

**Foundation Report: Comparing U.K. and U.S. Property Terms**

February 6, 2009 ■ FTSE 100: 4,292 ■ FTSE 350 RE: 1,501 ■ RMZ: 432 ■ U.K. 10-YR GILT: 3.74%

## HIGHLIGHTS:

**Overview:** This report is designed to help investors reconcile key U.S. and U.K. property terms. It is written primarily from the standpoint of a U.S. investor trying to understand the U.K. property market, but we believe that it also will be helpful for U.K. investors trying to understand the U.S. market. The report includes a glossary of key U.K. and U.S. property terms and illustrations of selected terms in use. Our goal is to provide both definitions as well as some more subtle implications.

**Comparing Investment Yields:** The benchmark property yield metrics in the U.K. and the U.S. (Net Initial Yield and Nominal Cap Rate, respectively) have material differences that can be misleading in cross-market comparisons. In addition, we believe that each measure has serious flaws. Of course real estate investors do not make their decisions based solely on initial yield metrics, but calculating a property portfolio's initial yield is a basic step that needs to be done on an apples-to-apples basis.

**Net Initial Yield vs. Nominal Cap Rate:** While similar, important differences include:

- The numerator of the Net Initial Yield calculation is Net Rent, not Net Operating Income. Net Rent is a good proxy for a landlord's cash flow if the property or portfolio concerned is fully leased and if all costs of operating the property are covered by the tenants, but it can overstate cash flow in the case of material vacancy.
- Empty Rates (i.e. property taxes) warrant special attention. As a result of an April 2008 tax code change, U.K. landlords now pay full rates on vacant space (after a short grace period). This revision puts U.K. landlords on similar footing to those in the U.S., but the tax rate is much higher in the U.K. than in the U.S. (i.e. 30-40% of Headline Rent in the U.K. and 15% in the U.S.).
- The denominator of the Net Initial Yield calculation includes Purchaser's Costs. These total about 5.75% of transaction value and reduce the Net Initial Yield by 30-45 basis points versus the Gross Initial Yield (which does not include Purchaser's Costs). The Nominal Cap Rate calculation does not include Purchaser's Costs in the denominator.

**Both Metrics are Flawed:** Both Net Initial Yield and Nominal Cap Rate are cash based, not accounting based. While a focus on cash can be a good discipline, it ignores certain real economic costs of operating real estate portfolios. In the U.S., we estimate that Net Operating Income (NOI) is overstated by 10-15% versus underlying economic income. The costs that NOI ignores include amortization of Tenant Improvements, Leasing Commissions, and a Structural Reserve. In the U.K., our impression is that the gap between Net Rent and Economic NOI is of a similar magnitude—while the capex reserve in the U.K. is lower, Net Rent can understate operating expenses.

**Economic Cap Rate is Better:** For making comparisons across companies and markets, we strongly prefer Economic Cap Rate. This Green Street-defined metric makes explicit estimates for the economic costs missed by both the Net Initial Yield and Nominal Cap Rate calculations. As a result of Fully Repairing and Insuring lease provisions, Tenant Improvement and Structural Reserve costs are much lower in the U.K. than in the U.S., but these costs are still material.

**Net Asset Value:** Green Street has been a long-time advocate of the fair value accounting approach, and it is refreshing to participate in a market where this approach is the norm. Despite the availability of company-provided NAVs in the U.K., Green Street will calculate its own estimates. Key reasons include: 1) company-generated NAVs are published with a substantial lag; 2) an independent, portfolio-wide perspective of property value may provide insights; and 3) a robust NAV model is required to give an accurate estimate of implied net initial yields (i.e. based on the current share price) and to translate key metrics into standard terminology so that companies can be compared on an apples-to-apples basis by global investors.

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## I. Overview

This report is designed to help investors reconcile key U.S. and U.K. property terms. It is written primarily from the standpoint of a U.S. investor trying to understand the U.K. property market, but we believe that it also will be helpful for U.K. investors trying to understand the U.S. market.

Capitalized terms used in this report are defined in Appendix A (for U.K. property terminology) and Appendix B (for U.S. terms). Exhibit 1 provides a simplified, hypothetical example of the basic property terms in use. Appendix C presents selected property terms, and actual or estimated amounts, on a standardized basis relative to Net Rent for British Land, Hammerson, Land Securities, and Liberty International.

## II. Comparing Investment Yields

The benchmark property yield metrics in the U.K. and the U.S. have material differences that can be misleading in cross-market comparisons. In addition, we believe that each measure has material flaws. Of course real estate investors do not make their decisions based solely on initial yield metrics (they also look at growth potential, IRR analyses, comparable transactions, etc.), but calculating a property portfolio's initial yield is a basic step that needs to be done on an apples-to-apples basis.

The benchmark real estate yield and valuation measure in the U.K. is Net Initial Yield and the benchmark in the U.S. is Cap Rate (a.k.a. Nominal Cap Rate). While similar, important differences include:

- The numerator of the Net Initial Yield calculation is Net Rent, not Net Operating Income (or the closest U.K. term, Net Rental Income).
  - Net Rent is a good proxy for a landlord's cash flow if the property or portfolio concerned is fully leased and if all costs of operating the property are covered by the tenants.
  - If the property is **not** fully leased, Net Rent does not fully capture the cost to the landlord of paying operating expenses (e.g. unreimbursed Service Charge Expense, Property Outgoings, and Empty Rates if applicable) on vacant space. Net Operating Income, by contrast, is burdened by non-reimbursed landlord costs. For example, a hypothetical property that is 90% leased would have a 10% lower Net Initial Yield than a fully leased property with the same value, but a 16% lower Cap Rate (see Exhibit 1).
  - Net Rent is an annualized **current pace** of rent as at a particular date. The NOI concept in the Cap Rate calculation is most commonly an estimated **forward one-year** estimate.
- Empty Rates (i.e. property taxes) warrant special attention. As a result of an April 2008 tax code change, U.K. landlords are now required to pay full rates on vacant space (after a short grace period).
  - This change puts U.K. landlords on similar footing to those in the U.S. (technically landlords are responsible for property tax in the U.S. and tenants are responsible for business rates in the U.K.; effectively landlords in each country are responsible if the space is vacant).
  - The tax liability is much higher in the U.K. than in the U.S. (i.e. 30-40% of Headline Rent in the U.K. and 15% in the U.S.).
  - It is important that investors factor in the cost of Empty Rates (where applicable) in their investment considerations, but the Net Initial Yield calculation does not do so.
- The denominator of the Net Initial Yield calculation includes Purchaser's Costs. These total about 5.75% of transaction value and reduce the Net Initial Yield by 30-45 basis points versus the Gross Initial Yield (which does not include Purchaser's Costs). The Cap Rate calculation does not include Purchaser's Costs in the denominator. Comparisons among these measures can easily be mishandled, as yields are often quoted without specifying the underlying calculation method.

### In our view, both Net Initial Yield and Cap Rate are flawed metrics:

- Both measures are cash based, not accounting based. While a focus on cash can be a good discipline, it ignores certain real economic costs of operating real estate portfolios:
  - In the U.S., we estimate that Net Operating Income is overstated by 10-15% versus underlying economic income. The costs that NOI ignores include amortization of Tenant Improvements, Leasing Commissions, and a Structural Reserve.

## Exhibit 1 - Basic Property Terms in Use

**Cap Rates are more sensitive to occupancy levels than Net Initial Yields--NOI is burdened with unrecovered Service Charge Expenses and other Property Outgoings (including Empty Rates, if applicable).**

| Portfolio Occupancy                                      | 100%     | 90%      |                     |   |
|--|----------|----------|---------------------|---|
| <b>Hypothetical Portfolio Data</b>                       | <b>£</b> | <b>£</b> | <b>% Difference</b> |   |
| Rents Receivable (RR)                                    | 1,000    | 900      | -10%                | Cash rents from property                            |
| Tenant Improvements (TI) and Leasing Commissions (LC)    | 50       | 45       | -10%                | Usually Free Rent but sometimes TIs                 |
| Service Charge Income (SCI)                              | 100      | 90       | -10%                | Landlord recovery of Service Charge Expense         |
| Service Charge Expense (SCE)                             | 100      | 100      | 0%                  | Cost to the landlord if less than full occupancy    |
| Empty Rates (ER)   | 0        | 32       | 100%                | Rise proportional to vacancy levels                 |
| Other Property Outgoings (OPO)                           | 65       | 62       | -5%                 | Decline less than proportional to vacancy levels    |
| Structural Reserve (SR)                                  | 30       | 30       | 0%                  | Unaffected by vacancy levels                        |
| Next Rent Review (NRR)                                   | 5 Yrs    | 5 Yrs    |                     | Capture of full reversion can take up to five years |
| Reversionary Potential (RP)                              | 10%      | 22%      |                     | Assumes occupancy moves to 100%                     |
| First Year NOI Growth Rate (GR)                          | 2%       | 2%       |                     | Growth rate applied to current NOI                  |
| <b>Property Valuation</b>                                |          |          |                     |   |
| Property Value (PV) <sup>1</sup>                         | 20,000   | 20,000   |                     | Valued using Net Initial Yield in the UK            |
| Purchaser's Costs (PC)                                   | 1,150    | 1,150    |                     | 4% stamp duty, 1.75% other                          |
| Property Value Including PC (PVIP)                       | 21,150   | 21,150   |                     | Used in denominator of NIY calculation              |
| <b>Income Measures</b>                                   |          |          |                     |   |
| Net Rent (NR)  | 1,000    | 900      | -10%                | RR - Ground Rent (if applicable).                   |
| Gross Rental Income (GRI)                                | 950      | 855      | -10%                | RR - (TI + LC)                                      |
| Net Rental Income (NRI)                                  | 885      | 751      | -15%                | GRI + SCI - (SCE + ER + OPO)                        |
| One Year Forward Net Operating Income (NOI) <sup>2</sup> | 954      | 812      | -15%                | (RR + SCI - (SCE + ER + OPO))*(1+GR)                |
| Economic NOI (EcNOI)                                     | 874      | 737      | -16%                | NOI - (TI + LC + SR)                                |
| <b>U.K. Yield Measures</b>                               |          |          |                     |   |
| Net Initial Yield (NIY)                                  | 4.73%    | 4.26%    | -10%                | NR/PVIP   |
| Gross Initial Yield (GIY)                                | 5.00%    | 4.50%    | -10%                | NR/PV   |
| Net Equivalent Yield (NEY)                               | 5.10%    | 5.00%    | -2%                 | See Appendix D for calculation                      |
| Net Reversionary Yield (NRY)                             | 5.20%    | 5.20%    | 0%                  | (NR*(1+RP))/PVIP                                    |
| <b>U.S. Yield Measures</b>                               |          |          |                     |   |
| Nominal Cap Rate (NCR) <sup>3</sup>                      | 4.77%    | 4.06%    | -15%                | NOI/PV  |
| Economic Cap Rate (ECR) <sup>4</sup>                     | 4.37%    | 3.68%    | -16%                | EcNOI/PV  |

Source: Green Street Advisors

- 1) Property Value held constant for illustrative purposes. Reduced occupancy can result in a fall in Property Value.
- 2) Net Operating Income can be higher or lower than Net Rent depending on look-forward growth rate, extent of Property Outgoings, and vacancy.
- 3) Different numerator than Net Initial Yield (NOI vs. Net Rent) and no Purchaser's Costs in denominator.
- 4) Addition of cap-ex reserve (Tenant Improvements and Structural Reserve) increases operating leverage.

- In the U.K., our impression is that the gap between Net Rent and Economic NOI is of a similar magnitude —while the capex reserve in the U.K. is lower, Net Rent can understate operating expenses (see Appendix C for a preliminary analysis of this issue). Also, as noted above, Net Initial Yield can overstate the current income of a property portfolio with material vacancy (and vacancy is likely to be increasing in the current environment).

**For making comparisons across companies and markets, we strongly prefer Economic Cap Rate.**

This Green Street-defined metric makes explicit estimates for the economic costs missed by both the Net Initial Yield and Nominal Cap Rate calculations.

As a result of Fully Repairing and Insuring leases, Tenant Improvement and Structural Reserve costs are lower in the U.K. than in the U.S., but these costs are still material. While estimating the costs can be difficult, ignoring them both overstates and distorts investment return metrics. At present, we assume that average Structural Reserve costs in the U.K. are roughly 50-75% of the level we use in the U.S. (i.e. approximately 3% of NOI for the U.K.)

### **III. Green Street Net Asset Value Estimates**

Major property companies in the U.K. publish NAVs that are calculated by the companies based on individual property valuations provided by professional valuers (a.k.a. appraisers or surveyors). The U.K. valuation community enjoys a long history, follows well-established standards, and has a good reputation for integrity and thoroughness.

These NAV calculations are most welcome. As compared with the U.S., U.K. landlords can have in-depth discussions about the value of properties and development projects. In addition, these companies can frame capital allocation decisions in terms of NAV. **Green Street has been a long-time advocate of the fair value accounting approach, and it is refreshing to participate in a market where this approach is the norm.**

Despite the availability of company-provided NAVs in the U.K., Green Street will calculate its own estimates (as we have done for more than 20 years in the U.S.). Key reasons for this include:

- Company-generated NAVs are published with a substantial lag and on different reporting cycles. Some companies report on a quarterly basis, some semi-annually. At a time of fast-moving market conditions, it is essential to have fresh valuations prepared on a consistent basis as of a similar date. This is especially important since our key goal is to make relative company valuation calls. **Green Street NAV estimates will be as of a given Green Street report date**, not a given company end-of-reporting-period date.
- The U.K. valuation process is done on a property-by-property basis, not on a portfolio-wide basis. On the one hand, a property-by-property approach is superior, since professional valuers get detailed information that is not publicly available. On the other hand, assumptions regarding vacancy and unreimbursed landlord expenses may differ when an investor takes a portfolio-wide view.
- While property valuations published by companies are prepared by reputable third-parties according to well-designed standards, an independent view (Green Street is not paid by the companies for which it provides research opinions) can provide insights.
- A robust NAV model is required to give an accurate estimate of implied net initial yields (i.e. based on the current share price) and translate key metrics into standard terminology so that companies can be compared on an apples-to-apples basis by global investors.

Since Green Street's NAV estimates will be prepared as of a different date and using a different methodology, they will not be directly comparable to company-prepared NAVs (see the definition of Net Asset Value in Appendix A for additional discussion).

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Appendix A

**Glossary of Selected U.K. Property Terms**

**Development Properties**

- **Definition:** Properties that are under construction or redevelopment and are not ready for occupancy by a tenant.
- **Commentary:**
  - In the U.K., properties are usually transferred from the Development category to the Investment (a.k.a. Operating in the U.S.) category upon completion of construction.
  - It is possible (and likely in the current environment) to have poorly leased properties counted as Investments. This can understate a U.K. company's effective development exposure relative to the U.S.
  - In the U.S., properties are usually transferred from the Development category to the Operating (a.k.a. Investment in the U.K.) category upon completion of construction AND the earlier of stabilization (i.e. nearly full occupancy) or one year.
  - A large pipeline of completed development properties that are in lease-up will result in a relatively low published Net Initial Yield.

**Dilapidations Charge**

- **Definition:** Repairs or cash payment made by a tenant upon leaving previously rented space.
- **Commentary:**
  - Under fully Repairing and Insuring lease covenants, a tenant is required to reinstate the property back to the condition when originally leased, after allowing for reasonable wear and tear. Generally does not apply if the property is to be redeveloped upon the tenant vacating the premises.
  - Landlord-tenant disputes often end up in a compromise as part of a lease renewal.

**Diluted EPRA EPS**

- **Definition:** Earnings measure that attempts to be representative of the recurring cash flows of a company. European Public Real Estate Association (EPRA) sanctioned earnings are often used by major U.K. property companies.
- **Commentary:**
  - Closest term to Funds From Operations (FFO) and Adjusted Funds From Operations (AFFO) in the U.S. Since Diluted EPRA EPS does not add back Free Rent or real estate-related amortization (e.g. the spreading of Tenant Improvements over the term of the lease), it is closest to Adjusted Funds From Operations. The most important item missing from Diluted EPRA EPS is a Structural Reserve.
  - Adjustments from IFRS earnings to Diluted EPRA EPS include:
    - Subtract gains (add back losses) from revaluation of properties
    - Subtract gains (add back losses) from sale of assets
    - Subtract gains (add back losses) on fair value changes for derivative contracts
    - Exclude deferred tax on investment properties
    - Remove one-time charges

**Effective Rent**

- **Definition:** Headline Rent paid by a tenant adjusted for Free Rent and other landlord concessions. The adjustments are generally made on a straight-line basis, amortized to the earlier of the life of the lease or first break.
- **Commentary:**
  - In difficult economic times, and/or for development projects struggling to attract tenants, the discount between Headline Rent and Effective Rent can be as large as 25% (e.g. on a City office building with a 12 year lease with 36 months of Free Rent).
  - Effective rent is a key measure used during Rent Reviews and property valuations. U.K. valuers focus on underlying cash flows, not merely Headline Rents.
  - Changes in Estimated Rental Value over time should be measured on an Effective Rent basis.

### Empty Rates

- **Definition:** Business rates (a.k.a. property taxes) paid by a landlord on space that is vacant.
- **Commentary:**
  - As a result of changes to the U.K. tax law as of April 2008, full Empty Rates are now payable on property that has been empty for three or more months in the case of office and retail properties, and six or more months in the case of industrial properties. This is a dramatic change from the prior law, which allowed for 50% relief (and 100% relief on industrial properties).
  - By contrast, in the U.S., landlords have always been responsible for property taxes on a given building whether it is rented or not. Also, the tax liability in the U.K. is much higher: 30-40% of Headline Rent in the U.K., versus 15% in the U.S.
  - The change in the U.K. law puts significant pressure on landlords to fill vacant space before the grace period expires—a particularly important issue for development projects delivered in a weak leasing market. Also makes it more likely that obsolete vacant space will be torn down.
  - The implications of this change may not be fully reflected in U.K. property and company valuations at this time.

### Estimated Rental Value (ERV)

- **Definition:** Total potential rent for a property leased at current market rental rates. Most common practice is to assume 100% occupancy. Calculated net of ground rent if applicable.
- **Commentary:**
  - Assumption of full occupancy is generally too aggressive, especially on a portfolio-wide basis.
  - Comparing In-Place Rent to ERV is similar to assessing a property's Embedded NOI Growth (see U.S. definitions; note that Embedded NOI Growth assumes no change in existing occupancy).
  - Should be calculated on an Effective Rent basis, but generally not presented in this way.

### Fully Repairing and Insuring (FRI)

- **Definition:** Common U.K. lease provision specifying that most building maintenance and insurance costs will be borne by the tenant. The tenant incurs some costs directly and is billed by the landlord via the Service Charge for other costs.
- **Commentary:**
  - At the end of a lease, the tenant is required to return the space to its condition at the start of the lease (i.e. the departing tenant effectively pays for a portion of the Tenant Improvements for the next tenant). See Dilapidations.
  - Materially reduces the tenant improvement, maintenance, and long-term capital expenditure burden borne by a U.K. landlord versus that of a U.S. landlord.
  - Generally speaking tenants are responsible for maintenance items and landlords are responsible for replacements and upgrades, but specific repairing covenants can vary.
  - Despite the FRI provision, the cap-ex burden borne by a typical U.K. landlord is material and should not be ignored.

### Free Rent (or Rent Free Period)

- **Definition:** Rent holiday at the beginning of a lease, granted by the landlord to induce a tenant to complete a lease deal. Generally measured in months.
- **Commentary:**
  - Free Rent is sometimes given as a landlord's cash contribution to Tenant Improvements. In such cases the quoted Rent Free period generally includes the cost to the landlord of both items.
  - Rent Free period varies according to market conditions, length of lease signed, property sector, whether the property is newly built or existing, and whether the tenant is renewing an existing lease or signing a new deal. A rough range of Rent Free periods on a 15-year lease common during the past few years is as follows:
    - Lease renewal in a healthy shopping centre: zero to three months.

- New lease in a healthy, existing shopping centre: three to six months.
- New lease in a newly built office building or shopping centre: 12 months during a landlords' market and 36 months in a tenants' market.

#### **Gross Initial Yield**

- **Definition:** Net Initial Yield calculated without Purchaser's Costs in the denominator.
- **Commentary:**
  - Excluding Purchaser's Costs, all else being equal, reduces the denominator in the yield calculation and results in a higher yield.

#### **Gross Rental Income**

- **Definition:** Rent Receivable (including contractual rent increases if any) smoothed for the amortization of Free Rent, Tenant Improvements borne by the landlord, and Leasing Commissions (if not reflected in Property Outgoings).
- **Commentary:**
  - All the rental revenue received from a tenant as adjusted on an accrual basis for concessions.
  - An accounting term found on the income statement of a property company.

#### **Ground Rent**

- **Definition:** Rent paid by the landlord (in this case a leaseholder) of a building to the owner of the land on which the building sits.
- **Commentary:**
  - More common in the U.K. than the U.S. Agreements vary dramatically:
    - Sometimes the rent paid is very small (a "peppercorn"), sometimes it includes a percentage of the building owner's profits.
    - Leaseholds can have long (e.g. 99 or 999 year) initial terms.
    - A leasehold with a long remaining lease term and a peppercorn rent is known as a "virtual freehold".

#### **Headline Rent**

- **Definition:** Rent paid by a tenant without giving effect to Free Rent or other concessions. Also ignores Ground Rent (if applicable).
- **Commentary:**
  - Using a Headline Rent to calculate an investment yield can be misleading as there can be a significant gap between Headline Rent and Effective Rent.

#### **High Street**

- **Definition:** Primary pedestrian shopping street in a town or city centre.
- **Commentary:**
  - The primary shopping destination in the U.K., accounting for roughly two-thirds of retail sales.
  - The nearest U.S. term is "main street", but in the 1950s sense of this term when Americans still visited main street regularly.

#### **International Financial Reporting Standards (IFRS)**

- **Definition:** Reporting standards for most of the non-U.S. world. Set by the London-based International Accounting Standards Board (IASB).
- **Commentary:**
  - IFRS requires fair value accounting for real estate (in the statements or footnotes).
  - Comparable to U.S. Generally Accepted Accounting Principles (GAAP); GAAP does not require or allow fair value for real estate, except when assets will be sold shortly and are estimated to be worth less than their depreciated book value.

#### **In-Place Rent**

- **Definition:** see Headline Rent.

### Investment Properties (similar to Operating Properties in the U.S.)

- **Definition:** Essentially all of the properties owned by a landlord that are not Development Properties or Trading Properties.
- **Commentary:**
  - Note that “operating properties” in the U.K. refers to properties owned or controlled by a landlord in which the landlord is playing an active role in the underlying business (e.g. LAND’s former Trillium business unit).

### Landlord and Tenant Act of 1954

- **Definition:** Law specifying the duties and obligations of tenants and landlords in the U.K (see Section 25 of the Act). Gives most tenants the right to stay in a property unless certain criteria are met by the landlord, and the right to compensation even if those criteria are satisfied.
- **Commentary:**
  - Makes it difficult for a landlord to replace a tenant, and therefore sometimes arduous for a landlord to maximize the value of a property. This is primarily an issue with Shopping Centres, where getting the right tenant mix is very important.
  - The terms of the Act are an indirect counterweight, in terms of the relative power of landlords and tenants, to the Fully Repairing and Insuring and “upward only” Rent Review provisions of most U.K. leases.
  - Tenants and landlords can agree to “opt out” of this law, but such arrangements are rare.
  - In the U.S., by contrast, tenants do not have the right to stay in their space unless they had negotiated a specific lease-extension right.

### Leasing Commissions

- **Definition:** Fees paid by a landlord to an agent (i.e. broker) that has helped secure a lease from a tenant.
- **Commentary:**
  - Most leases in the U.K. are arranged by agents; few deals are done on a direct landlord-to-tenant basis.
  - Cost is roughly 10% of the first-year Headline Rent.

### Like-For-Like (known as Same-Store or Same-Unit in the U.S.)

- **Definition:** Properties held for the full length of two accounting periods (e.g. one quarter as compared with the same quarter of the previous year, or one year versus the prior year).
- **Commentary:**
  - Needed to adjust for the effect of acquisition and sales activity that cause period-to-period growth rates to be under or over-stated.

### Net Asset Value (NAV)

- **Definition:** The mark-to-market value of a company’s equity capital, as of a given date, using an estimate of the open-market (i.e. private market) value of its real estate and other adjustments. Most often presented on a per share basis.
- **Variations:**
  - **Diluted EPRA NAV:**
    - An NAV estimate calculated according to the guidelines of the European Public Real Estate Association (EPRA).
    - Under IFRS, U.K. real estate companies are required to present their real estate assets on a fair value basis in their accounting statements. The EPRA calculation adjusts for dilution (from options, convertible securities, etc), presents finance leases, development properties held for sale and Trading Properties at the lower of cost or realizable value, adds back deferred tax, and restates derivative positions that are deemed hedges on a book-value basis (rather than fair value).
    - Fair value is estimated **as of a given balance sheet** date and reported to investors with a one-two month lag.

- The property portfolio valuation is done on an asset-by-asset basis, using individual property information, by third-party valuation firms (a.k.a. surveyors or appraisers) employed by the company. Valuation firms follow the respected guidelines of the Royal Institute of Chartered Surveyors (RICS).
  - Debt is not marked-to-market, but derivative positions are marked-to-market.
- **Diluted EPRA NNAV (a.k.a. Triple-Net NAV):**
  - Similar to Diluted EPRA NAV, but adjusts debt on a fair market value basis, presents derivatives at fair value, and adjusts deferred taxes to estimated fair value factoring expected hold period (for REITs, deferred taxes are now generally small; pre-REIT status deferred taxes were often quite large).
- **Green Street NAV:**
  - An NAV estimate calculated by Green Street Advisors.
  - The property valuation is based on summary portfolio information, **as of a given Green Street report publication date**. Green Street does not receive individual property information and the analysis is not based on RICS standards.
  - Debt is marked-to-market, deferred taxes are adjusted on a company-by-company basis based on expected future payments, and other adjustments are made to present assets and liabilities on a fair market value basis.
  - The Green Street NAV estimate for a given company is not authorized or endorsed by the company, and Green Street is not employed by the company. Since it is calculated on a different date and a different method, it is not directly comparable to the company's published NAV.

#### Net Equivalent Yield (see Appendix D)

- **Definition:** Time-weighted average of Net Initial Yield and Reversionary Yield. The yield an investor would receive based on leases in place today, through to their next review or break, time-weighted with the yield based on Estimated Rental Value. Includes an assumption for downtime after lease expiry. Denominator includes Purchaser's Costs.
- **Commentary:**
  - Some investors consider this term as equivalent to internal rate of return (IRR), but the Net Equivalent Yield:
    - Potentially overstates a thoughtfully prepared IRR since Estimated Rental Value generally assumes 100% occupancy.
    - Potentially understates a thoughtfully prepared IRR because ERV is based on a snapshot of Reversionary Potential as of a point in time; it assumes no change in market rent in the future.
    - Often used in a time of recent strong market rental growth to give a better picture of medium-term yield potential than Net Initial Yield.

#### Net Initial Yield

- **Definition:** Net Rent divided by the value or price of a property plus Purchaser's Costs.
- **Commentary:**
  - Most common property yield and valuation measure in the U.K.
  - Numerator is Net Rent (a valuer's or property professional's cash concept), not Net Rental Income (an accountant's accrual concept).
  - Generally based on leases in force as at the date of the valuation (not on a "look-forward" year).
  - For a less-than-100% leased property (especially important to consider on a **portfolio** basis, where some Voids are nearly always present), Net Rent can materially exceed Net Rental Income. This is because the landlord is responsible for the operating and maintenance costs of the vacant space (including Empty Rates if applicable).
  - The closest U.S. term is Nominal Cap Rate. Both terms have flaws (see Section II); we prefer the term Economic Cap Rate (see U.S. definitions).
  - The inclusion of Purchaser's Costs increases the denominator of the Net Initial Yield calculation by nearly 6% vs. the Nominal Cap Rate calculation. All other things being equal, this reduces the calculated yield by 30-45 basis points.

**Net Rent**

- **Definition:** Rent Receivable less Ground Rent (if applicable).
- **Commentary:**
  - Numerator for Net Initial Yield.
  - Generally calculated as the annualized current pace of leasing in force as at a given date.
  - Cash concept, not an accounting concept (e.g. the Net Rent for a lease in its Free Rent period is zero). Excludes proper matching of upfront and periodic costs of establishing tenancy and maintaining the property. These costs include Tenant Improvements, Leasing Commissions, and a Structural Reserve.
  - Unlike Net Operating Income, Net Rent ignores the net cost to the landlord of operating the property or portfolio. This can be misleading in cases where the tenants do not cover the full operating costs (e.g. if there are material Voids, Empty Rates, or portfolio management costs).
  - Since Net Rent, as disclosed by most property companies, reflects Free Rent concessions on a cash basis but ignores Tenant Improvements, there is a possibility of non-comparability between companies that adopt different approaches to landlord concessions.

**Net Rental Income**

- **Definition:** Gross Rental Income minus Property Outgoings.
- **Commentary:**
  - Closest term to Net Operating Income (see U.S. definitions), but Net Rental Income:
    - Is accrual-based, not cash-based.
    - Includes the amortized cost of Free Rent (and implicitly Tenant Improvements) and leasing commissions. So, there is no need to apply a reserve for these items.
  - Can include surrender premiums and other income such as JV fees.
  - NOT the numerator in the Net Initial Yield calculation.

**Occupancy Costs**

- **Definition:** Cost to a tenant to occupy space at a property.
- **Commentary:**
  - Key metric for understanding the economics of retail properties.
  - In the U.K., often includes the cost of business rates (i.e. property taxes). Rates total 30-40% of Headline Rent and skew comparisons on this measure with the U.S.
  - Difficult to calculate the Occupancy Cost to tenant sales ratio in the U.K. because tenant sales information is generally not available.

**Passing Rent**

- **Definition:** See Headline Rent.

**Prime Yield**

- **Definition:** Hypothetical yield for a top-quality, freehold interest in a relatively new property located in a prime location, and fully leased at current market rent (i.e. "rack rented") to a good-quality tenant under a long lease.
- **Commentary:**
  - Used as a benchmark for valuing real-world properties that are often of lesser quality in some material way.
  - Given the assumption that the property is fully leased at current market rent, the initial, equivalent and reversionary Prime Yields are all equal.
  - The Prime Yield information provided by CBRE, a well-known brokerage and research firm, is shown on a net basis. That is, the assumed denominator includes Purchaser's Costs.

### Property Outgoings

- **Definition:** Cost to the landlord of operating a property or portfolio of properties. Includes Service Charge expense (generally the largest component, often broken out separately), Ground Rent (where applicable), and amortization of Free Rent, Tenant Improvements borne by the landlord, and Leasing Commissions (if not already reflected in Gross Rental Income).
- **Commentary:**
  - For a fully-leased property in the U.K., Service Charge expense is generally fully recovered from tenants.
  - It is important that investors understand those situations where outgoings are not fully recovered (e.g. as a result of Voids or other costs that are not fully recovered).

### Purchaser's Costs

- **Definition:** Assumed or actual cost to a buyer of a property. Most commonly assumed to total about 5.75% of the purchase price (broken down as follows: 4% stamp duty, 1% agent's fee, 0.5% legal and due diligence, 0.2625% VAT on fees).
- **Commentary:**
  - Important for investors to understand if a quoted investment yield is calculated on a net basis (i.e. with these costs in the denominator) or a gross basis (i.e. ignoring these costs).
  - Stamp duty can sometimes be avoided (e.g. if the property is owned by a single-purpose corporation and the sale is of the corporation, not the property), but market practice is to assume that it will be paid.
  - Seller costs total approximately 1.5%, which implies a total of 7.25% of roundtrip transaction costs on a property investment in the U.K.

### Rent Payable

- **Definition:** Rent paid by a landlord. See Ground Rent.

### Rent Receivable

- **Definition:** Cash rent received by a landlord from a tenant during a given period. If a tenant is in a Rent Free Period, Rent Receivable would be zero.
- **Commentary:**
  - In the U.K., this is an income statement term, not a balance sheet term.

### Rent Review

- **Definition:** Process by which rental payments are adjusted on a periodic basis.
- **Commentary:**
  - In the U.K., the process generally takes place every five years and most leases are "upward only" (the new rent will be set to the higher of the market rent or the current rent being paid by the tenant).
  - New rent established with reference to lease transactions in a comparable property, location and condition. When a landlord and tenant cannot agree on a new rent based on market evidence, the dispute is settled by an arbitrator.
  - While the upward only nature of the Rent Review process is landlord-friendly, the tenant's right to remain in the property (see Landlord and Tenant Act of 1954) is an unattractive feature of standard U.K. leases that acts as something of a counterweight.
  - U.S. leases do not have Rent Reviews within their term and the lease length is generally shorter than in the U.K. U.S. leases typically have built-in rent increases (a.k.a. bumps): these can be fixed (e.g. 2% per year) or variable (e.g. based on inflation).

### Retail Park

- **Definition:** Grouping of Retail Warehouses, grocery stores, and/or small shops (i.e. High Street stores).
- **Commentary:**
  - There are important distinctions in the broad category of Retail Parks:

- Open A1 parks have wide planning authority with little or no restrictions on the type of tenants allowed. These parks, because of their flexibility and better growth prospects, are highly valued by investors. At the high-end of this category are “fashion parks” that include fashion retailers, restaurants, and book stores.
- Parks with restricted planning authority cater primarily to Retail Warehouses. These parks have restricted growth prospects and are less prized by investors.
- Known as a strip center, power or lifestyle center in the U.S.

#### Retail Warehouse (a.k.a. Solus)

- **Definition:** A single-tenant, large-format store.
- **Commentary:**
  - Generally located in an edge of town or suburban area and most often tenanted with a “do-it-yourself” or electronics retailer. These are called “bulky goods” retailers in the U.K.
  - Known as “big box” stores (e.g. Costco or Best Buy) in the U.S.

#### Reversionary Potential

- **Definition:** The potential increase in total rent, from marking leases to market and increasing occupancy to 100%, shown on a percentage basis.
- **Commentary:**
  - Similar to the Green Street term Embedded NOI Growth (see U.S. definitions. Note that Embedded NOI Growth assumes no increase in occupancy).
  - If the calculation results in a negative number, the property is said to be “over rented”.

#### Reversionary Yield

- **Definition:** Estimated Rental Value for a property divided by its cost or value.
- **Commentary:**
  - Hypothetical yield for a property fully leased at market rents.
  - Can be calculated on a net (with Purchaser’s Cost in the denominator) or gross basis.

#### Service Charge

- **Definition:** Expenses incurred by a landlord that are billed to the tenant in order to recover all, or a portion, of the landlord’s Property Outgoings. These can include the cost of common area maintenance (CAM), insurance, property management, and sometimes utilities.
- **Commentary:**
  - When a property or portfolio is fully leased, the Service Charge generally fully covers the operating cost to the landlord.
  - Many tenants negotiate a Service Charge cap (i.e. upper limit), which can cause the landlord to incur a shortfall on the recovery of Property Outgoings if large expense items arise or inflation is high.
  - Generally does not include business rates (property taxes), which are paid directly by the tenant (in the U.S. landlords directly pay real estate taxes).
  - Most similar U.S. term is “tenant reimbursements”.

#### Shopping Centres

- **Definition:** Large retail property. Can be located in town or in a suburban location.
- **Commentary:**
  - The average size of the Shopping Centres owned by the major U.K. REITs is about 900,000 sq. ft.
  - Known as malls in the U.S.

#### Take Up

- **Definition:** Gross leasing activity for a given period of time.
- **Commentary:**
  - Known in the U.S. as gross absorption.
  - Preferred measure of net absorption (which measures only the **net change in occupied space**) is not widely published in the U.K.

### Tenant Improvements

- **Definition:** Costs to improve space to be occupied by a tenant. Investors are most concerned with the portion of these costs that are borne by the landlord as part of the inducements to complete a lease deal.
- **Commentary:**
  - In the U.K., Free Rent and Tenant Improvements are generally combined into one Free Rent Period measured in months (i.e. the quoted number of month of Free Rent includes both costs).

### Top-Up Yield

- **Definition:** Income return on a property based on Headline Rent.
- **Commentary:**
  - Gives investors a sense of the investment yield for a property or portfolio after existing Rent Free periods have burned off.
  - Potentially overstates the future yield if new leases with material Free Rent are signed to replace maturing leases.

### Trading Properties

- **Definition:** Properties owned with the intent to sell in a relatively short period of time.
- **Commentary:**
  - Trading Properties can include stabilized assets, land, or development projects. Trading Properties are typically carried at cost on a company's balance sheet and are considered to be current assets.
  - If an external valuation of the properties indicates that Trading Properties are worth less than cost, a REIT will take an impairment charge. However, a REIT is not allowed to capture the upside by recognizing a valuation surplus in the event that the value of these assets increases.
  - In a rising market, Trading Properties may be undervalued in a REIT's balance sheet. In a declining market, Trading Properties may be fairly valued if value has declined below the acquisition price.
  - Trading Properties can be reclassified as an Investment Property. However, this requires a material change of view regarding its use.

### Void

- **Definition:** Vacant space.
- **Commentary:**
  - Voids have at least three negative effects on landlords:
    - Loss of rent.
    - Empty Rates (i.e. property taxes).
    - Unreimbursed Service Charges (e.g. the cost of minimum maintenance, security, insurance, and other operating costs).

### Zone A Rent

- **Definition:** Rent paid by a tenant in the Zone A portion of its space. This is the first 20 feet of store depth from the entrance (i.e. the most valuable selling space).
- **Commentary:**
  - Most common rental value in the U.K. for Shopping Centre and High Street properties. Does not apply to Retail Warehouses and Retail Parks.
  - Generally speaking, the rent paid by the tenant will halve for each further 20 foot of depth into the store.
- Not possible for an investor to convert a Zone A rent into an average rent for a property or tenant space.

*Appendix B***Glossary of Selected U.S. Property Terms****Adjusted Funds From Operations (AFFO)**

- **Definition:** Funds From Operations (FFO), less a reserve for Tenant Improvements & Leasing Commissions, and a Structural Reserve. Also excludes straight-lined rents (i.e. future rent increases amortized over the course of the lease), and profits from merchant-building activities. Sometimes includes other adjustments as required to make a given company's reported AFFO more comparable to its peers.
- **Commentary:**
  - By making an allowance for cap-ex items, AFFO fixes the single biggest flaw in the Funds From Operations calculation.

**Cap Rate (a.k.a. Nominal Cap Rate)**

- **Definition:** Net Operating Income divided by property value.
- **Commentary:**
  - Most common property yield and valuation measure in the U.S.
  - NOI is calculated on a cash basis by adding back depreciation and amortization. Since this calculation ignores Tenant Improvements, Leasing Commissions, and Structural Reserves (these three items typically total 10-15% of NOI), Cap Rate is a flawed measure of economic yield.
  - As used by Green Street, and many market participants, the numerator is generally a look-forward one-year estimate. This contrasts with Net Initial Yield, where the numerator is annualized as of a given date.
  - A less-than-fully-leased property's Cap Rate is burdened by both the lack of income from vacant space, and the related costs to the landlord (real estate taxes, unreimbursed common-area charges, etc). Net Initial Yield is burdened by the first of these factors, but not the second.
  - Unlike Net Initial Yield, the denominator does not include Purchaser's Costs. Assuming full occupancy, and all else being equal, a given property's Cap Rate will be higher than its Net Initial Yield (order of magnitude is 30-45 basis points).

**Economic Cap Rate**

- **Definition:** Net Operating Income, less an estimate of the costs related to Tenant Improvements, Leasing Commissions, and a Structural Reserve over a full real estate cycle, divided by property value.
- **Commentary:**
  - Green Street defined term.
  - As a result of including an estimate of the cost to lease and maintain the property or portfolio under consideration, the Economic Cap Rate measure provides a much better estimate of underlying economics than does the Nominal Cap Rate.
  - A carefully prepared analysis using Economic Cap Rates is a good way to help present the investment yields from properties in two markets (e.g. the U.S. and the U.K.) on the same basis. Of course a well-constructed IRR analysis is the best way to fully compare expected property returns.

**Embedded NOI Growth**

- **Definition:** The hypothetical percentage increase in Net Operating Income that would result from marking a property or portfolio's leases to current market levels, assuming no increase in expenses and no change in occupancy.
- **Commentary:**
  - Green Street defined term.
  - Provides a rough sense of the potential upside from a property as leases roll to market levels.
  - Unlike Reversionary Potential, does not assume full occupancy.

### **Funds From Operations (FFO)**

- **Definition:** Net income, excluding gains or losses from sales of property, plus real estate depreciation and real estate-related amortization (e.g. Tenant Improvements and Leasing Commissions).
- **Commentary:**
  - Most common measure of U.S. REIT operating performance.
  - By adding back real estate depreciation and real estate-related amortization, FFO dramatically overstates a company's operating results.
  - Can include profits from merchant-building and land sales.
  - Deeply flawed as a valuation measure both in absolute terms (since it ignores depreciation and real estate amortization) and relative terms (since differences between company accounting practices and leverage can make comparisons meaningless).

### **Net Operating Income (NOI)**

- **Definition:** Property or portfolio revenue less operating expenses, presented on a cash basis.
- **Commentary:**
  - Revenue is predominantly rents and tenant reimbursements; expenses include property taxes, utilities, maintenance costs and property-level personnel. Most major non-cash costs (depreciation and amortization) are excluded.
  - Similar to the corporate term "earnings before interest, taxes, depreciation, and amortization" (EBITDA), but NOI excludes central administrative overhead (i.e. G&A costs).
  - Unlike Net Rent (the numerator for Net Initial Yield), NOI is directly reduced by the cost to the landlord of operating expenses (e.g. property taxes, utility costs and unreimbursed common charges) related to vacant space.
  - Since most non-cash costs are excluded from the calculation of NOI, economic property income is overstated by roughly 10-15% based on Green Street estimates. Depreciation and the amortization of tenant improvements and leasing costs are real costs that are ignored in the calculation of NOI, but essential to understanding real estate economics.

### **Operating Properties (similar to Investment Properties in the U.K.)**

- **Definition:** Essentially all the properties owned by a property company that are not Development Properties.

### **Same-Store (known as Like-for-Like in the U.K.)**

- **Definition:** Properties held for the full length of two accounting periods (e.g. one quarter as compared with the same quarter of the previous year, or one year versus the prior year).
- **Commentary:**
  - Needed to adjust for acquisition and sale activity.
  - There can be material differences in the way companies report same-store results (e.g. some companies include development properties in lease-up in the beginning period; as these properties are leased up, same-store growth measures are inflated).

### **Structural Reserve**

- **Definition:** The cost (estimated on a straight-line basis over the life of the various building components) of maintaining a property or portfolio in good operating condition, excluding those costs already reflected in Tenant Improvements and Leasing Commissions.
- **Commentary:**
  - Green Street defined term.
  - Most important aspects include the cost of replacing roofs, refurbishing lobbies and elevators, replacing major HVAC systems (heating, ventilation and air conditioning) and maintaining car parks.
  - Estimated by Green Street to range from about 3.5% to 5.5% of NOI in the U.S. Appropriate reserve in the U.K. is smaller as a result of Fully Repairing and Insuring lease provisions.
  - One of the least understood, and most ignored aspects of real estate investing.

## Appendix C

**Basic Property Terms as discussed by, or estimated for, the UK Majors - The relationship of Net Rent to Net Operating Income can vary materially.**

|                                       | British Land <sup>1</sup> |             | Hammerson <sup>1</sup> |             | Liberty International <sup>1</sup> |             | Land Securities <sup>1</sup> |             |
|---------------------------------------|---------------------------|-------------|------------------------|-------------|------------------------------------|-------------|------------------------------|-------------|
|                                       | £m                        | % of NR     | £m                     | % of NR     | £m                                 | % of NR     | £m                           | % of NR     |
| Rent Receivable                       | 653.0                     | 100%        | 308.3                  | 102%        | 459.9                              | 106%        | 625.0                        | 100%        |
| Ground rent                           | 0.0                       | 0%          | (5.4)                  | -2%         | (25.4)                             | -6%         | 0.0                          | 0%          |
| <b>Net Rent (NR)</b>                  | <b>653.0</b>              | <b>100%</b> | <b>302.9</b>           | <b>100%</b> | <b>434.5</b>                       | <b>100%</b> | <b>625.0</b>                 | <b>100%</b> |
| Other Income                          | 3.0                       | 0%          | 3.2*                   | 1%          | 21.5                               | 5%          | 11.5*                        | 2%          |
| Spreading of TI and RI <sup>2</sup>   | 53.0                      | 8%          | 0.0                    | 0%          | (1.6)                              | 0%          | 51.0                         | 8%          |
| <b>Gross Rental Income (GRI)</b>      | <b>709.0</b>              | <b>109%</b> | <b>306.1</b>           | <b>101%</b> | <b>454.4</b>                       | <b>105%</b> | <b>687.5</b>                 | <b>110%</b> |
| Service Charge Income                 | 53.0                      | 8%          | 53.0                   | 17%         | 66.9                               | 15%         | 101.2                        | 16%         |
| Service Charge Expenses               | (53.0)                    | -8%         | (59.2)                 | -20%        | (67.8)*                            | -16%        | (138.3)                      | -22%        |
| Other Property Outgoings <sup>3</sup> | (42.0)                    | -6%         | (24.2)                 | -8%         | (79.2)*                            | -18%        | (48.0)*                      | -8%         |
| <b>Net Rental Income (NRI)</b>        | <b>667.0</b>              | <b>102%</b> | <b>275.7</b>           | <b>91%</b>  | <b>374.3</b>                       | <b>86%</b>  | <b>602.4</b>                 | <b>96%</b>  |
| Remove Spreading of TI and RI         | (53.0)                    | -8%         | 0.0                    | 0%          | 1.6                                | 0%          | (51.0)                       | -8%         |
| <b>Net Operating Income (NOI)</b>     | <b>614.0</b>              | <b>94%</b>  | <b>275.7</b>           | <b>91%</b>  | <b>375.9</b>                       | <b>87%</b>  | <b>551.4</b>                 | <b>88%</b>  |
| Structural Reserve <sup>4</sup>       | (19.6)                    | -3%         | (9.1)                  | -3%         | (13.0)                             | -3%         | (18.8)                       | -3%         |
| Tenant Improvements <sup>4</sup>      | (32.7)                    | -5%         | (15.1)                 | -5%         | (21.7)                             | -5%         | (31.3)                       | -5%         |
| Leasing Commissions <sup>4</sup>      | (6.5)                     | -1%         | (3.0)                  | -1%         | (4.3)                              | -1%         | (6.3)                        | -1%         |
| <b>Economic NOI</b>                   | <b>555.2</b>              | <b>85%</b>  | <b>248.4</b>           | <b>82%</b>  | <b>336.8</b>                       | <b>78%</b>  | <b>495.2</b>                 | <b>79%</b>  |
| General and Administrative Expenses   | (73.0)                    | -11%        | (41.2)                 | -14%        | (45.2)                             | -10%        | (66.0)                       | -11%        |
| Property Outgoings + G&A Expenses     | (115.0)                   | -18%        | (65.4)                 | -22%        | (124.4)                            | -29%        | (114.0)                      | -18%        |

\*Figures are estimated as the numbers are not disclosed.

1) Hammerson and Liberty International data as at 31-Dec-07. British Land and Land Securities data as at 31-Mar-08. Information represents the fiscal year 2007-8.

2) Spreads (i.e. amortizes) Free Rent and guaranteed Rent Increases over the shorter of the length of a lease or the tenant's first break option. In cases where a given company has recently done a large amount of leasing with significant Free Rent granted (e.g. if a large amount of development was recently completed), the number can increase Gross Rental Income. Once the Free Rent period has ended, however, this line will reduce Gross Rental Income. Note that U.K. leases typically grant Free Rent upfront but rarely have guaranteed future rent increases, while U.S. leases generally have small Free Rent provisions and material future rent increases that need to be spread over the life of the lease (in the U.S. this is known as "straight-lined rents").

3) Other Property Outgoings incorporate empty rates costs (if applicable).

4) Green Street estimates.

## Appendix D - Net Equivalent Yield Calculation

| <b>Portfolio Occupancy</b>                     | <b>100%</b>   | <b>90%</b>    |
|--|---------------|---------------|
| Net Rent (NR)                                  | 1,000         | 900           |
| <b>Net Equivalent Yield (NEY)*</b>             | <b>5.10%</b>  | <b>5.00%</b>  |
| Years to ERV being achieved                    | 5.00          | 5.00          |
| Years Purchase (YP) <sup>1</sup>               | 4.32          | 4.33          |
| Present Value of income prior to reversion     | 4,318         | 3,897         |
| Reversion to market rent %                     | 10.00%        | 22.22%        |
| Reversionary rental value                      | 1,100         | 1,100         |
| YP perpetuity @ NEY %                          | 19.62         | 20.01         |
| Deferred 5 years (PV £1 for 5 years @ NEY %)   | 0.78          | 0.78          |
| Present Value of income post reversion         | 16,832        | 17,253        |
| Present Value of total income                  | 21,150        | 21,150        |
| <b>Property Value</b>                          | <b>20,000</b> | <b>20,000</b> |
| <b>Purchaser's costs</b>                       | <b>1,150</b>  | <b>1,150</b>  |
| <b>Property Value (Inc. Purchaser's Costs)</b> | <b>21,150</b> | <b>21,150</b> |

\*EY is calculated by an iterative process. Must be re-calculated when there are changes to inputs.

1) Year Purchase is the sum of present values, discounted at the Net Equivalent Yield, and which is used to convert income to capital values.

YP for finite cash flows is calculated as follows:  $(1-(1+r)^{-y})/r$ .

For perpetual cash flows, YP calculation is reduced to:  $1/r$

Where:

r = Net Equivalent Yield (this is why the process is iterative)

y = Years cash flow is spread over.

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*Appendix E - Sources***References**

Baum, A. and Crosby, N. (2008). *Property Investment Appraisal (3<sup>rd</sup> edition)*. Oxford: Blackwell Publishing.

Block, Ralph. (2006). *Investing in REITs (3<sup>rd</sup> edition)*. New York: Bloomberg Press.

British Land. (2008). *Annual Report*. Retrieved July 8, 2008 from <http://www.britishlandreports.com/financialreports/2008annualreport/>

European Public Real Estate Association (EPRA). <http://www.epra.com/body.jsp>. In particular, see "Best Practice Policy Recommendations" dated May 2008.

Hammerson. (2007). *Annual Report*. Retrieved July 8, 2008 from <http://www.hammerson.com/453>

IPD. (2007). UK Annual Digest. Retrieved May 6, 2008 from <http://www.IPD.com>

Jones Lang LaSalle, & Estates Gazette. (2004). *The Glossary of Property Terms (2<sup>nd</sup> ed.)*. London: Jones Lang LaSalle & Estates Gazette.

National Association of Real Estate Investment Trusts (NAREIT). <http://www.nareit.com>

Wyatt, P. (2007). *Property Valuation in an Economic Context*. Oxford: Blackwell Publishing.

**Verbal References**

Executives from British Land, Hammerson, Liberty International, and Land Securities, from discussions on various dates in 2008 and 2009.

Mr Graham Bearman MRICS, Senior Manager/Property Specialist, Real Estate, Ernst & Young LLP, from a discussion on 6 November 2008.

Mr Jonathan Paul, from various discussions in December 2008 and January 2009.

Mr Ben Thomas BSc (Hons) MRICS, DTZ, and Mr Bryn Williams BSc (Hons) MRICS, Director of DTZ, from a discussion held on 9 July 2008.

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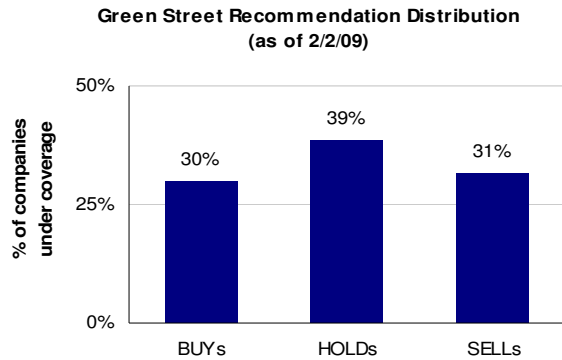
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**Total Return of Green Street's Recommendations**

| Year                            | Buy            | Hold          | Sell          | NAREIT Eqty <sup>4</sup> |
|---------------------------------|----------------|---------------|---------------|--------------------------|
| 2009 YTD <sup>3</sup>           | -9.2%          | -10.8%        | -18.3%        | -17.3%                   |
| 2008                            | -27.8%         | -30.7%        | -53.2%        | -37.7%                   |
| 2007                            | -6.5%          | -22.3%        | -27.6%        | -15.7%                   |
| 2006                            | 45.4%          | 29.9%         | 18.4%         | 35.1%                    |
| 2005                            | 26.3%          | 18.3%         | -1.9%         | 12.2%                    |
| 2004                            | 42.3%          | 28.4%         | 15.6%         | 31.6%                    |
| 2003                            | 42.7%          | 37.2%         | 20.9%         | 37.1%                    |
| 2002                            | 17.7%          | 2.6%          | 1.9%          | 3.8%                     |
| 2001                            | 35.7%          | 19.1%         | 11.9%         | 13.9%                    |
| 2000                            | 53.6%          | 29.3%         | 4.4%          | 26.4%                    |
| 1999                            | 14.2%          | -9.2%         | -20.2%        | -4.6%                    |
| 1998                            | -0.6%          | -15.1%        | -16.4%        | -17.5%                   |
| 1997                            | 37.1%          | 14.2%         | 5.8%          | 20.3%                    |
| 1996                            | 47.3%          | 30.2%         | 17.5%         | 35.3%                    |
| 1995                            | 23.6%          | 14.3%         | -0.4%         | 15.3%                    |
| 1994                            | 20.5%          | -0.7%         | -9.3%         | 3.2%                     |
| 1993 <sup>3</sup>               | 29.4%          | 5.4%          | 6.7%          | 12.4%                    |
| <b>Total Return<sup>3</sup></b> | <b>2375.8%</b> | <b>181.4%</b> | <b>-57.4%</b> | <b>203.6%</b>            |
| <b>Annualized</b>               | <b>22.2%</b>   | <b>6.7%</b>   | <b>-5.2%</b>  | <b>7.2%</b>              |

Year Ended December 31:

- 1) Historical results through January 3, 2005 were independently verified by Ernst & Young, LLP. E&Y did not verify stated results subsequent to January 3, 2005. Past performance results cannot be used to predict future performance. For a complete explanation of study, see 5/9/03 report "How are We Doing?".
- 2) Company inclusion in the calculation of total return has been based on whether the companies were listed in the primary exhibit of Green Street's "Real Estate Securities Monthly", pg. 11-14. Beginning with May 2000, Gaming C-Corps and Hotel C-Corps, with the exception of Starwood Hotels and Homestead Village, are not included in the primary exhibit and therefore not included in the calculation of total return. Beginning with March 2003, all Hotel companies are excluded.
- 3) Study uses recommendations given in Green Street's "Real Estate Securities Monthly" from January 29, 1993 through February 2, 2009.
- 4) Not directly comparable to Green Street's performance indices because NAREIT includes more companies and uses market-cap weightings. Green Street's returns are equally-weighted averages.

*Green Street will furnish upon request available investment information regarding the recommendation*

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