

Nordic Journal of Surveying and Real Estate Research 9:1 (2012) 76–97

submitted on 6 June, 2012

revised on 26 October, 2012

accepted on 30 October, 2012

European Listed Real Estate: The Capital Structure Perspective

Jaakko Niskanen

jaakko.niskanen@aalto.fi

+358-50-537 8450

Aalto University, School of Engineering
Department of Real Estate, Planning, Geoinformatics
P.O. Box 15800, 00076 Aalto, FINLAND

Heidi Falkenbach

heidi.falkenbach@aalto.fi

+358-40-735 1181

Aalto University, School of Engineering
Department of Real Estate, Planning, Geoinformatics
P.O. Box 15800, 00076 Aalto, FINLAND

***Abstract.** This paper studies the capital structure decisions of European listed real estate companies, tax-neutral REITs (Real estate investment trusts), and tax-paying entities, REOCs (Real estate operating companies). The practical implications of REITs' tax neutral status for their capital structure are of utmost interest not only for real estate practitioners, but also for financiers, such as equity holders, banks, and other potential sources of capital. The study concludes that the tax-neutral REITs are significantly less levered than their taxed counterparts, REOCs: Along with tax neutrality, a further potential reason for the structurally less monitored REOCs' higher leverage could be an attempt to mitigate the potential agency costs with additional debt. The observed pattern in REIT/ REOC leverage is consistent throughout the studied sample.*

1 Introduction

The role of real estate investments as a diversifier of a mixed asset portfolio has been discussed in great detail in the academic literature. Summarizing the previous studies, Seiler et al. (1999) note that property has a low correlation with other asset classes and, thus, should be included in a mixed asset portfolio. The early literature in the field predominantly focused on the U.S. and U.K. markets – however, more recent literature confirms that other European markets (see, e.g., Stevenson, 2000; Fraser et al., 2002; Hoesli et al., 2004) and the Finnish market (Falkenbach, 2009) might also attain diversification benefits.

Including real estate in a portfolio may, due to a number of inherent characteristics, pose challenges to the investor. First, the properties are

heterogeneous and the unit size large – constructing a well-diversified real estate portfolio may prove challenging. Second, along with market- and asset-specific expertise, real estate investments require active property management (in other words, real estate cannot merely be owned passively; it requires careful attention from the owners' part – naturally, the property management in practice can be outsourced, yet this requires some attention to initiate and supervise, too).

Some part of these challenges may be avoided by investing in real estate via indirect means. The variety of instruments available in the real estate market can be illustrated by a four-quadrant model comprised of two dimensions: private / public and equity/debt (see, e.g., Hudson-Wilson et al., 2003). On the private real estate equity side, direct real estate as well as investment in private commingled vehicles (vehicles consisting of assets drawn from several accounts and then blended together, as opposed to direct investing), such as non-listed real estate funds, can be found. On the other hand, public real estate equity (i.e., real estate equity publicly available for investors, as opposed to private real estate equity, which is only available to some investors or investor groups) investments include investments in both real estate operating companies (REOCs) and real estate investment trusts (REITs). On some occasions, a certain social function pertains to REITs – this may be the case in countries where the REIT legislation seeks to, for example, increase the amount of rental apartments being built.

The pros of public real estate equity vehicles are obvious – they provide the investor with transparency, high liquidity, and a standardized market place. In addition, the unit size of the investment is (in most cases) remarkably lower. However, the previous literature also suggests that the risk and return characteristics of these instruments can be similar to those of stocks; yet, many interpretations are available, including some suggesting that listed real estate can be considered as an asset class per se and others claiming that direct real estate and public real estate are co-integrated and in the long term could be regarded as substitutes (see, e.g., Eichholtz, 1996, 1997; Ling & Naranjo, 1999; Mueller and Mueller, 2009; Fraser et al., 2002). A recent study by Hoesli and Oikarinen (2012) noted that in the long run, REITs behave much like direct real estate. Yet, regarding the short-term co-movement, REITs and stocks correlate more strongly than REITs and direct real estate. According to Hoesli and Oikarinen, in the long run REITs are “expected to generally offer similar diversification properties as direct real estate.”

Of the total real estate assets globally, more than 40% are located in Europe. The value of global real estate assets amounts to more than 19 trillion dollars. It follows that the value of European real estate assets totals more than 7.8 trillion dollars. Globally, the value of total listed real estate assets amounts to nearly 1.16 trillion dollars, of which Europe's share remains at 21%, or \$249 billion, a relatively low figure. Furthermore, the European listed real estate market is divided between REOCs, which represent two-thirds of the market, and REITs, which represent the remaining one-third of the market (EPRA, 2009, 2010).

To put the figures in a broader perspective, the value of the whole global, listed stock market reaches close to 44 trillion dollars. Thus, the value of all real estate assets, both private and public, is equal to almost 44% in value as compared

to the listed stock market assets in the world (EPRA, 2010). It follows that real estate should be included in an investment portfolio of any well-diversified investor.

In the past decade, the European (listed) real estate market has been subject to substantial changes in financial regulation. As of now, a market previously dominated by REOCs is currently comprised of 366 listed real estate companies, of which one-third, or 127, are listed as REITs (EPRA, 2009, 2010). The emergence of European REITs has been accelerating during the past few years: An increasing number of European countries have recently adopted legislation regarding REITs, treating them as pass-through entities that distribute most of their earnings as dividends to shareholders. Globally, REITs are not a new phenomenon: “Long-established examples of tax-transparent vehicles exist in the shape of Real Estate Investment Trusts (REITs) in the USA and the Australian Listed Property Trusts (LPTs)” (Baum and Devaney, 2008). Real estate operating companies are not subject to any special legislation, whereas REITs must follow strict regulations pertaining to their capital structure, distribution requirements, and ownership structure, to name but a few. In exchange for following the requirements, REITs are granted tax-exempt status. Schacht and Wimschulte (2008) found that the German REITs, G-REITs, have the potential to attract remarkable funds in the medium term. Moreover, G-REITs may facilitate a more integrated and developed property and capital market within the country.

Jaffe (1991) argues that the effect of taxes on corporate capital structure has been explored in great detail in academic finance. Jaffe also adds that the theoretical relationship between corporate taxes and corporate capital structure has been thoroughly investigated (e.g., in the previous works by Modigliani and Miller, 1958, 1963 and Miller, 1977). In contrast, the effect of taxes on the capital structure of partnerships, REITs, and related entities has received only modest attention in the existing literature. In 2001, Brounen and Eichholtz asserted that the theory on capital structure is one of the most puzzling issues in corporate finance literature. Feng et al. (2007) make a similar note, positing that much of the literature on capital structure excludes REITs, mainly due to the unique regulatory environment in which these firms operate.

The concept of agency cost is also central to this study; agency cost is an economic concept pertaining to the cost that a principal experiences when he chooses an agent to act on his or her behalf. The cost arises from the fact that the parties most often have different interests, and the agent potentially more information – thus, the principal assumes the “cost” of the agent not acting in the principal’s best interest. Theoretically, in a world of no taxes, agency costs, or bankruptcy costs, the capital structure should not matter (Modigliani and Miller, 1958, 1963). Yet, in most cases, they do exist and thus interfere with the theoretical hypothesis. To cite Jensen (1986): “Corporate managers are the agents of shareholders, a relationship fraught with conflicting interests. Agency theory, the analysis of such conflicts, is now a major part of the economics literature.”

Interestingly, some scholars argue that the effect of these aforementioned factors on REITs is rather small (Capozza and Seguin, 1999). Taxes do not count

in the case of REITs and agency as well as bankruptcy costs only have limited relevance. The aim of this paper is to study the capital structure of European non-taxed real estate entities, REITs, and to compare the capital structure decisions of these tax transparent companies to those of their taxed counterparts, REOCs. The potential differences in the companies' use of leverage in terms of debt-to-assets ratio are also of primary interest in this study. Furthermore, we assess whether the leverage patterns remain similar throughout the study period or whether potential deviations from the mean can be found. In addition, we study the relative amount of short-term debt (less than one year maturity) of all debt financing. Finally, we study the relationship between both REIT and REOC leverage and annual M/B ratios.

This paper is organized as follows: First, we discuss the European real estate equities market, including the largest European real estate markets and the issues pertaining to regulation. Thereafter, we discuss what the literature has to say about the capital structure of real estate equity companies. Thereupon, we present the data and methodology used, as well as the empirical results of the study. Finally, we provide summary and concluding remarks.

2 European Real Estate Equities

The European listed real estate market has expanded rapidly during the past decade. REOC stocks, that is, shares of real estate companies that are not regulated by any other equities in a distinguishing manner, have been available on the market for a long time, whereas the REIT market has been growing steadily as a result of several European countries recently introducing specific REIT regulations (see, e.g., Niskanen and Falkenbach, 2010; Niskanen et al., 2011; Niskanen and Falkenbach, 2012). The combined value of all real estate assets in Europe is estimated to be 7.8 trillion dollars (table 1), with the respective figure in the U.S. amounting to close to 5.9 trillion dollars. The largest real estate countries in Europe are the U.K., Germany, and France.

Today, the number of European countries with special REIT legislation amounts to 14, with the largest REIT countries being France, the U.K., and the Netherlands. Altogether, European REITs constitute more than 22% of global REIT assets (tables 2 and 3).

At this point, we need to make a clear distinction between European REITs and REOCs: In order to qualify as an REIT, a real estate company must fulfill certain requirements set forth by the national legislation. In return for avoiding taxation on the corporate level, the company must distribute most of its income as dividends. The tax-exempt status puts the REIT shareholder in a comparable position to those investing in real estate directly or through mutual funds. As opposed to tax-exempt REITs, real estate companies organized as REOCs are subject to corporate tax. REOCs are real estate companies that are either domiciled in countries without REIT legislation or that have chosen not to opt for REIT status.

REIT legislation in the U.S. dates back to the 1960s, whereas the field of European REITs is far more fragmented: This is due to the fact that REIT legislation is always passed on a country-by-country basis. As a result, there is

Table 1. Real estate, stock values (\$ bn).

Total real estate assets, world	\$19,269	
Total real estate assets, Europe	\$7,815	41%
Total listed real estate assets, world	\$1,159	
Total listed real estate assets, Europe	\$249	21%
REOCs Europe (239companies)	\$167	14%
REITs, Europe (127 companies)	\$82	7%
Total stock market value, world	\$43,539	
Total stock market value, Europe	\$11,136	26%

Source: EPRA 2009, EPRA 2010.

Table 2. Global REIT market.

	Number of REITs	Value of REITs (€bn)	Value of Global REIT market, %
Africa	5	2.1	0.73%
Americas	230	146.7	51.15%
Asia	109	39.8	13.88%
Australia	66	34.9	12.17%
Europe	127	63.28	22.07%
Total	537	286.78	100%

Source: EPRA Global REIT Survey, 2009.

no common REIT structure within the European Union. Despite some differences in national REIT legislation, the majority of the European REIT structures still exhibit similar features. The characteristics typically exhibited by European REIT structures are discussed in more detail below (e.g., in Eichholz and Kok, 2007).

First, the main issue in REIT legislation is *tax exemption at the corporate level*. REIT regimes aim to avoid having their rental income taxed at the corporate level, thus putting the shareholder in a comparable position with an investor owning property directly. Maybe this is one of the reasons that led Lee and Chiang (2010) to find that REITs, after the structural break of the early 1990s, now move more in tandem with private real estate in the long run rather than with the stock market (for a further analysis of the exclusivity of REITs as an asset class, see Chiang and Lee, 2002).

Moreover, REIT tax treatment can be seen as analogous to that of mutual funds (which are exempt from corporate tax). In order to be granted a tax-exempt status, REITs are typically subject to *distribution requirements*. In order to guarantee an ultimate tax payment, REITs must annually deliver a substantial amount of net profits as dividends, with typical percentages varying between 80 and 100%. Moreover, REITs are often faced with *operational restrictions*. Typical restrictions entail regulations pertaining to real estate development and investment strategy, especially regarding the assets that qualify as REIT investments.

Furthermore, REITs must follow special *leverage restrictions*. Eichholz and Kok (2007) argue that leverage restrictions put REITs in a disadvantageous position in comparison with other types of property investment: The amount of debt allowed in REIT operations is restricted, unlike in the case of REOCs. As depicted in table 4, leverage requirements of differing qualities and quantities are stipulated in 13 of the 14 REIT countries in Europe. Luxembourg has no leverage requirements for REITs, whereas all other REIT countries limit the use of leverage in one way or another. The most typical way of limiting the use of leverage is to set a limit for debt as compared to total assets. REIT-specific *shareholder requirements* are set forth to ensure that the structure and share liquidity of REITs are used properly. In practice, this translates into a minimum number of shareholders and/or a maximum percentage owned by a single shareholder. The requirements differ greatly between countries. Finally, some European countries require that REIT candidates *be listed* on public stock exchanges. European REIT countries are shown in table 3.

As can be seen, REITs and REOCs operate in very different operational environments. REITs have the benefits of attracting investors with their tax transparency (tax exemption at the corporate level), whereas REOCs have more operational freedom and flexibility.

Of the 366 European listed real estate companies, nearly two-thirds have been set up as REOCs (239 companies) and a third as REITs (127 companies). The combined value of REOCs adds up to 167 billion (67%) and the respective value of REITs to 82.3 billion dollars (33%). The overall value of European listed real

Table 3. *European REIT market: number and value of REITs by country.*

	REITs since	Local REIT name	Number of REITs	Value of REITs (€bn)	Value of European REIT market, %	Value of Global REIT market, %
Belgium	1995	SICAFI	14	4	6.32	1.39
Bulgaria	2004	SPIC	19	0.2	0.32	0.07
Finland	2009	REIT				
France	2003	SIIC	46	32.2	50.88	11.23
Germany	2007	G-REIT	2	0.4	0.63	0.14
Greece	1999	REIC	2	0.5	0.79	0.17
Israel	2006	REIF	1	0.08	0.13	0.03
Italy	2007	SIQ	1	0.4	0.63	0.14
Lithuania	2008	REIT				
Luxembourg	2007	SIF				
Netherlands	2003	FBI	8	5.9	9.32	2.06
Spain	2009	RECI				
Turkey	1995	REIC	13	0.9	1.42	0.31
United Kingdom	2007	REIT	21	18.7	29.55	6.52
Total			127	63.28	100.00	22.07

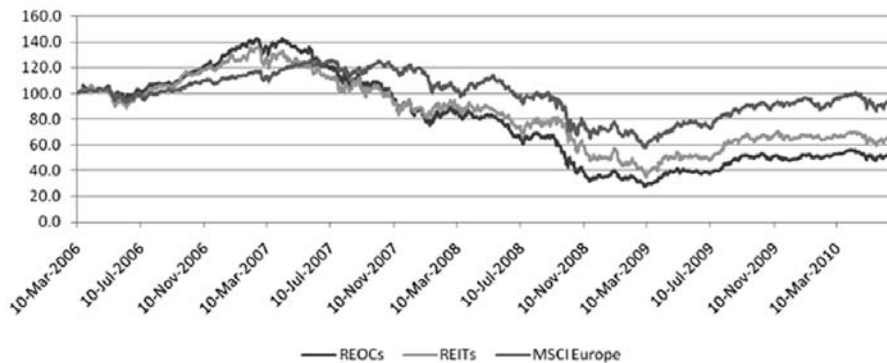
Table 4. REIT leverage requirements.

Country	Leverage limitation	Leverage limited to
Belgium	×	< 65% of assets
Bulgaria	×	
Finland	×	< 80% of assets
France	×	
Germany	×	< 66.25% of assets
Greece	×	< 50%
Israel	×	< 60%
Italy	×	
Lithuania	×	< 75% of net assets
Luxembourg	No	
Netherlands	×	< 60% of book value
Spain	×	< 70% of assets
Turkey	×	
United Kingdom	×	Finance cost ratio 1.25*

* Finance cost ratio is defined as taxable profits before interest and tax depreciation / financing costs related to the tax exempt business.

Source: EPRA 2009.

estate is no more than 249 billion dollars, or 3.19% of total real estate assets. The total value of the European stock market is listed at 11.1 trillion dollars, whereas the listed real estate's share (249 billion dollars) constitutes only 2.24% of the figure. Despite recent developments in the European public real estate markets (the real estate market that is publicly available for all investors), the figure is still markedly lower than in the U.S. or throughout the rest of the world (EPRA, 2009, 2010). Indexed asset returns for European REITs, REOCs, and the general stock market are provided in figure 1.

**Figure 1.** Indexed asset returns.

Given that these both forms of investment exist for investing in real estate, the reasons for particular investor preferences should have to do with the differences regarding regulations (taxes, permissible activities). While many would identify corporate taxation as the primary difference, the ability to pursue growth with internally generated funds is also of importance. In fact, Chan, Erickson, and Wang (2003) posit that the REIT form of investment constitutes a disadvantage for any firm wanting to adopt a high-growth strategy. REOCs' ability to retain earnings makes greater growth opportunities possible without additional external funding. Since growth is generally positively related to shareholder returns, investors should prefer REOCs to REITs based on this factor (Dickens and Delcours, 2004). Moreover, Dickens and Delcours argue that the retained earnings could be profitably used to hire outside management to decrease possible principal-agent problems. The authors conclude that the superior form of investment would be the one providing the best combination of growth opportunities and management interest alignment with shareholders, with a minimum amount of risk.

3 Literature Review

Howe and Shilling (1988) and Delcours (2005) argue that non-tax-paying firms must compete in the debt markets with firms for which interest expenses result in tax savings. The fact that taxed firms can afford to pay a higher interest on debt subsequently results in the fact that there is a large tax disadvantage for non-tax-paying firms that use debt. Furthermore, Delcours also adds that REOCs in general face fewer restrictions than REITs. Since the potential agency costs for a strictly regulated REIT are smaller than for REOCs, the latter might choose to lever in order to reduce potential agency conflicts between managers and stakeholders. *Ceteris paribus*, this assumption implies more extensive use of leverage for REOCs than for REITs. In other words, *ceteris paribus*, REOCs would be opting for more debt financing than REITs. Judged from a general perspective, it is also worth noting that the strict regulations faced by REITs may also have negative consequences – potentially lucrative investment opportunities could be missed or capital might not always be sent to places where it can be used most efficiently. The REIT dividend requirements ensure that the owners will be paid dividends even though the company could potentially be able to earn a better return on the capital than the owner.

Capozza and Seguin (1999) claim that the decisions concerning capital structure are some of the most complex and important decisions that managers face. The authors note that, according to Modigliani and Miller (1958, 1963), the capital structure of a firm should matter, but only for three reasons: Taxes, bankruptcy costs, and agency costs. They argue that if none of the three factors is present, then the capital structure should be irrelevant.

Titman and Wessels (1988) note that, according to most capital structure theories, the type of assets owned by a firm in some way affects its choice of capital structure. Scott (1977) suggests that by selling secured debt, firms can increase the value of their equity by expropriating wealth from their existing unsecured creditors. Moreover, a model presented by Myers and Majluf (1984)

demonstrates that there may potentially be costs associated with issuing securities and that the firm's managers will have better information about the securities than the firm's outside shareholders. Interestingly, from a real estate perspective, Myers and Majluf argue that these costs can be avoided by issuing debt secured by property with known values. Thus, companies with assets that can be used as loan collateral may be expected to issue more debt in order to take advantage of this opportunity.

As we already know, REITs are non-taxable entities. Moreover, Capozza and Seguin (1999) note that, in the case of REITs, the effect of bankruptcy costs is quite mild. Since there is an active and liquid market for real estate assets (REIT holdings), some scholars argue that the managers of distressed REITs would be able to liquidate some or all of REIT assets in a timely fashion with quite minimal discounts to their normal, fair market values. However, the second component of bankruptcy costs, the fixed costs associated with consultant fees, bankruptcy court, and lawyers, is still pertinent. Consequently, given the low *ex ante* probability of incurring bankruptcy, Capozza and Seguin assert that managers do not need to consider them when creating or modifying a REIT's capital structure. Finally, Capozza and Seguin consider agency costs, or the activities in which managers engage that simultaneously enhance their compensation at the expense of shareholders. They claim that as in case of bankruptcy costs, potential agency costs do exist for a REIT structure, but such costs are mitigated for at least two reasons. First, the tangibility of the assets facilitates monitoring the management behavior by external shareholders. Due to the existence of a parallel (private) real estate market, external shareholders are quick to detect management's overspending on real assets. The second advantage mitigating the potential REIT agency costs is the transparency of the income statement. Unlike in the case of more traditional companies, where inefficient spending can be hidden under Sales or Research and Development, the amount of discretion demanded for REITs is much more regulated.

Maris and Elayan (1990) studied the REIT capital structure of 61 REITs in the U.S. between 1981 and 1987. They noticed that despite the lack of tax incentives, many REITs were highly leveraged (i.e., they used high amounts of debt financing). First, Maris and Elayan note that the nature of REIT assets is well suited to secured borrowing. Second, they considered two non-tax factors encouraging the use of debt: Agency costs and the *leverage clientele effect*. According to both these views (agency costs, leverage clientele effect), it may be rational for untaxed firms to use debt financing.

The leverage clientele effect is based on the assumption that companies specialize their capital structure so that it appeals to different investor clienteles. Moreover, the leverage clientele effect suggests that a bimodal distribution of capital structures within an industry is created: Maris and Elayan *de facto* find that REIT capital structures are bimodally distributed, which supports the notion that the leverage clientele effect encourages the use of REIT debt financing.

Another interesting view, the signaling theory of debt, was presented by Ross (1977). The concept of signaling asserts that financial leverage may be used

to provide information about the future performance of a company: More debt serves as a sign of a better future.

In 1991, Jaffe noted that, “The theoretical relationship between corporate taxes and corporate capital structure has been thoroughly investigated (e.g. Miller (1977) and Modigliani and Miller (1958, 1963)). In contrast, the relationship between taxes and the capital structure of partnerships, Real Estate Investment Trusts (REITs), and related entities has been largely ignored in the literature.” Jaffe asserted that the current thinking on the subject is potentially best summarized by Howe and Shilling (1988), who, as discussed in the first paragraph of this chapter, claim that the fact that taxed firms can afford to pay a higher interest on debt subsequently results in the fact that there is a large tax disadvantage for non-tax-paying firms that use debt.

However, in his study Jaffe shows that, under normal conditions, the values of partnerships and REITs are invariant to leverage. Moreover, Jaffe finds that partnerships appear to be more highly levered than corporations. This could be occurring because small firms find the issuance costs of debt to be smaller than the issuance costs of equity. Another alternative is that partnerships are more common in industries where assets have a high debt-capacity, such as in real estate.

Feng et al. (2007) note that, according to the *trade-off theory*, in which “a long-term optimum capital exists where benefits of debt financing are traded off against the costs,” mandatory interest payments on debt reduce the cash flow and mitigate agency costs. They further posit that, according to trade-off theory, in order to maintain the capital structure at the long-term optimum level, firms must adjust their capital structure to match changes in the market-to-book ratio. Thus, no long-term relationship exists between the M/B ratio and capital structure. The authors continue by adding that the *pecking order theory* presented by Myers and Majluf (1984) claims that investors are wary of managers selling equity (only) when it is overvalued, and thus the stock prices are discounted when new equity issues are announced. It follows that, due to asymmetric information and adverse selection pertaining to new equity issues, managers will use internal funds and debt first, and only choose equity as a last resort. The pecking order theory predicts a persistent positive relationship between leverage and the M/B ratio. Finally, *market-timing theory* suggests that managers will issue equity whenever the conditions are judged to be favorable. It predicts a persistent negative relationship between leverage and the M/B ratio.

When studying REIT and REOC data from the U.S. for the years 1999 through 2001, which covers 145 REITs and 24 REOCs, Delcours (2005) notes that, in general, REOCs face fewer restrictions than REITs. The implications from the dividend and outside management issues also affect the use of leverage. REITs seldom (get to) retain any earnings, leading to the likely need for external financing, which can be obtained from issuing additional equity or debt. Ghosh, Nag, and Sirmans (1997) found that REITs raised roughly twice as much in equity than in debt during the 1991–1996 term. In Delcours’s sample, the REIT leverage ratio was 0.488, whereas the ratio for REOCs was slightly higher, 0.505.

Similar to Howe and Shilling (1988), Delcours argues that “since one of the motivations of a firm’s use of debt is to obtain a tax shelter, there should be no

advantage of REIT use of debt because REITs pay no income taxes and compete for funds in the debt market with firms that enjoy tax savings and thus can afford to pay a higher borrowing cost.”

On the other hand, Delcours adds that a company’s use of debt in its capital structure could potentially reduce agency conflicts between managers and stakeholders (see Capozza and Seguin, 1999). Debt financing (and loan servicing costs) reduces free cash flows that managers would be able to invest in less profitable projects. Loan servicing costs thus conserve a substantial amount of cash flow, constraining managers’ ability to make less optimal decisions. Moreover, the debt holders have incentives to monitor managers’ actions. The authors want to stress that this “loan servicing costs conserve excess cash” perspective is not always so simple and straight-forward. We believe it should be noted that, especially now in the current times of abnormally low interest rates, the form in which cash is paid out from a company (investor returns) may very well be dominated by dividend payments over interest payments (and amortizations). However, to add to this last point, debt holders surely have strong incentives to monitor managers’ actions, and we find that, given the largely different nature of interest payments and dividends (interest payments are set and “obligatory” for the company, dividends are not set and depend on the company’s operative results), the point made by Delcours is largely valid, yet it should be analyzed and applied with care and due attention. Each company and each case at hand is unique and has its own case-specific characteristics. Not to be totally ignored, surely the equity holders, too, have incentives to monitor management; yet Delcours’s theory is based on the assumption that creditors could potentially monitor them more effectively than equity holders. Finally, it should be noted that debt financing is, in practice, oftentimes also used in order to increase the return-on-equity (ROE). Especially in the current, abnormally low interest rate environment, ROE can be effectively levered with debt financing.

4 Data and Methodology

The data used in this study was retrieved from Thomson Datastream, an FTSE Index company, and the European public real estate association (EPRA). The data consists of the constituent equities of the FTSE REIT/Non-REIT indices. The FTSE REIT Index comprises 37 real estate equities and the Non-REIT Index 41 real estate equities. Of the 37 REIT Index constituent equities, 25 are quoted in euros and 12 in British Pound sterling. On the REOC side, only 14 equities are quoted in euros, whereas the figure for British Pound sterling is 16, 6 for the Swedish Krona, 4 for the Swiss Franc, and 1 for the Norwegian Krona. The index constituents are screened for appropriate free-float and share liquidity. The index currency is the euro.

Company accounts data from the years 2005 to 2009 were retrieved, which constitutes a sample period covering the financial information from the past five calendar years. Certain companies had differing reporting periods: Those observations were appropriately combined with those from regular reporting periods.

For the REIT market in Europe, the *FTSE EPRA/NAREIT Developed Europe REITs* Index, constructed by the FTSE Index Company, was used. For REOCs, the *FTSE EPRA/NAREIT Developed Europe Non-REITs* Index was employed. The

FTSE EPRA/NAREIT Developed Europe REITs Index is a subset of the FTSE EPRA/NAREIT Developed Index, which gives investors the capability to view each constituent's classification within the EPRA/NAREIT universe according to REIT legislation. The benchmark equity index used for the general European stock market is *MSCI Europe*. All equity indices used in the study are quoted as *total return* indices.

Given the previous literature on the area of research under study, we hypothesize that *European REITs use less leverage than their REOC counterparts*. Our hypothesis for the relative amount of short-term debt (maturity less than one year) of all debt financing is that *no difference between REITs and REOCs* should be found. Finally, we constructed a similar hypothesis for the REIT and REOC M/B ratios (the ratio pertaining to the market and book values of equity). To test the hypotheses, we ran separate T-tests for the difference in means.

5 Empirical Results

In this section, we present the empirical results of the study. First, the average debt-to-total assets for the whole sample reached 0.45, or 45% (table 5). For REITs, the figure was 39% and for REOCs it was 51%. As suggested by Maris and Elayan (1990), this finding shows that even tax-neutral REITs use debt financing to a certain rather high extent.

When studying the REIT leverage figures in conjunction with those of the REOCs, we found that the amounts of leverage employed by REITs are notably lower compared to those of REOCs (statistically significant at the 99.95% level). This finding seems rational due to the tax savings obtainable for REOCs but not for REITs. As Howe and Shilling (1988) noted, non-tax-paying firms must compete in the debt markets with companies whose interest expense results in tax savings. Therefore, there is a strong tax disadvantage for non-tax-paying firms to use debt. Furthermore, as suggested by Delcours (2005), the potential agency costs of less strictly regulated and supervised REOCs could be mitigated through debt financing. Mitigating the agency costs is not the same as totally eliminating them – agency costs potentially exist in all business related activities where the ownership and operative management are working separately. Nor does mitigating the agency costs remove general business risk, given that risk is a factor inherently present in all business related activities.

Table 5 also shows that, when measured according to *debt repayable in less than 1 year / all debt*, REITs exhibit lower figures than REOCs (15% for REITs and 17% for REOCs). This finding is uncertain in terms of its statistical significance.

The price-to-NAV ratio of real estate companies (the ratio of the *market price of equity* and the *net asset* value of the underlying real estate assets), as well as the market-to-book ratio, may vary quite drastically from period to period. For example, during the 1990s growth period, REITs in the U.S. traded at significant premiums in relation to their net asset values (NAVs) – REITs were expected to be able to generate significant value (beyond that of their property holdings per se) through acquisitions, development, management expertise, and refinancing (Ling and Ryngaert, 1997). On the other hand, scholars have suggested that when listed

Table 5. Sample statistics for key variables; arithmetic averages.

	Whole sample	REITs	REOCs	Difference in means	T-score	Stat. sign
MV / BV ex. Int.*	1.10	1.12	1.07	0.04	0.67	
Debt-to-total assets	0.45	0.39	0.51	0.11	6.95	0.0005
Debt repayable < 1year / total debt	0.16	0.15	0.17	0.02	0.79	

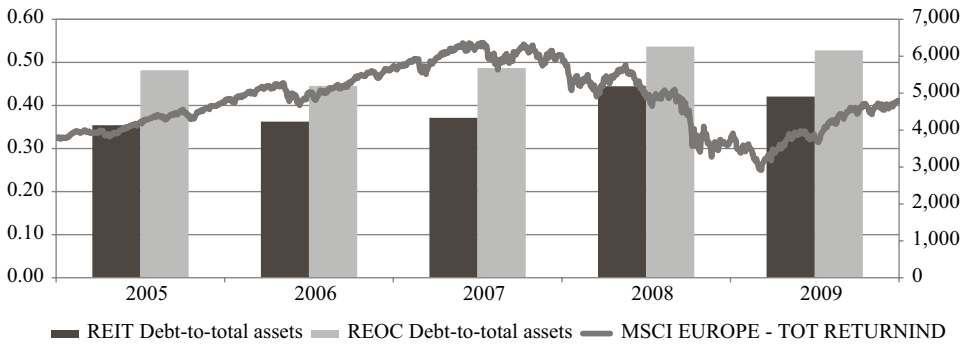
Notes: The above table shows that the REIT debt-to-total assets ratio is statistically significantly lower than that of REOCs'. The finding is statistically significant at 99.95%. OBS! MV = Market Value of equity, BV = Book Value of equity. Ex. int = Excluding intangibles.

Table 6. Sample key figures; per annum.

	2005	2006	2007	2008	2009
REIT M/B	1.22	1.42	1.09	0.78	1.07
REIT Debt-to-total assets	35.4%	36.3%	37.1%	44.5%	42.1%
REIT Debt repayable<1year / total debt	18.0%	19.6%	15.6%	12.2%	11.6%
REOC M/B	1.30	1.57	0.96	0.60	0.88
REOC Debt-to-total assets	48.2%	44.5%	48.7%	53.7%	52.8%
REOC Debt repayable<1year / total debt	20.2%	19.0%	16.6%	13.9%	13.9%

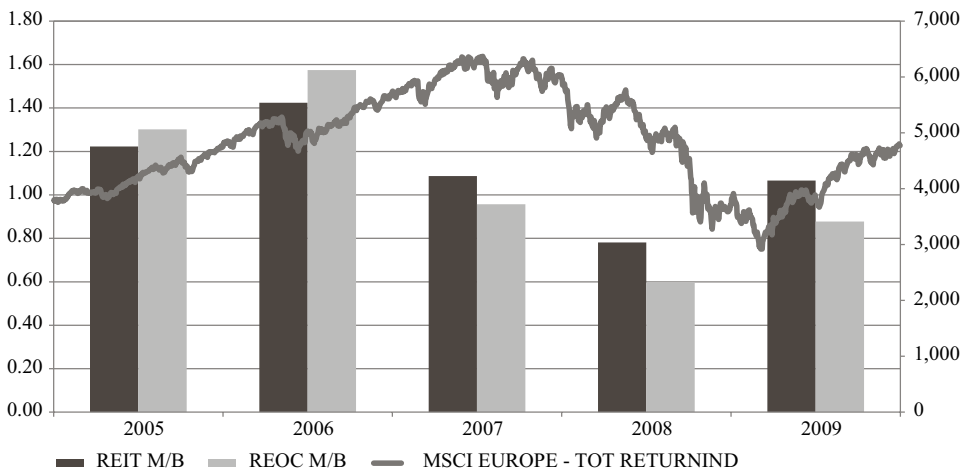
real estate vehicles trade at discount-to-NAV, one of the reasons (in addition to investor preferences for other asset classes) could have to do with what is termed a property-led recession and the corresponding negative sentiment towards real estate as an asset class (Steinert and Crowe, 2001). Discounts could also be the result of agency costs, contingent capital gains tax liabilities, and a number of other firm-specific factors (Barkham and Ward 1999). Barkham and Ward add that there are two approaches to investigating discount-to-NAV in closed-ended funds: The rational approach and the “noise trader,” or “sentiment,” approach. The rational approach links the discount-to-NAV to the aforementioned factors, whereas the noise trader model is associated with the previous work of Shiller (1989), De Long et al. (1990) and Shleifer and Vishny (1990). The model suggests that, along with rational traders, a group called noise traders can also be found on the market – “not only does the noise trade model predict that security prices will diverge from their fundamental values in the short run but that securities will be priced below fundamental values in equilibrium.”

The average market-to-book ratio (excluding intangibles) for the whole sample of this study, which covers the period from 2005 to 2009, is 1.10. The average market-to-book ratio for REITs is 1.12 and for REOCs it is 1.07. REITs exhibit slightly higher market-to-book values than REOCs; however, this finding is not statistically significant (table 5). The downward sloping trend is common for both variables – the M/B ratios decreased towards the end of the study period, with the exception of the last study year, when the figures increased slightly. When studying figure 3, for example, it is not hard to see that the M/B ratios move in tandem with the stock market – when stock prices went up, so did the M/B ratios, and vice versa.



Notes: REIT debt / total assets ratio has been throughout the sample consistently lower than that of REOCs', an indication of corporate tax status playing a role in capital structure decisions faced by these companies..The trend in both REIT and REOC leverage is upwards-sloping. TOT RETURN IND = Total Return Index for MSCI Europe.

Figure 2. Debt/total assets, annual ratios.



Notes: The graphs display market-to-book ratios for REITs and REOCs. Figures exclude the book value of intangible assets.

Figure 3. Annual M/B ratios.

Table 6 presents and figure 2 graphs the annual key figures for REITs and REOCs. In terms of the debt-to-total-assets ratio, REITs exhibited lower leverage figures than REOCs throughout the whole study period from 2005 to 2009. The average REIT leverage for the whole study period was 39.37% whereas the respective figure for REOCs was remarkably higher, 50.78%. In relation to the entire period under study, most leverage was used by both REITs and REOCs in 2008. This is probably due to the fact that in 2008 the asset values had started to decline, thus cutting up the equity and letting the existing debt form higher debt-to-asset ratios. In other words, as the asset values decreased, the equity in real estate investments decreased accordingly and no active attempt to take on more debt had to be carried out in order to have the leverage ratios go up. The average ratio for

debt-to-total assets for REITs in 2008 reached 44.5%, whereas it reached 53.7% for REOCs. Moreover, the trend in the use of leverage is clearly upward-sloping for both study groups: Throughout the years 2006 and 2008, the relative amount of debt financing that was being used increased for REITs and REOCs alike.

The annual development of the real estate companies' M/B ratios is graphed in figure 3. Although the M/B ratios (excluding intangibles) in 2005 and 2006 for REITs reached 1.22 and 1.42, respectively, whereas they reached 1.30 and 1.57, respectively, for REOCs, the figures were quick to decrease in value in 2007 and 2008. The bottom notation for REITs was 0.78 and for REOCs it was 0.60, both of which occurred in 2008. In other words, the stock market actors were quick to downgrade the equity value of these real estate companies, whereas the book value for equity was slower to adjust (with the market-to-book value having to do with how equity is valued by the stock market versus the book valuation of equity). The relationship between the REIT and REOC M/B ratios and leverage are further graphed in figures 4 and 5.

According to Delcours (2005), an examination of the REIT/REOC capital structure suggests that the companies rely equally upon long- and short-term debt. As depicted in figure 6, in our study it can be concluded that REITs in general

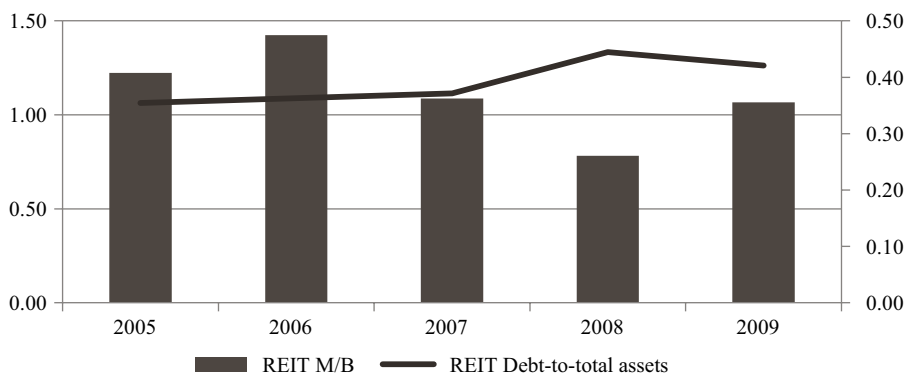


Figure 4. REIT M/B ratios and leverage.

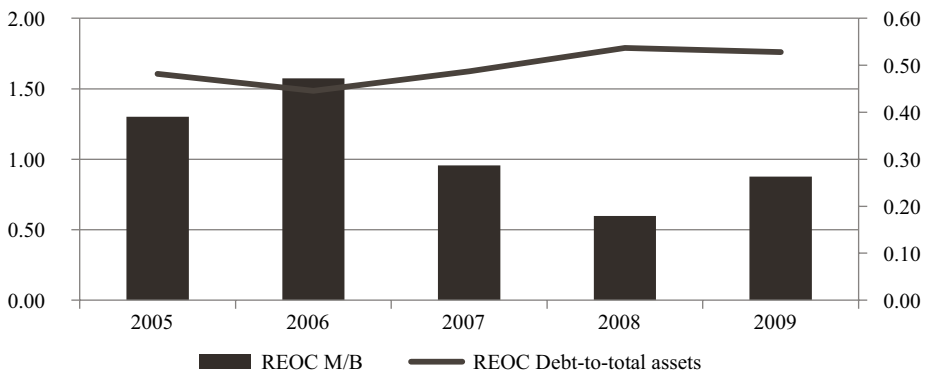


Figure 5. REOC M/B ratios and leverage.

use less short-term debt than do REOCs (the REIT figures for debt repayable in less than one year are lower than those of REOCs). Moreover, for both REITs and REOCs the share of short-term debt to total debt used decreases along with time. The short-term debt to total debt of REITs in the year 2005 was 18%, and in 2009 it was only 11.6%. For REOCs, the same figures are 20.2% and 13.9%, respectively. One explanation could be that, along with the insecurity brought on by the global financial crisis, the real estate companies have started to reduce their interest rate risk by increasing the relative share of long-term debt. Thus, in the process the share of short-term debt has decreased.

Figure 7 graphs the frequency of the different leverage decisions of both REITs and REOCs for the study period (altogether, 183 observations for REITs and 169 observations for REOCs). For REITs, the highest leverage frequency is distributed for 30–40% and 40–50%. For REOCs, the highest frequency is found at 40–50%, followed by 50–60%. Furthermore, the REIT leverage figures start to drop dramatically when proceeding to the leverage ratio of 60–70%, whereas in the case of REOCs there are almost 50 observations levered at equal or more than 60%. At the other end of the spectrum, as many as 14 REIT observations can be found in the category of less than 10% leverage. These 14 REIT observations are



Figure 6. Debt repayable < 1 year / total debt.

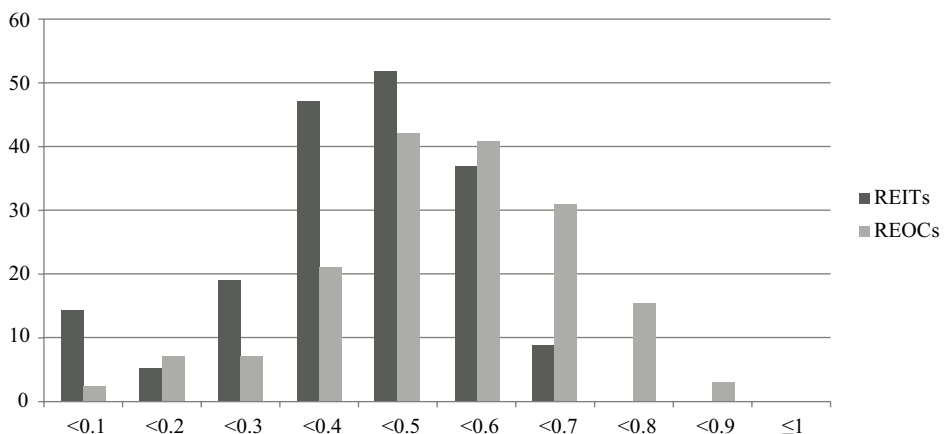


Figure 7. Frequency bar chart for leverage.

accompanied by just 2 REOC observations. To summarize, in light of the results of this study, the case of leverage clientele effects proposed by Maris and Elayan (1990) becomes somewhat blurred. However, most REIT leverage seems to be concentrated rather tightly between 30 and 60%.

Finally, to test the potential correlation between the market-to-book ratio and leverage *within* the REIT and REOC samples, we ran additional tests. The findings revealed that, within the sample groups, REIT leverage correlated positively with the market-to-book ratio (0.066), whereas the REOC correlation for leverage and the market-to-book ratio was negative (−0.048). It is worth noting that both of the coefficients that we detected are rather modest in terms of their deviation from zero (neutral) – thus, further research should be performed before drawing more in-depth and informative conclusions. In summary, the findings from the REIT sample provide modest support for the pecking order theory (which posits a positive relationship between leverage and the M/B ratio). In contrast, the findings from the REOC sample offer equally modest support for the market-timing theory (which posits a negative relationship between leverage and the M/B ratio).

6 Conclusions

It has been claimed that capital structure decisions are some of the most important decisions that managers face. It should be added that this is not only true for the managers' part, but also for equity holders, lenders, and other stakeholders. Capital structure decisions are vital for any company, let alone real estate firms that are often highly levered and seeking to employ debt to maximize their return on equity. Even though capital structure planning is, without a doubt, given much attention by practitioners, this research sheds more light on this controversial issue by providing helpful tools for understanding capital structure decisions and analysis on a practical level. Contrary to the existing literature on the field, which predominantly focuses on the U.S. market, the aim of this paper was to study the capital structure of *European* non-taxed real estate entities, REITs, and to compare the capital structure decisions of these tax-transparent companies to those of their taxed counterparts, REOCs. The practical implications of the tax neutrality of REITs for their capital structure are of great value not only for real estate practitioners themselves, but also for financiers and other stakeholders of real estate companies. One of our primary interests was to study the potential differences in the companies' use of leverage in terms of their debt-to-assets ratio. Furthermore, we assessed whether the leverage patterns remain similar throughout the study period or whether potential deviations from the mean can be found. In addition, we studied the relative amount of short-term debt (less than one year maturity) for all types of debt financing. Finally, we researched the relationship between both REIT and REOC leverage and the annual M/B ratios.

We found that the tax-exempt REITs are significantly less levered than their taxed counterparts, REOCs, which is a rather strong indication that corporate tax status plays a role in the capital structure decisions of firms. An additional potential reason for the higher leverage of structurally less monitored REOCs may have to do with an attempt to mitigate the potential agency costs with additional debt. One

very practical implication is that during the current global financial crisis and period of tightened credit availability, the REITs (less dependent on debt) may well have had an advantage over the more leveraged REOCs in finding new capital from the markets. In more detail, being less dependent on debt (and more packed with equity financing) during austere times, REITs have been better able to seize the moment and start projects that they could not have been initiated without the necessary equity. Moreover, in terms of acquiring new debt, lower existing LTV ratios (loan-to-value ratios, i.e., how much of the asset value has been financed with debt) may well prove an advantage, too, thus providing REITs with an “option” to add more debt should they opt to do so. In the mid and long term, this could be a factor that really makes a difference – i.e., in terms of which companies will be able to continue and expand their operations and prey upon other companies that have been forced to cut down on their investments and liquidate their assets at low price levels.

The observed pattern in REIT/ REOC leverage was consistent throughout the sample period being studied. The paper also assessed the amount of short-term debt used by REITs and REOCs and their M/B ratios; no statistically significant findings were discovered. In the future, as the potential data available from the European REIT market has expanded, it would be of utmost importance to study how country and company-specific factors affect the capital structure choices of listed real estate companies in Europe. It would also be instrumental to make comparisons with other large markets, such as those in Asia, the U.S., and Australia. These comparisons could also help researchers detect the effects of institutional differences and local practices. Moreover, does the focus of the companies investing activities make a difference? Can condominiums, for example, be leveraged more easily than less liquid investing targets, such as office space and warehouses? How have the leverage patterns de facto changed during the global financial crisis, when credit availability has evidently been tightened? Which companies have been able to survive and deliver superior returns before, during and after the crisis? When working with a more extensive data set, the capital structure theories (trade-off, pecking order and market timing) should also be addressed in more detail. Should the financial turmoil continue for some time, and should credit become even harder to attain, it might not be totally absurd to expect that the more heavily levered real estate companies (REOCs) will face some serious trouble in refinancing their operations as the debt maturities run out.

References

- Barkham, R., & Ward, C. (1999). Investor Sentiment and Noise Traders: Discount to Net Asset Value in Listed Property Companies in the U.K.. *Journal of Real Estate Research*, 18(2).
- Baum, A., & Devaney, S. (2008). Depreciation, Income Distribution and the UK REIT. *Journal of Property Investment and Finance*, 26(3), 195–209.
- Brounen, D., & Eichholtz, P. (2001). Capital Structure Theory: Evidence from European Property Companies' Capital Offerings. *Real Estate Economics*, 29(4), 615–632.
- Capozza, D., & Seguin, P. (1999). Leverage and Value in Apartment REITs. *National Multi Housing Council (NMHC) Research Report*.

- Chiang, K., & Lee, M-L. (2002). REITs in the decentralized Investment Industry. *Journal of Property Investment and Finance*, 20(6), 496–512.
- De Long, J. B., Shleifer, A., Summers, L.H., & Waldmann, R.J. (1990). Noise Trader Risk in Financial Markets. *Journal of Political Economy*, 98, 703–38.
- Delcours, N., & Dickens, R. (2004). REIT and REOC Systematic Risk Sensitivity. *Journal of Real Estate Research*, 26(3), 237–254.
- Delcours, N. (2005). The Influence of Firm Operating Characteristics on Incentive Compensation in the Executive Suite: Equity Reits vs. Reocs. *Investment Management and Financial Innovations*, 2, 83–97.
- Eichholtz, P.M.A. (1996, January-February). Does international diversification work better for real estate than for stocks and bonds? *Financial Analysts Journal*, 56–62.
- Eichholtz, P.M.A. (1997). Real estate securities and common stocks: a first international look. *Real Estate Finance*, 14(1), 70–74.
- Eichholtz, P., & Kok N. (2007). The EU REIT and the Internal Market for Real Estate. *A Research Report for European Landowners' Organization, the European Property Federation, the Royal Institution of Chartered Surveyors, The European Group of Valuers' Associations, and the Urban Land Institute Europe*.
- European Public Real Estate Association EPRA. (2009). *Global REIT Survey*, 2009.
- European Public Real Estate Association EPRA. (2010, July). *Monthly Statistical Bulletin*.
- Falkenbach, H. (2009). Diversification benefits in the Finnish commercial property market. *International Journal of Strategic Property Management*, 13(1), 23–35.
- Freng, Z., Ghosh, C., & Sirmans, C.F. (2007). On the Capital Structure of Real Estate Investment Trusts (REITs). *The Journal of Real Estate Finance and Economics*, 34(1), 81–105.
- Fraser, W.D., Leishman, C., & Tarbert, H. (2002). The long-run diversification attributes of commercial property, *Journal of Property Investment and Finance*, 20(4), 354–373.
- Ghosh, C., Nag, R. & Sirmans, N. (1997, Fall). Financing Choice by Equity REITs in the 1990s. *Real Estate Finance*, 41–50.
- Hoesli, M., Lekander, J., & Witkiewicz, W. (2004). International evidence on real estate as a portfolio diversifier. *Journal of Real Estate Research*, 26(2), 161–206.
- Hoesli, M., & Oikarinen, E. (2012). Are REITs Real Estate? Evidence from International Sector Level Data. *Swiss Finance Institute Research Paper* No. 12–15.
- Howe, J., & Shilling, D. (1988). Capital Structure Theory and REIT Security Offerings. *The Journal of Finance*, 43(4), 983–993.
- Hudson-Wilson, S., Fabozzi, F.J., & Gordon, J.N. (2003, Special Issue). Why Real Estate? An expanding role for institutional investors. *The journal of Portfolio Management*, 29, 12–25.
- Jaffe, J. (1991). Taxes and the Capital Structure of Partnerships, REITs and Related Entities. *The Journal of Finance*, XLVI(1), 401–407.
- Jensen, M. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, 76(2), 323–329.
- Lee, M-L., & Chiang, K. (2010). Long-run Price Behaviour of Equity REITs: Become More Like Common Stocks After the Early 1990s? *Journal of Property Investment and Finance*, 28(6), 454–465.

- Ling, D., & Ryngaert, M. (1997). Valuation Uncertainty, Institutional Involvement, and the Underpricing of IPOs: The Case of REITs. *Journal of Financial Economics*, 43, 433–456.
- Ling, D.C., & Naranjo, A. (1999). The Integration of Commercial Real Estate Markets and Stock Markets. *Real Estate Economics*, 27(3), 483–515.
- Maris, B., & Elayan, F. (1990). Capital Structure and the Cost of Capital to Untaxed Firms: The Case of REITs. *AREUEA Journal*, 18(1), 22–39.
- Miller, M. (1977). Debt and Taxes. *Journal of Finance*, 32, 261–275.
- Modigliani, F., & Miller, M. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *The American Economic Review*, 48(3), 261–297.
- Modigliani, F., & Miller, M. (1963). Corporate Income Taxes and the Cost of Capital: a Correction. *The American Economic Review*, 53(3), 433–443.
- Mueller, G.A., & Mueller, R.G. (2009). Public and Private Real Estate in Mixed-Asset Portfolio. *Journal of Real Estate Portfolio Management*, 9(3), 193–203.
- Myers, S., & Majluf, N. (1984). Corporate Financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221.
- Niskanen, J., & Falkenbach, H. (2010, Sep-Dec). REITs and Correlations with Other Asset Classes: A European Perspective. *Journal of Real Estate Portfolio Management*, 16(3), 227–239.
- Niskanen, J., Rouhento, J., & Falkenbach, H. (2011). European real estate equities: Ownership structure and value of the firm. *Journal of European real estate research*, 3(2), 131–143.
- Niskanen, J., & Falkenbach H. (2012, June). Liquidity of European real estate equities: REITs and REOCs. *International Journal of Strategic Property Management*,
- Ross, S. (1977). The Determination of Financial Structure: The Incentive Signalling Approach. *Bell Journal of Economics*, VIII, 23–40.
- Schacht, U., & Wimschulte, J. (2008). German Property Investment Vehicles and The Introduction of G-REITs: An Analysis. *Journal of Property Investment and Finance*, 26(3), 232–245.
- Scott, J. (1977). Bankruptcy, Secured Debt and Optimal Capital Structure. *Journal of Finance*, XXXII(1), 1–19.
- Seiler, M.J., Webb, J.R., & Myer, F.C.N. (1999). Diversification Issues in Real Estate Investment. *Journal of Real Estate Literature*, 7(2), 163–179.
- Shiller, R. J. (1989). *Market Volatility*. Cambridge, MA: MIT Press.
- Steinert, M., & Crose, S. (2001). Global Real Estate Investment: Characteristics, Optimal Portfolio Allocation and Future Trends. *Pacific Rim Property Research Journal*, 7(4), 233–239.
- Stevenson, S. (2000). Constraining optimal portfolios and the effect on real estate's allocation. *Journal of Property Investment and Finance*, 18(4), 488–506.
- Titman, S., & Wessels, R. (1988). The Determinants of Capital Structure Choice. *The Journal of Finance*, 43(1), 1–19.

Appendix 1: Sample Constituent Equities

REIT Companies	Country code	Currency
Befimmo (Sicafi)	BELG	EUR
Cofinimmo	BELG	EUR
Wereldhave Belgium	BELG	EUR
Intervest Offices	BELG	EUR
Warehouses De Pauw	BELG	EUR
LEASINVEST-SICAFI	BELG	EUR
Silic	FRA	EUR
Mercialys	FRA	EUR
Icade	FRA	EUR
Fonciere Des Regions	FRA	EUR
Gecina	FRA	EUR
Affine	FRA	EUR
Societe de la Tour Eiffel	FRA	EUR
Klepierre	FRA	EUR
Unibail – Rodamco	FRA	EUR
Alstria Office	GER	EUR
Eurobank Properties Real Estate Investment Co	GRC	EUR
Immobiliare Grande Distribution	ITA	EUR
ProLogis European Properties	NETH	EUR
Eurocommercial Properties	NETH	EUR
Vastned Off/Ind	NETH	EUR
Vastned Retail	NETH	EUR
Corio	NETH	EUR
Wereldhave	NETH	EUR
Nieuwe Steen Inv	NETH	EUR
British Land Co	UK	GBX
Great Portland Estates	UK	GBX
Land Securities Group	UK	GBX
Segro	UK	GBX
Hammerson	UK	GBX
Primary Health Prop.	UK	GBX
Liberty International	UK	GBX
Derwent London	UK	GBX
Shaftesbury	UK	GBX
Mucklow (A.& J.)Group	UK	GBX
Workspace Group	UK	GBX
Big Yellow Group	UK	GBX

Non-REIT Companies	Country code	Currency
Sponda Oyj	FIN	EUR
Technopolis	FIN	EUR
Patrizia Immobilien	GER	EUR
DIC Asset AG	GER	EUR
Gagfah	GER	EUR
Colonia Real Estate	GER	EUR
Dt Euroshop Na	GER	EUR
TAG Immobilien AG	GER	EUR
Deutsche Wohnen AG	GER	EUR
Lamda Develop/R	GRC	EUR
Babis Vovos International	GRC	EUR
Beni Stabili	ITA	EUR
Norwegian Property ASA	NOR	NOK
Ca Immobilien	OEST	EUR
Conwert Immobilien Invest	OEST	EUR
Wihlborgs Fastigheter	SWED	SEK
Hufvudstaden A	SWED	SEK
Castellum	SWED	SEK
FABEGE	SWED	SEK
Kungsleden	SWED	SEK
Klovern AB	SWED	SEK
PSP Swiss Property	SWIT	CHF
Allreal Hld N	SWIT	CHF
Swiss Prime Site	SWIT	CHF
Zueblin Immobilien Holding AG	SWIT	CHF
Daejan Hdg	UK	GBX
ING UK Real Estate Income Trust	UK	GBX
UK Commercial Property Trust	UK	GBX
Minerva	UK	GBX
Quintain Estates and Development	UK	GBX
Helical Bar	UK	GBX
CLS Holdings	UK	GBX
St.Modwen Properties	UK	GBX
Grainger	UK	GBX
Development Securities	UK	GBX
Unite Group	UK	GBX
ISIS Property Trust Ld	UK	GBX
Standard Life Inv Prop Inc Trust	UK	GBX
IRP Property Investments	UK	GBX
Invista Foundation Property Trust	UK	GBX
F&C Commercial Property Trust	UK	GBX