STANDARDS BOARD FOR ALTERNATIVE INVESTMENTS

Broker-Dealer Products

Key Questions for Investors to Ask

SBai Toolbox

Introduction

An area that has seen a fast expansion in recent years is factor-based investing (aka alternative risk premia or dynamic beta). Rather than looking at traditional asset classes such as equities, fixed income, real estate or commodities (and their sub-asset classes), factor-based investment approaches look at (well-understood and academically documented) underlying factors that explain and influence an asset's risk and/or performance as building blocks for portfolio diversification.

Institutional investors can access factor-based investment strategies in different ways, including through managed funds, broker-dealer products or in-house implementation (trading desk). Different types of issues arise in these set ups. For a managed fund, many of the issues in relation to conflicts of interest, disclosure, fund governance etc. are similar to regular alternative investment funds and are addressed in the Alternative Investment Standards. However, investors might require additional specific disclosure about strategy design to assess the manager's skill. When institutional investors (and investment managers) use broker-dealer products (e.g. factor indices), a different type of due diligence is necessary. This memo provides an overview of some of the distinctions between managed funds and broker-dealer products and provides a list of key questions institutional investors and investment managers should ask when conducting due diligence of broker-dealer products.

Key distinctions between managed funds and broker-dealer products

	Managed fund	Broker-dealer product
Fiduciary responsibility	• Asset managers have fiduciary responsibility • Asset managers are highly regulated, including AIFM-D and UCITS in the EU, FCA Principles in the UK, Investment Advisers Act (1940) and SEC no-action letters in the USA	• Broker-dealers trade generally on a principal basis with their clients, but need to prevent conflicts of interest between client interests and their own (including economic) • Conflicts to some extent mitigated by regulatory requirements, governance and organisational structure, rigid Rulebooks, transparent fee structure • Broker-dealers are highly regulated, in particular for this specific area of their business: • In the EU, the European Benchmark Regulation (EUBMR) aims at preventing or

The SBAI Toolbox is an additional aid to complement the SBAI's standard-setting activities. While alternative investment fund managers sign up to the Alternative Investment Standards on a comply-or-explain basis, the SBAI Toolbox materials serve as a guide only and are not formally part of the Standards or a prescriptive template.

	Managed fund	Broker-dealer product
		managing any potential conflict of interest for Broker-dealers when making indices that qualify as Benchmarks under EUBMR available to their clients. Additionally, EU broker-dealers are subject to the provisions of MiFID on identification and prevention of conflicts of interest • Globally, broker-dealers may sponsor indices following the provisions of the IOSCO Principles for Financial Benchmarks, which also aim to mitigate conflicts of interest
Product design	• Often multi-factor approach • Some managers also specialise in single style (e.g. trend) or asset class (e.g. volatility) • More opportunity for ongoing manager intervention/strategy adjustment than in the case of an index product • Managers have the ability to provide on-going and active oversight of the investment strategy, including for systematic strategies • Some managers offer separately managed accounts, which can potentially provide customised solutions based on client preferences	• Broker-dealers offer both single strategy access as well as portfolios • Generally, fully systematic[1] • Broker-dealers also offer the ability to customise strategies including managed solutions. • Products can evolve: minor changes could be implemented as an amendment to the existing strategy (index), significant changes may require the launch of new indices. For indices subject to EUBMR, there is a regulated process to communicate changes to the index with the index users and in some instances to get their input
Disclosures	• Offering document, marketing materials, SBAI Disclosure Statement, DDQ • Compared with index products, funds pursuing proprietary strategies are not required to be fully transparent with regard to the precise parameters of their strategies. As a result, managers can offer access to proprietary strategies without giving away trade secrets to competitors	• Strategy delivered by the Index is expected to be fully transparent: the Rulebook should allow any investor to replicate the strategy (construction and valuation) • Additional disclosures in line with the Regulation, e.g. EUBMR (governance, publication, amendments, termination, etc…)
Costs	• Management Fee • Performance fees (unusual) • Trading cost including brokerage, exchange fees and clearing. • Financing costs for leverage including borrowing cash for longs, stock borrows or swap fixed leg.	• Requirement to provide full transparency on all index cost where part of the methodology • Disclosure tends to be very granular but it may be difficult for investors to assess economic impact on an ongoing basis (the gross vs. net analysis included further below can provide better understanding and an easier way to compare cost across providers)

[1] Broker-dealers also offer managed solutions by third party managers

	Managed fund	Broker-dealer product
	• Other expenses i.e. cost of fund structure including registrations, administrator, legal, audit etc. *The SBAI Standard Total Expense Ratio (STER) sets out the methodology to calculate a single standardised expense ratio for investment funds to allow the comparison of the funds structural cost on an "apples to apples" basis. The STER excludes incentive fees and trading cost. More details are available here.*	
Access	• Typically in fund format (UCITs, offshore fund, or others), and therefore fully funded or provided as a managed account which may be partially funded.	• In multiple formats, to fit the investor's preferences: dedicated fund, note, Total Return Swap (potentially unfunded (but may require collateral) and therefore more cash efficient)

The following section includes questions investors should ask when investing in broker-dealer products.

Key questions for investors to ask

1. Experience:

- What is the background / history of the broker-deal in the factor / risk premia space?
- What is the organisation of the business?
- What has been the evolution of the AUM? Splitting between smart beta (long only), Risk Premia and other types of indices?
- Evolution of the number of investor mandates?
- Allocation of AUM by client type?

2. Research & Development:

- What are your internal quantitative research capabilities?
- Do you have a separate quantitative team and where is it in your organisation?
- Do you leverage academic research? How?
- Do you use 3rd party research? How?
- What is the process to validate a new strategy (and to decommission a strategy)?
- What is your strategy monitoring process?
- For your flagship strategies, can you show the ratio of the production performance since live vs simulated performance? Can you also share historical backtests?
- How do you take into account liquidity in the strategy development?
- How do you think about slippage, i.e. when the price at the time of a signal is different from the price achieved when executing the rebalancing of the index?[2]
- How do you assess, measure and monitor market impact?
- Do you set up capacity limits for your strategies? If so how?

3. Governance:

- What are potential conflicts of interest and how are they mitigated?

  Position keeping and trading:
  - Who maintains and has access to the front-office position keeping?
  - How are orders communicated to the execution team?
  - Are you allowed to internalise trades? If so against what type of flow?

  Benchmark administration:
  - Who is the Benchmark Administrator?
  - How related (or independent) to (/ from) the broker-dealer is the Benchmark Administrator?
  - Who performs the oversight function within the Benchmark Administrator?
  - What is the relationship between the Benchmark Administrator and the “business”?

  Calculation Agent:
  - Who is the Calculation Agent?
  - If the Calculation Agent is a third party to the broker-dealer, are they using some code / infrastructure developed by the Broker-dealer or their own?
- How is the research team and the structuring team separated from the execution and from the prime brokerage / financing teams of the broker-dealer?

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[2] Two types of slippage can occur: slippage between the signal timing and the index rebalancing and the slippage between the index rebalancing and the hedge/trade execution by the broker-dealer. The first type of slippage impacts the investor directly, the second type of slippage is a risk for the broker-dealer (compensated for by the margin built into the index product).

- Do control functions (Legal, Compliance, Risk Management, ...) have a veto right in relation to dealing with conflicts of interest and the ability to launch / maintain an index?
- What is the process followed in case of amendment or termination of an existing Index? How are existing or past investors in the Index consulted and notified?
- How are discretionary events implemented? Who can exercise discretion at the broker-dealer?

4. Operational aspects:

- Can the broker-dealer provide position level look through reporting? With what frequency? In what format?
- Can the broker-dealer provide bespoke risk management reports?
- Does the broker-dealer provide an online reporting tool?
- Are fact sheets, commentaries produced on a regular basis?
- What is the process to trade baskets of Indices? Single confirmation or multiple? What is the process to rebalance the basket over time, at the discretion of the investor? Can it be done online?
- Ability to include Indices produced by other banks within a given basket?
- What are the available delivery possibilities? Fund? Certificate? Total Return Swaps? Options?

5. Trading Set Up:

- Which trading team is responsible for the hedging of the single strategies (the "Hedging Trading Team")?
- How is that team related to the other traders for the respective asset classes? What organisation/information barriers are set up to avoid information leak from one team to the next? How is it controlled/monitored?
- What are the compensation arrangements for the "Hedging Trading Team" and "Structurers"? (e.g. as a function of transaction fees, product performance (absolute, relative, …), desk performance, …)

6. Team Set up:

- What is the organisation chart for the business?
  - Showing main functions, senior managers for each
  - Bios for senior managers
- Team composition:
  - Number of Structurers dedicated to the business: __
  - Number of Traders dedicated: __
  - Number of quantitative research analysts: __
  - Number of (non-quant) research individuals: __
  - Cross asset:
    - Structurers covering all asset classes with same reporting line: __
    - Traders: __
  - Recent departures: __
- Details about the quantitative research effort supporting the business

7. Investment Process (strategy specific):

- Description of flagship strategy/ies?
- List of main single strategies, with definitions?
- Portfolio construction:

   - With are the principles / philosophy followed?
   - How are single strategies selected to be part of a portfolio?
   - How to ensure diversification?
   - What is the turnover?
- How is downside risk management taken into account when designing single strategies? Portfolios?
- Performance of relevant strategy:
   - When is it expected to perform/to be challenged?
   - Explain the 3 largest historical drawdowns?
   - Is there anything significantly different in the current market conditions compared to the backtest which could have an impact on the strategy going forward?

8. Cost Analysis (strategy specific):

- Define and disclose each of the fees, costs impacting the performance of the relevant strategies, portfolios?
- **Net vs Gross cost analysis:**
   - In this analysis, all costs, fees, spreads, bid/offers and any other elements, whichever way defined or named, shall be taken into account.
   - Those costs shall be considered wherever they are documented (in the index, in the product, in any intermediary transaction (OTC hedge, etc…)).
   - Those costs shall include (but not be limited to), as applicable: bid/offer, brokerage fees, borrow costs, financing costs, service provider costs (administrator, custodian, etc…), entry/exit cost at the product level…
   - The Bank (and Asset Manager for comparison if relevant) shall provide the track record of each strategy and portfolio net of all fees and costs impacting the investor (= the “Net” track record)
   - Provide a second track record assuming that each instrument in each index can be traded at mid-market, without any other costs (i.e. no fee, no brokerage, no borrow etc…) (= the “Gross” track record)
   - Show the drag coming from the Net vs Gross track records

Note for investors: Net vs Gross cost analysis

- Investors should take into account the Total Return vs Excess Return nature of different access solution (and their impact from a cost perspective)
- It is important to highlight that the difference between the Gross and Net track records as defined above is <u>not</u> a reflection of the profitability of the trade for the provider. Indeed, a potentially large portion of those costs are actually incurred by the Provider to hedge the exposure to the Index, in the market
- This difference is a measure of some “total cost of ownership” and is defined such that it can be compared more easily, on a relative basis, between Providers

9. Index Design (strategy specific):

- Can the Index’ value be replicated / calculated based on the information included in the Index Rulebook? If not, what is missing?
- Is the index subject to the provisions of the EUBMR or the ISOCO Principles for Financial Benchmarks?
- Are any prices, parameters used in the Index determined by the Broker-Dealer? If so, what are the checks and balances in place to mitigate conflict of interests?

- What was the rationale for any amendment made to the Index Rulebook since the original Index version was launched?
- Are any costs impacting the value of the Index not disclosed in the Index Rulebook?
- Are any costs impacting the value of the Index not fixed? Why? What controls in place?
- What is the approach to back-testing? (time periods used, out-of-sample testing, correlation analysis between in-sample and out-of-sample data, etc.)
- Is the step-by-step impact of optimisations (as set out by Rule Book) on risk and return characteristics of the strategy disclosed?

Appendix A
Working group members

Name	Title	Organisations
Iivo Paukkeri	Portfolio Manager	Aalto University Foundation
Duncan Moir	Senior Investment Manager, Alternative Investment Strategies	Aberdeen Asset Managers Limited
Avgustina Sarkizova Evelina Klerides	Partner, Dynamic Beta Partner, Dynamic Beta	Albourne Partners
Walter Cegarra	Founder	Arch Ventures
Deepak Gurnani	Founder	ARP Americas
Christopher Reeve	Director of Risk	Aspect
Martin Tornqvist Andre Breedt	Head of Legal and Compliance Research Associate	Capital Fund Management
Apostolos Katsaris	CIO	CdR Capital Ltd
Melissa Hill	Co-Founder	Eleos Capital Advisors Limited
Nicolas Papageorgiou	CIO, Public Markets	Fiera Capital
Hugues Bessette	Chief Investment & Risk Officer	Innocap
Steven Desmyter	Global Co Head Sales & Marketing, Man Group and Global Co Head of Responsible Investing	Man Group
Lisa Fridman	Portfolio Manager	Martlet Asset Management
Scott Treloar	CEO	Noviscient
Matt Talbert	Senior Investment Manager	Teacher Retirement System of Texas
Jerome Teiletche	Head of Cross Asset Solutions, Managing Director	Unigestion
Samantha Foster	Managing Director, Investments Office	USC University of Southern California
Dr. Sushil Wadhwani	CIO	QMA Wadhwani
Neal Howe	Partner & Director of Investor Solutions	Welton Investment Partners
Rodney Livingston	Senior Investment Officer	West Virginia Investment Management Board
Thomas Deinet	Executive Director	SBAI