does not play into the valuation process.

Our current FV Survey illustrates the use of market data as a maturing trend in the treatment of price challenges. Clearly, such information helps mutual fund groups go beyond the pricing challenge process and contests the need for certain secondary source comparisons. It can also support determinations regarding risks associated with valuations where little market data exists to support the underlying evaluation. We believe that tracking market data is a great key valuation indicator (KVI) for mutual fund advisers and Boards to add to their dashboards.

Mutual fund groups have long debated and executed price challenges based on market data and secondary vendor price comparisons, as well as news and events specific to the market, industry, and issuer. We continue to see in our FV Survey responses that one favored policy is to take action on a price challenge when conflicting market data suggests that a price is not accurate. To that end, the industry's overall reliance on market data remains high in valuation deliberations; 61 percent of the participants now regularly use market data, up from 54 percent in the prior year's survey.

An unsettled issue involves the appropriate amount of documentation, as a next step, required of an affirmed price challenge by the pricing vendor. Here, the industry is divided between the 37 percent that document the nature of the pricing challenge and note that the pricing vendor affirmed its evaluation, and the 43 percent that, upon receiving an affirmation, reach back out to the initiating source, discuss the results of the challenge, and conclude thereafter.

The participants are more aligned with how they act on such information. In the FV Survey, 79 percent indicate they may change the price if they feel it is inaccurate, even if they do not receive a response from the pricing vendor; that represents an increase from last year's 73 percent response rate. Mutual fund Boards also want to know about the challenge process; one maturing trend is the reporting of the price challenge information to the mutual fund Board. In the current year's FV Survey, 57 percent receive such information, up from 52 percent a year ago.



Liquid, liquid, illiquid — what now?

As the FV Survey came to a close, few fund topics were receiving more attention than liquidity. Since January 2014, when the SEC released the Investment Management Update “Risk Management in Changing Fixed Income Market Conditions” (the “Update”),³ there has been a steady intensifying of regulatory focus on liquidity. Specifically, the Update indicated that mutual fund advisers should consider: 1) assessing and stress testing liquidity; 2) conducting more general stress testing and scenario analysis on inputs such as interest rate changes and widening of spreads; 3) performing risk management evaluation of portfolio composition, concentration, and diversification; 4) enhancing communications with the mutual fund Board to include reporting of risk exposures and liquidity determinations; and 5) updating shareholder communications on the adequacy of disclosures and completion of a communication plan should escalation be required to external stakeholders.

The SEC’s Office of Compliance, Inspections, and Examinations (OCIE) quickly followed up with sweep exams focused specifically on fixed income fund liquidity. These sweep exams targeted, among other areas, how much progress mutual fund advisers were making with regard to the considerations discussed in the Update.

Finally, as spring turned into summer, the SEC released in 2015 the proposed rule “Investment Company Reporting Modernization,” in which it proposed to amend Regulation S-X Rules 12-13 through 12-13D⁴ with the intention of providing investors with greater transparency regarding investments they deemed illiquid. Now the SEC has proposed additional guidance on liquidity — primarily dealing with the definition of an illiquid security and related to liquidity monitoring programs.

The good news is the industry appears well-prepared for whatever comes next. Two-thirds of our FV Survey participants indicate that their mutual fund advisers have a formal liquidity monitoring program already in place, and nine percent say they are actively developing one. Of course, how FV Survey participants define an illiquid security varies — 64 percent use the SEC’s definition, 8 percent use a definition based on those classified as level 3 investments under generally accepted accounting

principles, and 14 percent use definitions that are dependent on security class and market conditions.

Factors considered in evaluating liquidity ranged from 91 percent assessing the securities in the portfolio to 58 percent considering the magnitude of redemptions in the past. FV Survey participants identified other procedures that they use to manage liquidity — 82 percent responded that they monitor the percentage of an issue that they own and a further 15 percent have established an ownership threshold that if exceeded, the security would be considered illiquid. Also, to manage redemption activity, 53 percent and 20 percent, respectively, focused on the need to have bank lines of credit and interfund lending facilities in place to meet liquidity needs. We believe that it is prudent to have a combination of procedures to assess and report liquidity risks, as well as have cash facilities in place that could manage the disruption to mutual funds, performance, and shareholders.

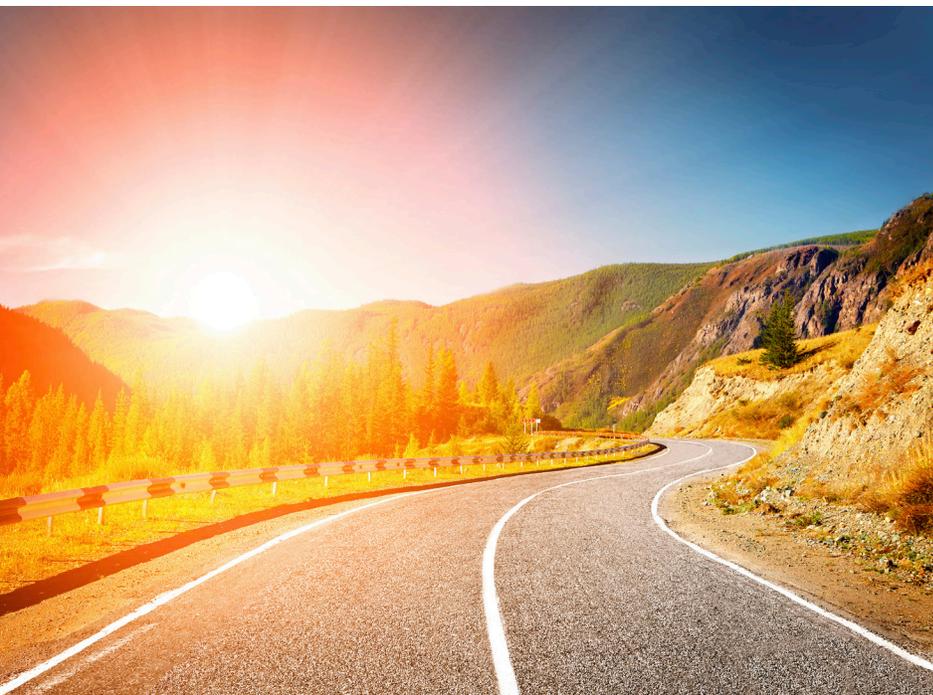
Of note is that 38 percent of the FV Survey participants believe that the proposed changes to Regulation S-X — designed to identify illiquid securities in the schedule of investments — would be helpful to shareholders. Other FV Survey participants believe the changes would only be helpful to the SEC and other regulators (33 percent), or provide no additional value at all (29 percent). The industry will need to remain patient as it waits to see if this disclosure is required going forward.

A potential valuation issue that may pop up around the corner is the intersection of liquidity tools, data analytics, and specifically the application of machine learning to valuation determinations. As those in the field know, the study of pattern recognition and computational learning theory has given rise to advanced machine-based tools that strengthen predictive capabilities through the construction and analysis of algorithms. Shortly, such information will be able to identify and estimate the impact of liquidity on a particular security position or an asset class. The emergence of machine learning will invariably challenge the mutual fund industry and regulators to come to grips with the credibility of liquidity information and whether such tools should be required to be considered in fair value judgments.

³ <https://www.sec.gov/divisions/investment/guidance/im-guidance-2014-1.pdf>

⁴ <https://www.sec.gov/divisions/corpfin/ecfrlinks.shtml>

Managing valuation risk



As in the prior year's survey, the formalization of risk oversight within the mutual fund industry continues to be a maturing trend, with 77 percent of the fund groups indicating that they have a risk function in place. In this year's FV Survey, 53 percent of mutual fund groups identify risks associated with the valuation of certain investment types as part of their formal Rule 38A-1 or enterprise risk assessment process, compared to 48 percent in 2014.

Overwhelmingly, 96 percent of those FV Survey participants have identified internal controls to manage valuation risk, and 64 percent have identified valuation of portfolio investments within the risk charter. Specifically, 19 percent identified the valuation pricing challenge process as a valuation risk, while 24 percent cited valuation model validation, and 40 percent identified liquidity considerations.

This FV Survey finding is a predictable one, as a maturing trend has been the intersection of valuation and formal risk management practices. Thus, the identification of more individual valuation risks surely enhances the overall importance of managing valuation risk. We expect this trend to continue.

Knowing exactly what to receive and when to receive it is not always easy, as some materials are not necessary in all circumstances. One of the emerging trends in this year's survey is that 25 percent of survey participants indicate that the Board has added valuation risk dashboards containing KVIs to assist in their oversight of the valuation process, as compared to 9 percent in the prior year. Given the judgment required by management and the Board in knowing what reports are necessary and the regulatory guidance around the need for "continuous monitoring," it is possible that some Boards may use tools like these more often as a risk-intelligent way to determine when the valuation environment has changed, when the level of price uncertainty is higher for a particular asset class, when Boards might want to increase their level of involvement, and what information they will need to receive to effectively do so.

As with many things, the definition of what mutual fund managers and Boards have designated as a KVI varies widely, but the important point is the maturing trend of risk-based tools being employed in the valuation process. Another notable finding is that 19 percent of survey participants who have developed risk management scenarios — such as asset and stress test liquidity tests that are consistent with the SEC's January 2014 guidance⁵ — and used the results as part of their valuation process. Finally, mutual fund companies' use of internally developed models is rising and becoming more entrenched; 14 percent of the participants indicate that their use of such models increased over the past 12 months, and nearly 60 percent of the participants say they use them in their valuation process.

⁵ <http://www.sec.gov/divisions/investment/guidance/im-guidance-2014-1.pdf>

Looking ahead

Given the events of the past few months, it seems clear that valuation will continue to be a hot-button issue for the mutual fund industry. In some cases, these developments have poked holes in valuation processes once deemed impenetrable; in others, they have simply helped to refocus attention on emerging and maturing valuation trends. In particular, certain matters on the valuation front will bear monitoring in the coming year:

1

Liquidity and valuation

The SEC's release of proposed rules on liquidity and liquidity risk management programs ensures that the topic of liquidity will be on the mutual fund industry agenda for some time. We believe that sweep exams by OCIE will continue in this area as the SEC focuses on the impact of rising interest rates on redemption and liquidity risk. We also believe that the SEC should take a leading role in determining the need for liquidity adjustments to each asset class when third parties are involved in providing such data. This would provide the mutual fund industry the necessary guidance to move forward.

2

Eye on mutual fund Boards

The role of mutual fund Boards will likely gain continued attention and prominence. Mutual fund Boards will be expected to be diligent and proactive in this respect, identifying those valuation "moments that matter" when they need to meet and deliberate valuation considerations and document governance actions. This will go a long way to reduce the risk of management and the Boards being second-guessed.

3

Intersection of risk and valuation

The use of dashboards and KVIs has increased, continuing a trend of marrying risk intelligent governance and Board reporting. These themes will continue to intersect with the maturing of the mutual fund industry's risk management programs. As they collide and combine, new tools, metrics, and reporting will impact and enhance the valuation process.

4

Overseeing the extended enterprise

As mutual fund companies often outsource non-portfolio management operations to third-party vendors, the challenges related to cyber and data security, change management controls, and understanding the overall control environment and its operating effectiveness will push mutual fund advisers and fund Boards to review their emergency plans in anticipation of the next valuation disruption and work to get a better handle on their extended enterprise.

Key findings

This year's FV Survey brought to light some notable findings relating to Board governance, policies and procedures, pricing sources, specific investment types, halted securities, and private equity.

Board governance

- 45 percent of FV Survey participants indicate that the level of detail provided to their Boards or one of its committees had changed over the past 12 months.
- 34 percent of the FV Survey participants indicate that their Boards are specifically considering liquidity in performing its valuation oversight.
- Nearly a quarter of FV Survey participants reveal that their Boards discussed the text contained in the SEC's recent Money Fund Rule and made changes to its oversight as a result.

Policies and procedures

- Similar to 2014, 75 percent of FV Survey participants have regularly scheduled dates, most commonly on an annual basis, at which valuation policies and procedures are updated.
- Nearly 50 percent of FV Survey participants either increased automation in the valuation process over the past year and/or conducted a study designed to find efficiencies in the valuation process.
- 54 percent of FV Survey participants indicate that the front office is responsible for notifying the fund accounting department or management of any market- or issue-specific events that have occurred and may affect pricing.

Pricing sources

- 61 percent of FV Survey participants note that they submit a price challenge only when they have conflicting market data to suggest that the price from the primary vendor is inaccurate, compared to 54 percent in the prior year.

Fair value considerations for specific investment types

- For those using triggers, the S&P 500 (most commonly with a 50 basis point trigger) and S&P 500 futures (most commonly with a 75 basis point trigger) are the most frequently used proxies.
- 58 percent of FV Survey participants use bid pricing exclusively for fixed-income securities.
- Depending on the asset class, between 33 percent and 38 percent of FV Survey participants indicate that they compare daily fixed income prices received from their primary pricing source to a secondary source.
- 82 percent of the FV Survey participants determine valuations for interest rate swaps based primarily on prices obtained from a pricing vendor; 84 percent used such prices for determining credit default swap valuations.
- 7 percent of FV Survey participants lowered the trigger percentage used for fair-valuing foreign equities from the closing market price, and the percentage of FV Survey participants reporting that they use zero triggers was 47%.

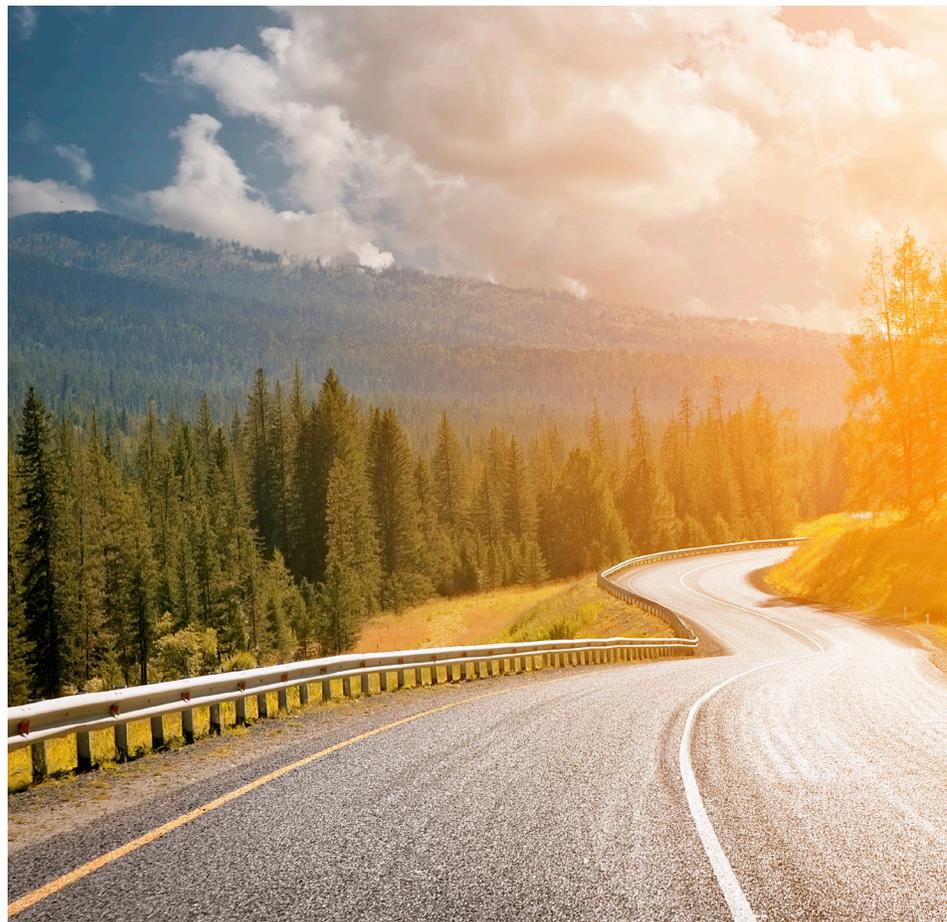
Halted securities

- 69 percent of FV Survey participants indicated that when a security is halted or delisted, they use the most recently traded price without adjustment, assuming no specific information to the contrary exists. When evaluating for events subsequent to the security halt, 57 percent of FV Survey participants indicated that they would not change this price unless company specific news arises or bids exist.

Private equity

- 82 percent of FV Survey participants indicated they would apply a fair value modeling process to a newly acquired private equity position within one quarter of acquisition. 83 percent evaluate these models at least on a quarterly basis.
- 50 percent of FV Survey participants indicated that they rarely use more than one valuation methodology. 37 percent noted that they sometimes use multiple valuation methodologies, and 13 percent indicated that they mostly use multiple valuation methodologies.

Our FV Survey series continues to exhibit that industry participants are focused on the intersection of risk management, strong controls, proactive governance, and use of market data as imperatives for providing shareholders with accurate net asset values and protecting the franchise brand. The results from this latest report indicate the emergence of new valuation trends as other trends are maturing into standard industry practices.



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