

THE REAL ESTATE INDEX AND BENCHMARKING PROTOCOL

MAINTAINING INDUSTRY STANDARDS, CONFIDENTIALITY, AND THE INTEGRITY, QUALITY AND ACCURACY OF REAL ESTATE DATABASES

Enshrined in MSCI's operational governance framework, technical documentation, and index and benchmarking rules, are a set of core principles for real estate investment measurement which underpin our day-to-day procedures and outputs. Adherence to these principles helps protect and reinforce the independence, accuracy and authority of our information services.

Every real estate fund and investment portfolio is a unique mix of financial structures, property types and locations. To build reliable and authoritative benchmarks and indexes from the pooled records of the assets of many thousands of such funds demands the application of robust standards.

As a specialist in real estate indexes and analytics, we are well placed to meet these objectives, each of which addresses one of four main target areas:

INDUSTRY STANDARDS

- **Global Data Standard for IPD indexes:** MSCI collects detailed asset and fund information based on a single set of clear definitions, branded as the IGDS and designed to identify all required data items and typologies consistently and precisely. These include asset specific market capital and rental valuations, all capital and revenue account cash flows, and operating and occupational costs, as well as a comprehensive array of fund level financial overlays relating to cash, debt, indirect interests and fund costs, taxes and fees.
- **Industry standard analysis methods:** the computation of performance indexes and the construction of benchmarked comparisons are designed and implemented in accordance with the disciplines and methods contained in broadly accepted industry wide guidelines. One important example is the Global Investment Performance Standard (GIPS).

ACCURACY AND RELIABILITY

- **Data capture:** the majority of the required information fields are collected directly from the information systems of property investment teams – end investors, managers, valuers and/or occupiers - through predefined templates which enshrine these data standards and within a process governed by a Submitters Code. MSCI confines its real estate data generation activities to rule-based data compilation, and does not conduct valuations or infer/estimate cash flows.
- **Asset level measurement:** data are assembled asset-by-asset in order to give the detail needed to fully validate the input record; facilitate the application of a single set of rules to every asset in each portfolio in all territories; and support a wide range of analyses and diagnostics.
- **Whole portfolio reporting:** records are assembled for entire investment portfolios or operational estates so that even-handed comparisons can always be made. This precludes the risks of selective data provision or cherry picking.
- **Rigorous data checking:** all records go through stringent and clearly documented consistency and quality control tests utilising computerised validation systems; expert scrutiny; supplier query plus requests for source evidence; and final signoff from the data submitter. The aim is to ensure that all data input records are accurate and complete. The data checking process is managed through the use of a standard template and a full set of rules, definitions and procedures.
- **Timely data updating and reporting:** within the limits of the above conditions, all data are updated and reported as indexes and standard benchmarks to pre-agreed and published timetables and in accordance with precisely disciplined release procedures.

REPORTING INTEGRITY

- **Confidentiality:** MSCI protects commercially sensitive client asset, portfolio and fund information, by enforcing an aggregation rule which precludes the release of results unless they reflect at least five assets in at least three portfolios. All staff are bound by strict security and confidentiality policies and rules.
- **Dominance:** MSCI screens all summary reports of benchmarks and market information for the dominance of single data providers – whether owners, investment managers or valuers – to check that the weight of capital in the most recent results does not exceed pre-agreed thresholds and is reported wherever appropriate.
- **Data security:** all data are stored and processed on MSCI's centrally governed IT systems, which provide rigorous access control and robust protection against external intrusion, as defined by the group's overall information security policy. The MSCI platforms also benefit from cutting edge standards of data resilience.
- **No consultancy or advice:** the reporting and client support provided by MSCI is restricted to factual analysis and quantified comparison, coupled with any necessary help that may be required for results interpretation

GOVERNANCE

- **Operational independence:** an autonomous index and benchmark governance regime, implemented through the real estate Technical Committee, is explicitly separated from commercial targeting and business development. This safeguards the independence, confidentiality and quality control of our procedures and methodology.
- **Intellectual property:** whilst ownership of the raw input data on properties and funds remains with the data submitters, the intellectual property and database rights in the processed data and all derived outputs and reports remain with MSCI, whether or not these are published. Permission must always be sought from MSCI for the use of these results and a licence will normally be required.
- **Accountability:** the application and further development of MSCI's rules and procedures are informed by client consultative groups, composed of representative users of the services in the majority of national markets covered by MSCI. The most fundamental index and benchmark rules and specifications are reviewed by these groups, who provide valuable stakeholder input on the definitions, standards, methods and processes, all aimed at achieving globally consistent analyses and reports.
- **Process oversight:** application of these principles is monitored internally by an independent team which conducts regular reviews of MSCI business processes. Furthermore, an incident management regime records and follows up all incidents that may impact MSCI business activities in any way.
- **Index and Benchmark Regulation:** the complete index design, review, construction, computation and reporting regime is implemented in accordance with, and externally audited for compliance with the 19 IOSCO Principles for Financial Benchmarks.

By following the above rules and objectives, MSCI turns tens of thousands of property records from many hundreds of property owners across over 30 national markets into standardised, fair and confidential benchmarked reports on investment performance and occupation. The same database delivers authoritative public domain market and fund indexes to a single global standard. These indexes underpin the transparency of the real estate asset class, boost the content and quality of property research, and support a range of innovative financial and other investment products.