The Development of Passive Investment in North America, Asia & Europe

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• Methodology and sample
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Introduction

Index management around the world

- Indexation plays an important role in global asset allocation.
- Total worldwide assets under internal indexed management rose to $6.17 trillion as of June 30, 2012 (according to Pensions & Investments’ annual survey of managers of indexed assets), a 1.8% increase over the $5.99 trillion as of one year earlier (Zanona, 2012).
- Assets invested globally in Exchange Traded Funds (ETFs) and Exchange Traded Products (ETPs) reached a new milestone at the end of January 2013 by crossing the $2.05 trillion mark, an increase of 5.2% since the end of December 2012 ($1.95 trillion) driven by significant net inflows into equities and strong equity market gains (ETFGI, 2013).
Introduction

Index management around the world

- The global ETF market has grown to $1.76 trillion during 2012 registering close to 30% year-to-year growth, and is currently estimated to target a 23% growth globally during 2013 (Deutsche Bank, 2013).

- The table below compares the size and increase of ETF market in U.S., Europe and Asia.

<table>
<thead>
<tr>
<th>ETF assets (trillion)</th>
<th>U.S</th>
<th>Europe</th>
<th>Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>31/12/2012</td>
<td>$1.12</td>
<td>$0.3333</td>
<td>$0.136</td>
</tr>
<tr>
<td>Increase since 31/12/2011</td>
<td>29.30%</td>
<td>23.60%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Source: Deutsche Bank (2013)
In terms of the number of products, the graphic below reports the substantial growth of the number of ETPs since 2000 for U.S., Europe and Asia Pacific (BlackRock, 2013).
Introduction

Purpose of the surveys

• All of these factors points to an increasing interest in indexing management and investing directly in tracking products.
• As the choice of an index is a crucial step in both asset allocation and performance measurement, it is useful to investigate index use, as well as investor perception of the quality of current indices.
• Thus, EDHEC-Risk Institute conducted surveys among different part of the world (North America, Europe and Asia Pacific) to collect investors’ opinion on stock, government bond and corporate bond indices.
• In this presentation, we will compare the results obtained in the three surveys.*

* Only results of questions common to the three surveys will be presented here.
Methodology and sample

Sample: periods and countries

• The three surveys (North America, Europe and Asia Pacific) were conducted between October 2010 and June 2011 and were based on online questionnaires sent to investment professionals.

<table>
<thead>
<tr>
<th>Regions</th>
<th>Survey period</th>
<th>Number of respondents</th>
<th>Countries covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>February to June 2011</td>
<td>112*</td>
<td>United-States, Canada</td>
</tr>
<tr>
<td>Europe</td>
<td>October to November 2010</td>
<td>104</td>
<td>France, UK, Benelux, Italy, Northern Europe, Switzerland, Germany, Austria, Spain, Ireland,...</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>March to May 2011</td>
<td>100*</td>
<td>Australia, Hong Kong, Singapore, India, Malaysia, New Zealand, Japan, China, Thailand, Pakistan, Vietnam, ...</td>
</tr>
</tbody>
</table>

*Note that the initial sample was made of 139 respondents for North America and 127 respondents for Asia Pacific. For the present comparison, we eliminated private wealth management respondents, as this category was not part of the Europe sample.
Methodology and sample
Sample and possible biases

• A survey is always subject to biases. Investors that responded to the questionnaire could have, on average, different views than the overall average of institutional investors, as investors who are familiar to indices may be more likely to respond to the questionnaire than other investors.

• Concerning countries, there may be a slight bias towards French companies in the European sample (17% of respondents), as EDHEC-Risk Institute has historically been a French institution.

• Japan appears to be underrepresented in Asia sample (4% of respondents). Thus the survey mainly represents respondents from Asia Pacific excluding Japan.
In the three regions, a majority of respondents are asset management or investment management companies (from 58% to 66%).

In North America and Europe, about 29% are asset owners (pension funds and insurance companies) versus 20% in Asia.

In Asia, 22% of respondents are investment consultants, while this category is quite marginal among North American and European respondents (7% and 5%, respectively).
Qualities of indices

Criteria to evaluate index quality

• The indexing industry has grown in importance leading to a large offer of competing indices for investors who have to make a choice among them.

• A first important question is therefore by which criteria investors actually judge index quality in the first place.

• The usual basic qualities that are typically cited for indices include representativity, transparency, liquidity and investability (see e.g. Arnott et al., 2008, p. 64; Kamp, 2008).
Do you consider the following characteristics important for selecting and assessing an index as benchmark?

- **Transparency is a major criterion for index investors**

  - Index transparency: important and very important characteristics

  - Full information on the construction methodology is publicly available: 97.3% (North America), 89.0% (Europe), 94.2% (Asia)
  - A full list of index constituents is available: 95.5% (North America), 99.0% (Europe), 99.0% (Asia)
  - Full information on current index weights is available: 96.4% (North America), 99.0% (Europe), 99.0% (Asia)
  - Full information on historical index weights is available: 82.7% (North America), 85.0% (Europe), 85.0% (Asia)

- All criteria related to transparency appear to be important to very important characteristics for index users in all parts of the world (from 82% to 99%).

- Basic disclosure required by investors (such as historical weights) are often only available at significant cost in practice.
Do you consider the following characteristics important for selecting and assessing an index as benchmark?

- The use of objective guidelines to construct an index is a major concern for index investors.

  - Results concerning the importance of construction methodology characteristics are less spectacular than those concerning transparency, except for the use of objective guidelines to select constituents (89% to 97% of respondents).
  - In practice, guidelines to select constituents may be subject to significant discretion by index providers.

![Construction methodology: important and very important characteristics](chart)

- Avoiding any discretionary choices through e.g. committee decisions
  - North America: 68.8%
  - Europe: 74.0%
  - Asia: 83.0%

- Using objective guidelines to select constituents
  - North America: 92.3%
  - Europe: 97.3%
  - Asia: 89.0%

- Backed by economic and/or theoretical concepts
  - North America: 60.6%
  - Europe: 74.0%
  - Asia: 80.4%
Liquidity of index vehicles

Do you consider the following characteristics important for selecting and assessing an index as benchmark?

- Liquidity of underlying assets is also a major concern for index investors

Liquidity of index vehicles: important and very important characteristics

- Underlying assets of the index are liquid
  - North America: 83.9%
  - Europe: 89.4%
  - Asia: 92.0%

- Considerable trading volume of instruments linked to the index (e.g., index futures, ETFs and etc.)
  - North America: 56.3%
  - Europe: 67.3%
  - Asia: 77.0%

- Liquidity of underlying assets also appears to be a major criteria for investors in selecting an index in our three samples (84% to 92% of respondents), the higher percentage being found among Asian investors.
Risk and return properties

Do you consider the following characteristics important for selecting and assessing an index as benchmark?

- **Asian investors** are the most interested by stable risk-factor exposure and efficiency.

- Risk and return property characteristics appear to be less essential for investors than transparency and liquidity. However, we note that Asian investors give them more importance than North American and European investors (up to 74% for stable risk factor exposure).
Active versus passive management

Role of indices

• Some papers (Ranaldo and Häberle, 2007; Fuller et al., 2010) argue that current indices are not completely passive as they involve lots of active choices.

• Investors were thus asked about their perception of indices reflecting a passive strategy as opposed to an active strategy.
Active versus passive management

Do you agree with the following statements?

• Investors agree that index construction could include systematic approaches that deviate from cap-weighting, but indices should not serve to generate alpha.

Agreement and strongly agreement on assertions about indices

- An index can only reflect a passive strategy
  - North America: 42.2%
  - Europe: 50.0%
  - Asia: 56.1%

- An index should not be based on generating outperformance or alpha through return forecasting
  - North America: 76.1%
  - Europe: 75.2%
  - Asia: 74.2%

- An index can contain systematic quantitative strategies
  - North America: 68.2%
  - Europe: 73.0%
  - Asia: 75.8%

- An index can contain discretionary active management
  - North America: 23.9%
  - Europe: 31.7%
  - Asia: 32.3%

• About half of the respondents think that an index can only reflect a passive strategy. However, about 75% of them agree to accept quantitative approaches while constructing the index.

• Meanwhile, less than a third of respondents accept discretionary choices for index construction and 75% of them think that index should not be based on alpha.
Active versus passive management

Acceptance of new forms of indices

• The results suggest acceptance of new index offers which deviate from cap-weighting but maintain systematic rules.
  – For most respondents an “index” is not required to be passive in a very strict way – holding a portfolio without any trading – but rather is required to be passive in a broader sense – holding a portfolio without trying to generate alpha.
  – Passive investing mainly means for them, being exposed to risk premia or normal returns as opposed to abnormal returns.
Investment in asset classes and indices

Overview

• Investors were then asked which asset class they invest in (as well as the amount of asset under management invested in each asset class). The results could be found in Appendix 1 at the end of this presentation.

• For each asset class they invest in, investors were asked about their use of indices in this asset class (see Appendix 1, for complete result), as well as about their satisfaction rates with indices.

• From all their answers, the most interesting result for index providers is the satisfaction rate of indices for each asset classes.
Current usage of indices and satisfaction

Are you satisfied with the following products you have used?

- Investors are not totally satisfied with indices, especially with bond indices.

- Overall satisfaction rates appear not to be good, especially for bond indices.
- European investors appear to be the least satisfied among all investors, their highest rate being only 67% for equity indices.
- North American investors are globally, the most satisfied, especially with government bond indices (71% versus 51% and 53% for European and Asian investors, respectively).
Current usage of indices and satisfaction

Are you satisfied with the following products you have used?

• It appears that the currently used indices lead to relatively low satisfaction rates across users. Since these indices are widely used, it could imply that there are many index users who do not find that the current indices address all of their needs.

• It seems that there is room for index providers to make efforts on improving the qualities of indices.

• Differences in satisfaction rates across asset classes suggest that there might be specific issues associated to each asset class. In what follows, those specific issues will be looked in details.
Do you think the following types of equity indices are important to your portfolio construction process?

• Investors give more importance to regional/country indices than to sector/style indices.

Types of equity indices seen as important to very important in the portfolio construction process

- Regional or worldwide indices
- Country indices
- Sector indices
- Size-segment indices
- Style indices (Value/Growth)
- Factor-based equity indices (momentum indices, etc.)

• Regional and worldwide indices for North American and European investors (80% and 85% of respondents, respectively), and country indices for Asian investors (81.5% of respondents), appear to be the most important indices, while sector indices (except for Asian investors), size indices (except for North American investors). Style indices appear less important.
Equity indices

Country versus style indices

• The previous results may appear surprising, as they are in contradiction with literature recommendations.

• For example, Fama and French (1992, 1993, 1996) argue that firm size (large cap, small cap) and style (growth, value) are the most important stock characteristics.

• On the contrary, country diversification is diminishing over time (Hamelink et al., 2001; Errunza et al., 1999; Bakaert and Harvey, 2000). However, these findings mainly relate to developed markets. Christoffersen et al. (2010) find that international diversification benefits for emerging market countries are still strong.
Do you think there are significant problems associated with cap-weighted indices?

- Cap-weighted indices have issues for a majority of investors.

- A majority of investors think that there are important issues with cap-weighted indices, with the highest percentage being found among European investors (68%), followed by Asian investors (58%), compared to 52% among North American investors.
- Investors responding they do not know were the most numerous in Asia (22%).
Equity indices

**Issues with cap-weighted indices according to investors**

- Overinvestment in overpriced stocks and size biases: the two biggest problems with cap-weighted indices

![Bar chart showing important to very important issues with cap-weighted indices](chart)

- One of the two biggest problems of cap-weighted indices is overinvestment in overpriced stocks for all investors. The other one is size biases for North American and Asian investors, and poor diversification for European investors.

- For Asian investors, all issues are quite big (no percentage below 74%), while the lack of representativity of the economy is a major concern for only 58% and 54% of North American and European investors, respectively.
Equity indices

Issues with cap-weighted indices

• Overinvestment in overpriced stocks and poor diversification concerns of respondents are consistent with the findings from the literature that cap-weighted indices overweight overpriced stocks and underweight underpriced stocks (Hsu, 2006) and that these indices are concentrated in a few large stocks (Tabner, 2007; Malevergne et al., 2009).

• Investor perception of size and sector biases corroborate the findings of Amenc et al. (2006).
• Respondents share much of the criticisms that have been outlined in research publications.

• It should be noted that our three samples of investors consist of advanced index users in large institutions.

• Our conclusions are derived from the average view of these particular samples. Hence, their opinions may not necessarily be representative of average professionals who are less familiar with indices.
Do you think the following types of government bond indices are important to your portfolio construction process?

- Large importance is given to regional/country indices, but sub-segment indices are more considered than in equity asset class.

Regional or worldwide indices
- North America: 65.1%
- Europe: 63.1%
- Asia: 71.6%

Country indices
- North America: 52.7%
- Europe: 61.4%
- Asia: 69.2%

Maturity-segment indices
- North America: 52.3%
- Europe: 64.9%
- Asia: 73.5%

Credit rating segment indices
- North America: 67.5%
- Europe: 64.9%
- Asia: 66.2%

Inflation-protected indices
- North America: 56.8%
- Europe: 58.5%
- Asia: 65.1%

- Regional and worldwide indices for European investors (71%), and country indices for Asian investors (69%), appear to be the most important, while North American investors consider maturity segment indices as the most important.
Government bond indices

Regional versus sub-segment indices

• Compared to equity indices, regional or worldwide indices still appear to be quite important in the portfolio construction process.

• Meanwhile, as compared to equity indices, the importance of sub-segment indices (i.e., maturity indices and credit-rating segment indices) is more pronounced than it was for style and size segment indices in equity management.

• Looking at European and North American respondents, even government bond sub-segment indices with the lowest consideration (inflation-protected indices) are still more important to government bond investors than any of the style, sector or size segment indices to equity indices.
Do you think there are significant problems associated with government bond indices?

- Less investors find issues with government bond indices than with equity indices, but more of them are undecided.

- In Europe and Asia, about half of government bond index users consider that there are important issues associated with government bond indices. In contrast, only one third of North American respondents share this opinion.

- All these percentages are quite lower than for equity indices. On the other hand, percentage of undecided respondents are largely higher than for equity indices.
Government bond indices

Important issues with government bond indices according to investors

- Difficulties to replicate the index is the biggest problems with government bond indices.

The results show that European investors perceive all the issues proposed in the questionnaire as having quite similar importance.

- American investors are largely more concerned by the difficulties to replicate the index, just like Asian investors, the latter being all the more concerned by proprietary models for pricing.
Government bond indices

Debt-weighting index debate

• Similar to cap-weighted indices dominating the equity index universe, weighting by the amount of debt outstanding is the most common approach for government bond index construction.

• There is a debate on debt-weighting indices in the literature. Proponents of debt-weighted indices argue weighting by outstanding debts is the only way to reflect the overall market movement (Brown, 2002).

• On the other hand, people challenge debt-weighted indices by arguing that the calculation of outstanding market value of debt can be difficult, since the amount of outstanding debt changes over time, and such changes are not always made public.

• Thus, investors were asked about their opinion on this subject.
What are your opinions on the following statements made by academic research?

- Weighting government bond indices according to debt is criticised

The results show that all investors (North American, European and Asian) share the same opinion about debt-weighted indices, i.e. they see this weighting as having critical issues.
Government bond indices

Conclusion

• Overall, unlike equity indices, government bond indices are likely to be used frequently for hedging purposes to hedge clearly defined risk factor exposures such as interest rate risk or inflation risk.

• As a result, sub-segment indices, such as maturity-segment indices are more important as opposed to sub-segment indices for sector and styles within the equity index universe.

• A majority of respondents consider current government bond indices as problematic. The relative importance of issues outlined by investors may be different whether they are North American, European or Asian. Meanwhile, the lack of stability of duration and the lack of investability are important concerns for all of them.

• Index investors were also asked about their opinion on corporate bond indices. The results which are quite comparable with those obtained for government bonds are displayed in Appendix 2.
Overall Conclusion

• Investors underline the problems of traditional indices, whatever the asset classes (equity, government bond or corporate bond).

• The problems identified by investors are different across asset classes. In the same way, the importance attributed to different types of indices varies across asset classes.

• It seems that there is room for improvement in index construction. However a unique index construction approach across all asset classes may not be necessarily consistent with investors’ varying objectives. Thus, in the future, more “objective-oriented” as opposed to generic indices, may be required to address investor different objectives.
Appendix 1: Investment in asset classes

Which asset class have you invested in?

- Investors in equity asset class are the most present among our respondents.

- Equity appears to be the dominant asset class with around 90% of investors invested in.

- Fixed income investors appear to be slightly less numerous in Asia than in North America and Europe (less than 65% versus around 70%).
Appendix 1: Investment in asset classes

What percentage (in AUM) of your total investments are invested in the following asset classes?

- Respondents also invest the highest percentage of their AUM in equity.

- Equity is the dominant asset class for North American investors in terms of percentage of AUM (68% of AUM), versus around 50% for European and Asian investors.

- Among all investors, European are those with the highest percentage of AUM invested in government bonds.
Appendix 1: Current usage of indices and satisfaction

Have you used the following indices in your investments in the respective asset classes

- Indices are most widely used in the equity asset class.

- Indices are more prevalent in equity investment (more than 90%) and less prevalent in government and corporate bonds from 59% to 76%). This is not surprising as equity indices were the first to be developed.

- North American investors appear to use slightly less indices in equity class than other investors, but a little more than others in bond classes.
Appendix 2: Corporate bond indices

Do you think the following types of corporate bond indices are important to your portfolio construction process?

- The relative importance given to the various types of corporate bond indices is different according to investors’ localisation.

- The most important indices in the construction process differ for each group of investors: credit rating segment indices for European investors, maturity-segment indices for North American investors and country indices for Asian investors.
Appendix 2: Corporate bond indices

Do you think there are significant problems associated with corporate bond indices?

- Investors are more numerous to find issues with corporate bond indices than with government bond indices.

- In Europe and Asia, more than half of corporate bond index users (57% and 54%, respectively) consider that there are important issues associated with government bond indices, when they are only 42% among North American respondents.

- These percentages are lower than those for equity indices, but higher than those for government bond indices. Percentage of undecided respondents are comparable to those for government bond indices.
Appendix 2: Corporate bond indices

Important issues with corporate bond indices according to investors

- Overinvestment in more risky companies and lack of liquidity are the biggest problems with corporate bond indices.

- For all investors, the two main issues appear to be the overinvestment in more risky companies and the lack of liquidity, the lack of liquidity being in first position for European investors, with 68% of respondents and in second position for North American and Asian investors, with 70% and 82% of respondents, respectively.

- All issues appear with the highest percentage of respondents for Asian investors, and the lowest percentage of respondents for European investors.
Appendix 2: Corporate bond indices

Conclusion

• Corporate bond indices could be used to seek higher return as a cost of more credit risk exposures.

• More than half of European and Asian institutional index users (42% of North American investors), consider that current corporate bond indices are problematic, a higher share of respondents than for government bond indices, though lower than for cap-weighted equity indices.
References

References

References


• Zanona, M. 2012. Index Assets Stay Steady for Year. Pensions and Investments (17 September).