An MSCI Brand

Bringing global consistency to real estate performance measurement

IPD Global Data Standards Consultation

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WHY IS CONSULTATION REQUIRED?

Real estate investment is increasingly recognized as a global asset class by institutional investors. Although the preference for domestic investment remains strong, more and more institutions are adopting a global approach to real estate in order to fully exploit the substantial diversification potential of the asset class.

MSCI is supporting these trends by providing its clients with objective insights – via real estate performance measurement and analytics through the investment process - to power their multi-asset and multinational portfolio construction and management. In order to be most widely used, these insights need to be comparable internationally and across asset classes, and to allow for integrated measurement and analysis at the fund, asset and tenant level.

In order to achieve this, MSCI has begun the ambitious project of enhancing the global consistency of its indexes and portfolio analytics by standardizing the collection of data, the calculation of measures and the classification of markets over the 32 countries it covers. As well as enhancing global consistency, standardization is a necessary first step towards the greater automation of data collection, which should eventually lead to a drastic reduction in the workload for data contributors.

This global standardization project is being conducted under the governance of the **real estate Technical Committee** and represents a thorough process involving both research by MSCI and consultation with market participants and their representative bodies. This standardization process is not being undertaken from a purely theoretical viewpoint: it is essential that it should create greater value for market participants globally, while not losing any of the value that lies in locally-generated information.

For this reason we would like to consult for the third time this year on the methodological changes we are intending to make.

In March 2014, we announced a **series of changes to our standard methodology**: establishing a list of key global financial variables; developing a performance methodology excluding currency impacts ("local currency benchmarks"); standardizing the methodology for index reweighting; and standardizing fund level performance globally.

In October 2014, we considered the implementation of six new changes in the following areas: global operating cost classification and measures, global yield measures, global vacancy measures, global property classification, global fund classification and a standard fund level return calculation for cross-holdings.

In this current consultation, we are considering the implementation of seven new changes.

Broad descriptions of the proposed changes are provided below, together with links that will direct you to descriptions of each proposed change and consultation questions.

We would appreciate your feedback on the proposed changes, and are seeking to obtain this before 7th February 2015. Please provide your comments/answers to the consultation questions either via your client consultant or directly by email: **feedback@ipd.com**

PROPOSED CHANGES FOR CONSULTATION

MSCI's standardization work in 2014 has continued to focus primarily on enhancing the global consistency of asset level and fund level measures and classifications. The scope of the current consultation focuses on seven broad areas, with some of the key issues raised by our research being summarized below:

1. Standard Net Income Formula and Data Collection

Net operating income (NOI) derivation in data assembly and processing is not currently standardized across markets. In some markets the data are collected directly from contributors, while in others they are derived from gross income and cost information. When derived, the formula used differs from country to country, depending on the income and costs fields collected. Consequently, in some cases recoveries are recorded as an income component, which may create confusion and the possibility of double-counting. MSCI is proposing to standardize the formula and data collection standard for the calculation of net operating income.

2. Change to Variable Currency Conversion for Capital Expenditure

Clients have questioned the logic of weighting capital expenditure to the start of the month when calculating capital employed, but then converting that data to another currency (if required) at an end-month rate. For the purposes of internal consistency, we propose to change the timing of the currency conversion of capital expenditure from the current end-month rate to the prior end-month rate.

3. Standardization of Gross Capital Value derivation

Standard yield measures **(see October 2014 Consultation)** are to be calculated both on a net capital value (excluding acquisition costs) and a gross capital value basis. At MSCI, gross capital values are collected from contributors, or derived by adding an estimate of acquisition costs to the collected net capital value. At present, gross capital values are available in only half of the markets MSCI covers. In markets where gross capital values are available, MSCI's method of derivation applies acquisition cost estimates that 1) do not necessarily account for geographical differences, and 2) are not updated consistently across countries. MSCI proposes to change its standard methodology in order to be able to use accurate gross capital values in all countries.

4. Global Monthly Asset Operational Classification

For analytical purposes, MSCI endeavours to distinguish passive performance from performance resulting from active management. Active management is defined as development, re-development and transaction activity. In order to estimate passive performance, assets are classified based on their operational status and only those which are not subject to any active management ("Standing Assets") are included in the analysis. However, the current definition of standing assets does not only cover passive management, as it also includes leasing activity, a part of active management. For analytical purposes, MSCI proposes to distinguish, within the current standing assets category, those that are heavily exposed to leasing risk ("Non-stabilized Assets") from those that are not ("Stabilized Assets").

5. Asset Exclusion Rules for Indexes

MSCI runs a stringent data quality assessment process during every data update period for the purpose of identifying errors that may have been missed by data submitters ("bad data"). If these errors are not corrected in time for index calculation, the relevant assets are excluded. In addition, assets may also be excluded from MSCI indexes when they display attributes (e.g. natural damage) or performances that are judged to be "abnormal", on the grounds that they are manifestly different from underlying market trends. Although this exclusion framework is structured around a formal and robust validation process, criteria for excluding abnormal assets are – in most countries - discretionary, and this can potentially undermine index comparability and objectivity. MSCI is proposing to standardize its definition of "bad data", and to discontinue any asset exclusion based on discretionary decisions.

6. Asset to Fund Performance Reconciliation

MSCI calculates real estate investment performance at the asset and fund level. Fund reconciliation means linking asset and fund-level performance through the performance of the intervening investments and financial layersThe impact of each individual component depends on the sequence in which the reconciliation is performed. Markets have adopted different sequences and the definition of a common sequence needs to be agreed. MSCI proposes to change various local standards and apply the same sequence of reconciliation globally.

7. Assets and Liabilities Classification

For reporting, fund performance measurement and analytical purposes, MSCI collects financial data on all assets and liabilities present in funds/vehicles. Currently, the data classification standard varies from country to country. MSCI is considering establishing a standard global classification of assets and liabilities. This will help asset to fund reconciliation and also make data collection clearer and more consistent across countries.

COMMENTS AND FEEDBACK

The consultation period is open until 7th February 2015. Please provide your comments either to your client consultant or directly by email: **feedback@ipd.com**

Following the end of the consultation period, we will send you a summary of the comments that were provided, how we plan to address them, and the eventual decision on the way in which they will be reflected in future MSCI outputs.

TOPICS FOR FUTURE CONSULTATION

MSCI is also in the process of standardizing a number of other methods. Below is a list of the areas where future changes may have a material impact on performance:

- Interpolation
- Geographic Classification
- Asset Operational Classification 2 (Summary Status and Asset Strategy)
- Restatement and Freezing
- Headline Measures Sample Consistency
- Market Size Estimates
- Global Tenancy Data Collection Standard

We are currently assessing the impact of these changes, and if significant, they will be subject to another round of consultation within the next three months.

CONSULTATION ITEM 1: NET OPERATING INCOME

BACKGROUND

Net operating income (NOI) derivation in data assembly and processing is not currently standardized across markets. In some markets the data are collected directly from contributors, while in others they are derived from gross income and costs information.

When derived, the formula used differs from country to country, depending on the income and costs fields collected. Consequently, in some cases recoveries are reported as an income component, which may create confusion and the possibility of double counting.

PROPOSED CHANGE

From now on all countries will both collect (for validation purposes) and derive net operating income as:

NOI = rent as invoiced (including turnover rent) + other income + key money/surrender premiums – total net costs

Where, net costs are gross costs – recoveries, and **(see October 2014 Consultation)**:

- Gross costs comprise all operating costs that are paid out by an investor in the operation of a property. Some of these can be recovered from tenants, while others cannot. These costs are sometimes referred to as total costs, but they do not include those costs paid directly by tenants (e.g. single-let properties, full insurance and repair leases etc.)
- Recoveries are payments that tenants are required to pay the owner of a property for operating expenses that the latter has paid, under the lease provisions in place. Precise payment arrangements may vary, with recoveries either fixed in advance or adjusted to cover costs actually incurred.

It should be stressed that in deriving net operating income, MSCI will treat recoveries as a cost component, not as revenue.

Net operating income will continue to be collected for the purpose of checking the results obtained from the derivation formula.

BENEFITS / IMPACT

- Impact on the reported net operating income will not be significant.
- Enhanced comparability of revenue and cost components, and avoiding double counting.
- Greater data processing simplicity and speed.

TIMELINE FOR IMPLEMENTATION

Second half of 2015

CONSULTATION QUESTIONS

- Does the definition of net operating income above correspond to practices in your market?
- If not, please describe the differences.
- Are the definitions below clear to you?

DEFINITIONS

Rent as invoiced	Rent as invoiced for the period from all leases net of any rent discounts but gross of ground rent, and including turnover rents. The sum of unit level rents invoiced including turnover rent. Excludes: • Rent lost due to vacancies • VAT • Arrears • Prepayments • Repayments • Service charges • Buying-out rental contracts.
Other income	Income other than rental income attributable to the property for the period, aggregated to the property level. May include: hoardings, wayleaves, rights of way, income guarantees, subsidies, and car parking income (where not included in the rent as invoiced above). Excludes: • Key money • Surrender premiums • Income derived from expenditure recoveries (service charges) • Interest paid on rent arrears • Tax credits • Income from activities outside the landlord's obligation under tenant leases e.g. income from supply of secretarial or other services to tenants. • Insurance commission.
Key Money / Surrender premium	Key money: Payments occasionally made by potential tenants to secure a new lease. (Excludes deposits paid by tenants and held by landlords against potential damages.) Includes surrender premiums treated as revenue receipts under local accounting regulations: Payments made by tenants to release them from lease contracts prior to the expiry date. Surrender premiums classed as capital receipts under local accounting regulations should be recorded under capital receipts.
Total Net Costs	For the preceding 12 months, represent the sum of all operating costs net of recoveries: (utilities, maintenance, property taxes, management costs and other net costs) + (cost of vacancies, letting & rent review fees, ground rents, bad debt write-offs) minus unallocated recovered costs

CONSULTATION ITEM 2: VARIABLE CURRENCY CONVERSION

BACKGROUND

MSCI calculates performance in different currencies by converting every component of return for each asset. Clients have questioned the logic of weighting capital expenditure to the start of the month when calculating capital employed, but then converting that data to another currency (if required) at a month-end rate.

PROPOSED CHANGE

For the purposes of internal consistency, we propose to change the timing of currency conversion of capital expenditures from the current month-end rate to the prior month-end rate.

The currency conversion tables used are Reuters Company / WM London 4PM, which are consistent with the rates used by the MSCI equity business.

BENEFITS / IMPACT

- Simulation based on a subset of the MSCI universe shows this change to have had a limited impact on total return, in the order of a few basis points, except for a number of months in Continental Europe and in the UK (see simulation results table on the following page).
- Enhanced internal consistency.
- Enhanced comparability with MSCI equity indexes.

CONSULTATION QUESTIONS

- Do you agree with the change?

Current formula

$$TR_{t\_Conv} = \frac{(CV_t \text{ x } Xrate_t) - (CV_{t-1} \text{ x } Xrate_{t-1}) - (CExp_t \text{ x } Xrate_t) + (CRec_t \text{ x } Xrate_t) + (NI_t - Xrate_t)}{(CV_{(t-1)} \text{ x } Xrate_{t-1}) + (CExp_t \text{ x } Xrate_t)}$$

New formula

$$TR_{t\_Conv} = \frac{(CV_t \text{ x } Xrate_t) - (CV_{t-1} \text{ x } Xrate_{t-1}) - (CExp_t \text{ x } Xrate_t) + (CRec_t \text{ x } \boxed{Xrate_{t-1})} + (NI_t - Xrate_t)}{(CV_{(t-1)} \text{ x } Xrate_{t-1}) + (CExp_t \text{ x } \boxed{Xrate_{t-1})}}$$

Note that the equity business uses a different method to convert performance in different currencies. Instead of converting the raw variables for each asset, it converts the performance itself, by compounding the performance by the change in the currency rate over the same period. Our proposed methodology has the benefit of reconciling the results with those calculated using the equity business methodology.

Total return difference between old and new currency conversion methodologies

	Old conversion method					New conversion method					Difference (new - old), bps				
	Asia-pacific	Cont. Europe	North America	Other	UK	Asia-pacific	Cont. Europe	North America	Other	UK	Asia-pacific	Cont. Europe	Nth America	Other	UK
Mar '08	5.11%	8.66%	1.01%	8.38%	-3.45%	5.15%	9.11%	1.01%	8.38%	-3.43%	4	45	0	0	2
Jun '08	5.89%	-1.40%	0.63%	--	-2.66%	5.93%	-1.37%	0.63%	--	-2.65%	4	4	0	--	1
Sep '08	-17.67%	-11.98%	-0.54%	--	-15.07%	-17.69%	-12.23%	-0.54%	--	-15.11%	-2	-24	0	--	-5
Dec '08	-13.63%	-5.00%	-8.59%	--	-28.85%	-13.59%	-4.68%	-8.59%	--	-28.88%	4	32	0	--	-3
Mar '09	-3.48%	-6.40%	-9.47%	-4.48%	-6.45%	-3.50%	-6.35%	-9.47%	-4.48%	-6.45%	-2	5	0	0	0
Jun '09	13.37%	3.81%	-5.58%	5.64%	11.50%	13.42%	3.83%	-5.58%	5.64%	11.58%	5	2	0	0	7
Sep '09	9.07%	3.46%	-3.80%	4.21%	-0.01%	9.09%	3.49%	-3.80%	4.21%	-0.04%	2	3	0	0	-4
Dec '09	3.72%	-2.08%	-1.75%	-1.84%	8.70%	3.73%	-2.09%	-1.75%	-1.84%	8.62%	1	-1	0	0	-8
Mar '10	3.99%	-4.15%	1.12%	-5.69%	-1.55%	4.02%	-4.17%	1.12%	-5.69%	-1.69%	4	-2	0	0	-14
Jun '10	-5.47%	-7.76%	3.71%	-9.47%	1.28%	-5.48%	-7.85%	3.71%	-9.47%	1.32%	-1	-9	0	0	3
Sep '10	17.37%	12.98%	4.51%	11.45%	7.47%	17.40%	13.28%	4.51%	11.45%	7.69%	3	30	0	0	21
Dec '10	8.71%	-0.01%	3.87%	-1.73%	1.26%	8.72%	0.08%	3.87%	-1.73%	1.27%	1	10	0	0	0
Mar '11	3.38%	7.43%	3.49%	5.78%	4.46%	3.39%	7.47%	3.49%	5.78%	4.46%	1	4	0	0	1
Jun '11	6.12%	3.64%	4.08%	2.17%	2.30%	6.13%	3.67%	4.08%	2.17%	2.25%	1	3	0	0	-5
Sep '11	-6.88%	-6.36%	3.15%	-7.46%	-1.16%	-6.90%	-6.40%	3.15%	-7.46%	-1.17%	-2	-4	0	0	-1
Dec '11	8.04%	-1.96%	2.66%	--	1.41%	8.05%	-1.98%	2.66%	--	1.41%	1	-1	0	--	0
Mar '12	3.34%	3.71%	2.56%	--	3.73%	3.31%	3.72%	2.56%	--	3.75%	-2	1	0	--	2
Jun '12	1.25%	-3.70%	2.45%	-4.71%	-1.36%	1.24%	-3.79%	2.45%	-4.71%	-1.38%	-1	-8	0	0	-1
Sep '12	3.38%	2.36%	2.41%	--	3.45%	3.38%	2.32%	2.41%	--	3.48%	0	-4	0	--	3
Dec '12	1.92%	2.81%	2.12%	2.47%	0.67%	1.91%	2.89%	2.12%	2.47%	0.72%	0	7	0	0	4
Mar '13	2.43%	-1.38%	2.40%	--	-5.56%	2.42%	-1.38%	2.40%	--	-5.60%	-1	0	0	--	-5
Jun '13	-9.88%	2.02%	2.96%	--	1.81%	-9.93%	2.03%	2.96%	--	1.78%	-5	1	0	--	-3
Sep '13	4.48%	5.41%	2.92%	--	9.51%	4.47%	5.45%	2.92%	--	9.63%	-1	4	0	--	12
Dec '13	-2.14%	2.83%	2.74%	--	6.67%	-2.18%	2.87%	2.74%	--	6.73%	-5	5	0	--	6
Mar '14	5.97%	1.49%	2.46%	0.02%	4.05%	5.96%	1.50%	2.46%	0.02%	4.04%	-1	1	0	0	-1

CONSULTATION ITEM 3: GROSS CAPITAL VALUE DERIVATION

BACKGROUND

Standard yield measures **(see October 2014 Consultation)** are to be calculated both on a net capital value (excluding acquisition costs) and a gross capital value basis. At MSCI, gross capital values are collected from contributors, or derived by adding an estimate of acquisition costs to the collected net capital value. At present, gross capital values are available in only half of the markets MSCI covers. In markets where gross capital values are available, MSCI's method of derivation applies acquisition cost estimates that 1) do not necessarily account for geographic differences, and 2) are not updated consistently across countries.

PROPOSED CHANGE

In order to be able to use accurate gross capital values in all countries, it is proposed that:

- MSCI will not collect gross capital values but will calculate them from acquisition costs and net capital values.
- The same definition of acquisition costs will be applied in all countries, the sum of transfer tax on the date of valuation, notional legal and agency fees, and any other costs incurred in the course of the acquisition.
- The primary source of acquisition cost information remains the contributors, but where they are not able to provide this information, MSCI should estimate it.
- Estimated acquisition costs will be determined by MSCI Research from a survey of market agents, at least once every three years. Interim updates will be implemented when significant legislative changes come into effect.
- Acquisition costs will be collected from investors as a percentage to be added to net capital value.

TIMELINE FOR IMPLEMENTATION

Second half of 2015

BENEFITS / IMPACT

- Ability to calculate yields on a gross capital value basis in all countries.
- Enhanced accuracy of gross capital value derivation, reflecting ongoing changes in acquisition costs.

CONSULTATION QUESTIONS

- Do you agree that MSCI should estimate acquisition costs when they are not provided?
- Do you quote yields on a gross or a net value basis?
- Do you agree that an update of the acquisition costs every three years is acceptable?
- Do you agree with the granularity of the acquisition costs data collection?

CONSULTATION ITEM 4: GLOBAL MONTHLY ASSET OPERATIONAL CLASSIFICATION

BACKGROUND

For analytical purposes, MSCI endeavours to distinguish passive performance from performance resulting from active management. Active management is defined as development, re-development and transaction activity. In order to estimate passive performance, assets are classified based on their operational status, and only those which are not subject to any active management ("Standing Assets") are included in the analysis. However, the current definition of standing assets is not confined to passive management, as it also includes leasing activity, a part of active management.

PROPOSED CHANGE

For analytical purposes, MSCI proposes (see next page) to distinguish, within the current standing assets category, those that are heavily exposed to leasing risk ("Non-stabilized Assets") from those that are not ("Stabilized Assets"). The distinction between stabilized and non-stabilized is based on the proportion of floor space vacant: assets with a vacancy rate of at least 25% are considered to be non-stabilized. MSCI also proposes to make the distinction between construction and pre-construction phases for development assets.

TIMELINE FOR IMPLEMENTATION

Second half of 2015.

BENEFITS / IMPACT

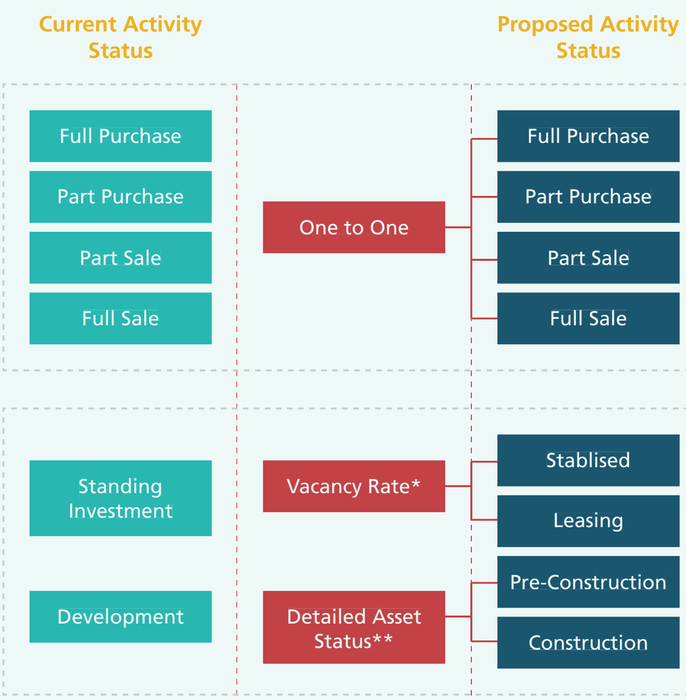
- Including leasing performance in the analysis of active management.
- Provides greater understanding of core and non-core assets within portfolios by attributing the contribution of returns to each.
- A more granular breakdown allows better performance feed-back while maintaining the benefits of existing practice, as stabilized and non-stabilized assets together make up the current standing investment sample. Similarly, construction and pre-construction assets will aggregate to the current development sample.

CONSULTATION QUESTIONS

- Are you familiar with the concepts of standing investments, stabilized assets and non-stabilized assets? Do you use them?
- Do you think that the distinction between stabilized and non-stabilized should be based on a globally-fixed threshold, or a market-specific threshold?

It should be noted that market specific thresholds may be more reflective of market economic factors. On the other hand, a fixed threshold will rely less on ongoing assessments of local market participants' views.

Change in monthly asset operational classification



Change in structure

Proposed activity status will split active management such as purchase and sales with operating/non operating such that an asset can be identified as a purchased development

Change in classification

Standing investment to be split into stablised and leading. Developments to be splitinto pre construction and construction.

CONSULTATION ITEM 5: ASSET EXCLUSION RULES FOR INDEXES

BACKGROUND

MSCI runs a stringent data quality assessment process during every data update period, for the purpose of identifying errors that may have been missed by data submitters ("bad data"). If these errors are not corrected in time for index calculation, the relevant assets are excluded.

In addition, assets may also be excluded from MSCI indexes if they display attributes (e.g. natural damage) or performances that are judged to be "abnormal", on the grounds that they are manifestly different from the underlying market. Although this exclusion framework is structured around a formal validation process, criteria for excluding abnormal assets are – in most countries - discretionary, and this can potentially undermine index comparability and objectivity.

PROPOSED CHANGE

MSCI is proposing to standardize its definition of "bad data" and to discontinue any asset exclusion based on discretionary decisions.

"Bad data" comprises:

- Missing data (not provided).
- Data that does not comply with MSCI Data Standard definitions.
- Contradictory data: classifications or values inconsistent with relevant scenarios.
- Questionable results for which no explanation has been provided; including exceptional period-to-period movements, outliers, and illogical movements in relation to other measures or asset classifications.

This change implies that automatic exclusion rules will continue to be applied in the UK and Ireland in the case of:

- Assets with levels of capital expenditures or receipts at least 10% of capital value.
- Short leaseholds.
- Long leasehold/fixed rent properties.
- Change in ownership share.
- Zero OMRV.
- Ireland (Republic of) & Channel Island assets.
- Owner occupied properties.
- Change in valuer.

TIMELINE FOR IMPLEMENTATION

Second half of 2015. The new rules will only be implemented for computing performance in the future.

BENEFITS / IMPACT

- Tests conducted on the impact of discretionary flagging suggest that in all markets except South Korea and Central and Eastern Europe, the impact of discontinuing discretionary asset exclusion is not material to total returns.
- More consistent indexes, less affected by discrepancies in individual analysts' judgment of abnormality.

CONSULTATION QUESTIONS

- Do you agree with MSCI's aim of reducing subjectivity in its index determination process?

CONSULTATION ITEM 6: ASSET TO FUND RECONCILIATION

BACKGROUND

MSCI calculates real estate investment performance at the asset and fund levels. The asset level measures the performance of the underlying direct real estate assets within the fund, while the fund level measures the performance of the entire fund; not only the directly-held real estate, but also all other investments and financial layers.

Fund reconciliation means linking asset and fund-level performance through the performance of the intervening investments and financial layers, in order to measure how much each adds to or subtracts from the direct return, building up to the fund return. These components of fund performance include leverage, non-direct investments, cash, other assets and liabilities, together with fund-level costs, tax and fees.

Reconciliation is performed using a bottom-up approach. Financial components are added successively to the direct real estate return, gradually building a measure of overall fund performance. The total return of the combined components is re-calculated at each stage. The impact of each component over a given period is calculated as the arithmetic difference between two successive compounded returns.

$$\text{Impact Component}_n = \text{TR}_{\text{direct}} + {}_{\text{component 1}} + \ldots + {}_{\text{component n}} - \text{TR}_{\text{direct}} + {}_{\text{component 1}} + \ldots + {}_{\text{component n-1}}$$

The impact of each individual component depends on the sequence in which the reconciliation is performed. Markets have adopted different sequences, and therefore the definition of a common sequence needs to be agreed.

PROPOSED CHANGE

MSCI proposes to change the various local standards and apply the same sequence of reconciliation globally (see below).

1. **Direct assets** constitute the initial basis for the calculation. The other financial investments and layers are then added in the following order:
2. **Debt linked to specific assets.** This asset-level debt is secured against specific direct assets, and therefore its impact is calculated relative to those assets. The debt impact can be split into nominal and mark-to-market effects.
3. **Indirect real estate.** These investments are normally used by the fund manager as a substitute for direct assets and are seen as a part of the real estate portfolio. Their impact should therefore be closely linked to the performance of the direct assets.
4. **Fund-level debt.** This debt is generally secured against the full real estate portfolio, held directly or indirectly. The debt impact can again be split into nominal and mark-to-market effects.
5. **Cash.** Layering cash immediately after fund-level debt allows the undistorted analysis of the net debt position.
6. **Other assets and liabilities.** These can be non-real estate investments, derivatives, or any other assets or liabilities held by the fund. They usually represent a small share of the total value of the portfolio, with a minor impact on performance.
7. **Fund costs.** After all assets and liabilities have been included, general costs attached to running the fund are layered.
8. **Fund level tax.** Taxes are added immediately after general fund costs. Most funds are tax exempt, but if present they will reduce returns.

These layers allow for the bottom-up construction of a **gross fund return**: the return that the fund manager has been able to generate.

9. **Fund management fees** are then deducted from the gross fund return. This allows the calculation of a **net fund return**, which an average investor will receive once the manager has been remunerated for managing the fund.

Calculation

	Components	Total return	Impact
+	Fund mgt fees	$TR_{\text{Below layers + Fees}}$	$TR_{\text{Below layer + Fees}} - TR_{\text{Below layers}}$
+	Fund tax	$TR_{\text{Below layers + Tax}}$	$TR_{\text{Below layers + Tax}} - TR_{\text{Below layers}}$
+	Fund costs	$TR_{\text{Below layers + costs}}$	$TR_{\text{Below layers + costs}} - TR_{\text{Below layers}}$
+	Other assets& liab	$TR_{\text{Below layers + OAL}}$	$TR_{\text{Below layers+OAL}} - TR_{\text{Below layers}}$
+	Cash	$TR_{\text{Dir + DebtAL + OREI + DebtFL + C}}$	$TR_{\text{Dir + DebtAL + OREI + DebtFL + C}} - TR_{\text{Dir + DebtAL + OREI + DebtFL}}$
+	Fund-level debt	$TR_{\text{Dir + DebtAL + OREI + DebtFL}}$	$TR_{\text{Dir + DebtAL + OREI + DebtFL}} - TR_{\text{Dir + DebtAL + OREI}}$
+	Other RE inv't	$TR_{\text{D + DebtAL + OREI}}$	$TR_{\text{Dir + DebtAL + OREI}} - TR_{\text{Dir + DebtAL}}$
+	Asset-level debt	$TR_{\text{Dir + DebtAl}}$	$TR_{\text{Dir + DebtAL}} - TR_{\text{D}}$
	Direct assets	TR_{Dir}	

The impact approach has the benefit of being simple and intuitive; however the impact calculated for each financial layer depends on the sequence order.

TIMELINE FOR IMPLEMENTATION

Second half of 2015.

BENEFITS / IMPACT

- Consistent calculation of the performance impact of each fund overlay.

CONSULTATION QUESTIONS

- Do you consider fund to asset reconciliation to be an important analysis?
- Do you agree with adopting a sequential method for estimating components' impacts?
- If you agree with the sequencing methodology in principle, do you agree with the proposed sequence order?
- Do you agree with adopting arithmetic differences and not geometric ones?

CONSULTATION ITEM 7: ASSETS AND LIABILITIES CLASSIFICATION

BACKGROUND

For reporting, fund performance measurement and analytical purposes (see above fund to asset reconciliation), MSCI collects financial data on all assets and liabilities present in a fund. Currently, the data classification standard varies from country to country.

PROPOSED CHANGE

MSCI is considering changing its standard to establish a standard classification of assets and liabilities in funds/ vehicles (see table below).

The aim is to standardize the classification of all assets and liabilities included in a fund / vehicle. This will help improve asset-to-fund reconciliation, and will also make data collection clearer and more consistent across services.

The classification follows a nested structure (see table below), allowing data collection at a granular level. Each record will be recorded at the granular Level 4 but reported at the broader Levels 2 and 3.

TIMELINE FOR IMPLEMENTATION

Second half of 2015.

BENEFITS / IMPACT

- Globally consistent classification of funds' assets and liabilities.
- Allows for insightful analysis, in particular for asset to fund performance reconciliation.

CONSULTATION QUESTIONS

- Does the proposed classification give the right level of granularity?
- If not, please state your preferred level of granularity in the context of the objectives of this classification.

Level 1	Level 2 (reporting)	Level 3 (reporting)	Level 4 (data collection and recording)
Assets	Direct Real Estate	Direct Real Estate	Direct holdings, Joint Ventures, Waterfall Partnerships (GAV level), beneficiary interests in trust
	Indirect Real Estate	Private RE Funds	Private real estate funds, Waterfall Partnerships (NAV level), real estate partnerships using Equity Method Accounting, Limited Partnerships, other UCITS equity – non-listed, other AIF equity – non-listed
		Private RE Operating Companies	Private REIT, total other private real estate operating company
		Public Real Estate Securities	Public REITs, other public real estate securities
	Derivatives	RE Derivatives	Currency hedging, interest rate hedging
		Hedging	
	Debt Investments	Debt Investments	
	Cash Balance	Cash assets	Cash on balance sheet, cash - off balance sheet
	Other assets	Forward Agreements	
		Other assets	
Liabilities	Liabilities	Debt portfolio level - fixed	Secured OR non-secured and amortizing OR non-amortizing
		Debt portfolio level - floating	
		Debt - asset level	Secured OR non-secured and amortizing OR non-amortizing
		Cash liabilities (overdrafts)	
		Mezzanine finance	
		Debt exposure through indirect holdings	
	Other Liabilities	Forward commitment liability	
		Minority Interests	
		Total Other liabilities	

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