Indices: The Good, the Bad and Knowing the Difference

An issuer comes to us and asks if it can link its debt security to an index. This seemingly simple question (if the index is the S&P® 500 Index, for example) progresses through layers of complication as the underlying index varies from a broad-based benchmark index (such as the SPX) to a proprietary index with a small number of constituents. We discuss below the principal issues to consider.

IS IT AN INDEX?

There is no definition of "index" under the U.S. securities laws, nor are there any regulations governing indices, other than the generic exchange listing rules discussed below.[1] There are several definitions that come close to an index definition, but the focus of those definitions relates principally to the characteristics of the index as "broad" or "narrow."

An index is generally understood to represent a statistical aggregate that measures or reflects change; for our purposes, the change relates to groups of equity securities, commodities, bonds, currencies or futures contracts. From that overbroad definition, we can look to some regulatory sources for reference.

The NYSE has certain "generic" listing rules, which have been approved by the Securities and Exchange Commission (the "SEC").[2] When listing a debt security, such as an exchange-traded note, on the NYSE Arca, the underlying index must meet these rules. In the case of an equity index, the following summarized requirements apply:

- Minimum of ten constituents;
- Minimum market value per component of at least $75 million;
- Minimum monthly trading volume above a threshold;

[1] Benchmark regulation and related rules adopted outside of the United States are beyond the scope of this article.
[2] *See* NYSE Arca Equity Rule 5.2-E(j)(6). The Nasdaq and Cboe BZX Exchange have substantially similar generic listing rules. *See* Nasdaq Rule 5710 and Cboe BZX Exchange Rule 14.11(d).

- No single component can be more than 25% of the dollar weight of the index, and the five highest dollar-weighted components cannot exceed 50% of the dollar weight (60% for an index of fewer than 25 components);
- 90% of the index's weight and at least 80% of the number of components must be eligible for standardized options trading on the NYSE
    - This last requirement does not apply, however, if:
        - No underlying component represents more than 10% of the dollar weight of the index; and
        - The index has a minimum of 20 components;
- All component securities are either issued by a company required to file periodic reports under the Securities Exchange Act of 1934 (the "Exchange Act") or are non-U.S. securities or American depositary receipts, with such non-U.S. securities subject to certain limitations.[3]

Some general themes emerge from these rules, and one can define a spectrum of index characteristics, with bona fide indices on one end and indices that may be very customized (and, as a result, less "index like") on the other. The following indicia are helpful in characterizing an index as a bona fide index:

- More than 20-25 components;
- Not top-heavy;
- Actively traded components;
- The index and its methodology have been publicly available for some period of time;
- The index methodology is rules-based and can be replicated by third parties;
- There are listed options and/or ETFs linked to the index; and
- The index measures an objective market segment.

The following index characteristics may raise concerns warranting additional review:

- Fewer than 10 components;
- A small number of index components represent most of the index weighting;
- A narrow-based index (see below);
- The index methodology has discretionary elements;
- The index was created for the purpose of issuing a product or meeting the needs of a specific or a limited number of customers, rather than in order to objectively measure an identifiable market segment; or
- Embedded fees in the index negatively affect the index level.

[3] NYSE Arca Equity Rule 5.2-E(j)(6)(B)(I)

NARROW VERSUS BROAD-BASED INDICES

The NYSE generic listing rules are similar to the definition of an index that is not a "narrow-based security index" in Section 3(a)(55)(C) of the Exchange Act (*i.e.*, the index is a broad-based index). A broad-based index has the following characteristics:

- It has at least nine component securities;
- No component security comprises more than 30% of the index's weighting; and
- Each component security is
    - Registered under Section 12 of the Exchange Act;
    - One of 750 securities with the largest market capitalization; and
    - One of 675 securities with the largest dollar value of average daily trading volume.[4]

A narrow-based index likely would not satisfy the generic exchange listing rules. This is not to say that an index with a small number of components could not be a bona fide index. The NYSE FANG+™ Index has ten components, meets the NYSE Arca generic listing requirements and has a recognized index administrator (ICE Data Indices, LLC, which is the index sponsor, index administrator and index calculation agent).

DESCRIBING AN INDEX

Indices operate pursuant to a methodology, and are administered by a small cast of characters with tightly defined roles. The methodology and the identities of the entities responsible for index administration must be clearly described in the index description portion of an offering document. There is no provision in Regulation S-K under the Securities Act of 1933 (the "Securities Act") setting out requirements related to index descriptions. Practitioners are left to analogize and to determine the type of information that a reasonable investor likely would find to be material.

There are a number of distinct roles performed in conjunction with the maintenance of an index, including the following:

- The *index sponsor* (or "administrator") manages the index. The index sponsor may or may not own the intellectual property underlying the index. Anyone who wants to reference the index, or link a security or derivative to the index, must license it from the index sponsor. The index sponsor is usually the entity that has created the index (*i.e.*, wrote the methodology), although in recent years many banks have engaged third-party sponsors to administer indices that were created by the banks.[5] S&P Dow Jones Indices LLC is the sponsor of many indices, including the SPX. FTSE Russell is the index sponsor of the Russell 2000® Index (the "RTY") and other indices. Disclosure relating to the offer of a debt security that references the performance of the SPX or the RTY will include a paragraph or two describing the license agreement between the issuer of the debt security and the index sponsor.

[4] *See also* Section 3(a)(55)(B) of the Exchange Act (definition of a "narrow-based security index"); Section 1a(35)(A) of the Commodity Exchange Act (same); Section 1a(35)(B) of the Commodity Exchange Act (an index that is not a narrow-based security index).

[5] An index sponsor may succeed to an index created by another index sponsor.

- The *index calculation agent* determines the level of the index pursuant to the methodology. Generally, the index calculation agent has very little discretion, subject to the exceptions described below. This role may also be performed by the index sponsor.
- The *index publisher* disseminates the index level and other related information. Many times this role is combined with that of the index calculation agent. Bloomberg L.P. disseminates the levels of many indices with respect to which it may or may not be the index calculation agent.

INDEX METHODOLOGIES

An index operates pursuant to its methodology (or "rulebook"); thus, any offering document relating to an index-linked security will describe the methodology. This may present some challenges given that some methodologies incorporate complex mathematical formulae. When describing a complex methodology in an offering document, an issuer may face a dilemma: whether to simply repeat the complex formulae included in the methodology in the offering document, and avoid the risk of error, or attempt to summarize these formulae in plain English. The SEC Staff has expressed concerns about the inclusion of complex formulae in descriptions of proprietary indices underlying structured notes sold to retail investors.[6]

The methodology must be precise and replicable. If an index is transferred from one sponsor to another, the new sponsor must be able to continue to operate the index without interruption. Vague methodologies, or those with significant discretionary elements, will not transition smoothly to a successor index sponsor.

To the extent possible, discretionary elements should be avoided in an index methodology. Examples of discretion, or "expert judgment," include an exercise of discretion with respect to data inputs (such as pricing of index components), as opposed to relying on prices obtained from publicly available or other pricing sources that are not related parties or broker price quotes. This problem may arise more frequently in the context of a proprietary index that relies on pricing inputs from bids and offers, instead of, or in addition to, relying on public sources or on arm's-length transaction prices.

Ministerial discretion is acceptable. For example, the index methodology will set forth certain market disruption events, which may cause the index sponsor not to publish the index level for the disrupted day, or provisions for substitutions or replacements of components under certain circumstances. Often there will be limited discretion involved under these circumstances. Valuing a distribution of property to index component owners in a merger, spin-off or other distribution event may require an exercise of judgment by the index calculation agent. Substituting an index component for another after a merger or bankruptcy of the original component may require some discretion.

Discretionary elements in an index may raise issues under the Investment Advisers Act of 1940 (the "Advisers Act"). A structured product referencing an index with significant discretionary elements may resemble "investment advice." Generally, a broker-dealer that receives no special advisory or index-related fee in connection with its sale of the structured product would not be considered to be actively managing an investment strategy. The broker-dealer's recommendation to a client to purchase the

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[6] *See* "Structured Products – Complexity and Disclosure – Do Retail Investors Really Understand What They Are Buying and What the Risks Are?" at: https://goo.gl/x2wQEG (the "SEC Staff Speech").

structured product would be part of its dealer function and any "advice" reflected in the underlying index would be incidental to its role as the broker-dealer.[7]

The exception that proves the rule is the Dow Jones Industrial Average^{SM} (the "INDU"). According to S&P Dow Jones Indices LLC ("S&P"), the composition of the INDU is determined by the Averages Committee, which is composed of two representatives of *The Wall Street Journal* and three representatives of S&P. There are no pre-determined criteria for selection of a component stock, except that components should be established U.S. companies that are leaders in their respective industries. While stock selection is not governed by quantitative rules, a stock typically is added to the INDU only if the company has an excellent reputation, demonstrates sustained growth and is of interest to a large number of investors. Discretionary, yet acceptable as it is a bona fide benchmark index that reflects an accepted and established sector.

COMMODITIES INDICES – DISCLOSING THE EFFECT OF ROLL COSTS

Indices of futures contracts on commodities have distinct characteristics that must be properly disclosed. An index of futures contracts on a commodity, like oil, has certain "roll costs," which have an effect on the index level. Futures contracts normally specify a date for delivery of the underlying asset or for settlement in cash based on the level of the underlying asset. As the futures contracts approach expiration, they are replaced by similar contracts that have a later expiration. Thus, for example, a futures contract purchased and held in August may specify an October expiration. As time passes, the contract expiring in October may be replaced by a contract for delivery in November. This process is referred to as "rolling." If the market for these contracts is (putting aside other considerations) in "backwardation," which means that the prices are lower in the distant delivery months than in the nearer delivery months, the sale of the October contract would take place at a price that is higher than the purchase price of the November contract, thereby creating a positive "roll yield." The existence of backwardation and positive roll yields will positively affect the level of an index of futures contracts, and the value of a structured product linked to that index.

Some futures contracts included in an index of futures contracts may be trading in "contango" markets. Contango markets are those in which the prices of contracts are higher the more distant their delivery time, which results in a significant cost to roll the futures contracts. The existence of contango in the futures contracts markets will result in negative roll yields, which will adversely affect the level of the futures contract index. Consequently, if the markets for the commodities futures contracts are in contango, the negative roll yields will lower the level of the index and negatively affect the value of any structured product linked to
that index.

When describing an index of futures contracts in an offering document for a structured product linked to that index, it is important to clearly explain the effect of contango and backwardation, and include appropriate risk factors explaining how the relevant index of futures contracts will be affected.

[7] Section 202(a)(11) of the Investment Advisers Act excludes from the definition of "investment adviser" a "broker or dealer whose performance of such services is solely incidental to the practice of his profession."

MATERIALITY, THE MORGAN STANLEY NO-ACTION LETTER AND WHY MORE IS BETTER WHEN CONSIDERING INDEX COMPONENTS

When describing an index with a small number of components, the question will arise as to whether any particular index component is so material to the index that there should be disclosure about the issuer of that index component (in the case of an equity index). This concern is not relevant in the case of a broad-based or recognized index with a large number of components, such that no individual component comprises a material part of the index's value (*e.g.*, the SPX or RTY).

Many practitioners focus on the materiality of an index component to the index as whole in reference to the SEC Staff's position in the 1996 Morgan Stanley no-action letter.[8] In principle this guidance is not relevant to an index and especially not to a broad-based index. In the Morgan Stanley letter, the issue related to the type of disclosure required to be included concerning an underlying common stock issuer in the context of an offering of exchangeable securities. The SEC Staff in its relief looked to the availability of public information about the underlying common stock issuer and determined that if the underlying issuer was eligible to use Form S-3 (essentially, a large public float and at least one year of Exchange Act reporting) and the common stock was registered under Section 12 of the Exchange Act (*i.e.*, "Morgan Stanley eligible"), then the issuer of the exchangeable security could include abbreviated disclosure about the underlying common stock issuer.

So how does this relate to indices, if at all? For an equally-weighted index with 10 components, an issuer may be concerned as to whether there is sufficient publicly available information for each index component as, in the case of a 10% weighting, each constituent could be viewed as material to the performance of the index. In fact, practitioners considered whether each index component with a weight of 5% or greater was Morgan Stanley eligible for years, until, in May 2015, the SEC's Office of Capital Market Trends indicated that a 20% or greater weighting of an index component would be considered material, thus requiring Morgan Stanley eligibility for that component.[9] The SEC Staff also has taken this view with respect to baskets of equity securities, custom indices and narrow-based indices.[10] When there are a large number of index components, the concern about sufficient public disclosure about each index component is mitigated.

When a structured product linked to an underlying index, such as an exchange traded note, is listed on an exchange, the index, as mentioned above, must meet the exchange's generic listing requirements. No Morgan Stanley analysis of the index is required in that situation because, in meeting the exchange's listing rules, which have been approved by the SEC, regulatory concerns about the index have been addressed.[11] Practitioners use this shortcut by checking to see if there is an ETF linked to the index in question; if there is, then no Morgan Stanley analysis on the index would be required as the underlying index would have to have met the exchange's listing standards.[12]

A larger number of index components also helps mitigate concerns about "window cleaning." Many times, a proprietary index is created, maintained or sponsored by an investment bank or one of its

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[8] Morgan Stanley & Co. Incorporated, June 24, 1996.

[9] *See* the SEC Staff Speech.

[10] *Id*.

[11] Under NYSE Arca Equity Rule 5-2-E(j)(6)(B)(I)(1)(b)(v)(A), issuers of components of an equity index must be Exchange Act reporting companies.

[12] The NYSE Arca Equity generic listing standards for equity indices underlying an ETF are similar to those for equity indices underlying an exchange traded note. See NYSE Arca Equity Rule 5.2-E(j)(3)(a) and (b).

affiliates. In the course of its business, the investment bank may obtain material non-public information about a particular issuer that may be included in the proprietary index. Or, the investment bank's research arm may have a negative rating or recommendation for an index component. In either case, if the index is a narrow-based index, the investment bank may reconsider selling a product linked to that index as it may raise questions about material non-public information.

COMPLIANCE ISSUES

Concerns about potential or actual conflicts of interest always are raised in relation to proprietary indices. For an index like the SPX, which is sponsored by a non-broker-dealer, there is no concern that the index sponsor will be selling products linked to the SPX and potentially influencing the index level or its components. For a proprietary index created and sponsored by an investment bank and referenced in products that the bank or its affiliates sell to investors, there are significant concerns that those who market and sell the products might have influence over the operation of the index.

The NYSE Arca addresses these issues in Equity Rule 5.2-E(j)(6)(C): "If the value of an Index-Linked Security listed under Rule 5.2-E(j)(6) is based in whole or in part on an index that is maintained by a broker-dealer, the broker-dealer shall erect a 'firewall' around the personnel responsible for the maintenance of such index or who have access to information concerning changes and adjustments to the index, and the index shall be calculated by a third party who is not a broker-dealer."

A separate group within the investment bank should be responsible for any index development.

Even if the index is generated by a third-party provider, the issuer or investment bank seeking to sell a product linked to that index should perform diligence on the provider. Concerns about the misuse of material non-public information should be addressed. NYSE Arca Equity Rule 5.2-E(j)(6)(C) goes on to require "[a]ny advisory committee, supervisory board or similar entity that advised an index licensor or administrator or that makes decisions regarding the index or portfolio composition, methodology and related matters must implement and maintain, or be subject to, procedures designed to prevent the use and dissemination of material, non-public information regarding the applicable index or portfolio."

When performing diligence on third-party index providers, issuers and investment banks should ask, at a minimum, whether the index provider has sufficient experience and does the index provider periodically conduct internal reviews to ensure that the index methodology is consistently and accurately applied, and also should consider the index's history.

FINRA, in its Report on Conflicts of Interest (Oct. 2013) (the "FINRA Report"), identified a number of "embedded" conflicts of interest that may exist in offerings of structured products. These embedded conflicts usually exist when issuers or their affiliates play multiple roles in determining a structured product's economic outcome and also may make critical and potentially subjective decisions that affect the value of the structured product.[13] Decisions made by an index calculation agent, which may be an affiliate of the issuer of the structured product or a FINRA member firm, include:

- Discretion in determining an index closing level;
- Discretion to adjust an index methodology; and
- The fees associated with proprietary indices, which may be difficult to assess.

[13] The FINRA Report is available at: https://goo.gl/AaY4o4.

Whenever there are these types of conflicts of interest in an index, issuers must ensure that there is full disclosure and robust risk factors to alert and inform investors. Sellers of structured products linked to indices with conflicts of interest should ensure that purchasers understand and are fully informed prior to their purchase of the product.

USING BACKTESTED PERFORMANCE DATA

Index sponsors of newly created indices may provide hypothetical pre-inception performance, or "backtested," data. The presentation of backtested index data in a disclosure document has been the subject of regulatory attention. The SEC, in its April 2012 sweep letter sent to structured products issuers, inquired as to whether those issuers used backtested data and how it was presented "in a balanced manner."[14] After reviewing the issuers' responses, the SEC did not object to the use of backtested data. In contrast, FINRA members, in their communications, may not include backtested data in materials provided to retail investors. FINRA views any presentation of backtested data in communications to retail investors as not in compliance with the content standards of FINRA Rule 2210(d) (Communications with the Public). Under certain limited circumstances, FINRA allows the use of backtested data in communications to institutional investors.[15]

Based on the SEC's sweep letter and FINRA guidance, some best practices have developed:

- The backtested data must be objective and capable of reproduction;
    - The backtested data should be replicable by a third party and reflect the application of the index methodology to past historical data;
    - Any variations from a strict application of the index methodology to past historical data should be clearly disclosed;
    - Indices with elements of discretion may not lend themselves to a backtested presentation, as the application of discretionary elements to past situations could not be done accurately;
- The time period covered by the backtested data should be long enough to cover a variety of market conditions, including stressed periods;
    - There should be no "cherry picking" of favorable historical periods where the index would have had higher index levels; and
- Back tested data should be accompanied by careful disclosure:

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[14] The April 2012 sweep letter is available at: https://goo.gl/x4z19s.

[15] *See generally* Interpretive Letter to Bradley J. Swenson ALPS Distributors, Inc. at: https://goo.gl/KhkdAR. "Institutional Investors" are defined as any person described in FINRA Rule 4512(c), regardless of whether that person has an account with the FINRA member; governmental entity or subdivision thereof; employee benefit plan that meets the requirements of Section 403(b) or Section 457 of the Internal Revenue Code and has at least 100 participants, but does not include any participant of such a plan; qualified plan, as defined in Section 3(a)(12)(C) of the Act, that has at least 100 participants, but does not include any participant of such a plan; FINRA member or registered associated person of such a member; and person acting solely on behalf of any such institutional investor. FINRA Rule 4512(c) defines an "institutional account" as (1) a bank, savings and loan association, insurance company or registered investment company; (2) an investment adviser registered either with the SEC under Section 203 of the Advisers Act or with a state securities commission (or any agency or office performing like functions); or (3) any other person (whether a natural person, corporation, partnership, trust or otherwise) with total assets of at least $50 million.

- An explanation of how the data was derived, including any assumptions and the effect of any fees;
- A clear statement that the backtested data is hypothetical, not actual, and was created with the benefit of hindsight;
- A statement that the backtested data should not be used to predict future results;
- A clear delineation between the backtested data and any actual historical data, disclosing the dates that the backtested data ends and the historical data begins; and
- Risk factors should be included, warning investors that the backtested data has the limitations discussed above, should not be relied upon to predict future performance, and may not be accurate with respect to periods of high stress (extreme interest rate environments or times of volatility).

CONCLUSION

Structured products may reference the performance of a variety of indices. Generally, when it comes to the components of an equity index, the more the merrier. In any event, the manufacturer and seller of an index-linked structured product will have to pay careful attention to the attendant issues: describing complex methodologies, sufficient disclosure about the components, materiality of any one component, discretion, compliance issues within the issuer or dealer, and the use of any backtested performance data, among others.

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