

Real Estate Investment Trusts: The US Experience and Lessons for the UK



Research Findings



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REAL ESTATE INVESTMENT TRUSTS: THE US EXPERIENCE AND LESSONS FOR THE UK

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CONTENTS

1.	Introduction and background		
2.	An c	overview of the UK and US legislative frameworks	9
3.	A br	ief history of US REITs	11
	3.1	Composition and size	11
	3.2	Pricing, institutional ownership and liquidity	14
	3.3	The bursting of a bubble: postscript	18
	3.4	The evolution of US REIT management and investment strategies	20
4.	The	investment characteristics of US REITS	28
	4.1	Investment performance	28
	4.2	What is a REIT?	31
	Арр	endix	40

1. INTRODUCTION AND BACKGROUND

The Real Estate Investment Trust (or "REIT") structure is being widely adopted around the world. More than 20 countries now have REIT, or REIT-like tax-transparent real estate investment trust structures. Most countries are adopting REIT structures similar to the current US model, one that has resulted from nearly 50 years of growth, change and maturation. The US REIT is an investment vehicle that was originally created by the United States Congress in 1960 with the introduction of the Real Estate Investment Trust Act, legislation that authorised a real estate ownership structure with tax treatment similar to that of mutual funds; a tax-exempt pass-through entity with broad based ownership that distributes most of its earnings and capital gains to investors. Subsequent revisions to the legislation have shaped the current REIT framework.

The REIT structure was initially designed to permit small and medium-sized investors access, albeit indirectly, to the commercial real estate asset class thereby providing a means to achieve the benefits associated with real estate investment for many investors for whom direct equity investment is beyond their means or unfeasible. Investment in REITs offers immediate diversification benefits that can be tailored to specific investor needs with investment in a portfolio of REITs with differing investment strategies in terms of property type and location focus. Shares of public REITs trade on organized exchanges (mostly the NYSE), thereby provide a liquid way to invest, albeit indirectly, in a diversified (although some REITs are very specialised, as indicated) and professionally managed portfolio of commercial properties.

Today, the US REIT sector represents an important component of the real estate asset investment universe. Figure 1 provides end of year 2006 numbers to illustrate the absolute and relative magnitudes of the so-called four quadrants of institutional real estate (public/private and debt/equity (Figure 1a), and the market capitalisation of the US REIT sector relative to private real estate market equity sources (Figure 1b). The value of equity in public REITs represents about one-third of the overall value of equity invested in institutional class real estate related assets. Figure 2 gives a sense of the penetration of REITs as owners of property by property type. REITs have grown to represent important shares of the major commercial investment property market sectors, but are particularly dominant in the regional shopping mall sector.

1. INTRODUCTION AND BACKGROUND



Source: Emerging Trends in Real Estate 2007, Urban Land Institute and PriceWaterhouseCoopers.

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The UK REIT vehicle was launched on January 1, 2007. The global proliferation of REIT investment vehicles is being accompanied by investor demand for knowledge about the investment characteristics of REITs. How do REITs perform relative to private real estate and broader stock markets? What is the role of public REITs in a mixed asset portfolio? Who invests in REITs and how does this impact pricing? How will the investment characteristics of REITs change as the markets grow, develop and mature?

To explore these questions, this paper looks to the US REIT market, the oldest and largest in the world. We outline key regulatory differences in the US and UK REIT models, provide a brief historical account of the development of the US REIT sector, detail US REIT ownership dynamics and undertake an empirical analysis of the investment characteristics of US REITs, both as stand alone investments and within a mixed asset portfolio. Throughout the paper we incorporate the findings of academic research that has addressed many of the investment issue mentioned above in a US context with a focus on the lessons to be learned and applications to investors in the developing UK REIT market.

2. AN OVERVIEW OF THE UK AND US LEGISLATIVE FRAMEWORKS

The UK REIT model generally follows the current US structure, although there are some important differences that we touch on below. In both countries a major incentive for real estate firms to adopt REIT status is that REITs are exempt from tax at the corporate level; it is a pass through vehicle. The "cost" to obtain the favorable tax treatment comes in the form of a number of regulatory rules and constraints that apply to a firm's ownership, operations (assets and income), and distribution of earnings to investors, the intent of which is to ensure that REITs are in effect consistent with the intent of the enabling legislation (ie relatively passive investment vehicles that are accessible to small individual investors). Table 1 summarizes the main "tests" firms must pass to qualify as a REIT, as well as other key components of the REIT regulations in the two structures.

One important area where the UK and US models diverge is tax treatment of property assets at the time of conversion to REIT status. When a firm elects REIT status in the UK, two things happen. First, the firm's assets are brought into the REIT at market value, not book value based on historical cost and accounting depreciation. Second, the firm must pay a 2% tax on the private market value. In the US system, firms do not pay flat tax on market value, but in theory on capital gains and depreciation recapture as if the properties were being sold today. We say in theory because most firms convert to REIT status utilising an Umbrella Partnership (or UPREIT) structure that allows for the contribution of assets in exchange for partnership interests in the REIT without triggering capital gains tax on the properties transferred to the limited partnership.¹

Another key difference is that UK REITs are required to list their shares on an exchange. Hence in the UK, REITs are publicly traded investment vehicles. Unlike UK REITs, US REITs are not required to list their shares on a public exchange, and hence can elect REIT status without its shares having to trade on a public exchange. The so-called unlisted (or non-traded) REIT sector witnessed tremendous growth in the early 2000s. These REITs follow the same Securities Exchange Commission (SEC) rules as publicly-traded REITs, but raise equity capital by selling shares to investors through broker-dealer networks. These shares are generally issued at a fixed price of \$10 and come with a relatively constant dividend payout. However, because they are not listed on a public stock exchange, there is no formal secondary market in which to trade the shares. As such, ownership of non-traded REIT shares is quite different than their public counterparts, especially with respect to liquidity and price discovery. There are also "private REITs" in the US directed at institutional investors that do not have to follow SEC guidelines. The appendix at the end of the paper provides a summary and comparison of key characteristics of publicly traded, non-exchange traded and private REITs. While it is important to be aware of the various US REIT classifications, our focus in this study is on publicly-traded REITs that make up the bulk of the US industry capitalization and are of the most relevance to UK REIT investors.

¹ In an UPREIT, the REIT itself does not own properties but a controlling interesting in a limited partnership that owns the real estate. At the time of the IPO, the owners of the private real estate firm receive Operating Partnership (OP) units in exchange for contributing their property assets to the Operating Partnership while public shareholders receive common stock. OP units are usually convertible into common stock on a one for one basis. There are two key differences, however, that you should be aware of. Unlike the common shares of the UPREIT, OP units are not listed on a stock exchange and hence not highly marketable. In addition, when OP unit holders sell their OP Units this is a taxable event. The UPREIT structure introduces a potential conflict of interest between REIT common shareholders and management that owns UPREIT units as it relates to the sales of properties contributed to the REIT, and the differing tax impacts on shareholders and OP unit holders.

Table 1: A comparison of key requirements of US and UK REIT strue	tures
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Test/Rule	US	UK
Ownership	 Minimum of 100 shareholders. "Look through" provision: ownership by institutional investors such as pension funds does not violate five or fewer rule. Five or fewer shareholders cannot control company. 	 No corporate shareholder can control more than 10%. Five or fewer shareholders cannot control company (cannot be "close" company). Ownership by "collective investment schemes" does not violate five or fewer rule.
Assets	 At least 75% of assets must be real estate (including mortgages), government securities or cash. 	 At least 75% of assets must be rental property. Must hold at least three properties with no one property comprising more than 40% of portfolio.
Income	 At least 75% of income must be from property rental or interest on mortgages. At least 95% of income must be from real estate or passive sources (eg dividends or interest). 	 At least 75% of income must be from property rental.
Debt	 No formal (stated) restrictions. 	 Interest coverage ratio must be 1.25 or greater.
Distributions	 90% of income must be distributed to shareholders. 	 90% of income must be distributed to shareholders.
Converting to REIT Status	 No requirement to file prior to conversion. Unrealised built-in capital gains are taxable. Most REITs utilise the Umbrella Partnership (UPREIT) structure to defer this tax bill. 	 Must file for REIT status prior to conversion. 2% "tax" paid on market value of assets (new base).
Exchange Listing	 Not required. Three types of REITs are permitted: (i) publicly traded; (ii) SEC registered but non-exchange traded; (iii) Private. 	Mandatory.
Taxable Activities	 REIT may own up to 100% of a "Taxable REIT Subsidiary" (TRS). Ownership of TRS's can be no more than 20% of REIT assets. Dividends from TRS qualify under the 95% income rule, but not under the 75% income rule. 	 Tax exempt property business is inside the "ring fence". Taxable activities may occur outside the ring fence. Amount of taxable activities outside the ring fence governed by the Asset and Income restrictions above.

Sources: EPRA Global REIT Survey, August 2007; "Guidance to Real Estate Investment Trusts", HM Revenue and Customs; Chan, Erickson and Wang (2003).

A third departure from the US model relates to debt. The UK model imposes a minimum interest coverage ratio, where the US does not specify any restrictions on leverage (or gearing), though in practice the use of debt by US REITs is monitored by the bond-rating agencies to ensure that REITs remain a relatively low leverage investment. Overall, US REITs are about 50 percent debt financed on a loan-to-value basis. The relatively low leverage level, as compared to that employed by many private players, helps keep the emphasis on income generation and also provides greater flexibility for REITs in times of credit market stress and a tightening of mortgage availability.

The US REIT model today allows a REIT to own taxable REIT subsidiaries in which the REIT can conduct more entrepreneurial activities such as property development and third party asset and fund management. The UK model allows these activities in REITs, but the income from them does not qualify for the same favourable tax treatment. In this sense the UK model appears somewhat less entrepreneurial than its US counterpart.

3.1 Composition and Size

As of June 30 2008 there were 172 publicly traded REITs operating in the US with an overall market capitalisation of just over \$283 billion. Today, the US REIT sector is dominated by *equity* REITs that engage in property investment and development (ie direct ownership of real property). As of the end of 2007, 110 of the 138 REITs in the National Association of Real Estate Investment Trusts (NAREIT) were equity REITs and this group represented more than 90% of the NAREIT market capitalisation. There were 25 *mortgage* REITs that invest in mortgages, either through direct lending or by purchasing mortgages and/or mortgage backed-securities and three *hybrid* REITs that both own property and invest in mortgages. The emphasis throughout this paper is on the investment attributes of equity REITs. However, it is important for readers to recognise that the dominance of equity REITs is a relatively new phenomenon, starting in 1992 with the birth of the so-called "modern REIT area". In the early years, mortgage and hybrid REITs played a much more important role. Figure 3 shows the evolution of the REIT sector in terms of the relative market caps of equity, mortgage and hybrid REITs.²





The equity REIT market experienced tremendous growth during the 1992–1997 period, increasing from a market capitalisation of less than \$9 billion to nearly \$128 billion. Figure 4 shows the rapid growth over this period, in terms of both the number of publicly-traded REITs and overall equity market capitalisation. It also highlights a number of important events and significant legislative changes to the REIT structure that made REITs an attractive investment to a wider range of investors including institutions, and thus contributed to the transformation in what has become known as the modern REIT era.

² Chapter 2 of Chan, Erickson and Wang (2003) is a nice overview of the growth and development of the US REIT /market since inception.



Most of the recent growth in REIT market capitalisation derived from the 1993–1994 REIT initial public offering (IPO) "boom". Figure 5 shows the equity capital raised by public equity REITs through equity offerings, both initial (IPO) and add-on or secondary equity (SEO) offerings, annually since 1990. In 1993 and 1994 alone, 95 capital constrained, private real estate firms went public as REITs in order to raise funds on Wall Street required to refinance maturing mortgages and to take advantage of buying opportunities in the depressed direct (private or unsecuritised) real estate market. Figure 6 shows the magnitude of the importance of the 1993–1994 IPOs, by expressing IPO dollar volume in relation to REIT market capitalisation.







3.2 Pricing, institutional ownership and liquidity

The private real estate market depression and capital crunch of the early 1990s was the spark for the growth in public market involvement in, and the securitisation of, commercial real estate, on both the debt and equity sides. As property markets turned down and the extent of overbuilding was realised, many private real estate firms needed to recapitalise their balance sheets and could not refinance mortgage loans coming due with new mortgage debt because the private debt tap turned off. To survive, these firms either had to find private equity infusions (joint venture partners on specific projects or at the entity level), or go public and raise equity to restructure their balance sheets. Hence, initially private firms were pushed to the public markets as a means of survival. However, once REIT prices started to increase sharply other private real estate firms faced significant pull from Wall Street to ride the wave and go public to obtain the "IPO pop". With low interest rates and bond yields together with bargain basement prices (high cap rates) well below replacement value for high-quality property, investment bankers saw an opportunity to arbitrage private and public real estate markets. For a time, REITs were perceived as "growth" stocks, and during this period REIT share prices increased sharply with REITs as a whole being priced at roughly a 30 percent premium to net asset value (NAV) in both 1996 and 1997, as shown in Figure 7.





The choice by so many private real estate companies to go public with REIT status during this period changed the real estate market forever. Historically, as originally intended, REIT shares were primarily held by individual investors, as REIT market capitalisations were simply too small for large investors to be able to make meaningful investments that would retain their liquidity (Parsons, 1998; Lieblich and Pagliari, 1997). It was essentially impossible for investors to sell off large blocks of REIT shares either quickly and/or with little price impact; they may as well have owned the underlying properties themselves.

Figure 8 shows that institutional ownership of REITs hovered in the 15 to 20 percent range prior to the REIT boom. Starting in 1993, institutional ownership increased sharply as a number of the newer REITs were of the size (market cap) necessary to attract significant institutional investment. Interestingly REIT institutional ownership quickly obtained a level consistent with the holdings in the broader stock market, settling in at about 45 percent.



Source: Figure 6.2 in Chan, S.H., Erickson, J. and K. Wang (2003)





The growth and accompanying increased institutional involvement in the equity REIT market coincided with much higher trading volumes, stock turnover and liquidity of REIT shares, which in turn fostered further institutional investor interest, higher volumes and liquidity. Figure 9 shows the sharp upward trend in daily REIT trading volume. Data from a recent study of REIT liquidity by Marcato and Ward (2007), shown in figure 10, reveal a sharp drop in US REIT bid-ask spreads associated with the emergence of the modern REIT era. Clayton and MacKinnon (2000) report a significant increase in REIT market depth as evidenced by lower price impacts of trades over the 1993–1996 period. Subramanyam (2007) finds that, in general, REIT bid-ask spreads were much higher than those on other common shares prior to 1993, but that the two converged as REIT liquidity increased in subsequent years.

The changing nature of REIT institutional ownership may have implications for their premium or discount to NAV. In the context of closed-end mutual funds, Lee, Shleifer and Thaler (1991) rely on a clientele argument, based on the relative difference between individual (retail) and institutional ownership of the fund shares and the underlying assets owned by the fund. They argue that the noise traders in financial markets are individual investors (see also Delong, Shleifer, Summers and Waldman; (1990)). Since shares of closed-end funds are held primarily by individual investors, it is their sentiment that drives the closed-end discount. At first glance, this story appears to fit the REIT market prior to the 1990s, when there was little institutional interest in REITs. In recent years, however, institutional investors have held more than 50% of REIT shares. Based on this, it may seem that the sentiment argument is not relevant to the REIT market. However, it is likely that the differential ownership between the fund (REIT) and its underlying assets (unsecuritised real estate) plays a role. Since individual ownership is still much more concentrated in REIT shares than direct property investment, individual investor sentiment could still drive premiums and discounts to NAV as long as individuals and institutions differ in their expectations.

In addition, much of the growth in institutional ownership of REITs derives from the growth of REIT mutual funds. Kallberg, Liu and Trzcinka (2000) provide evidence on the rapid growth of open-ended REIT mutual funds in the 1990s. They report that there was one REIT mutual fund in 1989, six at the end of 1992, 20 by the end of 1994 and 67 in December 1997. Assets managed went from \$1 billion in 1992 to \$13.25 billion by the end of 1997. At the end of 1997 REIT mutual funds held about 10% of the REIT market capitalisation. Flows of funds into open-ended mutual funds derive from individual investors, and are often viewed as an indicator of market sentiment. Hence, even with increased institutional involvement in the REIT market, individual investor sentiment may still play a large role.

Figure 11 provides a snapshot of the ownership structure of REITs today, with 11(b) providing a detailed breakdown by category of institutional investors. Of particular note in 11(b) is the relatively small ownership by pension funds (about 10%). In the mid 1990s, as the REIT market began to take off and pension fund investment to real estate was increasing, many market observers were predicting that public REITs would become the real estate vehicle of choice for pension funds. This has not happened and real estate has remained dominated by private ownership structures. We explore this phenomenon in more detail later in the paper.



Figure 11a: Who owns REITs?



3.3 The bursting of a bubble: postscript

The REIT boom came to a crashing end early in 1998, with share prices and premia to NAV falling fast and far, a situation that would remain for the next two years. The NAREIT equity price index lost 22% in 1998 and, by the end of 1999, REITs were priced at about an 18% discount to underlying property NAV. The end of the 1990s REIT-growth episode and also the length of the downturn were due, in part, to concerns with REIT pricing in relation to private real estate market fundamentals, emerging concerns about REITs issuing equity simply because it was cheap and then using it to overpay for properties, but also to the emerging dot-com stock phenomenon. The collapse in REIT prices coincides with the start of the NASDAQ dot-com bubble. It is widely thought that the "whoosh" sound heard in the REIT sector was the sound of money being pulled out of REITs and put into dot-com stocks; one sector (REITs) had run its course and it was time for momentum traders (return chasers) to move on to the next "hot" sector. This caused much confusion and concern among REIT management and investors as the rapid and sustained shock to REIT share prices took place with little apparent change in underlying real property fundamentals. Similar to what we saw with the Russia bond default effect on the CMBS market, REIT investors learned that REITs are part of the broader capital markets and hence REIT values can at times be affected by factors not directly related to property markets.

Following the turbulent times associated with a new beginning in the 1990s, the REIT sector has stabilised and gained credibility as REITs have become an established investment option for both real estate investors to gain long-term exposure to real estate and stock investors seeking high dividend yields. The legitimacy and acceptance of REITs into the mainstream Wall Street world was recognised starting in 2001 when Equity Residential REIT was added to the Standard and Poor's 500 index. Since that time a number of additional REITs have been added to this index (see Table 2).

Sector	Company	Entrance date	(\$ millions) Market cap	Market cap % of NAREIT
Apartment Investment Mgmnt Co.	Apartment	3/13/2003	3,423	1.2
AvalonBay Communities	Apartment	1/9/2007	7,587	2.6
Boston Properties	Office	3/31/2006	10,951	3.8
Developers Diversified Realty Corp.	Retail	3/20/2007	5,062	1.7
Equity Residential	Apartment	11/1/2001	11,183	3.8
General Growth Properties	Retail	6/29/2007	9,355	3.2
HCP, Inc.	Health Care	3/31/2008	7,282	2.5
Host Hotels & Resorts	Hotel	3/19/2007	8,339	2.9
Kimco Realty Corporation	Retail	4/3/2006	9,915	3.4
Plum Creek Timber, Inc.	Specialty	1/16/2002	7,012	2.4
ProLogis	Industrial	7/16/2003	15,082	5.2
Public Storage, Inc.	Specialty	8/18/2005	15,081	5.2
Simon Property Group	Retail	6/25/2002	20,754	7.1
Vornado Realty Trust	Diversified	8/11/2005	13,067	4.5
Total			144,093	49.6
NAREIT Equity Index				290,594
S&P 500 Index				11,591,371

Table 2: REITs in the S&P 500 Index (as of March 31, 2008)

Market dynamics have changed dramatically. In the early 1990s, private firms went public because they had to. Today it is a choice. In deciding whether or not to be a REIT, a firm must weigh the tax and access to capital advantages against the costs and constraints from the restrictions on operating and financial structure as well as dividend payout requirements. In addition, REIT management must be prepared to live in the public market fish bowl to some extent, their decisions and actions on display for all to see through required financial disclosure and scrutiny from market analysts.³ Since 2002, the cost of being public has increased as public companies including REITs, have had to comply with the provisions of the Sarbanes-Oxley Act (known as SOX) that came into existence following a series of corporate scandals including Enron, Tyco and Worldcom.

³ During the past few years a large number of public REITs have been acquired and taken private. These transactions are bring driven in part by differential public versus private pricing (ie arbitrage as discussed in section 12.3), but are also related to the requirements of costs of being a public company including significant fixed costs that result from SOX. See "Some REIT Executives Tire of the Public Arena," Jennifer Forsyth www.realestatejournal.com February 22, 2006.

The securitisation revolution of the 1990s helped produce today's robust public real estate investment trust (REIT) and commercial mortgage-backed securities (CMBS) markets and has facilitated major capital flows into real estate in recent years that have strengthened linkages between private real estate asset markets and wider national and global capital markets. How has this impacted the REIT management strategies and the investment characteristics of REIT shares?

3.4 The evolution of US REIT management and investment strategies

The preceding section provides a broad overview of the growth, development and maturation of the US equity REIT sector with an emphasis on market wide changes since the early 1990s. It also illustrates a dramatic difference between the UK and US REIT markets in terms of the birth of the respective REIT models. The modern US REIT regime grew out of the need for equity financing to recapitalise an industry beset with problems – it solved an access to capital problem at a most opportune time. The UK regime, on the other hand, was implemented with a well developed public real estate operating company already in place, with the intent to provide a more tax efficient flexible form of exposure to real estate.

This section delves into the changes that have taken place at the individual REIT level, with a focus on the evolution of REIT management strategies and structures, property portfolio holdings, investment and other revenue generating activities, as well as ownership and capital structures (ie financing sources).

The private real estate companies that recapitalised in the 1990s by converting to public REIT status learned quickly that being in the public securities arena means increased scrutiny by investors and analysts on all aspects of REIT investment, financing, operating and other management decisions including governance related issues such as board structure. As the REIT sector developed and matured, the traditional real estate cliché that the only three things that matter in real estate investment are location, location and location, was augmented in the case of public REITs with another one claiming the three things that differentiate the successful from relatively less successful REITs is management, management and management. Today most, though not all, public REITs are relatively large dynamic, entrepreneurial, fully-integrated operating companies with quality management having both public operating company management and real estate investment expertise. The majority of US REITs today share many of the following common characteristics or features:

- internally managed
- focused by property type (and possibly region)
- large, vertically integrated operating platforms
- low to moderate financial leverage (gearing)
- diversified capital sources debt and equity, public and private

The current "look" of REITs is one that has developed and evolved over the past 15 years, and it contrasts significantly with that of REITs in the pre-"modern REIT era" prior to the early 1990s. REITs in the 1980s were essentially passive pass-through vehicles lacking in vertical integration, that had diversified real estate portfolios comprised primarily of stabilised core or core-like properties. Originally, REITs were designed to allow retail-oriented investors to access diverse portfolios of high quality real estate via a liquid, publicly traded security. The dramatic growth in the REIT sector resulting from the IPOs of a number of large, entrepreneurial private real estate firms, many of which had development experience, along with important changes in REIT legislation, were the impetus to a morphing of REITs into more efficient, dynamic operating firms reminiscent of other publicly-traded companies.

Below we outline the economic and finance theory rationales underlying the characteristics listed above to help explain how each became an important consideration for REIT management teams as they aim to create so-called "franchise value" through the identification and exploitation of positive net present value (NPV) growth opportunities. We also provide perspective on issues that remain debated in industry and academic circles today.

As a prelude we borrow from an insightful speech given by Professor Dennis Capozza in his presidential address to the American Real Estate and Urban Economics Association (AREUEA) in 2005 in which he explored key REIT management considerations within a "lessons learned" framework as the REIT model evolved over the past 15 years.

REIT management strategy: lessons learned

- 1. Take your own advice (agency costs matter)
- 2. Stay focused (generally by property type)
- 3. Bigger is better (with qualifications)
- 4. Liquidity adds value
- 5. Eat your own cooking
- 6. Live within your means
- 7. Curb your enthusiasm; use moderate leverage
- Source: Capozza (2005)

3.4.1 Internal versus external management

Prior to the Tax Reform Act of 1986, REITs were required to be externally advised, passive investment vehicles. The external or outside management requirement created a major conflict of interest since REIT sponsors usually owned the management company and not much of the REITs themselves. REIT managers therefore had more of an incentive to grow the REIT to increase assets under management and hence the overall level of management fees rather than manage the REIT to maximise shareholder value. The 1986 act allowed REITs to be actively managed internally, providing a much better alignment of management of shareholder interests, and the opportunity for REIT managers to improve the efficiency of their operating decisions.

Today a US REIT can choose whether to be internally or externally managed, and almost all have chosen the internal option. Capozza and Seguin (2000) study the impact of management contract choice on REIT share price performance for a sample of REITs covering the late 1980s and early 1990s (post 1986 Tax Reform but pre-modern REIT era), and find that externally advised REITs under-perform their self-advised counterparts by 7% per year. Capozza (2005) reports that REIT managers paid attention; the percent of equity REITs externally advised fell from 48% in 1986, to 26% in 1992 and to under 10% in 2005.

The move to bring all management functions within the REIT led to REITs being more actively managed. It was only natural that this would lead to a greater degree of vertical integration within these "new" REITs. In fact, many of the private firms converting to REIT status were more integrated and actively managed than existing or old routes which reinforced the move this way. Rather than simply acquire and hold existing income-producing properties, the new REITs went further "upstream" in the production process to the construction and development of new buildings, and even the acquisition of land sites for future construction. Some also went "downstream" in the production and delivery process to include property management, leasing, and other related services. A key advantage of vertical integration is that it gives a REIT flexibility to survive, and even profit from, the changes in the relative valuations

between the stock and property markets. For example, vertical integration allows REITs to profit by selling properties when their NAV exceeds their stock market valuations, while retaining operating scale and geographical scope by continuing to control the operational management of the properties they sell. Most modern REITs exhibit at least some degree of vertical integration, and this has become a hallmark of modern REIT management strategy.

Specialisation: investment focus and firm value

A major feature of REIT management strategy during the 1990s that distinguished the new REITs from older ones was the move towards specialisation (ie focus) on one type of property, or sometimes two closely related types, such as industrial and office properties.⁴ Many of the most successful REITs are also regionally focused as well. In the previous decade, so called "old" REITs, had generally been diversified by property type, based on the notion, or conventional wisdom in the industry, that REIT investors would desire a diversified portfolio of properties. That is, by buying shares of a single REIT, investors could gain instant risk reduction through diversification by product type and potentially geographic region as well. According to Capozza (2005), slightly more than 25% of REITs were classified as diversified in 1990, defined as a significant proportion of property holdings in more than one property type. Table 3 shows the number of REITs focused on specific property types as well as those classified as diversified in 1994, according to NAREIT classifications. In 1994, 48 out of a universe of 216 equity REITs were classified as diversified. This number decreased each period and today stands at only nine REITs, comprising less than 8% of the equity REIT total, and even less on a market cap weighting basis.

	By nu	umber of	REITs	Ву	/ % of REI	Ts	2008 by mk	t cap
Property type focus	1994	2000	2008	1994	2000	2008	(\$ Millions)	%
Industrial/Office	29	38	27	13.4	21.6	22.9	69,004	23.7
Office	13	21	15	6.0	11.9	12.7	36,227	12.5
Industrial	12	10	7	5.6	5.7	5.9	25,172	8.7
Mixed	4	7	5	1.9	4.0	4.2	7,605	2.6
Retail	46	50	28	21.3	28.4	23.7	81,875	28.2
Shopping centers	28	31	15	13.0	17.6	12.7	34,390	11.8
Regional malls	11	12	8	5.1	6.8	6.8	40,928	14.1
Other	7	7	5	3.2	4.0	4.2	6,558	2.3
Residential	39	28	21	18.1	15.9	17.8	42,689	14.7
Apartments	34	22	17	15.7	12.5	14.4	40,847	14.1
Manufactured homes	5	6	4	2.3	3.4	3.4	1,842	0.6
Diversified	48	20	9	22.2	11.4	7.6	18,165	6.3
Lodging/resorts	10	15	11	4.6	8.5	9.3	17,779	6.1
Self-storage	21	4	4	9.7	2.3	3.4	17,706	6.1
Health care	12	13	11	5.6	7.4	9.3	27,082	9.3
Specialty	11	8	7	5.1	4.5	5.9	16,293	5.6
Total	216	176	118	100.0	100.0	100.0	290,594	100.0

Table 3: Evolution of US REITs by Property Sector Specialization

1994 and 2000 figures are year end numbers. 2008 data is as of the end of March.

Source: Chan, Erickson and Wang (2003) and the authors based on data available from NAREIT.

⁴ Industrial and office properties have similar leasing characteristics and often involve the same firms, or same types of firms, as tenants. Some properties are even hybrids or mixtures of office and warehouse uses.

What is (are) the major driving force(s) behind the increased emphasis on a focused investment strategy? One explanation is that, in theory, REITs do not need to diversify because investors can create their own diversified portfolios by acquiring individual REIT shares or investing in REIT dedicated mutual funds. This is particularly relevant today given the large percentage of REIT shares held by institutional investors including mutual funds. Diversification at the REIT level may have made some sense when REITs were viewed as passive investment vehicles, but REIT investors can diversify on their own by buying different types of REIT stocks, and in fact the more sophisticated institutional investors of the 1990s preferred to make these types of diversification decisions themselves. Institutional investors do not want REIT managers to be concerned with managing the risk of the property portfolio per se but to specialise in maximising shareholder value via the activities they are particularly skilled at.⁵

Increased specialisation is also connected with the shift to self-advised, internal management structures. Once REITs became more actively managed entities, it became clear that management expertise could usually be more effective when it was specialised by property type. Given the nuances that differentiate space market fundamentals, leasing and tenant relations as well as development and redevelopment activities across property types, it is likely the case that specialisation in what you are best at will maximise share value. Also, perhaps more importantly, the stock market can more easily understand and analyse a REIT that is specialised into one of a few somewhat standard space market segments. Specialisation or focus lowers a REIT's cost of capital, increasing share price and reducing the likelihood of being a takeover target.⁶

Led by health-care REITs in the late 1980s, REITs in the 1990s tended to specialise in specific property types and even subtypes (eg grocery-centered neighbourhood retail centers, stand-alone net lease retail, and high end luxury apartment properties). Smaller, more unique niches have also developed, including self-storage, manufactured housing, golf courses, and others, though with the exception of self-storage these sub-sectors have been limited to a small number of REITs.

Clearly the trend has been towards specialisation by property type, but the fact that there remain successful REITs that are diversified across property types suggests that there are exceptions to the rule and also that there may be other dimensions to which the focus concept can be applied.

Vornado Realty	7,920.00
Wahington Real Estate Inv	1,260.00
Cousins Property	540.00
Lexington Realty Trust	480.00
Investors Real Estate Trust	600.00
Cap Lease	80.00
Winthrop Realty Trust	160.00
One Liberty	70.00
HMG/Courtland Properties	3.30
Sector Total	11,110.00

Table 4: Diversified REITs in the NARIET Equity REIT Index (November 2008)

⁵ This fits with the dislike of large multi-product corporate conglomerates by stock investors in general, sometimes termed "diversification" that results in a "diversification discount" in share price.

⁶ Capozza and Seguin (1999) provide evidence that the primary value of specialisation is not an increase in the firm's operating profitability, but rather in the stock market valuation. Specifically, focus impacts REIT share value through the discount rate; investors impose a higher required return on diversified REITs via a higher illiquidity premium. Danielson and Harrison (2007) provide recent evidence on the link between REIT diversification, share price and liquidity and also report that "REITs focusing their investment activities within a single property sector enjoy enhanced liquidity and ease of valuation."

Table 4 lists the nine REITs that have bucked the trend and follow diversified strategies.

The largest of the group, Vornado, invests in major office properties in New York City and Washington DC, as well as retail properties throughout the country. It also has major interests in retail companies including Toys R US and Merchandise Mart, and provides mezzanine debt financing. The firm aims to capitalise on specific investment opportunities rather than follow a predefined strategy governed by property type focus.

Washington REIT has interests in approximately 100 office, medical office, industrial, multifamily and retail properties in the Washington metro area. Hence, while it is diversified by property type it is very focused locationwise. Cousins REIT is a similar story with a Southeast US focus. Lexington Realty Trust has interests in more than 300 office, industrial, and retail properties in 44 states. Again, while diversified by property type there is a unique angle to Lexington's investment strategy. The firm focuses on single tenant (mostly major corporations), net-leased properties. Thus, Lexington is focused by lease structure and tenant type.

REIT size: is bigger better?

There has been, and continues to be, considerable debate about whether REIT size (ie number of a square footage of properties and/or stock market capitalisation) matters. There is no question that REITs have tended to increase in size over time. Prior to the 1990s REIT boom, they were small capitalisation stocks, with little institutional ownership, having an average market cap of under \$100 million in 1990. The average market cap increased to \$725 million by the end of 1997 and stood at about \$2.6 billion at the end of 1st quarter 2008. Figure 12 shows the distribution of equity REITs by market capitalisation as of the end of March 2008.

As at November 2008 there were five REITs with market capitalisation of between \$5 billion and \$10 billion and 15 with capitalisations exceeding \$2.5 billion. Many REITs have moved out of the small cap realm and are considered mid and even large capitalisation stocks. The increase in size came partly from growth through property acquisitions and development, but also from the considerable consolidation the REIT market witnessed since the peak of mid-1990s boom resulting in a smaller number of larger REITs. Looking back at Figure 4, this is evident as the number of REITs has trended downwards since 1996 but the market capitalisation of the equity REIT sector increased substantially, until the 2007 credit-crunch induced downturn (some might say correction).



Source: Authors based on data available from NAREIT

The 'bigger is better' hypothesis derives from the belief that there are economies of scale in REIT level expenses and also in the cost of capital. The implication is that the big REITs will tend to get bigger (by some combination of buying or merging with other REITs, buying properties in the private property market, and/or developing new properties themselves), until the scale economies are exhausted.⁷ If this is true, then it suggests that REITs should grow for growth's sake. That is, REITs may face positive-NPV opportunities from expansion even when there is no positive NPV from the investment at the individual property level, simply because the increased scale will allow their average total costs to decline. This has important strategic implications, not only for individual REITs, but also for investors interested in the industry as a whole.

But is it true? Do REITs really face economies of scale, and if they do, are the scale economies very significant, and at what size of firm do they play out and get essentially exhausted? These are questions that have yet to be answered definitively, although some serious academic research has focused on this question in recent years. Ambrose, Highfield and Linneman (2005) provide the most extensive investigation of economies of scale in REITs to date. By using a long sample period that extends from 1990 to 2001, the authors are able to overcome an important limitation of many previous studies, most of which employed data from the mid 1990s growth period, making it difficult to separate size-related benefits from REIT market related effects. They report strong evidence of economies of scale particularly with respect to REIT overhead (G&A) expenses; increasing REIT size lowers average expenses and increases profit margins. Consistent with previous work they also find that larger REITs have higher liquidity and lower costs of capital.

⁷ Linneman (1997) was one of the first and most influential papers to suggest that the number of REITs will decrease but their sizes will increase as consolidation driven the exploitation of economies of scale in operations and capital cost and access. Linneman drew parallels between the future of the REIT sector and the consolidation in the automotive and aircraft manufacturing industries.

Not everyone is convinced that bigger is better. A number of REIT market observers think small is beautiful. And Figure 12 does reveal that there are a relatively large number of small REITs that coexist with the larger ones. In fact as at March 2008, 48 out of the 188 REITs in the NAREIT equity REIT index had market caps of less than \$1 billion. Moreover the median market cap was \$1.3 billion, considerably smaller than the \$2.6 billion average; many REITs remain small cap stocks. Smaller REITs, especially those that specialise regionally get to know their markets better and are able to move quickly to take advantage of value-creating opportunities, and hence able to grow faster. Supporters of this hypothesis agree that there may be economies of scale related to major fixed expenses, but suggest there may also be diseconomies of scale associated with managing an ever-expanding company that is involved in more markets (see Yang, 2001). As summarised by Block (2006) in writing about the trend towards national REITs, "The key to the success of these REITs will be the strength of the management teams in each of their local markets, together with the ability of corporate headquarters to walk the fine line between providing adequate guidance and allowing for incentives and creativity."

It is also likely the case that the benefits of size (ie the extent of scale economies) vary with the specific sector focus and business model of the various REITs. That is, diseconomies kick in sooner for some REITs than others depending on various characteristics associated with their property investments (eg property type, local versus international focus, local versus national versus multinational tenant base and more), especially if the growth is across different regions. Table 5 lists the 10 largest US REITs generally invested in core property types and the five largest that play in more specialised sectors.

Core		
Simon Property Group	Regional malls	10725
Prologis	Industrial	2850
Vornado Realty	Diversified	8503
Equity Residential	Apartments	7127
Boston Property	Office	5607
Kimco Realty Cp	Shopping centres	4361
General Growth Propertys	Regional malls	214
Avalonbay Communities	Apartments	4395
AMB Property	Industrial	1771
Macerich	Regional malls	1271
		46824
Specialty		
Host Hotels and Resorts	Hotel	3161
Public Storage	Self storage	11270
НСР	Healthcare	6480
Ventas Inc	Healthcare	4355
Plum Creek Timber	Timber	5415
		30681

Table 5: The largest US REITs (Jan 2009)

Six of 10 of the largest core REITs are focused on major shopping mall and industrial (distribution/logistics near major airports) properties. This supports the notion that the economics of the particular property-type space market play a major role. The majority of tenants in super-regional and regional shopping malls are national retailers, hence it makes sense to have a nation-wide REIT investment strategy. Similarly, Prologis and AMB are focused on national and multinational corporate tenants that are increasingly moving goods throughout the world as the global economy continues to integrate. The largest specialty REITs tend to be in sectors in which cash flow is derived from running a business as opposed to lease income (hotel and health care) and in which there are likely to be significant economies of scale and benefits to branding.

What does this all mean for the evolution of the UK market? Table 6 shows the current UK REIT universe by investment sector and market capitalisation. Two things stand out. First, it would seem that at least one of the large diversified REITs will face pressure to focus on a single property type, and hence spin-off properties in other categories. In addition, there could be consolidation of at least some of the relatively large number of smaller REITs to exploit economies of scale.

Company	Sector Focus	Market Cap £m
Big Yellow	Self storage	219.4
British Land	Diversified	2276.3
Brixton	Industrial	261.1
Derwent London	Offices	603.4
Great Portland Estates	Offices	397.8
Hammerson	Diversified	1155.9
Highcroft Investments	Diversified	15.76
Land Securities	Diversified	3056.3
Liberty International	Retail	1379.4
Local Shopping REIT	Retail	22.28
McKay Securities	Offices	62.74
Mucklow (A and J) Group	Industrial and offices	143.4
Primary Health Properties	Healthcare	98.1
Rugby Estates Investment Trust plc	Diversified asset managers	15.91
SEGRO	Industrial	716.5
Shaftsbury	Retail	374.5
Town Centre Securities	Retail	39.86
Warner Estate Holdings	Retail	10.35
Workspace Group	Offices and industrial	56.4

Table 6: UK REITS by sector focus and market capitalisation (Jan 2009)

Source: REITs and Quoted Property Group (REITa) www.reita.org and London Stock Exchange

4.1 Investment performance

While REITs in the US have gone through a number of changes over their history, the form adopted for UK REITs bears great similarity to the current structure of US REITs. Given this, a study of the past investment performance of REITs in the US may help shed light on the prospects for the UK market. Of course, past performance is never a guarantee of future performance. The historical performance of US REITs may be quite different from the future performance of US REITs themselves, let alone UK REITs. However, given the lack of history for UK REITs, and the similarities between the REIT structures in the two countries, an examination of the performance of US REITs may be instructive.

We examine the returns to US REITs for the 13 year period from Q2 1994 to Q2 2007. We choose the starting point for two important reasons. First, it begins just after the start of the new REIT era in the US, which we have discussed previously. REIT returns from before this time may bear little resemblance to returns in today's environment. Second, it coincides with the availability of the Credit Suisse/Tremont Hedge Fund Index. Thus, we can examine the performance of REITs alongside the performance of an alternative asset class, hedge funds, which has gained popularity amongst investors over the last few years, and has become part of many institutions' strategic asset allocation.

We choose total returns (income plus appreciation) to the NAREIT Equity REIT Index to represent the performance of US REITs for our study. We look only at equity REITs in the US as the inclusion of mortgage REITs would make the results less comparable to the current UK environment. Other asset classes included in our study are: US equities (represented by the S&P 500), bonds (represented by the 10 year US Treasury), hedge funds (Credit Suisse/Tremont Hedge Fund Index) and direct investment in US commercial property (Transaction Based Index (TBI) derived from sales of properties from the NCREIF index and produced by the MIT Centre for Real Estate).⁸ For each asset class (except hedge funds) we look at total returns each quarter, including both income and appreciation and assuming all income is re-invested.⁹





⁸ As the TBI Index is based on transaction prices it does not suffer from the "smoothing" problem that is typical of most commercial property indices which are usually based on appraised values.

9 Unfortunately, for hedge funds we have only a net asset value index and therefore cannot track income. However, given that hedge funds are strongly growth oriented and income paid out of the fund is often negligible, we do not believe that this is an issue.

Figure 13 shows the growth of a \$1 investment made at the beginning of 1994 in each of the five asset classes. The most noticeable aspect of Figure 13 is that the period was a very good one for real estate, both in the form of REITs and as direct property investment. REITs and direct real estate both outperformed all other asset classes over the 13 years. Comparing the paths of REIT and direct real estate investment one notes that they both follow the same general long term trend. However, REITs are more volatile than direct investment and there are periods when the performance of REITs and direct real estate diverge.

An example of divergence can be seen in the period from 1998 to 2000. During that time, the value of a direct property investment continued gradually upwards while REITs experienced a decline. This period was characterised by the dot com bubble in US equity markets and during this time US equity investors shows a distinct preference for growth oriented stocks. The result was a decline in REIT values, despite healthy fundamentals in the direct property market. It is also apparent on the graph that as the equity bubble burst REIT values staged a strong comeback because of a "flight to safety" and investors rotating towards value oriented investments. We discuss the relationship between REITs, direct real estate and equities in more detail in Section 4.2 below.

The other asset classes in Figure 13 show the expected results: Treasuries have low returns but appear quite stable over time, equities provide strong returns but are the most volatile of the asset classes, and hedge funds show returns in line with equities but with less volatility.¹⁰

For the purposes of an asset allocation, it is important that investors explicitly consider both the potential returns and the risk of each asset class. Table 7 shows the average returns per quarter from 1994 to 2007, along with volatility (as measure by standard deviation of returns) to indicate risk. The conclusions seen graphically in Figure 13 are again evident in the numbers.¹¹ REITs and direct real estate had returns quite similar to one another, and were the best returning asset classes.

Asset class	Average return per quarter	Volatility	Sharpe measure
Direct real estate	3.47%	3.36%	0.74
REITs	3.55%	6.87%	0.37
S&P 500	3.08%	7.83%	0.27
Hedge funds	2.94%	3.77%	0.51
10-year US Treasuries	1.45%	3.70%	0.12

Table 7: Risk and return characteristics by asset class (1994–2007)

On the risk side, however, it seems that property exposure via REITs comes at a price – inflated volatility. REITs have slightly more than twice the volatility of direct property investment. In fact, while direct property investment is the least risky asset class examined (lower volatility even than Treasuries), REITs are second only to equities in terms of risk. Figure 14 provides a synopsis in graphical form of the average risks and returns from the asset classes. As can be seen directly in the figure, the US experience is that REITs have average return characteristics similar to direct property investments but with risk more akin to equities.

¹⁰ See Allison and Lin (2004) for a discussion of a diversified allocation to hedge funds as a risk reducer rather than a return enhancer.

¹¹ One may notice that some of the results of Table 7 seem at odds with observations in Figure 13. For instance, the figure shows direct real estate with the highest ending value, but the table shows REITs with the highest average return. This is due to the fact that Table 7 looks at simple average return per quarter, while the Figure 13 includes compounding.



Also shown in Table 7 is the Sharpe measure for each asset class. The Sharpe measure incorporates both the average return and the volatility into a single measure of risk-adjusted performance.¹² REITs outperformed equities on risk-adjusted basis over this period, with their higher Sharpe based on superior returns and slightly lower risk. While riskier than Treasures, the much higher returns to REITs meant that REITs also outperformed that asset class. However, REITs do not compare as favourably on a risk-adjusted basis to what are often thought of as the "alternative" asset classes: direct property and hedge funds. While REIT returns beat direct property by an average of 8 basis points per quarter and beat hedge funds by a substantial 61 basis points per quarter, REITs' much higher volatility meant that overall they underperformed both of those asset classes by quite a wide margin.

Overall, the history of REITs in the US between 1994 and 2007 shows that they have performed better than both equities and Treasuries, but not as well as direct property and hedge funds. However, the stand alone performance of an asset is not its only important characteristic. Within a diversified portfolio, the relationship among investments (the correlation) is very important as it is via these inter-relationships that diversification arises. Table 8 shows the correlation of returns amongst the five asset classes.

	Direct real estate	REITs	S&P 500	Hedge funds
REITs	0.208	1		
S&P 500	0.245	0.311	1	
Hedge funds	0.166	0.360	0.582	1
US Treasuries	0.020	-0.002	-0.351	-0.234

Table 8: Correlations between asset classes

¹² The Sharpe measure is calculated as (average return to the asset class minus average T-Bill return) divided by the asset class standard deviation. It represents the average return provided by the asset class in excess of the risk-free return, per unit of risk.

Table 8 shows that REITs have reasonably low correlations with all of the other asset classes (the maximum being 0.36 with hedge funds). REITs may therefore have diversification properties that could make an allocation to them desirable within a portfolio. Note, however, that direct real estate investment exhibits lower correlation with both equities and hedge funds than do REITs, indicating that direct investment could provide even better diversification properties. Finally, an interesting aspect of Table 8 is that REITs, despite their nature as a real estate investment, actually have a higher correlation (0.311) with equities than they do with direct real investment (0.208). It seems that, at least on a short term basis, REITs may bear more similarity to equities than to real estate. This is an important issue, and one to which we will return below.

Key themes:

- REITs in the US have performed better than traditional asset classes on a risk adjusted basis.
- REITs have not performed as well as alternative asset classes on a risk adjusted basis.
- REITs have average returns similar to direct property investment but with risk similar to equities.

4.2 What is a REIT?

Apart from the historical investment performance of US REITs, as discussed above, another important question exists: What does an investment in REITs represent? While seemingly an abstract question, it has important ramifications for the treatment of REITs by investors.

The assets underlying REITs are real estate. Hence, one might expect that REITs would be a substitute for direct property investment. However, REITs trade as equities, a much different market mechanism than the rather thinly traded and slow moving direct property market. Trading on the more volatile equity markets may change the nature of REITs as investments, and if this is true REITs do not represent a "pure" real estate investment. The effect of this can be seen in the relative volatilities of REITs and direct real estate. The relevant question is whether REITs represent an investment in equities or in real estate, or if they are a hybrid investment with characteristics of both.

From a practical point of view, the question is where REITs fit within an asset allocation. Should they be considered part of the real estate allocation, or part of the equity allocation? This is a question with which US institutional investors have wrestled for a number of years. A recent survey indicates that 35% of US institutional investors consider REITs as part of their real estate allocation, while 37.5% consider them as part of the equity allocation (the remainder use REITs for short term rebalancing of real estate allocations).¹³ The lack of a clear answer as to where REITs fit in a portfolio may help explain why US institutions have not entered the REIT market whole heartedly.

Early evidence generally found little connection between returns to US REITs and returns to direct commercial property investments (usually measured by NCREIF).¹⁴ Seck (1996), for instance, found that REITs are not substitutes for unsecuritised real estate and that REIT returns are affected to a much larger degree by equity market effects than are returns to direct commercial property.

¹³ See Clayton (2007).

¹⁴ Corgel, McIntosh and Ott (1995) provide an excellent review of the early research on this question.

While much of the early research found little relationship between REITs and the US commercial property market (the conclusion being that REITs are stocks, not real estate), other researchers have concluded that there does exist a fundamental link between REITs and direct property markets, but one that may be masked by stock market volatility and other differences between REITs and commercial property. An early paper in this vein is Giliberto (1990). He notes that, between 1978 and 1989, the NAREIT Equity REIT Index and the NCREIF Index had a zero correlation. However, if one looks at only the portion of each index's returns not associated with broad stock market or bond market factors then the two forms of real estate are positively correlated. The implication is that REITs do have a link to property markets, and therefore are not purely stocks, although this link may be masked by equity market volatility.

More recently, researchers have noted that the average REIT in the US and the average institutional direct property holding have significant differences, and these may obscure the relationship between REITs and real estate. Pagliari, et al (2005) note that the NAREIT Index is oriented towards retail and residential properties with a relatively large allocation to non-traditional property types (such as health care facilities, hotels and golf courses, while institutional holdings (as represented by NCREIF) are oriented toward retail and office properties. Further, REITs utilise significant gearing in their capital structure while most institutional properties are held debt-free (74% of institutional properties are held without mortgage debt¹⁵). After controlling for these differences Pagliari et al. find that there is no significant difference between REITs and direct property markets in terms of average return and return volatility. They report that average returns to the two types of real estate investment are particularly close since the start of the "new REIT era", post-1993.¹⁶

Rather than attempting to determine whether REITs are real estate or stocks, Clayton and MacKinnon (2003) treat REITs as hybrid securities with characteristics of real estate, equities and bonds. They attempt to calibrate the extent to which REITs are driven by each of these markets. Over the period 1979 to 1998 they find that REIT returns have virtually no relation to real estate factors, and are driven in the main by large capitalisation equities. Most importantly for the developing UK REIT market, however, is the maturation process found in US REITs by Clayton and MacKinnon. They find that in the early 1980's REIT returns were driven mostly by large cap stock factors, with no relationship to property markets. In the late 1980's a significant small cap stock factor arose. After the start of the new-REIT era in the early 1990's, they found that US REITs had only a small relationship with large cap stocks, but a significant relationship to the underlying real estate market (albeit only 15% of REIT return volatility can be ascribed to real estate factors).

The picture that emerges from the Clayton and MacKinnon research is one in which the REIT market in the US has slowly matured.¹⁷ As investors became more aware of REITs, institutional investors became more interested in them, and more analysts started to cover these equities, there was a gradual shift in the information environment. In the early days, when little was known about REITs, they tended to simply follow the major market indices. As more information became available and investors became more comfortable with REITs as investments, they first began

 $^{^{\}rm 15}$ See Fisher at al. (2004).

¹⁶ In a similar paper, Riddiough, Moriarty and Yeatman (2005) find that controlling for property type differences, gearing and management fees narrows the gap between REIT returns and those to institutional property holdings, but a significant gap remains.

¹⁷ Other researchers have reported changes in the nature of REIT returns as the US market has grown. For instance, Glascock, Lu and So (2000) report that REITs are integrated with the direct property market but starting in 1992 they became less like bonds and more "stocklike" in their behaviour.

to resemble the small cap stocks that they are, and then to more closely reflect the underlying property markets in which they operate.¹⁸ Further, the amount of REIT return volatility not explained by stock, bond or real estate factors rose substantially over time; this is consistent with REITs more and more being driven by information specific to the REIT market, rather than just broad macro-level trends.

Whether the market for UK REITs will go through the same type of maturation process is an open question. On one hand, if UK REITs develop in a manner analogous to the US experience then one would expect similar changes over time in the UK market. Conversely, REITs are now a much more well known and understood phenomenon, both in the US and globally, than they were in the early days of the US market. Given this, it seems likely that UK REITs will have already begun as a mature market.

Anderson et al (2005) extend the work of Clayton and MacKinnon and show that REITs most closely resemble small cap value stocks (and bear little relationship to direct real estate). They also argue that the US REIT market has matured over time. Despite the fact that REITs are most like small cap equities, Anderson et al also show that most REIT volatility cannot be explained by any of the other asset classes – indicating that REITs may constitute a separate investment class unto themselves. Similarly, using a different methodology, Lee and Stevenson (2007) conclude that there are "strong linkages" between REITs and value stocks but there are still distinct differences between them.

Thus, while of all asset classes REITs seem to bear the most resemblance to small cap value stocks, their nature is still distinctive. REITs, in fact, may constitute a separate asset class altogether; neither real estate nor equity, although with some characteristics of each.

An issue with the literature discussed thus far is that it concentrates on short-run returns to REITs, typically looking at returns on a monthly or quarterly basis. Trading on the equity market may create volatility that makes REITs look unlike direct real estate over short time intervals, but it is possible that their nature as real estate investments may become more evident over longer horizons. This is an important question for the treatment of REITs within an asset allocation as most institutional investors have long investment horizons and it is the long term nature of REIT investment that should be of most importance to them.

Looking at the relationship between REITs and direct commercial property returns over long horizons, Barkham and Geltner (1995) and Geltner and Rodriquez (1997) both reach the same conclusion: REITs and real estate follow similar long term cycles. Over any short period of time, however REITs may depart significantly from the path of real estate.¹⁹ The short-term departures of REITs from real estate values can be ascribed to two factors, both related to the fact that REITs trade on the equity

¹⁸ Clayton and MacKinnon (2001) note that as well as structural changes in the REIT environment there are also cyclical patterns in the relationship between REIT returns and other asset classes.

¹⁹ A recent working paper by MacKinnon and Zaman (2007) supports this view, showing that the correlation between REIT and direct property returns increases with the investor's time horizon.

market. First, trading on the equity market may simply creates excess volatility in REITs, but this volatility tends to cancel itself out when looking at long time horizons. Second, because of more frequent trading on the equity market relative to the much thinner direct property market, information on property market conditions is much more quickly reflected in REIT prices than in property values. REIT values tend to lead property market values at a lag of one to two years. In other words, turning points in the property market tend to show up in REITs first. The Barkham and Geltner and Geltner and Rodriquez studies both conclude the lead time is generally somewhere between one and two years, although more recently MacKinnon and Zaman (2007) find a shorter lead time of around six months.

Overall, the US experience indicates that REITs should not be treated as real estate investments by short term investors. Rather, REITs should be treated as part of the equity allocation and an investment in a REIT should be considered in the same way as one would consider an investment in any other operating company (albeit an operating company whose main business is real estate). Investors with long investment horizons, however, should treat REITs differently, as part of their real estate allocation. A diversified REIT portfolio tends to have a strong relationship to diversified property portfolios over the long run, although with much different property type and gearing characteristics that should be considered in investment decision-making.

Key themes:

- Volatility makes REITs unlike direct property investment in the short run. Short horizon investors should treat REITs as part of the equity allocation.
- Over the long term, REITs follow cycles similar to property markets. Long horizon investors should treat REITs as part of the real estate allocation.
- On a short term basis, REITs bear most resemblance to small cap value stocks.
- On a short term basis, REITs appear to be a unique asset class, distinct from both equities and real estate.
- The US REIT market has matured through time. REITs have gradually become more like small cap stocks and real estate.
- Information on property markets is reflected in REIT prices before it is reflected in property prices.

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Characteristics of Publicly Traded REITs, Non-Exchange Traded REITs and Private REITs

Management

Minimum Investment Amount

Independent Directors



NAREIT does not intend this publication to be a solicitation related to any particular company, nor does it intend to provide investment, legal or tax advice. Investors should consult with their own investment, legal or tax advisers regarding the appropriateness of investing in any of the securities or investment strategies discussed in this publication. Nothing herein should be construed to be an endorsement by NAREIT of any specific company or products or as an offer to sell or a solicitation to buy any security or other financial instrument or to participate in any trading strategy. NAREIT expressly disclaims any liability for the accuracy, timeliness or completeness of data in this publication. Unless otherwise indicated, all data are derived from, and apply only to, publicly traded securities. Any investment returns or performance data (past, hypothetical, or otherwise) are not necessarily indicative of future returns or performance.

Investor Control

Corporate Governance

Disclosure Obligation

Performance Measurement

Publicly Traded REITs Non-Exchange Traded REITs Private REITs Publicly Traded REITs

Publicly Traded REITs Non Exchange Traded REITs WWW.INVESTINREITS.COM			
	PUBLICLY TRADED REITS		
Overview	REITs that file with the SEC and whose shares trade on national stock exchanges.		
Liquidity	Shares are listed and traded daily on stock exchanges with minimum liquidity standards.		
Transaction Costs	Broker commissions typically range between \$20 and \$150 per trade, depending on brokerage service. Investment banks receive a 2-7 percent fee to underwrite initial or follow-on offerings. Offering expenses vary based on deal size.		
Management	Typically self advised and self managed.		
Minimum Investment Amount	One share.		
Independent Directors	New stock exchange rules require a majority of directors to be independent of management. New NYSE and NASDAQ rules call for fully independent audit, nominating and compensation committees.		
Investor Control	Investors re-elect directors.		
Corporate Governance	Specific stock exchange rules on corporate governance.		
Disclosure Obligation	Required to make regular financial disclosures to the investment community, including quarterly and yearly audited financial results with accompanying filings to the SEC.		
Performance Measurement	Numerous independent performance benchmarks available for tracking public REIT industry. Wide range of analyst reports available to the public.		

Publicly Traded REITs Non	Exchange Traded REITs WWW.INVESTINREITS.COM			
	NON-EXCHANGE TRADED REITS			
Overview	REITs that file with the SEC but whose shares do not trade on national stock exchanges.			
Liquidity	Shares are not traded on public stock exchanges. Redemption programs for shares vary by company and are limited. Generally a minimum holding period for investment exists. Investor exit strategy generally linked to a required liquidation after some period of time (often 10 years) or, instead, the listing of the stock on a national stock exchange at such time.			
Transaction Costs	For each share purchased from the REIT, 10-15 percent of gross offering proceeds typically go to pay broker- dealer commissions, offering expenses and up-front acquisition or advisory fees (fees typically split between a related intermediary and third-party broker-dealer).			
Management	Typically externally advised and managed.			
Minimum Investment Amount	Typically \$1,000 - \$2,500.			
Independent Directors	Subject to North American Securities Administrators Association (NASAA) regulations. NASAA rules require that boards consist of a majority of independent directors. NASAA rules also require that a majority of each board committee consist of independent directors.			
Investor Control	Investors re-elect directors.			
Corporate Governance	Subject to state and NASAA regulations.			
Disclosure Obligation	Required to make regular SEC disclosures, including quarterly and yearly financial reports.			
Performance Measurement	No independent source of performance data available.			

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Publicly Traded REITs Non E	Exchange Traded REITs WWW.INVESTINREITS.COM
	PRIVATE REITS
Overview	REITs that are not registered with the SEC and whose shares do not trade on national stock exchanges.
Liquidity	Shares are not traded on public stock exchanges. Existence of, and terms of, any redemption programs varies by company and are generally limited in nature.
Transaction Costs	Varies by company.
Management	Typically externally advised and managed.
Minimum Investment Amount	Typically \$1,000 - \$25,000; private REITs that are designed for institutional investors require a much higher minimum.
Independent Directors	Not required.
Investor Control	Investors re-elect directors.
Corporate Governance	Not required.
Disclosure Obligation	Not required.
Performance Measurement	No public or independent source of performance data available.
WWW.NAREIT.COM	Publicly Traded REITs Non-Exchange Traded REITs



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