



**GROUND RULES FOR THE
MANAGEMENT OF THE
FTSE UK COMMERCIAL PROPERTY
INDEX SERIES**

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SECTION 1

1.0 INDEX OBJECTIVES AND DESIGN

- 1.1 This paper sets out the Ground Rules for the Management of the FTSE UK Commercial Property Index Series by FTSE. Copies of these Ground Rules are available from FTSE (see Appendix D).
- 1.2 The FTSE UK Commercial Property Index Series is designed to create an investable index series based upon the FTSE Property Database (see Appendix A). The Index aims to provide a daily measure of the performance of the universe of investable, institutional grade commercial property in the UK appropriately diversified by Market Sector.
- 1.3 To achieve this objective the Index offers a transparently diversified, representative exposure to that universe that is responsive to changes in that universe's characteristics.
- 1.4 The FTSE UK Commercial Property Index Series comprises the following indices:-
FTSE All UK Property Index

The above index comprises the following three indices representing specific Market Sectors:-

FTSE UK Retail Property Index
FTSE UK Office Property Index
FTSE UK Industrial Property Index
- 1.5 The base currency for the FTSE UK Commercial Property Index Series is Pounds Sterling, and the Index is calculated daily, on an end of day basis, two business days in arrears.
- 1.6 For each individual index, three indices will be calculated:

Gross Asset Value (GAV) Total Return Index
Net Asset Value (NAV) Total Return Index
Net Asset Value (NAV) Capital Return Index
- 1.7 The values of these indices will be derived directly from the asset values of the FTSE UK Property Index Assets which are investable property assets available in the market, with the NAVs adjusted for, inter alia, the full running costs of an investable index fund, and the effects of gearing that may be present in the underlying investments.
- 1.8 The FTSE UK Property Index Assets will comprise a selection of suitably qualifying property assets, identified by the Index Advisor, MSS Real Estate LLP, as follows:
- 1.8.1 Direct Property Assets: property interests in land and buildings capable of being held as investments whether held directly or via a unit trust, joint venture, partnership, limited partnership, or limited company, in respect of which the beneficial interest is in the majority of its assets.
- 1.8.2 Indirect Property Assets: those Property Assets that comprise minority holdings in assets directly linked to property interests in land and buildings, such as unit trusts, partnerships, limited partnerships and limited liability partnerships, joint ventures, limited companies, real estate investment trusts ('REITs'), equities, bonds and other assets.

SECTION 2

2.0 INDEX MANAGEMENT

- 2.1 FTSE is responsible for the calculation of the FTSE UK Commercial Property Index Series. FTSE will maintain records of the Gross and Net Asset Values of all FTSE UK Property Index Assets and the level of the FTSE UK Commercial Property Index Series. FTSE will implement the resulting changes from the annual review and/or as otherwise required by these Ground Rules.
- 2.2 The FTSE UK Commercial Property Index Series is managed by FTSE and FTSE consults on this with the Index Advisor and the Index Advisory Committee whose members comprise of independent and authoritative individuals from the commercial property community.
- 2.3 FTSE, advised by the Index Advisory Committee, is responsible for maintaining and evolving the FTSE UK Commercial Property Index Series Ground Rules.
- 2.4 FTSE, advised by the Index Advisory Committee, ensures that a consistent approach is applied to the selection of the FTSE UK Property Index Assets by the Index Advisor.
- 2.5 FTSE UK Property Index Assets can only become eligible for inclusion in the Index Series if they satisfy all Index qualification criteria (see Sections 3, 4 and 5 below).
- 2.6 FTSE UK Property Index Assets may be removed from the Index Series if they no longer satisfy the Index qualification criteria (see Sections 4 and 5 below).
- 2.7 The Index Advisory Committee will meet annually, or more frequently as required, to review FTSE UK Commercial Property Index Series Ground Rules and the index weightings and allocations.
- 2.8 At no time shall a decision by the Index Advisor to include or exclude an asset be taken as a buy or sell recommendation for that Market Sector or FTSE UK Property Index Asset. Assets are chosen or rejected solely on the basis of satisfying the Index Objective (see Section 1).

SECTION 3

3.0 PROPERTY ASSET UNIVERSES AND CLASSIFICATION

- 3.1 Each FTSE Property UK Index Asset will be chosen for inclusion or exclusion from the Index on the basis of providing good representation of the UK commercial property market after applying the Index qualification criteria (see Section 4).
- 3.2 The FTSE UK Commercial Property Index Series only recognises the categories of Market Sectors listed in Appendix B. Together these account for the majority of UK commercial property.
- 3.3 Property assets that do not fall into one of these recognised categories are deemed to belong to the minority, specialist sectors. Potential difficulties in obtaining access to valuations of property assets in these specialist sectors mean that they are not eligible for membership of the FTSE UK Commercial Property Index Series. This will be subject to review by the Index Advisor.
- 3.4 Property assets are considered eligible for inclusion in the Index according to their availability in the open market at the point of addition, or for exclusion from the Index taking into consideration their relative, comparable liquidity at the point of inclusion, with a view also to the objective to keep the Index Series diversified and representative by Market Sector.

SECTION 4

4.0 INDEX QUALIFICATION CRITERIA

4.1 Individual property assets are eligible for inclusion in the FTSE UK Commercial Property Index Series provided they are currently included within the FTSE Property Database, based on the eligibility criteria in Section 3. Once property assets are identified as eligible, the following criteria are used to select the assets for the FTSE Property Index.

4.2 Initial Screening

4.2.1 Indirect Property Assets must first qualify as follows:-

- a) Institutional;
- b) 'Open' or readily capable of being traded in the open market;
- c) Enhance the Index's diversification and representation;
- d) Representative of the Market Sector;
- e) May include property unit trusts, limited partnerships and limited liability partnerships, joint ventures, real estate investment trusts ('REITs'), listed equities, bonds and other assets directly linked to commercial property;
- f) Exchange Traded Funds (ETFs) may be used to provide efficient access to property stocks.

4.2.2 Direct Property Assets must first qualify as follows:-

- a) Institutional;
- b) Representative of properties traded in the open market;
- c) Not obsolete;
- d) Not so bespoke as to be unsuitable for alternative occupiers;
- e) Substantially let or pre-let; typically not having foreseeable vacancy risk within 5 years (e.g. expected vacancies not exceeding 33% of an individual property, by rental value);
- f) Enhance the Index's diversification and representation.

4.3 Selection of FTSE UK Property Index Assets

4.3.1 Following initial screening (see Rule 4.2) the potentially eligible property assets are further analysed as follows:-

4.3.2 Each potential property asset is categorised under its appropriate Market Sector by the Index Advisor.

4.3.3 Property assets that have previously been determined to be representative of their Market Sectors are then ranked by their potential to enhance the diversification and representation in the Index. For each Market Sector, the highest ranked property assets are deemed Eligible Property Assets for Index construction purposes.

4.3.4 Property assets can only be drawn from the qualifying pool of potential Eligible Property Assets of Rule 4.3.3, subject further to meeting the satisfactory due diligence requirements of Rule 4.4 below.

4.3.5 The total number and range of property assets for each Market Sector are managed so as to provide diversification by location, tenant and building type, consistent with good representation. However the total number of property assets for each Market Sector will vary subject to the Rules 3.4, 5.3 and 5.4.

4.3.6 In addition it is preferable, though not compulsory, that indirect property assets should be run by a management company that is regulated by a recognised regulatory body and/or is listed on a recognised stock exchange.

SECTION 4

4.4 Due Diligence

- 4.4.1 Due diligence is a critical component of investing in commercial property. For the FTSE UK Property Index it comprises due diligence, annual reviews, regular manager checks, estate management and risk monitoring. Property assets are therefore subject to a continuous requirement to satisfy the due diligence requirements of the Index. Having established quantitatively that a property asset is representative of its Market Sector (Rules 4.1 to 4.3), due diligence monitors qualitatively that it continues to remain so.
- 4.4.2 Due diligence and annual reviews form an integral part of the Index constitution procedure (see Sections 2 and 5) and are conducted by the Index Advisor.
- 4.4.3 Due diligence is conducted on selected Eligible Property Assets as a prelude to inclusion in the FTSE UK Property Index as follows:-
- 4.4.4 For Indirect Property Assets, due diligence is performed to ensure that the management company of the vehicle holding the properties and property assets themselves exist as represented. The following specific checks are carried out in this regard, namely the existence and conformity of:
- incorporation documents;
 - listing particulars, where appropriate;
 - any supplementary information;
 - administrator checks;
 - management company audited financial statements;
 - manager reference checks; and
 - appropriate property asset inspections.
- 4.4.5 Qualitative due diligence for asset management companies covers the administering of questionnaires, follow up telephone interviews and site visits to ascertain satisfactory evidence and analysis of:
- manager quality;
 - investment process; and
 - operations structure.
- 4.4.6 For Direct Property Assets, due diligence is to ensure that the properties exist as represented in the sales particulars. The following specific checks are carried out in this regard, namely the existence and conformity of:
- legal title;
 - environmental survey;
 - lease terms;
 - tenants' compliance with lease covenants;
 - local authority searches;
 - planning permissions;
 - building measurement and site boundaries;
 - tenant credit references;
 - building condition;
 - provision and condition of utilities' services;
 - service charges; and
 - independent rental, capital value and insurance valuations.
- 4.4.7 Regular property asset checks are an integral part of the index management (see Section 2) and are conducted by the Index Advisor.

SECTION 4

- 4.4.8 For Indirect Property Assets, such regular checks will focus on the manager of the underlying properties, significant changes in assets under management, key personnel changes, legal and regulatory issues arising.
- 4.4.9 For Direct Property Assets, such regular checks will focus on proper estate management aspects such as managing void risks, tenants' compliance with maintenance, user and other lease covenants, value enhancement opportunities, value impairment risks including those from local environment such as adjoining uses, planning or highway proposals and the like.

SECTION 5

5.0 INDEX CALCULATION AND MAINTENANCE**5.1 Weighting**

- 5.1.1 Market Sector target weights are taken from the FTSE Commercial Property Database and other appropriate industry sources, to provide a good representation of investable UK commercial property.
- 5.1.2 Direct and Indirect Property Assets are chosen (see Section 4) within Market Sector weighting parameters to continually reduce the difference between target and actual weightings.
- 5.1.3 The actual weights of the FTSE UK Property Index Assets within the Index Series shall be those weightings achieved by the Index Advisor. However, the Index Advisor will take all practical steps to ensure that the weights of each Market Sector shall align with the target weights generated by Rule 5.1.

5.2 Valuation and Reporting

- 5.2.1 Each Direct Property Asset has its value determined by an independent third party valuer (the Independent Valuer).
- 5.2.2 Each Indirect Property Asset has its value determined by the Index Advisor on the basis of established market practice for the valuation of such assets.
- 5.2.3 The Index Advisor transmits values for the Index Calculation on a daily basis to FTSE for final checks and anomaly monitoring. The levels of the FTSE UK Commercial Property Index Series therefore reflect weighted changes in the value of the FTSE UK Property Index Assets adjusted for the full running costs of a fund. Such costs will include, inter alia, all management fees, administration and trustee's fees.
- 5.2.4 FTSE then publishes values of the FTSE UK Commercial Property Index Series (All Properties and Market Sectors) usually within two business days.
- 5.2.5 For each individual Index, three indices will be calculated (in accordance with Rules 1.5 and 5.2.3) and published.

5.3 Review of Market Sector Target Weightings

- 5.3.1 The FTSE UK Commercial Property Index Series is reviewed annually in March by the Index Advisory Committee using data taken as at the last business day in December from the FTSE Commercial Property Database.
- 5.3.2 Changes arising from the annual review will be announced on or before the close of business on the last business day in March, with the changes implemented by the close of business on the last day in June.
- 5.3.3 The Market Sector weightings of the FTSE UK Commercial Property Index Series are determined by using the Rules in Section 5. Market Sector weights will move in line with the changes in the relative price performance of the Market Sectors. The weightings will otherwise only be changed at the annual review.

SECTION 5

5.3.4 The total number and range of the FTSE UK Property Index Assets may be varied through time following advice from the Index Advisor and the Index Advisory Committee (see Section 2) to ensure that the Index, at all times, continues to offer investors a broadly diversified and representative measure of the Index Objective (see Section 1).

5.3.5 The annual review is prepared by FTSE. All decisions at the time of the annual review by FTSE are taken following advice from the Index Advisory Committee in respect of FTSE's proposals for the composition of the Index and are final (see Section 2).

5.4 **Changes to Property Assets**

5.4.1 **Additions of Property Assets to the FTSE Property Database**

5.4.1.1 If a property asset qualifies in all respects for inclusion in the eligible universe (see Sections 3 and 4) and is added to the FTSE Property Database, it can be added to the appropriate Market Sector Index at any time in order to enhance representation.

5.4.1.2 Property assets may be considered eligible from time to time, independent of the number or volumes of property assets being added to or removed from the Index at any time.

5.4.2 **Removal of Property Assets**

5.4.2.1 A property asset in the Index will be removed from the Index if it is no longer considered representative of its Market Sector, fails to pass its due diligence review or otherwise ceases to qualify for inclusion in the Index (see Sections 3 and 4).

5.4.2.2 Property assets may be so removed from the Index at any time in order to enhance the diversity of the Index, consistent with the objective to make the Index more representative of the UK market.

APPENDIX A

FTSE PROPERTY DATABASE

The FTSE Property Database contains data that is collected from property funds, multiple third party data vendors, agents, investment consultants and other relevant industry sources.

The FTSE Property Database comprises identification, description, price and investment data on qualifying property assets (see Appendix B) that are available for investment in the UK property market and categorised by Market Sector and Sub-Sector.

APPENDIX B

QUALIFYING PROPERTY ASSETS

The FTSE UK Commercial Property Index comprises the following indices:

- FTSE UK All Property Index
- FTSE UK Retail Property Index
- FTSE UK Office Property Index
- FTSE UK Industrial Property Index

Market Sector & Sub-Sector definitions:-

Market Sectors comprise Retail, Office and Industrial property market sectors. Each Market Sector comprises the following property market Sub-Sectors.

Retail Sector

- **Shops**
Individual shops in 'high street' or town centre retail-trading locations where a variety of other shops are also located.
- **Shopping Centres**
Properties that comprise a number of contiguous shop units within an umbrella property management structure and shared service facilities such as parking, entrance ways, etc. Includes 'in town', 'edge of town', and 'out of town' shopping centres and factory outlet centres but not retail parks (see below).
- **Retail Warehouses**
Retail warehouses and retail parks comprising bespoke, large floor area, typically single storey retail units, usually with significant adjacent dedicated car parking. Includes 'in town', 'edge of town', and 'out of town' retail warehouses and retail parks but not shopping centres (see above).

Office Sector

- **Central London Offices**
Prime or good quality secondary office buildings within the central London boroughs of the City of Westminster, City of London, Tower Hamlets, Islington, Hackney, Southwark, the Royal Borough of Kensington and Chelsea, Camden, Hammersmith & Fulham, Wandsworth and Lambeth.
- **Regional Offices**
Office buildings in the UK that are not Central London Offices

Industrial Sector

- **Standard Industrial Properties**
Properties used for industrial or manufacturing purposes. This may include industrial estates where some of the buildings are used for warehousing and distribution purposes. It may also include industrial buildings or units that are used for office purposes.
- **Distribution Warehouse Properties**
Properties used for storage and distribution purposes.

APPENDIX B

Multi Use Properties

Where properties comprise a mixture of uses, such as offices with ground floor shops or shops with offices on the upper floors, then the predominant use (measured by value) will determine to which Market Sector the property asset belongs. These properties may include minority uses that do not fall into one of the recognised categories (see Section 3) such as residential use or leisure use, for example, but will still be considered suitable for inclusion in the Fund and the Index because the predominant use is within a recognised category.

APPENDIX C

INDEX ALGORITHM AND CALCULATION METHODOLOGY

Hours of Calculation

The indices will be calculated on each business day in the United Kingdom and usually published within two business days.

For all business days the Index calculation will use valuations of the FTSE UK Property Index Assets.

A business day is defined as a normal weekday when UK markets are open and trading.

Summary of calculation process for the FTSE UK Property Index Series

For each of the four initial indices a NAV capital (price) index and a GAV and NAV total return index will be calculated. An example for the Net Asset Value calculations is shown below. For the total return indices the GAV and NAV will be calculated in the same way.

NAV Capital (Price) Index

$$CI_t = \frac{NAV_t}{d} = \left(\frac{NAV_t}{NAV_{t-1}} \right) CI_{t-1}$$

CI_t = The Capital (Price) Index as of today (t)

NAV_t = Net Asset Value of each constituent in the index

d = Divisor; A figure that represents the aggregate net asset value of all index constituents at the base date. The divisor is a constant.

Total Return Index (TRI)

The total return index is calculated on a daily basis. However accrued income is only reinvested into the TRI on a quarterly basis. Between distribution periods the income that accrues on a daily basis is simply *added* to the TRI from the previous distribution day, adjusted for any capital gain or loss.

Intra-distribution period TRI is calculated as follows:

$$TRI_t^q = TRI_{t-1}^q \left(\frac{C_t^q + A_t^q}{C_{t-1}^q + A_{t-1}^q} \right), \text{ where}$$

$$A_t^q = \sum_{i=1}^t Z_i^q$$

On an income distribution day the calculation of the TRI is as follows:

$$TRI_t^{q+1} = TRI_{N(q)}^q \left(\frac{C_1^{q+1} + A_1^{q+1}}{C_{N(q)}^q + A_{N(q)}^q} \right) \left(1 + \frac{A_{N(q)}^q}{C_1^{q+1}} \right)$$

APPENDIX C

- TRI_t^q = the total return index level on day t in distribution period q.
 $N(q)$ = is the number of days in distribution period q.
 C_t^q = the capital NAV per unit at day t in distribution period q.
 Z_t^q = the income per unit during day t in distribution period q.

Constituent Asset Valuations

Final Index Values

Each day FTSE will receive gross and net asset valuations for the investable fund as well as the values for all the FTSE UK Property Index Assets. Upon receiving all of these valuations from the Index Advisor, FTSE will calculate official index levels for each Index (usually within two business days) and these will then be published by FTSE (see above).

It is a prerequisite of each property asset in the Index Series that its value can be determined by an independent valuer in order for the Index Advisor to calculate the gross and net asset value of the FTSE UK Property Index Assets.

Foreign Exchange Rates

The British Pound Sterling is the base currency for all index calculations.

APPENDIX D

FURTHER INFORMATION

Further information on the FTSE UK Commercial Property Index Series are available from FTSE on www.ftse.com, who will also welcome comments on these Ground Rules. Contact details can also be found on this website.

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