IPD Global Data Standards

Bringing global consistency to real estate performance measurement

Summary: October 2014 Consultation

Real estate is becoming an increasingly global asset class with new markets maturing rapidly and cross-border investment increasing. However, real estate can be an extremely diverse asset class with many standards and conventions across markets. In order to promote global consistency and comparability, MSCI is in the process of reviewing our methodology through a Global Data Standards project. As part of this project, several methodological developments were proposed and made available for comment through public consultations in March and October 2014. The purpose of this note is to summarize the feedback from the October consultation, and explain how we plan to incorporate it in the proposals.

During the March consultation, we prepared some succinct and high level material, and invited a small number of clients to discuss in detail with us. For the October consultation, we decided to prepare a document summarizing the range of proposals, and invited clients to provide us with feedback or to discuss further. We greatly appreciate the consideration that has been given to the proposals and the range of comments that have been received. Through this note we make reference to specific elements of feedback, and summarize the feedback where appropriate. In order to encourage the provision of frank and open feedback, we have anonymized the individual contributions.

The proposed changes covered by the October consultation focused on establishing standard global operating cost classifications and measures, yields measures, vacancy rate measures, global property classifications, global fund classifications, and fund level return calculations for cross-holdings. It also considered changes to restatement policy.

The following pages provide a summary of the feedback and MSCI’s planned course of action. The six areas of feedback covered in this document are:

1. Operating Costs
2. Yields
3. Property Classification
4. Vacancy
5. Global Fund Attributes
6. Cross Holdings

We would welcome any further feedback on the specific proposals and plans so please contact your client consultant or send an email to feedback@ipd.com should you want to provide additional comments or discuss further.

---

1 A copy of the October Consultation summary document can be found here.
FEEDBACK SUMMARY AND NEXT STEPS

OPERATING COSTS

a. Feedback overview
Clients welcome the simplification of the costs breakdown and data collection standard. As a consequence, MSCI plans to introduce the proposed changes listed on pages 5 to 9 of the proposal summary document.

b. Specific feedback

Feedback 1: Announced timing for implementation
“We support the initiative but have some concern about timing of implementation: you are proposing to implement as at Q4-14, but we feel Q1-15 would make more sense in order to keep methodology for calendar year 2014 consistent.”

MSCI’s response:
The implementation of the new cost breakdown will probably take place in H2 2015, later than initially thought. In terms of data collection, MSCI plans to keep the existing data collection standard for one more year before transitioning to the new one. Implementation of the new data collection standard is likely to occur in 2016.

Feedback 2: Definition of ground rent
“Ground rent – this is not defined.”

MSCI’s response:
MSCI defines ground rent as: “Total costs payable against the property and representing the rent due on leasehold properties to a superior landlord/owner of the freehold. Where ground rents include a turnover element based on tenant trading figures, provide the last available figure as a best estimate and adjust for the accrual in the following period. These amounts should include any movement in accrued costs and may include negative amounts where costs have been reversed.

Feedback 3: Definition of operating costs
“Please clarify that this is the sum total of utilities, maintenance, insurance, property taxes, property management, other costs, costs of vacancy, lettings, ground rents and bad debt write-offs defined in this section.”

MSCI’s response:
This is correct and will be added to the general definition as follows:
“Operating costs are the sum of all the categories detailed in this section. Gross and net totals are the sum of their respective categories for utilities, maintenance, insurance, property taxes, property management costs, and other costs. Both gross and net totals commonly include cost of vacancy, lettings, ground rents and bad debt write-offs.”
Being net of all recoveries, the net total or operating costs can be adjusted by miscellaneous recoveries that could not be categorized in prior categories. These recoveries will be recorded apart and deducted from components of the net total. MSCI hopes this alternative will have limited magnitude over time to enable a proper benchmarking of recovery practices.”

Feedback 3: Definition of gross costs

“[The proposed definition] implies that we will in future need to provide service charge expenditure and recoveries – a considerable added reporting burden.”

MSCI’s response:

MSCI is aware of the burden represented by data collection. That said, the simplification of the breakdown and its standardization will greatly reduce data collection burden, particularly for multinational investors.

Feedback 4: Inconsistency of capital cost definition

“The definition of capital costs is not consistent with current practices. Rather than inflict a special definition purely for MSCI purposes the pragmatic solution is to require contributors to adopt the default definition supplied or similar market practices / client requirements. For example, I doubt that many institutional investors capitalise fit out costs for new tenants. In practice, the differences are likely to be small in most jurisdictions – let’s not lose sight of the main requirement to ensure that all costs are reflected.”

MSCI’s response:

We do think that there are instances of some fit out costs being recorded as operating costs. MSCI’s goal is not to go against the practices when these practices are homogeneous or standard around the world. MSCI could not find such a standard for CAPEX where definitions are closely dependent on national accounting regimes, and in some cases are even investor-specific. This is why MSCI proposed a global standard that would allow for better global comparability of total return calculations, but that has the necessary inconvenience of being different from some locally entrenched practices. MSCI Client Coverage team will be assisting clients with any difficulty with data collection in relation with CAPEX. To reflect this, we suggest rephrasing the last paragraph as:

“Normal maintenance is therefore an operating expense as opposed to significant fit out costs for a new occupier which would normally be considered capital expenditure.”

Feedback 5: Definition of utilities

“This should cover the cost of utilities supplied ‘and paid for by the investor’ for the period. Just to clarify we cannot provide details of utility costs paid by tenants.”

MSCI’s response:

This is correct. MSCI is not asking for the utility costs paid directly by the tenant.
Feedback 6: Definition of property letting costs

“I assume legal fees on lettings, lease renewals and rent reviews should be reported.”

MSCI’s response:
This is correct.

Feedback 7: Definition of market rental value

“The definition of Market Rental Value is gross of ‘recoveries’. These appear to extend to service charges. Why include the service charge demanded but not deduct the costs incurred? Are we going to have to provide you with service charge expenditure and recovery data in future for every tenancy reconciled on a quarterly basis? This is likely to represent a considerable amount of work for little benefit - the short cut is what is done in the UK at the moment and only expense service charge shortfalls. How does this reconcile with the reduced contribution effort objective?”

MSCI’s response:
The proposal points out that the definition of market rental value should not be gross but rather net of recoveries. The service charge is therefore not relevant when defining estimated rental values (ERV) and MSCI is keen to not increase the complexity of data collection by avoiding details of costs at a tenancy level.

a. Feedback overview
Clients were supportive of the proposed change. The new standard will be implemented in the second half of 2015. MSCI is aware that the adoption of this standard represents a significant shift, especially for the UK market, and will keep providing local measures as the equivalent yield.

b. Specific feedback

Feedback 1: Yields for UK reporting

“We support the use of the new yield measures for your global products if this achieves global consistency, but we feel it is crucial to stick with the original calculation of net initial yield for UK reporting. To avoid confusion, we would suggest perhaps re-labelling the original as ‘UK net initial yield’ or similar; however, the UK market is used to reporting net initial yield as (Rent Passing - Ground Rent)/Gross CV and changing this calculation now would lead to considerable inconsistencies and confusion.”

MSCI’s response:
MSCI recognises this concern and will consider the possibility best way to address it.
Feedback 2: Net initial yield calculation

“We are unclear what is meant by 'total net costs'; if this includes irrecoverables then by definition it would be a 'net net yield'. Please can you provide clarity on this and provide a worked example?”

MSCI’s response:

Total net costs are calculated as total gross costs minus total recoveries. The net initial yield is calculated as the difference between annualized rent passing and total net costs, over either capital value gross or net of transaction costs. When the denominator is the gross capital value, MSCI refers to the Net Gross Initial yield, when the denominator is the net capital value, MSCI will refer to the Net Net Initial yield. The first “net” or gross relates to the numerator, the second to the denominator of the yield. The table below clarifies the denomination MSCI will apply for the different yields.

<table>
<thead>
<tr>
<th>Operating expenditures deducted (Numerator)</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transaction cost deducted (Denominator)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>Net Net</td>
<td>Gross Net</td>
</tr>
<tr>
<td>No</td>
<td>Net Gross</td>
<td>Gross Gross</td>
</tr>
</tbody>
</table>

Please find below a worked example.

<table>
<thead>
<tr>
<th></th>
<th>2013 in K€</th>
<th>2014 in K€</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Capital Value</td>
<td>4 800</td>
<td>5 000</td>
</tr>
<tr>
<td>Rent Passing</td>
<td>260</td>
<td>250</td>
</tr>
<tr>
<td>Total Net Costs*</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Gross Net Initial yield</td>
<td>5.4%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Net Net Initial yield</td>
<td>5.1%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

*Total of Net Costs is the Total of Net Operating costs for the preceding 12 months. It includes Utilities, Maintenance, Property Taxes, Management Costs and Other Net Costs, and as well Cost of Vacancies, Letting & Rent Review fees, Ground Rents, Bad Debt Write-offs.

Feedback 3: Net initial yield calculation

“The numerator income looks ok (rent + turnover + other), but is it really your intention to strip letting costs out of the Total Net Costs (Operational Costs). Is this the standard method used in the past?”
MSCI’s response:

Stripping the letting costs is an EPRA reporting standard. The treatment of letting costs as an expense or as capital varies according to the accounting regimes, and is a potential source of inconsistency through countries. We could also argue that, generally letting costs affect value beyond the taxable year, and should not be fully expensed when incurred.

Feedback 4: Equivalent yield

“Not covered in this consultation, but the cashflow model behind the MSCI equivalent yield metric is outdated and producing increasingly strange yields and income residuals that are far out of step with valuation yields.”

MSCI’s response:

MSCI is aware of this issue, and plans to review the assumptions of the recalculated equivalent yield in the next phases of the development of our new standards.

Feedback 5: Rationale for calculating both gross and net yields

“Please explain the rationale for calculating yields both on a gross and net capital value basis while fair market value uses only gross capital value.”

MSCI’s response:

The aim is to answer needs belonging to the following two phases of the investment cycle of a property. The first phase corresponds to the period before the acquisition of the property: yields are quoted in most markets on a gross basis. The second phase corresponds to the period when the property is held in a portfolio: here performance calculation assumes an appraisal value that is a net capital value.

Feedback 6: Definition of rent passing

“Rent passing used in the calculation of the net initial yield is not a common concept for markets outside the UK/US, and people in Europe find the concept ambiguous.”

MSCI’s response:

We hope that the definition provided in page 11 of the proposal is now clear enough: Total annual contracted rent derived from all leases in the property, at the valuation date. It excludes turnover rents and other recurring operating income, which should be recorded separately. It also excludes effects of straight lining for lease incentives such as rent free periods or step rents, VAT, arrears, interest on arrears, cost recoveries, key money, and surrender Premiums.

Feedback 7: Reversionary yield

“It is important to clarify the source of ERV, whether the calculation uses accounting data (provided by the appraiser) or whether it is based on tenancy source. Reversionary yield should be based on up-to-date tenancy figures and not on data from valuations which tend to be outdated.”
MSCI’s response:

MSCI is aware that sources of ERV information are inconsistent across markets, and plan to address it.

---

**PROPERTY CLASSIFICATION**

a. Feedback overview

The bulk of the feedback related to the length and detail of the property classifications. It is of paramount importance for our business, the strength and relevance of our analytics and for the global industry, to rely on MSCI using one standard global definition of the major property type. The proposal address this need. In each market the list presented to clients can be tailored to reflect the major property types covered by our clients locally.

b. Specific feedback

Feedback 1: Retail sector is over-expanded

“The proposed list of new property classifications is terrifying; the retail sector is already over-expanded in the existing product. How are you going to define ‘small’ regional centre? Surely this will change across geographies and is widely open to interpretation. Are they consistent with the ICSC definitions?”

MSCI’s response:

MSCI acknowledges that the global retail classification is long. This issue will be addressed in the data collection template that will provide a step by step approach for the classification of properties, and will only show the relevant property types in each market.

The granular data collection is already in place in all markets, we are just refining it and aligning definitions across markets. This will not change the way we report the most used segmentation in our products (indexes, PAS, etc), but will allow us a greater level of cross border comparability where clients require a more detailed property type breakdown.

In regards to the global shopping centre classification, although it is mainly based upon the ICSC classification there are still market specific requirements missing. The example given for “Small regional centres” are only related to the the South African market. The full list of shopping centres covers what we want to use globally but MSCI understands that not all property types are applicable for particular markets. MSCI plans to resolve this by only showing the relevant property types for each market via MSCI’s DCTs.

Feedback 2: Niche property types

Several respondents made comments on various niche property types being missing from the classification. To give a couple of examples:

“The proposed classification also omits various niche property types. e.g. student accommodation, data centres, etc.”

“Bingo Halls / Casinos and student accommodation appear to be missing. Is it worth making a distinction between petrol filling stations and motorway service stations?”
stations?”

MSCI’s response:

Data centres, student housing, specialist care homes, petrol stations, etc are still included however we have had to change the structure of some sectors. This will allow us to have more flexibility and aid better analysis going forward.

In regards to Bingo Halls and Casinos, historically we have not had this property type however we do see the use of having this within our classifications to be classified under the leisure sector. We have kept service stations to include both petrol filling stations and motorway service stations as there hasn’t been any specific demand or analysis required to understand the performance between the two. Furthermore we feel the use and build out of both are similar and can be aggregated into one.

Feedback 3: Reclassification of certain property types

“We do not think that car showrooms should be classified as retail but rather should be under ‘Other’. We would also like to see restaurants, bars, and pubs classified as leisure at all times and not just when on a leisure park.”

MSCI’s response:

Although there has been some suggestions to move property types such as showrooms, restaurants and bars into other sectors we are also aware that by doing so it will create changes in historical returns as it results in changing the way properties were classified in our current systems.

Feedback 4: Part ownership

“How would ownership of a part of a region shopping center be classified?”

MSCI’s response:

If you had part ownership of a Regional Shopping Centre we would still class the asset as a Regional Shopping Centre as the performance of your share of the asset still reflects the performance of a Regional Shopping Centre.

**FINANCIAL VACANCY**

a. Feedback overview

Most respondents support the proposed financial vacancy definition, including the exclusion of properties under development. Some respondents have suggested the development of new measures (year average financial vacancy, vacancy rate taking into account strategic vacancy).

b. Specific feedback

Feedback 1

“The fifth consultation question is inconsistent with the third. Please clarify if you are intending to include or exclude developments.” (Page 13)
**MSCI’s response:**

We confirm that properties under development will be excluded.

**Feedback 2**

“Why is the vacancy rate calculation based on ‘unoccupied space’ – surely it should be “vacant,” because an unoccupied unit can be let and income producing.” (Page 14)

**MSCI’s response:**

We confirm that the correct wording in Page 14 should be “vacant” and not “occupied”, since financial vacancy will occur only when no lease is attached to the unit.

**Feedback 3**

“Why is insurance commission excluded (page 12)? In the past, one of my clients paid a high property management fee but was reimbursed the property manager’s insurance commission. All things being equal your proposal would understate their performance.”

**MSCI’s response:**

In the case described above, MSCI will count this amount of cost recovered as part of cost recoveries.

**Feedback 4**

“The definition of Full Contracted Rent is very complex. What is it used for?” (page 12)

**MSCI’s response:**

The full contracted rent concept is used in the detailed calculation of the topped-up initial yield, which is a standard yield defined by the EPRA.

**Feedback 5**

“We calculate both floor space vacancy and financial vacancy, but find floor space vacancy more useful. Financial vacancy is less used as, in addition to the cost of inoccupation, it also reflects revenue losses due to tenant incentives.

We distinguishes then for each vacancy rate a “spot” vs. “year average”, and “total” vs. “leasing units” (excluding “strategic vacancy”)

Although We are interested in MSCI producing a vacancy rate measure excluding structural vacancy, we acknowledged that “strategic vacancy” is subject to interpretation, hence vacancy figures published by REITs that tend to be very low, and not necessary comparable.”
MSCI’s response:

MSCI will consider the value of developing additional measures of vacancy, including annual averages, and measures excluding strategic vacancy.

### GLOBAL FUND ATTRIBUTES

**a. Feedback overview**

All respondents were in agreement with the fund attributes and their definition as being relevant building blocks for fund type segmentation.

**b. Specific feedback**

**Feedback 1**

“We prefer the term "Balanced" to "Diversified".”

**MSCI’s response:**

Diversified was preferred because in some markets, ‘Balanced’ is associated with equal weights across sectors.

**Feedback 2**

“Is the architecture intended to apply to ‘Funds’ only or is it intended to cover all types of investment vehicle – i.e. commingled funds, separate accounts, JVs etc. If the latter, the definitions based on ‘fund’ are misleading and you should perhaps refer to ‘all investment vehicles’.”

**MSCI’s response:**

At MSCI we tend to call any investment vehicle a fund for simplicity. The definitions for each record will clarify the point.

**Feedback 3**

“The management model table (page 29) refers to property management but the definitions refer to fund management (pages 34 and 35)?”

**MSCI’s response:**

On Page 29, the attribute should read fund management, not property management.

**Feedback 4**

“MSCI should be able to classify not only current fund strategy, but also the initial strategy. Some funds like POF have drifted in terms of strategy from core (initially) to opportunistic (at the time of liquidation).”
MSCI’s response:

The fund strategy is recorded in a “periodic field”, i.e. a field update in each period. If the fund strategy changes over time, it is possible to change it.

---

**FUND LEVEL CROSS-HOLDINGS**

**a. Feedback overview**

From the feedback of several global managers, cross-holdings are not today considered as a major problem, except in a few specific countries like the UK. As expected, respondents showed diverse opinions on the rationale for adjusting, depending on their respective expectations on what an index is supposed to measure, i.e. market performance (irrespective of ownership structure) or the aggregation of vehicles’ performance. We believe that the current proposal addresses the diversity of these expectations.

**b. Specific feedback**

**Feedback 1**

“In theory we are supportive of removing the adjustment for cross-holdings, when looking at the benchmark it is useful if the benchmark is equal to the sum of all funds, particularly when looking at quartiles. However, as the only benchmark we use is Other Balanced Funds, there are unlikely to be any cross holdings.”

**Feedback 2**

“The case for cross-holding adjustment is obvious: the way underlying assets are owned should not have an impact on performance. Everything equal, if we accept that the ownership structure has an impact on performance, we accept artificial value creation. We do not think that funds with an "excessively large indirect exposure" should be eliminated from the benchmark. Cross-holding adjustment is the solution that should be adopted as it makes more sense economically.”

**Feedback 3**

“Cross-holdings are a genuine reality of the UK market. Balanced/diversified funds should not have any cross-holdings but specialist funds will have exposure to them. There is a difference between an index and a benchmark. Benchmarks may ignore cross-holdings but not indexes. An index with cross-holdings would include double-counting and that would be incorrect. Funds mainly invested in other funds, should be included in the Index (i.e. the master fund investing in the 3 sector funds and the 3 sector funds themselves) because the 4 funds are genuinely accessible by outside investors. The master fund was NOT a fund-of-fund, the fund manager of the master fund had full control of the sub-funds and therefore it was managed like a direct fund.”

**Feedback 4**

“We are surprised that funds with indirect investments are included in PFI. We think negatives of removing cross-holdings are greater than leaving in.”
Feedback 5

“If you are forced to remove cross-holdings, the fund you should remove from (the acquirer) is the one you can’t as you will not capture active decision. You can’t remove from fund whose shares are owned as this would be punishing them (lower weight in index) for who owns their shares.”

Feedback 6

“Adjusting for cross-holdings is probably theoretically right, but we wondered whether it is practically feasible. We believe that property funds should not invest indirectly and that there should be a limit to indirect holdings for funds we include into benchmarks. Typically, fund of funds should be excluded from the benchmark. In Italy, fund investing into other funds is relatively rare.”

Feedback 7

If we want to capture the performance of the real estate market, we need to remove the and double counting. If we are measuring the performance of funds we need to include everything, as it is important to capture all active management decisions.

After all if you were to build a Benchmark only including Fund of Funds, it would not make sense to remove cross-holdings from the benchmark to measure these funds’ performance.

Although cross-holding in France is not an issue today, it may change as indirect exposure could become a bigger part of the market. OPCI fund managers have just started to invest in UK and Germany by buying units of other funds... in 2 / 3 years they could start buying outside Europe and it could make sense to do it indirectly (so indirect investment as either a international diversification strategy or to pursue specific investment strategy – asset type/geographies).

Feedback 8

“Please confirm if the quarterly and annual universes in the UK will include cross-holdings. Since you have referred to funds, we take it that this cross-holding issue is purely limited GPF indices?”

MSCI’s response:

Including is a standard both for the Global Property Fund Index and also for local Property Fund Indexes. That said, MSCI retains the capacity to adjust for cross-holdings in specific markets where the industry requests it. More specifically, MSCI will liaise with the UK consultative group and will take a decision on the UK PFI.

Feedback 9

“If cross-holding are included, please can you clearly disclose this on all reporting and as a minimum state the % of cross-holding and the approximate impact on return for each country / region. 25bps may not sound a lot, but it is a significant slice of most funds’ outperformance objectives. (page 36).”

MSCI’s response:

MSCI will consider disclosing a relevant indicator of the level of cross-holdings in a market.
Notice and Disclaimer

• This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or redistributed in whole or in part without prior written permission from MSCI.

• The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

• The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NO ONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO THE INFORMATION. The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO THE INFORMATION. The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information.

• Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or subcontractors.

• Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

• The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

• None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

• It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

• Index returns do not represent the results of actual trading of investable assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

• The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

• Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

• Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research Inc. and Barra LLC, may be used in calculating certain MSCI equity indexes. More information can be found in the relevant standard equity index methodologies on www.msci.com.

• MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in investment products linked to MSCI equity indexes. Information can be found in MSCI's company filings on the Investor Relations section of www.msci.com.

• MSCI ESG Research Inc. is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and neither MSCI nor any of its products or services is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.

• Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD, FE, FEA, InvestirForce, and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor’s. “Global Industry Classification Standard (GICS)” is a service mark of MSCI and Standard & Poor’s.

About MSCI

MSCI Inc. is a leading provider of investment decision support tools to investors globally, including asset managers, banks, hedge funds and pension funds. MSCI products and services include indexes, portfolio risk and performance analytics, and ESG data and research.

The company’s flagship product offerings are: the MSCI indexes with over USD 9 trillion estimated to be benchmarked to them on a worldwide basis; Barra multi-asset class factor models, portfolio risk and performance analytics; RiskMetrics multi-asset class market and credit risk analytics; IPD real estate information, indexes and analytics; MSCI ESG (environmental, social and governance) Research screening, analysis and ratings; and FEA valuation models and risk management software for the energy and commodities markets. MSCI is headquartered in New York, with research and commercial offices around the world.

1 As of June 30, 2014, as reported on September 30, 2014 by eVestment, Morningstar and Bloomberg

Nov 2014

MSCI [real estate] 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document

13 of 13