

A hand in a dark suit sleeve with a white cuff is reaching from the right side of the frame towards a tall, precarious tower of light-colored wooden blocks. The hand is positioned to pull one of the blocks from the middle of the tower. The tower itself is built with blocks in a staggered, interlocking fashion, creating a complex, unstable structure. The background is plain white.

# Assess the Risks

KEY STRATEGIES FOR  
OVERSEEING DERIVATIVES

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# Contents

|                                                                        |           |
|------------------------------------------------------------------------|-----------|
| Who's Who                                                              |           |
| <b>BoardIQ's RoundTable</b>                                            | <b>2</b>  |
| <hr/>                                                                  |           |
| Action Step One                                                        |           |
| <b>Don't paint derivatives with a broad brush</b>                      | <b>4</b>  |
| <hr/>                                                                  |           |
| Action Step Two                                                        |           |
| <b>Find out why — and whether — the advisor should use derivatives</b> | <b>8</b>  |
| <hr/>                                                                  |           |
| Action Step Three                                                      |           |
| <b>Determine the advisor's competence</b>                              | <b>10</b> |
| <hr/>                                                                  |           |
| Action Step Four                                                       |           |
| <b>Scrutinize the back office</b>                                      | <b>14</b> |
| <hr/>                                                                  |           |
| Action Step Five                                                       |           |
| <b>Conduct ongoing assessments</b>                                     | <b>16</b> |
| <hr/>                                                                  |           |
| Action Step Six                                                        |           |
| <b>Be wary of pricing and valuation difficulties</b>                   | <b>18</b> |
| <hr/>                                                                  |           |
| Action Step Seven                                                      |           |
| <b>Educate the board</b>                                               | <b>20</b> |
| <hr/>                                                                  |           |
| Action Step Eight                                                      |           |
| <b>Understand the tax ramifications</b>                                | <b>22</b> |
| <hr/>                                                                  |           |
| Action Step Nine                                                       |           |
| <b>Weigh conflicts and custody considerations</b>                      | <b>24</b> |
| <hr/>                                                                  |           |
| Conclusion                                                             |           |
| <b>The nine action steps</b>                                           | <b>26</b> |
| <hr/>                                                                  |           |

# Introduction

In recent years, the use of derivatives by mutual funds has soared. These securities derive their value from an underlying asset such as a bond, stock, commodity or currency. As their use has increased, so have regulators' concerns about oversight of these complex financial instruments. Problems pertaining to the widely used derivatives, inverse floaters, arose earlier this year, and today there is considerable unease over derivatives tied to deteriorating credit markets.

In his keynote speech at the 2007 Mutual Funds and Investment Management Conference, the SEC's Division of Investment Management chief Buddy Donohue specifically cited the "increasing use by funds of derivatives and sophisticated financial instruments" as one of his top concerns. Donahue worried that many fund groups are wading into "uncharted territory." He voiced concerns that some funds' accounting, legal and com-

pliance systems and procedures may not be able to navigate the inevitably tricky shoals. The current turmoil in the Structured Investment Vehicles (SIV) market bears him out.

Mutual fund boards, prompted by the rise in use of derivatives and a greater awareness of their risks, are raising questions about derivatives. Trustees want to understand the effect derivatives have on risk management, valuation, accounting and taxation, legal and compliance, liquidity, portfolio management and shareholder disclosures. Yet there is very little guidance about the specific elements of board oversight when it comes to derivatives.

BoardIQ has assembled a Panel of experienced mutual fund trustees and industry experts to brainstorm how to improve the board's oversight of derivatives and complex instruments. The results of their discussion follow.



WHO'S WHO

## BoardIQ's Roundtable



**Ashok Bakhru** is president of ABN Associates, a management and financial consulting firm. He was Chief Financial Officer and Chief Administrative Officer of Coty Inc. Prior to that, he spent 25 years at Scott Paper Company in Philadelphia. Bakhru serves as Chairman of the Board of the Goldman Sachs Group of Mutual Funds, with assets of \$130 billion. He is and Chairman of the Board of the Goldman Sachs Fund of Funds, a registered hedge fund.



**Kathleen C. Cuocolo** founded Cuocolo & Associates, providing consulting services to the investment management community on governance, product development and operations matters. As an executive vice president at State Street Corporation, she created their Fund Administration Business and launched the first exchange-traded funds with the American Stock Exchange. Cuocolo is Audit Chair for the Citigroup Alternative Investments Trust, and was an independent director of the Guardian Life Funds, a Director and President of the China Fund, and Chairperson and President of the Select Sector ETFs.



**Elizabeth Duggan** is Vice President at Interactive Data Corporation, where she is responsible for creating and managing new product marketing initiatives. Duggan has 20 years experience in market data services working with investment companies, investment advisers, broker/dealers and other financial institutions, and specializes in the advancement and launching of Interactive Data's new evaluation services. Prior to joining Interactive Data, Duggan served as a senior vice president of Thomson Financial Securities Management.



**Anthony S. Evangelista** is a financial services partner in the Philadelphia office of PricewaterhouseCoopers. He has recently completed a tour in the firm's London office, where he led the Investment Management Risk Assurance Services practice. Prior to that, Evangelista was resident in the New York office of PricewaterhouseCoopers, where he led the firm's Investment Management Regulatory Compliance practice. Earlier Evangelista was with the Securities and Exchange Commission in the Division of Investment Management; Office of the Chief Accountant.



**Gary L. French** is senior vice president, fund administration, State Street Corporation. Prior to joining State Street, he was a managing director in charge of Deutsche Bank's fund operations unit, and president of UAM Fund Services. Earlier in his career, he was with Fidelity Investments where he served as senior vice president of fund accounting and as treasurer of the Fidelity Group of mutual funds.



**Peter W. Gavian** serves as an independent trustee of the Calvert Group and is Chairman of the investment policy committee. A former venture capital investment officer, Gavian founded Corporate Finance of Washington, Inc., in 1976 and has served as an expert appraiser of corporations and financial institutions for audit, SEC, IRS, ESOP and ERISA purposes. He frequently renders expert opinion on complex legal cases for the Internal Revenue Service and for the Solicitor, U.S. Department of Labor.



**Karen Horn**, Senior Managing Director of Brock Capital, has a long and distinguished career in the financial arena. She previously served as President of Global Private Client Services and Managing Director, Marsh, Inc. Prior to that Horn was Head of International Private Banking and Managing Director, Bankers Trust and Chairman and CEO of Bank One, Cleveland. She also served as President of the Federal Reserve Bank of Cleveland. Currently she is Chairman of the Audit Committee of T. Rowe Price Mutual Funds. She is also the Presiding Director of Eli Lilly and Company, a director and Chairman of the governance committee of Simon Property Group and a director of Fannie Mae.



**Bruce G. Leto** is a Partner and Chair of the Investment Management Group at Stradley Ronon Stevens & Young, LLP. For over 21 years, he has counseled investment companies, investment advisers, independent trustees and broker-dealers on securities and corporate matters relating to pooled investment products, including registered and unregistered, open- and closed-end investment companies. He is a member of the firm's Board of Directors and has been Chairman of the firm's Investment Management Group since 1994.

## Don't paint derivatives with a broad brush

Derivatives should not become shorthand for the most illiquid and exotic products. The term encompasses an extremely large category of instruments. Some are more sophisticated than others, and new instruments are being created in the market almost daily. But many derivatives are time-tested instruments, with deep and liquid markets. Hence, boards should bring more specificity to their conversations about derivatives and avoid letting the word refer solely to newer or exotic derivatives, or aggressive investment strategies.

Common derivatives that have been in use for many years include options and warrants for equity funds and interest rate swaps for fixed income funds. Derivatives can serve to quickly and cheaply adjust a portfolio's duration, market or interest rate exposure, and other characteristics. This can serve to reduce the risk profile of a portfolio or adjust it to desired specifications.

Instruments such as credit default swaps are more cutting-edge. The market for these types of derivatives may be less liquid, and counterparty risk may be greater. In addition, while credit default swaps resemble fixed income investments, in practice they demonstrate some equity-like characteristics.

Whether plain vanilla or cutting-edge, derivatives require additional regulatory and administrative protocols that in turn require oversight and judgment on the part of fund boards. The heavily regulated nature of the mutual fund industry means that boards must be sure all the necessary controls and procedures are in place to monitor the unique features of each derivatives strategy.

The fund prospectus is an important first step in board oversight of derivatives. Some fund prospectuses may be written broadly in order to give portfolio managers maximum flexibility around investment vehicles. The rules of registration statements require a fund prospectus to describe only the principal investment strategies used in the fund. Additional strategies may be relegated to the Statement of Additional Information. Thus, a fund that never uses derivatives may, in fact, state in its registration documents that derivatives are permitted. Boards should push for plain English discussions of derivatives usage in all fund documents.

While the board's job isn't to "greenlight" the use of specific derivatives, it should be sure it isn't taken by surprise when a specific instrument finds its way into a fund. Any instrument that can be used should be understood by the board. When an advisor decides to move into derivatives the mutual fund board should have a process to conduct the necessary oversight.

### THE PANEL'S CONCLUSIONS:

- 1** Don't think "derivatives" means only the most exotic instruments. Many derivatives are liquid and widely used and accomplish portfolio goals quickly and cost-effectively.
- 2** Even time-tested derivatives require additional boardroom monitoring.
- 3** Push advisors to identify in their registration statements the types of derivatives they are using and the ones they may use.

## DEFINING DERIVATIVES

A derivative is a security whose value is dependent upon, or derived from, one or more underlying assets. Here are definitions of the most frequently used derivatives:

### Equity Derivatives:

- **Call option:** A contract that gives the buyer the right (but not the obligation) to buy the underlying asset at a specified price (strike price) during a specified period. The buyer pays a fee, or premium, for this right.
- **Put option:** A contract that gives the buyer the right (but not the obligation) to sell the underlying asset at a specified price (strike price) during a specified period. The buyer pays a fee, or premium, for this right.
- **Collar:** A strategy that uses options to limit to a specific range the positive or negative returns on an investment in an underlying asset.
- **Exchange-traded option:** One with terms that are standardized by the exchange on which it trades.
- **Over-the-counter option:** A contract that is traded directly between two parties, without going through an exchange or other intermediary.
- **Forward contract:** An agreement to purchase or sell an asset at a pre-arranged future point in time at a pre-determined price. Forward contracts do not have standardized terms.
- **Futures contract:** A standardized contract, traded on a futures exchange, to purchase or sell an underlying asset, such as a physical commodity or a financial instrument, at a certain date in the future at a specified price.
- **Index option:** A call or put option on a financial index.

*continued*

### Debt Security Derivatives:

- **Asset-backed security:** A security whose payment stream is derived primarily from the cash flow of a discrete pool of self-liquidating assets which convert to cash within a finite period of time.
- **Collar:** A strategy that uses options to limit to a specific range the positive or negative returns on an investment in an underlying asset.
- **Collateralized debt obligation:** A debt security issued by a trust, whose payments are based on the cash flow of underlying assets of a portfolio of bonds, loans or similar assets.
- **Collateralized mortgage obligation:** A special purpose entity that owns pools of mortgage loans or mortgage-backed securities and that issues classes of bonds with different principal balances, interest rates, average lives, prepayment characteristics and final maturities.
- **Credit default swap:** A contract whereby the parties agree to isolate and separately trade the credit risk of a third party.
- **Floating rate security:** A debt security that pays an interest rate which is reset periodically, based on the movement of a representative interest rate index.
- **Interest rate swap:** An agreement whereby one party exchanges a stream of interest for the other party's stream of interest.
- **Mortgage-backed security:** An asset-backed security whose payments are derived from a discrete pool of mortgage loans.
- **Reverse floater/Inverse floater:** A floating rate security that pays an interest rate which fluctuates inversely with an interest rate index.
- **Structured note:** A debt security whose interest payments are linked to the movement of an interest rate, stock, stock index, commodity or currency.
- **Swap:** An agreement between two parties to exchange different streams of cash flows based on a specified or notional amount.

Source: Cuocolo & Associates



**Can the advisor  
explain derivatives  
crisply to the board?**

— Kathy Cuocolo

## Find out why — and whether — the advisor should use derivatives

Ask whether derivatives will be used for speculative purposes (to seek higher returns) or as a hedge against risk (a countercyclical strategy). Probe the advisor's case for securities they want to use. If the reason is cost and efficiency, ask to see some numbers to back up that argument. Fixed-income trading has high transaction costs associated with it. There can be a large spread between bid and offer prices. In those cases, it may make good sense to use derivatives instead of bonds, but the advisor should demonstrate this.

The use of derivatives may also be tied to a particular fund's benchmark. Some asset classes are illiquid, and managers must use derivatives to invest in them. It may be more cost-effective to use derivatives to track an element of a particular benchmark. Find out whether derivatives will be used to shape a fund's characteristics — and how. One good question to ask is: How will using derivatives help the fund meet its investment objective?

The Panel stresses the importance of differentiating between a new fund that the advisor says will invest in derivatives and an existing fund to which the advisor wants to add derivatives. Using a wider array of instruments in an existing fund is far easier for an advisor to do than launching a new fund. It is less expensive, requires fewer regulatory hurdles and takes less time. In most cases, it doesn't require shareholder approval. But altering an existing fund brings up suitability considerations. If an advisor wants to add or change the type, use or concentration of derivatives

in an existing fund, ask why. Try to find out whether the advisor is simply looking for a shortcut to introducing a new fund or is seeking to align the prospectus with the manager's philosophy or strategy.

Once a board understands why the advisor wants to use derivatives, trustees must understand the risks related to each of those instruments. One approach is to ask portfolio managers to make a list of every new instrument they want to use in an existing fund and describe:

- How often did the manager propose to use each instrument?
- What was the market for each?
- How liquid were the securities?
- How transparent was each instrument?
- What investment risks did each derivative present?

### THE PANEL'S CONCLUSIONS:

- 1** Be sure an advisor has a good reason for adding derivatives to an existing fund.
- 2** Ask the advisor how using derivatives will help each fund meet its investment objective.
- 3** Determine whether derivatives are suitable for each fund and its shareholders.
- 4** Find out the range and type of derivatives the advisor plans to use, and assess the investment risks of each.



There are two  
separate decisions:  
Can the firm do it?  
And should the  
firm do it?

— Ashok Bakhrui

## Determine the advisor's competence

Once a board has determined *why* an advisor wants to use derivatives, it then must determine whether the advisor knows how to use these instruments. Trustees should assess the portfolio management team's experience and skill level for each proposed type of derivative.

Before introducing derivatives in mutual funds, many advisors employ them in separately managed accounts or hedge funds. If there is an existing track record, even in non-'40-Act products, boards should examine it to find out how well the advisor has done. If the advisor hires someone with derivatives expertise in order to pursue a new strategy, the board should find out what that person's track record was at the prior firm, if possible. Trustees should listen closely to gauge how well the advisor's staff seems to understand the issues. Further, they should ask the important questions more than once to determine whether the board gets the same answer every time.

The Panel also suggests tapping the resources of experts to find out how thorough the advisor's due diligence has been. Boards should talk to, among others, the auditors, the Chief Compliance Officer, the Chief Risk Officer, and the fund treasurer about the due diligence the advisor has done regarding derivatives. The auditors can tell a board how long and how thoroughly they discussed valuation with the advisor. The CRO can explain how risk will be managed. Ask these sources what risks or problems they think could arise with the use of derivatives.

Another way to assess the advisor's competence is to review valuation error reports. How many mistakes has the advisor made in managing and pricing derivatives over the past year or two? If the advisor has had its difficulties working with these instruments, the board may not feel comfortable approving the increased use of derivatives.

The Panel believes the advisor should have a concrete mechanism in place to assess new instruments before they are used in any of the funds. Large fund advisors may have a standing New Instruments Committee or similar governance mechanism (see case study below).

### THE PANEL'S CONCLUSIONS:

- 1** Assess the advisor's ability to invest in derivatives, as well as the competence of the service providers who will be involved.
- 2** Examine any track record of managing derivatives at the advisor.
- 3** Ask the experts, including the CCO, CRO and auditors, how they rate the advisor's due diligence.
- 4** Review error reports to see how many are tied to derivatives.
- 5** Evaluate the answers the advisor offers to the board's questions.
- 6** Be sure the advisor has a means to evaluate new instruments before they are used.

Other advisors may use their risk committee to perform this function. One smaller fund manager put the investment management function together with the Chief Financial Officer and the CCO to perform due diligence on the derivatives they planned to use.

The Panel cautions boards of small fund groups to be particularly careful when vetting the use of derivatives. Below a certain size, advisors may not have the resources or experience to use sophisticated derivatives. For these groups, the input of service providers is essential. And independent consultants could be used to bolster the knowledge and the staff at the advisor.



Suitability  
and internal  
competence are  
the big issues.

— Peter Gavian

## CASE STUDY: HOW A NEW INSTRUMENTS COMMITTEE WORKS

The advisor of a large fund group created a New Instruments Committee to help control risks associated with exotic, untested derivatives. The committee meets regularly to vet proposals from fund portfolio managers who wish to use new derivatives. The committee includes representatives from operations, compliance, legal, pricing and valuation, fund accounting, tax, risk management, IT and the trading desk, as well as senior people at the firm. Because the reputation of the firm is at stake when it comes to new instruments, the advisor believes top-level people should be involved in the approval process. The committee scrutinizes each proposed security, looking at factors such as:

- Depth of the market and available and proposed counterparties
- Necessary accounting procedures
- Ease of valuation and availability of pricing sources
- The systems it will require and whether any of them are manual
- The controls it will require for monitoring and oversight
- Ability of outside accounting agent to support.

The committee frequently requests additional information on proposed instruments portfolio managers want to use. They sometimes agree to start small with a new derivative, perhaps by limiting its use to one fund and capping the exposure or dollar amount that can be invested in it. If use of the instrument goes smoothly for a period of time, the committee may approve broader or larger investment. But ultimately, this committee serves as a critical first line of defense for managing risk at the firm. In this function, the committee looks not only at the advisor's capabilities, but also at the various agents involved in the overall process, such as the accounting agent, fund administrator and custodian. The committee's reports help the fund board conduct their oversight of derivatives used in the fund.

A black and white photograph of Karen Horn, a woman with short, light-colored hair, wearing a dark blazer and a patterned scarf. She is looking slightly to the left with a serious expression. Her right hand is visible, gesturing with fingers spread. In the background, the back of a man's head and shoulders are visible. The text is overlaid on the left side of the image, enclosed in large square brackets.

I want to know  
whether we meet the  
advisor's guidelines for  
counterparty risk.

— Karen Horn

## Scrutinize the back office

Beyond evaluating the advisor's investment expertise around derivatives, the Panel is unanimous that boards should look closely at the support staff's ability to handle these instruments. The use of derivatives is accompanied by significant operational risks and legal risks, and boards should be sure the back office is up to the task. This inquiry should include the advisor's organization, as well as all the third-party service providers that make up the entire system.

The Panel recommends boards meet with key members of the accounting function to discuss how they plan to deal with derivatives. Many derivatives transactions do not settle in cash and thus may not alert the accountants to their presence. The board must be satisfied that fund accounting has a mechanism for tracking all trades. Find out what the volume of transactions will likely be, and ask whether the accounting systems can handle it. The Panel cautions that not all derivatives are supported by the usual automated systems, which adds to the risk of error.

Derivatives are accompanied by more complicated disclosure issues than are more straightforward securities. Risk analytics are crucial, too, as the recent subprime crisis showed. Many securities that had high credit ratings from the big agencies wound up suffering when the credit markets seized up. This showed the limits to the trust an advisor

can put in a credit rating and pointed out the need for advisors to do their own risk analytics. The Panel recommends that boards ask the advisor's internal audit group how they plan to conduct audits of the use of derivatives, including how they will assess back-office capabilities and qualifications.

One strategy for testing the operations side of things is for the advisor to send significant volumes of dummy derivatives trades through their systems. The board needs to determine whether trading in these instruments will trigger all the requisite controls. Only if these derivatives trades can be executed through the advisor in a controlled manner can the board be comfortable that the funds will capture the reward derivatives entail, while controlling the risk that accompanies them. Particular focus should be placed on the advisor and administrator's ability to reconcile positions, cash flows, accruals and collateral to the counterparties.

Another oversight method is to ask the advisor to provide details of the manual processes involved in the life of the derivative. Find out the extent to which trade flow, accounting, valuation, compliance, reconciliations, and financial statement disclosures are done by the staff, rather than by an automated system.

The Panel urges boards to make sure the advisor has done all the testing, asked all the questions, and is ready to support the portfolio managers' derivatives trading. The advisor must be able to demonstrate that it has the right techniques and controls surrounding derivatives. And the board should document its inquiry.

#### THE PANEL'S CONCLUSIONS:

- 1** Evaluate the back office's competence regarding derivatives, and that of the third-party service providers.
- 2** Interview fund accounting about their procedures for derivatives trades.
- 3** Find out how internal audit will monitor derivatives use.
- 4** Review and understand the advisor's tests of the systems and controls.
- 5** Ensure that the advisor has the proper controls in place to support its investments in derivatives.



**Be sure the advisor's derivative investment process includes assessing the tax ramifications.**

— Gary French

## Conduct ongoing assessments

When boards have done their due diligence — and verified that the advisor has done its due diligence — the work of overseeing derivatives is just beginning. The Panel urges boards to continue to monitor whether the advisor's use of derivatives is consistent with how they originally presented it to the board.

As trustees regularly review derivatives, there are some key questions they can ask:

1. What was the worst event that happened around derivatives in this time period?
2. Why did that failure occur?
3. What was the best event that happened?
4. Why did that success occur?
5. Are the derivatives broadly performing as the board and the advisor expected?
6. Are new derivatives being used or considered for use?

It is important to note that outsized positive performance should be just as concerning to the board as outsized negative performance.

The Panel agrees that proper and regular reporting is a board's most crucial tool for reviewing derivatives. All funds are different, and no single report can be effective for every board. The challenge for many boards

is identifying what data it wants to see. Pricing and adequacy of collateral are two common areas of review. Many derivatives are new, and boards may not know which aspects to monitor until they have worked with these products for a time. While one size does not fit all, the Panel believes boards should collaborate with the advisor and with their counsel on a process to design reporting for derivatives. The Panel recommends boards concern themselves in general with breaches at the advisor and with exceptions to the advisor's own guidelines.

One important aspect of derivatives that requires ongoing assessment is counterparty risk. An advisor may report that it is using 10 different derivatives in the funds. That may seem to diversify the risk. But if five of those derivatives were created with a single firm as the counterparty, the funds may be exposed to additional risk. Moreover, boards should be aware that the counterparty can turn around and immediately sell their participation in that instrument to someone else, further muddying the waters. Other items about which Panelists suggest trustees consider receiving regular updates include: gains and losses on each instrument; mark-to-market reports; collateral reports; notional exposure; and net exposure.

Reviewing service providers' reports — including SAS 70 reports, many of which cover certain aspects of derivatives trading — can also provide a window for trustees into a fund's handling of derivatives. If there are repeated NAV errors because of mispriced derivatives, these reports will show it. If the advisor takes too long to price fund securities each day because of tricky illiquid derivatives, the reports might show how often they have missed the daily NASDAQ deadline. These errors can indicate a problem with the back office's capacity to manage derivatives.

#### THE PANEL'S CONCLUSIONS:

- 1** Continuously monitor the advisor's use of derivatives.
- 2** Ask about failures and successes — and the reasons behind each.
- 3** Work with the advisor and with counsel on a process to design appropriate reporting for derivatives.
- 4** Understand the reports you receive, or ask the advisor to clarify them.
- 5** Pay attention to counterparty risk.
- 6** Focus on exceptions and breaches to identify problems with derivatives

Look into the liquidity and transparency of the proposed derivative.

— Liz Duggan



## Be wary of pricing and valuation difficulties

The Panel views valuing illiquid and exotic derivatives as the biggest potential pitfall boards and advisors face. While plain vanilla instruments have wide and deep markets, many sophisticated derivatives do not. The Panel recommends boards concern themselves primarily with vetting the advisor's pricing process. It generally is not the trustees' role to micromanage individual pricing situations. Boards should keep track of pricing errors for derivatives, however, to be sure they are not frequent or consistent.

In reviewing the advisor's pricing mechanisms, good questions to ask include:

1. What is your valuation process?
2. Who is involved in valuing securities?
3. How do you stress test the pricing mechanisms?
4. When a security trades, do you review the prior day's price to gauge the accuracy of the trade?
5. If a derivative has to be fair valued, can that be done on a daily basis?

Boards must know where the valuation inputs for each derivative are coming from. Ask the advisor what portion of the securities are valued using prices supplied by counterparties. If the only source of information is the person on the other side of your bet, the board should be cautious, says the Panel. Boards must also determine what percentage of securities is fair-valued using a model or matrix developed by or completed by management. That may indicate a potential conflict. Trustees should know which securities are priced using a ma-

trix or a model, similar to those used for municipal bonds. If the advisor inputs data into the model, those data may be biased, rather than based on observable market data.

An independent pricing service may be more objective, but problems arise when pricing vendors do not yet price a new kind of derivative. The services often wait until a baseline level of liquidity develops for new instruments, so they may not be a good source of independent information for boards in the early days of a derivative.

Many exotic derivatives are direct-negotiated and privately priced with a counterparty. They lack transparency, as well as backup price quotes. In addition, when transactions settle, they often do so orally. A buyer and seller agree on a price by phone, and that price gets factored into a fund's daily NAV. The written confirmation of the transaction may not be received at the advisor for several weeks. The Panel cautions boards to keep their antennae up with regard to these verbal agreements.

### THE PANEL'S CONCLUSIONS:

- 1** Verify that pricing processes — not individual transactions — are effective.
- 2** Look at the sources of pricing and be wary if the only source of a price is the counterparty.
- 3** Regard unconfirmed transactions with caution.
- 4** Go beyond tolerance checks when reviewing pricing moves.

## CASE STUDY: MONITORING RISK ON AN ONGOING BASIS

The advisor of one large fund group has a separate, highly quantitative risk function. Each mutual fund is assigned a risk budget, based on its investment objectives. The risk management team stress tests each portfolio every day. They issue daily reports indicating how much of the risk budget is being used by each fund. This group is concerned with identifying trendlines over time. Trending down is just as undesirable as trending upward. That's because it means a fund is not spending its risk budget and, thus, not pursuing potential higher returns, as may have been promised to shareholders.

The risk management function does not reduce risk to a single number. Rather, they look at all the components of risk. Though the risk budget and risk reports are tools that the advisor uses for its benefit, it does help the board monitor risk in the funds. When the advisor briefs the board about risk, it provides reports that are color-coded in red, yellow and green. These reports quickly indicate which funds are exposed to potential problems, which requires explanation from the advisor — and a change, if the board is not satisfied.

## HOW A VALUATION ERROR CAN HAPPEN

An example of a common pricing and valuation error occurs with derivatives known as swaps. These securities tend to move in small increments each day. One of the mechanisms for reviewing pricing is comparing how the current price changed relative to the prior day's price. The accepted range of daily change is known as a "tolerance" level. If a swap is processed from the incorrect perspective, that is, long instead of short, the value will be moving in the opposite direction from what was intended. This could expose the fund to more risk, rather than increasing the fund's protection. Such a mistake can be easily overlooked if each day's price movement fails to exceed daily tolerance checks. The swap can be moving by the correct amount each day — but in the wrong direction. If this error is not caught on the first day of the trade, it will be easy to miss from then on — until the manager tries to sell the security, that is, or the price movement otherwise sets off alerts with the portfolio manager or pricing/valuation agent for the fund.

## Educate the board

The Panel stresses the importance of board members receiving continuing education about derivatives. In this pursuit, they should seek training from the advisor and from outside sources. The goal of increasing their understanding is not to learn how to invest in derivatives. It is to learn enough to know what questions they should be asking and to evaluate the answers they receive.

The advisor should conduct regular education sessions with trustees. These sessions, while adding to the board's knowledge, serve a purpose for the advisor as well. They illustrate to the board how well the advisor's staff understands derivatives. Management can kill two birds with one stone by educating trustees and demonstrating its own competence. The Panel notes that boards may use these sessions to gauge the competence of outside vendors as well. Education is a double-edged sword, however. If the advisor has not done the necessary due diligence about derivatives, that will quickly become apparent to the board.

Trustees need to hear from everyone who interacts with these securities — portfolio managers, accountants, compliance personnel, legal counsel, valuation staff — about how derivatives work.

Outside sources of derivatives education offer a useful supplement to the advisor's workshops. The Panel suggests boards ask the independent auditors, outside counsel and

boardroom consultants to put together learning sessions. Trade associations, director forums and academics are other good sources of information.

An event like this past summer's subprime squeeze can also be a learning opportunity. Many derivatives were billed as uncorrelated assets, but August showed they were more correlated than people realized. The Panel recommends boards use industry crises to deepen their understanding of complicated matters such as derivatives.

Boards should request a telephonic meeting with the advisor when the financial press is screaming and markets are in turmoil. If the current situation is not applicable to a particular fund group, the board can still benefit by hearing what is happening in the industry and whether the crisis will impact other areas of the market. If the advisor is involved in the crisis, the board needs to know the magnitude of the crisis and how things will be dealt with.

In the situation of an advisor that manages non-mutual-fund products, boards should probe how those other products are reacting to the upheaval. Separately managed accounts or hedge funds may serve as a precursor to what will eventually hit the mutual fund business. As boards seek to transfer that knowledge back to the funds, they should ask, "What do we need to know and to do?"

After the dust has settled and the industry is getting back to normal, boards should go over the lessons they and the advisor learned. Perhaps compliance procedures need to be strengthened. Or the pricing approach the advisor uses may need to be modified. If manual processes showed stresses, it may be appropriate to automate more of them. Out of difficult times can come an improved advisor and a more aware board.

#### THE PANEL'S CONCLUSIONS:

- 1** Pursue continuing education about derivatives for the board.
- 2** Seek training from the advisor and from outside sources.
- 3** The goal is to know enough to ask the right questions.
- 4** Use industry crises as a learning experience — both during and after.



**Ask the advisor  
what the valuation  
process is, and how  
they stress test it.**

— Tony Evangelista

## Understand the tax ramifications

The Panel points out that derivatives often have an unforeseen impact on mutual fund taxation. Different instruments pose different challenges from a tax perspective. The advisor should consider how each instrument will be treated for purposes of federal income taxes and whether it will affect how gains and losses are reported.

The board's job is to be sure the advisor has considered the tax consequences in advance of introducing new derivatives to the funds. Once these instruments are in the portfolio, it may be too late to unwind any tax problems. Those ramifications can be severe, and shareholders may be harmed inadvertently.

The Panel acknowledges that few board members are derivatives tax experts. It is unlikely trustees will know all of the tax details, nor will they have a clear idea of the proper questions to ask. But boards should ask whether the advisor thoroughly understands the tax implications of the derivatives it employs.

### THE PANEL'S CONCLUSIONS:

- 1** Understand that derivatives can have a significant tax impact on mutual funds.
- 2** Consider taxes in advance of adding derivatives to a fund. Afterward may be too late.
- 3** Ask whether the advisor thoroughly understands and reports the tax implications of the derivatives it employs.
- 4** Ask the advisor whether it has reviewed the tax implications with the funds' auditor.

# THE POTENTIAL PITFALLS OF TAXATION AND DERIVATIVES

Adding derivatives to a mutual fund raises several potential tax issues that boards should be sure the advisor is aware of. These include:

## 1 Potential threat to the advisor's status as a Regulated Investment Company.

- a. **Asset diversification test:** Because the IRS has not given definitive guidance, it may be unclear who is the issuer of a derivative and how to value the derivative for purposes of the test.

*Example:* With a credit default swap, who is the issuer — the counterparty or the issuer of the underlying security? Is the value of the swap its notional amount or its fair market value?

- b. **Gross income test:** Because the IRS has not issued definitive guidance, and because it is difficult to apply existing guidance to complex securities like derivatives, the advisor may not know whether the income derived from certain derivatives is qualifying income for purposes of the 90% gross income test. Gross income from derivatives on commodities, real estate or foreign currency speculation is non-qualifying income for purposes of the 90% gross income test.

*Example:* If a fund uses foreign currency forwards, is it speculating in currency (non-qualifying income) or hedging currency exposure (qualifying income)?

**Net effect:** An error or misjudgment in applying these tests could lead the fund to be disqualified as a Regulated Investment Company, which would result in the fund being exposed to corporate-level taxes. It could also result in incorrect characterization of income or gains and losses being reported to fund shareholders.

## 2 Calculation of the fund's taxable income and net capital gains inconsistent with Generally Accepted Accounting Principles (GAAP).

- a. The intent and type of derivative could impact the timing and character of income and realized gains or losses for tax purposes versus GAAP accounting.

*Example:* Short sales or purchased puts may be reclassified from a long-term capital gain to a tax basis short-term capital gain. Or from a short-term capital loss to a tax basis long-term capital loss.

*Example:* The realized loss deferrals and holding periods for tax straddles may be reclassified from long-term to short-term for tax purposes.

Source: State Street

## Weigh conflicts and custody considerations

The Panel recommends fund trustees be aware that the use of derivatives creates additional potential conflicts that require additional monitoring and oversight.

One area that calls for scrutiny is procedures for allocating trades of portfolio investments. These procedures are inevitably altered when derivatives are introduced. For example, if a long-only advisor launches a 130-30 fund — one that can sell short with a portion of its assets — it will bring about changes to the ways in which trades are allocated. The advisor must be able to show the board its procedures for avoiding conflicts on the trading desk between short trades in the 130-30 fund and long trades of the same security in its other products. Trustees should discuss whether it is in the best interests of fund shareholders to have the advisor engaging in side-by-side investing. At the very least, there must be certainty that one side of the house, or one class of investor, is not being disadvantaged.

It is also important for boards to understand the advisor's procedures for segregating securities to address the leveraging aspect of derivatives. Over the years, the SEC has put out a number of interpretations and releases stating that certain derivatives have a leveraging aspect and therefore expose funds to greater risk than the value of those derivatives. Even if the advisor does not think that it is using the instruments for leverage, the SEC requires funds to earmark or segregate a sufficient amount of securities to offset that risk. These securities must be marked on the

fund's or custodian's books as available to make good on the debt should a trade go the wrong way. While the SEC has issued no-action letters regarding futures, forwards and short sales, the commission has not yet addressed certain other types of derivatives, such as the leveraging and segregation aspect of credit default swaps.

Disclosure issues arise from the fact that advisors must explain their funds' use of derivatives in the fund's registration statement, which includes the prospectus and statement of additional information. Boards should be concerned about the level of detail included in these disclosures. Particularly when an advisor receives approval to add derivatives to the funds, trustees should be sure that is accompanied by transparent disclosure in the registration statements.

Custody for derivatives is also more complex than it is for stocks or bonds. Derivatives are often privately negotiated agreements. For example, the customary terms of a swap contract are described in a generic swap agreement between the fund and the counterparty. The swap agreement permits the details of each transaction to be reflected in the specific transaction confirmations. Often these confirmations are not finalized until after the transaction has taken place. It is unclear whether the swap agreement and confirmation technically need to be held in the fund's custodian bank. In addition, there are custody issues with respect to collateral that is posted for derivatives actions. For example, typically the fund and the counterparty need to be able to access the collateral.

As the derivatives market develops, greater custody consistency should arise. But for now, the lack of uniformity can create the potential for errors. The Panel recommends boards ensure the administrator has an automated solution in place to validate the existence of derivatives with the counterparty. In addition, collateral requirements may be non-standard for these instruments and settlement time is usually longer, adding to the complications.

#### THE PANEL'S CONCLUSIONS:

- 1** Be aware of the potential conflicts and legal issues surrounding derivatives.
- 2** Be sure the advisor's legal, risk and compliance functions understand and monitor the conflicts.
- 3** Scrutinize allocation of trades and segregation of securities.
- 4** Monitor the adequacy of the advisor's derivatives disclosures.
- 5** Understand the advisor's custody arrangements for these instruments.

Ask how the advisor will conduct internal audits of these derivatives.

— Bruce Leto



# Conclusion

The use of derivatives can sometimes feel like a quagmire for boards. Just when they think they understand one aspect of these instruments, something else arises and boards are back to square one. The Panel convened by BoardIQ suggests nine key steps trustees can take to effectively oversee the use of derivatives.

## The Nine Action Steps

- 1** Don't paint derivatives with a broad brush
- 2** Find out why — and whether — the advisor should use derivatives.
- 3** Determine the advisor's competence.
- 4** Scrutinize the back office.
- 5** Conduct ongoing assessments.
- 6** Be wary of pricing and valuation difficulties.
- 7** Educate the board.
- 8** Understand the tax ramifications.
- 9** Weigh conflicts and custody considerations.

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