IDC INDEPENDENT DIRECTORS COUNCIL

Portfolio Trading and Best Execution

Webinar for Fund Directors

January 24, 2013

3:00 – 4:00 pm (EST)

Panelists

- **Ari Burstein**, Moderator, Senior Counsel, Investment Company Institute
- **Stephen Sachs**, Head of Capital Markets ProFunds Group
- **Mark D. Perlow,** Partner K&L Gates LLP

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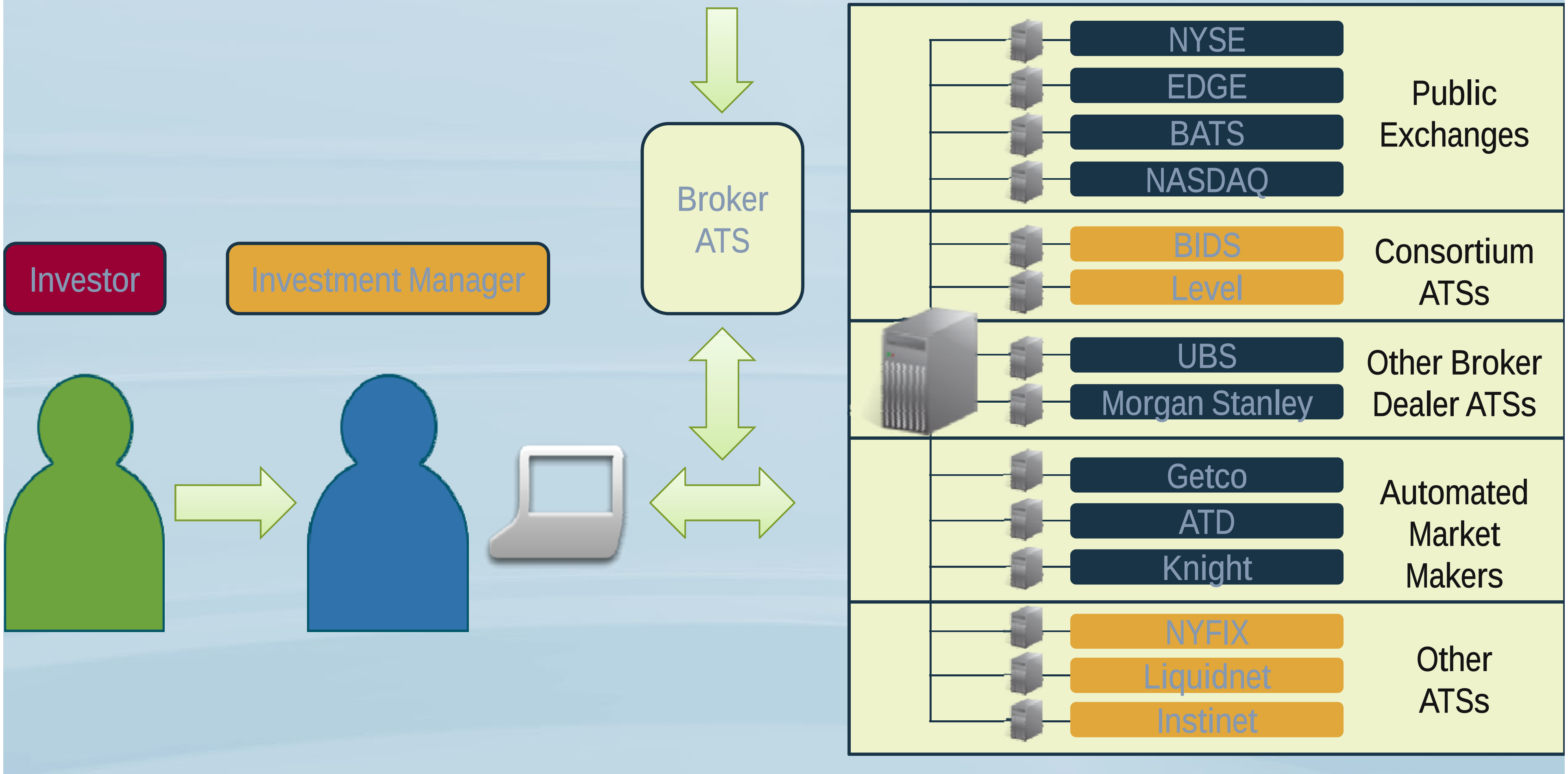
Overview: Current Equity Market Structure and Issues

- Basic market characteristics: fragmentation, competition among many trading venues, and proliferation of technology
- High frequency and automated trading – does it make the markets more efficient, or facilitate inefficient or predatory trading, or both?
- Dark pools – do they facilitate buy-side anonymity, or disguise predatory trading, or undercut price discovery, or all of the above?
- Controlling technology – glitches (Knight, Facebook, BATS) and flash crashes (full- and mini-sized) appear harder to prevent
- Proliferation of order types – smart routing in light of market fragmentation or a way to disguise trading interest?

U.S. Equity Market Structure 2013



Directors' Responsibilities Regarding Trading Issues

- The SEC has summarized directors' responsibilities regarding trading issues:
  - "[A] fund's board … should be sufficiently familiar with the adviser's trading practices to satisfy itself that the adviser is fulfilling its fiduciary obligations and is acting in the best interest of the fund."
- The SEC also has indicated that directors should consider market structure issues:
  - "[D]irectors should also consider … the adviser's decision whether to use an alternative trading system."
  - The SEC points directors to "[n]ewer trading venues, such as 'dark pools,' and the use of advanced mathematical models or algorithmic trading systems, crossing networks, and other alternative trading systems …"
  - "[W]ith the rapid development of increased options for trading venues, fund boards need to remain up to date in their familiarity with the evolving market in this area."

Directors' Responsibilities Regarding Trading Issues

- Possible discussion points with the adviser, per the SEC:
  - The process for making trading decisions and the factors involved in the selection of execution venues and the selection of broker-dealers
  - The means by which the investment adviser determines best execution and evaluates execution quality as well as how best execution is affected by the use of alternative trading systems
  - How transaction costs are measured
  - How the performance of the adviser's traders is evaluated

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Implications for Equity Best Execution – Questions Directors Can Ask

- Understand the trading philosophy
  - What is the manager's approach toward selecting brokers and routing trades?
  - How much influence do others (PMs, analysts) have in the broker selection process?
  - What are the most important elements of best execution?
  - How critical are commission levels in assessing best execution?
  - Do soft dollars impact the way orders are routed, and if so, how?
  - How, if at all, are the orders from different portfolios traded differently, based on the portfolio's investment strategy?

Implications for Equity Best Execution – Questions Directors Can Ask

- Understand the venues
  - Who trades there?
  - How does their matching engine work?
  - What order types do they allow and how do they work?
  - Dark pools deliberately avoid transparency. How does this help the funds' trading?

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Implications for Equity Best Execution – Questions Directors Can Ask

- Understand the brokers
  - What value and knowledge do they add to the trading process?
  - What are their routing and order internalization methodologies?
  - Have their algorithms been tested?
  - What is their process for preventing errors on orders placed into the markets?
  - How much do commission levels enter into the decision to use a broker, as opposed to other trading costs such as market impact?

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Implications for Equity Best Execution – Questions Directors Can Ask

- Communication with and education for the board
  - What types of reports, analytics and information should boards receive regarding execution quality?
  - How does a board oversee the execution quality of multiple sub-advisers?

Implications for Equity Best Execution – Questions Directors Can Ask

- Is there a contingency plan in place for market disruptions?
- How is the manager learning from its experiences and documenting it?
- How have the fund's processes changed as a result?

Key Differences Between Fixed Income and Equity Markets

- Hundreds of thousands of different issues (more if municipals are included)
  - Fund managers often are looking for a set of characteristics (*e.g.*, credit quality, issuer, maturity, yield) rather than particular issues
- Usually traded over-the-counter rather than on an exchange
- Little or no pre-trade transparency
- Much less frequent trading in bonds than stocks

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Key Differences Between Fixed Income and Equity Markets (cont'd)

- Much less liquidity in many types of bonds than for stocks
- No easily determined benchmarks for bond trading costs
- Bond dealers generally charge markups rather than commissions—pricing is on a "net" basis
- Dealers transact in only a subset of available bonds

Key Differences in Derivatives Markets

- Exchange traded futures and options
  - Executed in a public market by a broker/futures commission merchant for a commission
  - Data on contemporaneous transactions on the exchange and comparable commissions are available, but are not as accessible as for exchange-traded equities
- OTC derivatives/swaps
  - There is no secondary market for many OTC derivatives, and the counterparty's compensation is imputed rather than explicit, as with fixed income instruments
  - An adviser may use a process for systematically assessing investment professionals' judgments about the quality of each counterparty, based upon, among other qualities, the counterparty's financial stability, reputation and service and its ability to handle complex transactions

Directors' Responsibilities Regarding Fixed Income Trading Issues

- More possible discussion points with the adviser, per the SEC:
  - The process for trading fixed income securities and determining the costs of fixed income transactions
  - How the quality of trade execution is evaluated with respect to fixed income and other instruments traded on a principal basis
  - "Different factors may be appropriate for different funds, depending on a fund's investment objective, trading practices, and personnel."

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Implications for Fixed Income Best Execution – Questions Directors Can Ask

- Understand the trading philosophy
  - What is the manager's approach toward selecting dealers?
  - How much do the trading process and the investment process interact?
  - How does the manager address low liquidity markets?
  - How much does the manager want and need to concentrate its usage of dealers?
  - What are the advantages of using smaller dealers?

Implications for Fixed Income Best Execution – Questions Directors Can Ask

- Understand the dealers
  - How deep is their inventory?
  - How good is their knowledge of the market and of other dealers, investors and traders?
  - Are they proactive in providing trading and investment ideas?
  - What is the manager’s estimate of the markups/markdowns, implied commissions or imputed compensation for the dealers?

Implications for Fixed Income Best Execution – Questions Directors Can Ask

- Communication with and education for the board
  - What types of reports, analytics and information should boards receive regarding execution quality?
  - How does one get confidence in execution quality and reporting when there is little or no quantitative information?
- Is the manager learning from its experiences and documenting it?
- What information should boards be receiving regarding execution quality for derivatives?

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Additional Information: Equity Market Structure – Policy and Proposals

- Limit Up/Limit Down (adopted)
- Consolidated Audit Trail (adopted)
- Address technology and market risks – kill switches and drop copies
- Decimalization – increase the minimum tick size for small-caps (SEC roundtable)
- Reform the rules around dark pools
- Impose market-maker-like obligations on HFTs

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Additional Information: Dodd-Frank and OTC Derivatives

- “Swaps” and “security-based swaps” (SBSs) – if accepted for clearing at a central clearing house and required to be cleared by the CFTC and/or SEC – must be:
  - Cleared through a central clearing house
  - Traded on an exchange, designated contract market or swaps execution facility
- Clearing houses will set margin requirements for cleared swaps
- All transactions in swaps and SBSs, whether cleared or uncleared, will have to be reported in “real-time” to a swaps data repository, with delay allowed by CFTC/SEC rule for large/block trades

Additional Information: Dodd-Frank and OTC Derivatives

- Swaps dealers (SDs) and "major swaps participants" (MSPs) will be required to register with the CFTC (the SEC for security-based SDs and MSPs)
  - Capital and margin requirements for uncleared trades will be set for SDs and MSPs by the CFTC, SEC and bank regulators in joint rulemaking
  - Margin will be set at levels accounting for the greater risk of uncleared swaps
  - Customer margin will be required to be segregated from SD funds
- SDs and MSPs will be subject to business conduct requirements, including requirements to disclose certain information to counterparties
- SDs and MSPs must implement conflict-of-interest procedures and information walls separating research personnel/analysts from trading and clearing personnel