MSCI Consultation on the Design of a Family of China A Style Indices

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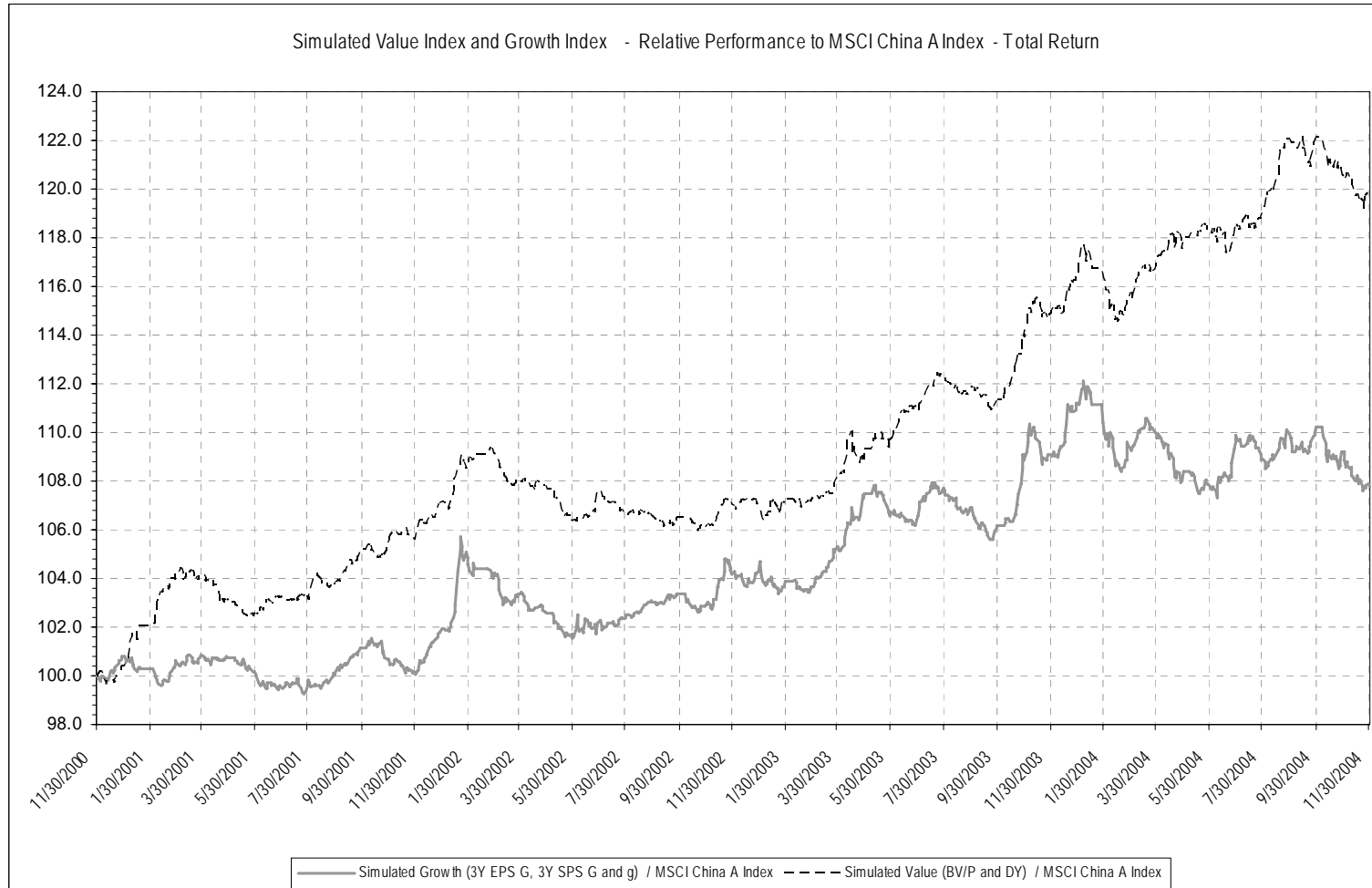- Family of China A Style Indices Index Design

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Introduction

- Early in 2005, MSCIBarra launched the China A Index series to serve the needs of China domestic investors

- MSCIBarra is committed to the China A Market and intends to further develop its family of indices in China to cover the needs of domestic investors

- MSCIBarra is now considering the creation of a family of Style Indices for the China A share market that:

  - Provides benchmark indices that are reflective of the style investment processes of China A share investors

  - Provide an appropriate framework to serve as the basis for investment vehicles

Investment Needs and Rationale for Style in China

- Based on MSCIBarra research, there are strong style effects in the China A Market

- As illustrated by the simulations on the next page value securities and growth securities, as a group, have distinct performance characteristics

    - Similar conclusions were drawn while building the CHE2 risk model used in Aegis for China in which value and growth are two risk indices

- This leads to performance differentials under different economic and market conditions, thus providing an opportunity to influence the overall performance of an equity portfolio by allocating to, and varying the allocation to, these styles

Meaningful Style Effect in the China A Share Market

Simulated Value Index and Growth Index - Relative Performance to MSCI China A Index - Total Return

Legend: Simulated Growth (3Y EPS G, 3Y SPS G and g) / MSCI China A Index — Simulated Value (BV/P and DY) / MSCI China A Index

Investment Needs and Rationale for Style in China *(Continued…)*

- In order to exploit these performance differential, value and growth investing requires a degree of manager specialization

    - Successful value investing requires investment managers to acquire above-average skills in valuing existing assets while successful growth investing demands above-average future sales and earnings forecasting skills

- The features of value and growth securities as well as the differences in the value and growth investment processes provide the rationale for dividing the market in value and growth investment styles

- The evaluation of these specialized managers requires appropriate style benchmarks that can also serve as the basis for style mandates attribution

Summary of Proposal

MSCIBarra proposes:

- To build a family of style indices from the existing MSCI China A Index

- To apply a two-dimensional, multi-factor style framework which uses a different set of variables to define value and growth companies

- To define value using the following descriptors:

  - Book Value to Price and Dividend Yield as the measure of value

- To define growth using the following descriptors:

  - Current Internal Growth Rate ($g=$ ROE(1-Pay Out))

  - Long-term historical EPS growth trend (using 3-years of historical data)

  - Long-term historical sales per share growth trend (using 3-years of historical data)

MSCIBarra proposes:

- To have style indices built independently from each other that closely capture the underlying investment style:

  - A Value Index including all securities with a value characteristic

  - A Growth Index including all securities with a growth characteristic

- To rebalance the style indices on a semi annual basis with two additional quarterly index reviews

- To use "buffer zones" for the various indices to reflect the investment process of style managers and limit the turnover caused by temporary migration of companies from one style index to the other

Summary of Proposal *(Continued...)*

Value Index
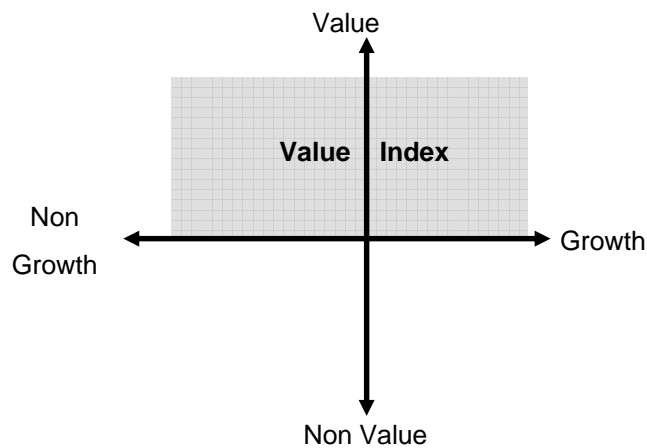
Growth Index

The Value Index includes all securities with a value characteristic
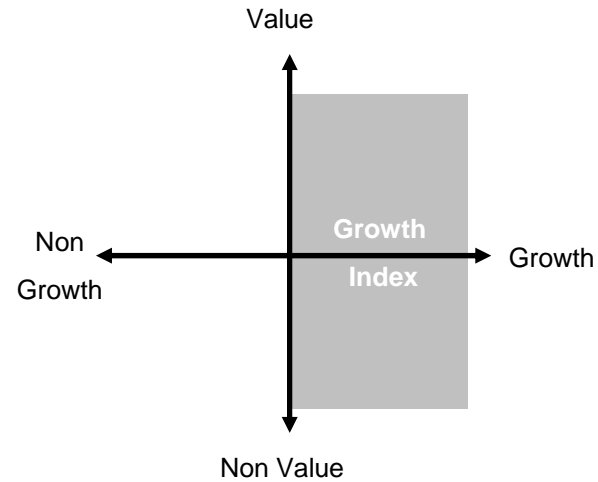
The Growth Index includes all securities with a growth characteristic

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Issues in Style Segmentation

One or Two Dimensions?

- Can Value and Growth characteristics be determined along a single dimension or is a two-dimensional framework preferable?

- Value securities are securities of companies with lower than average valuation

- Growth securities are securities of companies with higher than average future growth prospects

- A two-dimensional approach recognizes that a perfect link does not exist in practice and that value and growth need to be specified independently

  - In the two-dimensional framework, Non-Value does not necessarily equal Growth

  - Some companies can exhibit both Value and Growth characteristics, while others exhibit neither

Single or Multiple Factors?

- On the Value side multiple factors are needed:

  - To capture the multiple dimensions of company valuation

  - To offset potential measurement errors in accounting variables

  - To improve the comparability of company valuation within and across countries

- On the Growth side, future growth prospects:

  - Are not directly observable, and

  - Need to be estimated using statistics related to a set of historical and / or forward-looking accounting variables when available

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MSCI Value and Growth Style Space

- MSCIBarra proposes to uses a two-dimensional multi-factor approach to segment the MSCI China A Index into various style indices

- This framework has the following features:

  - Style is defined relative to other companies within the MSCI China A Index

  - Value and growth are specified independently using a different set of variables and using a multi-factor approach

  - Z-scores are used to combine the various variables for value and also for growth so that each security has a value z-score and a growth z-score

  - Securities can be positioned in the two-dimensional style space based on their value z-score and their growth z-score

MSCI Value and Growth Style Space *(Continued)*

Selection of Value and Growth variables

- Value will be defined using the following descriptors:

  - Book value to price ratio

  - Dividend yield

- Growth will be defined using the following descriptors:

  - Current Internal Growth Rate (g= ROE(1-Pay Out))

  - Long-term historical EPS growth trend (using 3-years of historical data)

  - Long-term historical sales per share growth trend (using 3-years of historical data)

MSCI China A Index in the Value and Growth Style Space
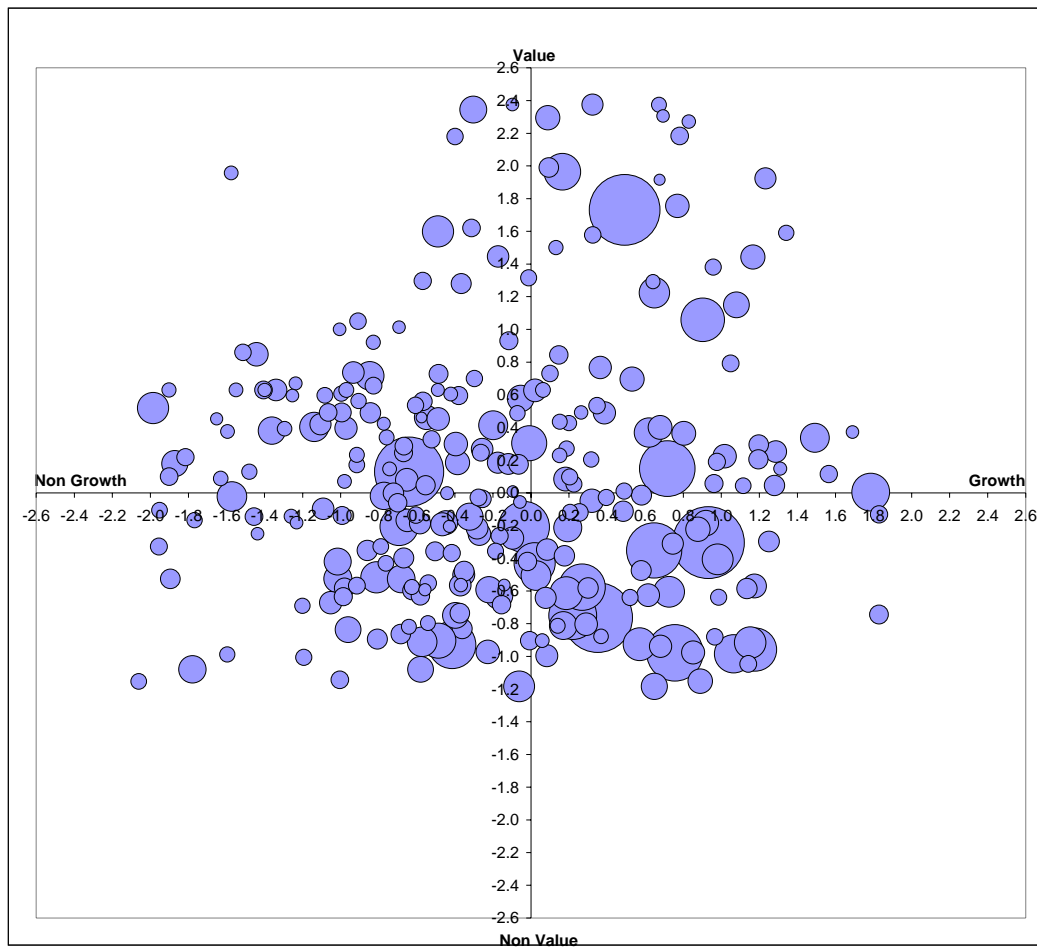
Family of China A Style Indices

Index Design

Investment Needs and Index Objectives

- A family of style indices should be developed keeping in mind the following objectives:

  - To serve as a tool for allocating across investment styles for the whole portfolio

  - To measure and analyze the performance of the various segments of the market or underlying universe

  - To serve as a basis for evaluating and attributing the performance of individual style managers

  - To provide an appropriate framework to serve as the basis for investment vehicles

- However some of the these objectives may have conflicting implications for the design of a family of style indices

- Finding a good balance in the index construction to achieve all of these needs might not be possible

  - Either some of the needs are viewed as more important and should drive most of the index construction

  - Or multiple series are required

Investment Needs and Index Objectives
(Continued...)

Asset Allocation Role
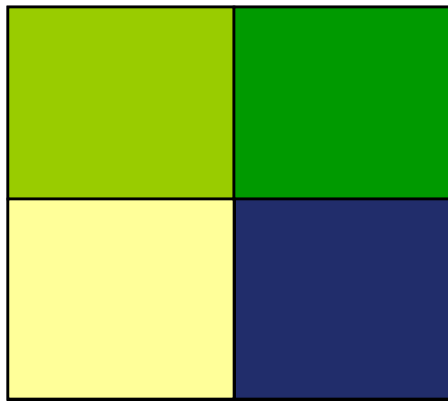
This index design would be characterized by:

- No overlap of market capitalization across sub-indices

- All sub-indices being contiguous

- Market capitalization of sub-indices to add up to the underlying universe (exhaustive).
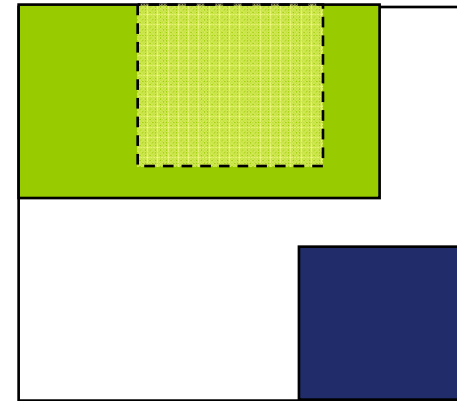
Performance Benchmarking Role
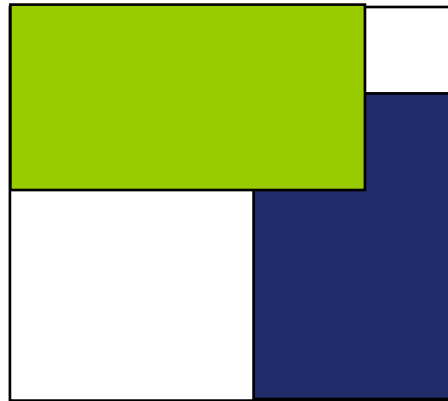
This index design would be characterized by:

- Independent index construction for indices

- Potential overlap of market capitalization between sub-indices

- Potential non-exhaustive representation of the underlying universe.

More Granular Style & Strategies

This index design could be characterized by:

- Narrow opportunity sets depicting a specific investment strategy or a subset of a broader style index

- Independent index construction

- Potential non-exhaustive representation of the underlying universe.

Investment Needs and Index Objectives
(Continued...)

- Given the existence of strong style effects in the China A market, many asset managers appear to be following investment strategies which are based on style, even though they might not always explicitly publicize it

- However, in China, the institutional investment process is generally not organized around size and style allocation as it is the case in many other major markets

- Therefore, the need for style indices is not predominantly for asset allocation and mandate attribution to style but rather for meaningful performance measurement

- In addition, there are important needs coming from retail investing for efficient indexation of active investment strategies around style

- Style indices that are built to be good performance benchmarks should portray the "unmanaged representation" of style investment processes

    - As such, they can support the efficient indexation of active investment strategies

- As a result, in order to be fully representative of the opportunity set available to value and to growth managers, style indices should:

    - Exclude the non-value and non-growth segment which is essentially comprised of high valuation and low growth securities that none of the value and the growth managers would consider as being part of their opportunity set

    - Fully allocate in the value index securities that exhibit value and growth characteristics and also fully allocate in the growth index securities that exhibit value and growth characteristics as each of the value and the growth managers would consider these securities as being fully part of their opportunity set

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Proposal for Value and Growth Indices

- Therefore, MSCIBarra proposes to have a series of value and growth indices built independently from each other

  - The Value Index would include only securities which have a positive value z-score

  - The Growth Index would include only securities which have a positive growth z-score

- Although this index design leads to an overlap between value and growth indices, it produces style indices which more accurately portray the unmanaged representation of the value and growth investment processes, and hence serve as better performance benchmarks for style investing

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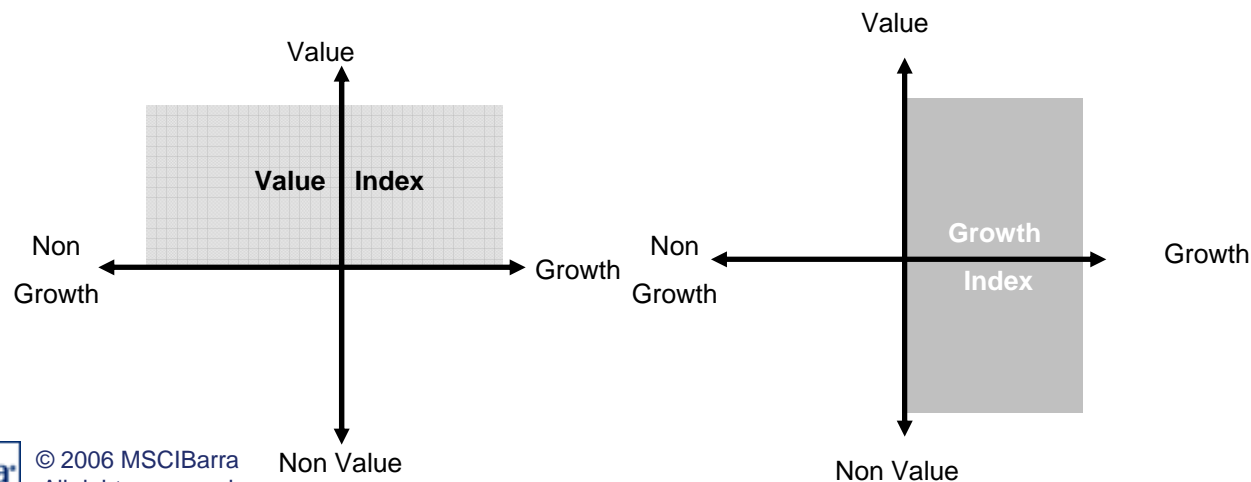
Proposal for Value and Growth Indices – Maintenance

Index Rebalancing and Buffer Zones

- The indices would be fully reviewed on a semi annual basis in May and November and partially reviewed in February and August

  - This rebalancing frequency provides a good trade-off between capturing style and controlling turnover

- Buffer zones will be used to manage the temporary migration of companies from one style index to the other. They will apply around the origin

  - Companies falling within the buffer zones will not change their current style classification at the time of rebalancing

- Outside of rebalancing, only securities which are added to the MSCI China A Index will be considered for inclusion in the style Indices

Discussion

Investment Process Needs

- Do you consider value and growth styles in your investment process?

    - If yes, how?

- Currently, what are the most important needs that a family of style indices should serve?

    - Do these needs include performance benchmarking and indices that can also serve as the basis for efficient indexation of active investment strategies around style?

    - The need for asset allocation across various style segments?

- Do you currently use any existing value and growth indices?

Discussion *(Continued…)*

Proposal

- How do you define value and growth for China?

    - What are the qualitative or quantitative characteristics that you look for?

- Are you comfortable with the proposed design of the Value and the Growth Indices which are built independently from each other?

- What is your view on the two-dimensional approach?

- Would you recommend to add or delete any variables?

Discussion *(Continued…)*

Style Investing in China and Variables Selection

- In China, broad consensus forecast data has become available recently

    - Do you use consensus forecast data? If yes which ones, from which provider?

    - What do you think of the accuracy of the data, the quality of the updates?

    - How common is the use of consensus data in China?

- For the historical growth rates, a balance needs to be found between:

    - Computing a meaningful growth rate (enough data points) while ensuring that historical data is available for the majority companies (many IPOs without any historical data)

    - Having growth rates which are not too lagged, especially if no forward looking growth rates are used

- In this context, do you think that 3 years of historical data is sufficient?

- Do you use some other considerations when determining value and growth?

    - If yes, what are the variables you are looking at?

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Discussion *(Continued…)*

- As illustrated on the next page, the distribution of the securities in the MSCI China A Index in the Value and Growth Style Space is very different from that of the MSCI USA Index, for example:

    - In China, there is not a strong link between value and growth and, as a result, there are many non value and non growth companies and many value and growth companies

- At the same time, some investors consider that in the China A Market:

    - Many value companies have low prices because they are under financial distress and/or exhibit very low growth features

    - Many growth companies are very expensive and might not have the growth potential that justify such valuations

MSCI China A Index in the Value and Growth Style Space
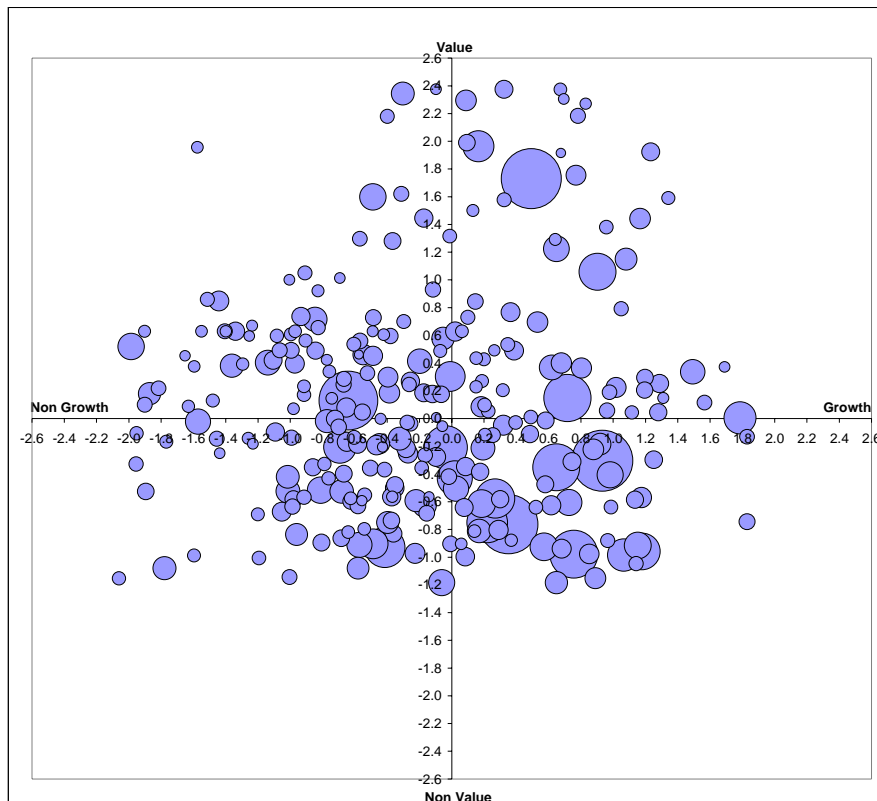
MSCI USA Index in the Value and Growth Style Space
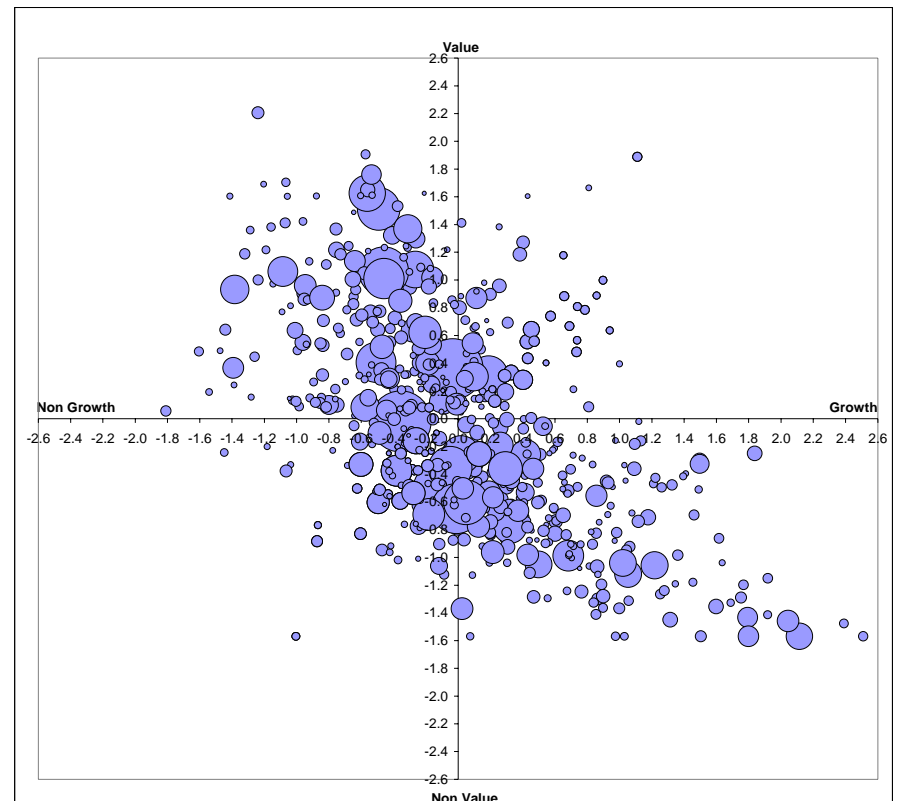
Alternative

- The current proposal does not impose a minimum growth requirement when building the value index and vice-versa. For the construction of the value indices and the growth indices:

  - Should some minimum growth requirement (i.e. screening out the 10% most non-growth companies) be used when building the value index

  - Should some minimum value requirement (i.e. screening out the 10% most expensive companies) be used when building the growth index

- Should these indices come in addition to or as a replacement of the proposed value and growth indices?

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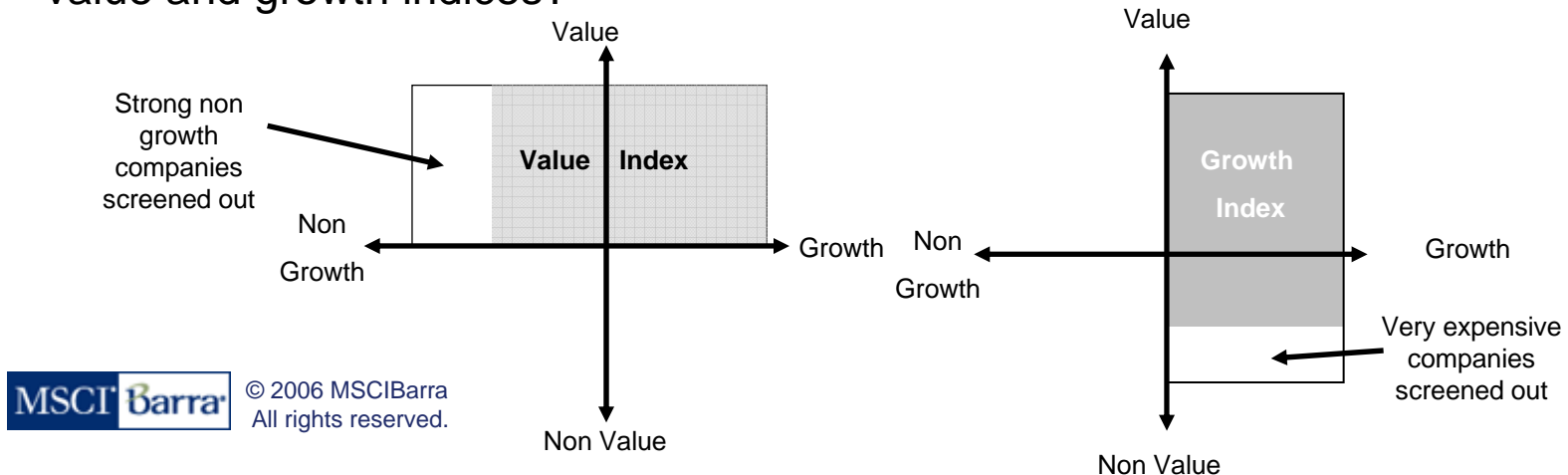
Discussion *(Continued…)*

Other Needs

- Beside the proposed Value and Growth Indices, are there other needs related to style investing which are not covered by this proposal?

- Is there a need for a more granular breakdown within the value and growth indices that could serve as the basis for investment vehicles, such as:

  - Deep value, aggressive growth, reasonable value, etc?

- Are you looking at other dimensions besides value and or growth?

  - Momentum, high dividend yield?

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