TAXES, INVESTORS, AND MANAGERS:

EXPLORING THE TAXATION OF FOREIGN INVESTORS IN U.S. REITS

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ABSTRACT

Exploiting a 2004 reduction in a unique capital gains withholding tax for foreign investors in U.S. publicly-traded REITs, this paper explores both the sensitivity of real estate investors to changes in their own taxes and the reaction of real estate managers to changes in their investors' taxes. We find that both foreign investors and REIT managers responded to the tax change. This is consistent with taxes both restricting the flow of foreign capital into U.S. REITs and affecting the management of their real estate properties. To our knowledge, this is the first paper documenting that U.S. managers change their U.S. operations in response to the tax positions of foreign investors. This work should spur further study of the interplay between real estate and income taxes, the role of taxes on foreign portfolio investment, and the role of taxes on real managerial decisions. It should also be informative to policy makers who recently relaxed the discriminatory tax treatment for foreign investors in U.S. real estate after considering the issue for many years.

1. Introduction

This paper analyzes the impact of a unique tax on foreign investors in U.S. real estate investment trusts (REITs). REIT profits are generally exempt from entity-level U.S. taxes to the extent they are distributed to shareholders. Each form of profit retains its character (e.g., ordinary income from rental income, capital gain from sale of properties) and is taxed on the investor's tax return based on the type of distribution. Consequently, the portion of U.S. REIT capital gains attributable to foreign investors normally would escape U.S. taxation because foreigners are generally not required to file U.S. tax returns or pay tax on capital gains. However, since 1980, special taxes arising from the Foreign Investment in Real Property Tax Act of 1980 (FIRPTA) have applied to foreign investment in REITs that generate capital gains.

We analyze one type of REIT profit, capital gains from the sale of real estate, which is subject to unusually harsh FIRPTA taxes. From 1980 to 2004, the U.S. levied a 35% tax (enforced through withholding beginning in 1982) on all REIT capital gains distributions to all foreign investors. Since then, if certain conditions are met, the U.S. taxes a foreigner investor's portion of capital gains at the investor's country's dividend withholding tax rate per its tax treaty with the U.S. This rate varies by country, ranging up to 30%. For example, in 2005, the REIT capital gains withholding tax rate dropped from 35% to 30% for Canadian investors, to 15% for British investors, and to 10% for Japanese investors.[1]

We exploit the identification provided by the 2005 change in the U.S. withholding tax on publicly-traded REIT capital gains to test the responsiveness of both foreign investors and REIT managers to changes in REIT distribution tax rates. We predict that the largest increases in

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[1] All countries' rates dropped in 2005, but some countries' rates have been lowered even further in subsequent years. For example, Canadian investors' rate dropped again in 2009 to 15%. Throughout the paper we refer to rates for non-individual, non-pension investors. Rates may vary for other types of investors.

foreign investment in U.S. REITs in 2005 were from countries where the withholding tax rate fell the most (e.g., greater increases in investment from Japan, where rates fell to 10%, than from Canada, where rates only declined to 30%).

We also test whether the foreign investor capital gains tax had created any type of "lock-in effect" on capital gains realizations. Managers of private non-listed REITS are reportedly extremely sensitive to FIRPTA taxes and have developed elaborate tax structures to shield foreign investors, including not selling real estate while foreign investors are shareholders (Grumbacher, Towsner, Schneider, and Norman, 2013). If publicly-traded REIT managers are similarly sensitive to the effect of U.S. taxes on their foreign investors, then REITs with disproportionate investments from countries that enjoyed larger withholding tax rate reductions should have realized larger increases in capital gains after 2004 than did REITs whose investors were less affected by the tax cuts. In other words, the exogeneity of the rate reduction enables us to test whether REIT managers considered the reduction in their foreign investors' U.S. withholding taxes when they rebalanced their real estate holdings.

To our knowledge, no one has addressed the responsiveness of foreign investors or managers to REIT tax changes.[2] In fact, few studies have studied whether foreign investors of any type respond to domestic taxes. One exception is Amiram and Frank (2015) who report that relatively favorable tax policies on the dividend income earned by foreign investors are associated with larger amounts of foreign portfolio investment. Another is Edwards and Shevlin

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[2] There is a substantial and growing literature on REITs, although very little that is relevant to our current study related to investor taxes or managerial decisions. Li and Weber (2009) examine the effect of differing distribution taxes on REIT stock price, showing that abnormal returns and trading volume around ex-dividend days are driven by the type of the distributions that is most tax-penalized. Mori, Ooi, and Wong (2014) reveal that REIT managers catered to a subset of investors in making financing decisions by taking into account the demand by convertible bond arbitrageurs when issuing convertible debt. Hartzell, Sun, and Titman (2006) look at REIT corporate governance issues, and conclude that greater institutional ownership in a REIT led to greater sensitivity to investment opportunities. Mühlhofer (2013) explains that REIT regulations make it difficult for REITs to time markets in order to realize short-term property appreciation profits.

(2011) who examine how a change in Canadian tax law affected the value of publicly traded income trusts to nonresident investors. We are also unaware of any research documenting that domestic managers alter their operations in response to the changing tax incentives of foreign investors. Several papers (e.g., Blouin et al., 2011, Campbell et al., 2013, Hanlon and Hoopes, 2014, and Lin and Flannery, 2013) have examined how shareholder taxes affect firm payout, capital expenditure, and leverage decisions. For example, Blouin et al. report that managers adjusted their mix of dividends and share repurchases after dividend and capital gains tax rates were changed in 2003 for U.S. individual investors, although changes were concentrated in those companies where insiders held disproportionate interests. However, they are examining domestic investors and we are investigating foreign ones. Also, they are exploring payout policies, as opposed to "real" decisions, such as the sale of apartments, office buildings and other properties. Also, they are exploring firm payout policies, as opposed to firm investment decisions, such as the sale of apartments, office buildings and other properties. The fact that REIT distributions retain their character upon distribution means that we can identify changes in a REIT's real estate sale activity by tracking shareholder capital gains distributions. The empirical setting in this paper offers a rare peek into firms' actual operations since tax policy links REIT operational decisions to payout decisions. Thus, to our knowledge, this is the first study of whether there is a connection between real choices that managers make and foreign tax clienteles.

In our empirical tests, we estimate the amount of investment in each publicly-traded U.S. REIT from asset managers in 17 major foreign countries in both 2004 and 2005. For example, we find that asset managers in Japan held 2.88% of Ventas shares at the end of 2004. Any capital gain distributions for these Japanese investors in 2004 would have been subject to a 35%

withholding tax and a requirement to file a U.S. tax return. However, in 2005 (after the change in the tax law), any capital gains for these Japanese investors would have been subject to only a 10% withholding rate. A reduction in the withholding rate from 35% to 10% for Japanese investors increased the likelihood that Japanese investors would be attracted to Ventas and other U.S. REITs. If managers of Ventas (and other American REITs held by foreigners who were now taxed more favorably) are influenced by the tax status of their investors, then we also expect that managers were less disinclined to sell appreciated properties in 2005 than they had been in earlier years.

To test for the sensitivity of foreign investors to changes in the withholding rates applied to REIT capital gains, we compare the change in aggregate investment from 2004 to 2005 from a particular country to a specific U.S. REIT with the reduction in the U.S. withholding tax rate levied on capital gains that those foreign investors might enjoy. We examine changes in 430 flows from countries to specific U.S. REITs. As predicted, we find that investments increased more from 2004 to 2005 from those countries where the withholding rate fell the most. Since investments surged when the withholding rate was reduced, we infer that the special U.S. withholdings on REIT capital gains constrain foreign investment in U.S. REITs. The details of these tests are discussed in Section 5; our results suggest an interquartile reduction in the tax rate (i.e., from 30% to 15%) boosted foreign investment from $2 million to $3.6 million.

Next, we test for the responsiveness of REIT managers to changes in the withholding rates to see whether the foreign investor capital gains tax created any type of lock-in effect on capital gains realizations. We first compare the change from 2004 to 2005 in each REIT's aggregate capital gains distributions with the withholding tax rate reduction for that REIT's foreign investors, but we do not find any statistically significant results. We then expand our

sample to include 2004 through 2009 to increase power. (Recall that a few tax treaties are renegotiated every year, resulting in possible additional changes to the applicable tax rates.) We find that capital gains distributions at the REIT level moved inversely with changes in withholding tax rates from 2005 to 2009. In other words, as expected, REITs whose foreign investors were disproportionately in countries where withholding rates fell substantially realized more capital gains than other REITs did, ceteris paribus. The findings are consistent with managers of U.S. REITs considering their foreign investors' U.S. tax liabilities when deciding to sell properties. In short, the evidence suggests that investor level taxes impose a lock-in effect on pass-through entity activities.

This paper makes three major contributions. First, it expands our scholarly understanding of how taxes affect foreign portfolio investment and the extent to which managers consider those taxes in making operational decisions. Second, it is one of the first papers to explore the impact of taxes on foreign investment in U.S. commercial real estate, a largely unexplored topic. Third, it should inform Congressional activity related to FIRPTA withholding taxes levied on foreign investments in real estate. Advocates contend that U.S. tax policy discourages foreign investment in U.S. real estate.[3] The evidence in this paper is consistent with the 2005 FIRPTA rate reduction on inbound portfolio investment increasing foreign investment in U.S. REITs. Our second finding adds that the 2005 changes impacted U.S. REIT capital gains realizations. This indicates that U.S. tax policy needs to consider not only the effect of rate reductions on foreign capital but also on domestic manager's portfolio decisions.

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[3] "Protecting Americans from Tax Hikes Act of 2015" (PATH), which was signed by President Obama on December 18, 2015, modified FIRPTA. See a technical explanation of the provisions of PATH related to REITs and FIRPTA at https://www.jct.gov/publications.html?func=startdown&id=4861.

That said, our finding that FIRPTA constrains foreign investments in publicly-traded U.S. REITs does not necessarily mean that the overall foreign holdings in all U.S. commercial real estate increased after 2004 or would increase further if tax relief were expanded. Foreigners may have simply shifted some of their U.S. real estate holdings from organizational forms or tax structures that avoided FIRPTA treatment before 2005 to direct ownership in REITs in 2005 and after. If so, the net effect of tax relief on the U.S. commercial real estate market could have been marginal. In other words, the findings in the paper are consistent with FIRPTA withholding taxes dampening foreign investment in publicly-traded U.S. REITs; however, it is beyond the scope of this paper to quantify the change in total inbound foreign investment in U.S. real estate following the 2004 legislation.

The remainder of the paper is organized as follows: Section 2 provides background. Section 3 develops the testable hypothesis. Section 4 details the empirical design. Section 5 presents the findings. Section 6 describes robustness tests. Closing remarks follow.

2. REIT and FIRPTA Background

REITs are legal entities (corporation, trust, or association) that invest in real estate.[4] The investments may be equity (ownership and operation) or debt (direct lending or investment in mortgage backed securities). As with mutual funds, investors buy shares in REITs, which can be publicly-traded or privately-traded. By pooling the investors' capital and investing in real estate

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[4] REITs are a major source of capital for the U.S. commercial real estate market and a popular means for foreigners to invest in U.S. real estate. According to the National Association of Real Estate Investment Trusts, at the end of 2013, public REITS (listed and non-listed) owned $1 trillion of commercial real estate assets. There were 203 listed REITS, 177 of which were traded on the New York Stock Exchange with a market capitalization of $653 billion. In that year, over 900 REITs were privately held.

assets, REITs enable individuals and entities to invest in liquid, diversified, professionally

managed, income-producing real estate.

REITs are generally not subject to corporate-level U.S. taxes on income distributed to

shareholders (and thus avoid double taxation), if they meet certain conditions.[5] The single-tax

result arises because REITs can deduct ordinary dividend and capital gains distributions paid to

shareholders from taxable income, leaving the sole taxation at the shareholder-level. This paper

focuses specifically on capital gains distributions for publicly-traded REITs because the 2004

law change only affected them. Capital gains distributions arise when REITs sell appreciated

property. For U.S. investors, capital gains distributions from U.S. REITs are taxed at their

personal capital gains tax rate (capped at 15% for individuals in 2004).

Despite the tax benefits of REITs, foreign investors in U.S. real estate, including REITs,

are tax-disadvantaged. Generally speaking, foreign investors are not taxed on capital gains from

the sale of U.S. assets. Concerns in the 1970s about foreign purchases of prime U.S. real estate

led Congress to enact FIRPTA, imposing a special withholding tax on foreign investors selling

U.S. real estate. Specifically, a foreign investor is subject to U.S. income tax on income from

disposition of U.S. real estate property interests (USRPI). USRPI includes both a direct

investment in real estate and an indirect investment through the stock of a U.S. real property

holding corporation (i.e., a USRPHC, a corporation whose assets are primarily made up of

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[5] To qualify as a REIT, a company must meet ownership, income, asset, and distribution tests. First, REITs must have at least 100 different shareholders (the "100 Shareholder Test") and more than 50% of the value of the REIT's stock (the "5/50 Test") cannot be owned by five or fewer individuals. To ensure compliance, most REITs limit ownership, e.g., provisions may limit a single shareholder from owning more than a certain percentage of outstanding shares. Second, at least 75% of a REIT's annual gross income must be real estate related (rents from real estate, interest on mortgages, gain on sale), and 95% of its gross income must be either real estate related or from some limited passive investments. Third, at least 75% of a REITs' assets must be in real estate, measured quarterly. Fourth, a REIT must distribute at least 90% of its annual ordinary taxable income to shareholders; else the REIT must pay tax on its income, i.e., double taxation is restored. Consequently, external capital is needed to fund a REIT's growth.

USRPIs). A foreign investor who sells stock of a U.S. REIT is considered selling stock of a

USRPHC and is therefore subject to FIRPTA.   In addition, FIRPTA applies if a foreign investor

receives a capital gains dividend distribution from a U.S. REIT, as a result of its selling real

property. The FIRPTA withholdings ensure that taxes are paid by foreigner investors. REITs

making distributions to a foreign investor must collect the withholding tax and remit it to the

U.S. (or be liable for the amount owed). FIRPTA takes precedence over existing tax treaties that

might otherwise provide tax relief.

REIT distributions are commonly made-up of three distinct cash flows that all have

different tax implications: ordinary income, return of capital, and capital gains.[6] We need to look

at the FIRPTA tax implications for all sources of U.S. REIT cash flows to foreign investors to

fully understand the impact of FIRPTA. See Table 1 for a summary of the tax rules governing

U.S. REIT investments.

Ordinary income distributions from rental income are not treated as real estate under

FIRPTA, and therefore foreign shareholders are taxed at the 30% withholding rate for dividends,

or lower depending on tax treaties.[7] Under most tax treaties, a foreign investor is taxed at a rate

of $0 - 30\%$ if the foreign investor owns less than a certain percent of the shares of stock in a

company. The average tax treaty rate is 15%, although many foreign pension plans are exempt

altogether from any tax on ordinary income.[8]

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[6] Publicly traded REITs distributed $29 billion to investors in 2013. Although the distribution mix varied by REIT, on average investors received 68% as ordinary dividend income, 19% as capital gains, and 13% as nontaxable return of capital. (www.reit.com.)

[7] Before 1997, most U.S. tax treaties excluded ordinary income distributions from a REIT from the lower treaty rate on dividends but, rather, were subject to the full 30% withholding rate. In 1997, the U.S. changed its treaty policy with respect to REIT dividends. See
http://www.reit.com/PolicyPolitics/~/media/Portals/0/Files/Nareit/htdocs/policy/government/npb4703.ashx.

[8] For example, with the U.S./German income tax treaty, the 30% withholding is reduced to 15% if the foreign investor owns less than 10% of the REIT; with the U.S./Netherlands income tax treaty, the 30% withholding is reduced to 15% if paid to a Dutch "beleggingsinstelling" or to an individual owning under 25% of REIT; Dutch pension funds are completely exempt.

When REITs sell appreciated property (creating capital gain distributions), U.S. investors are taxed at their personal capital gains tax rate, capped at 15% during 2004. In contrast, capital gains dividend distributions from sale of U.S. REIT assets are treated as real estate under FIRPTA, and therefore foreign investors are subject to a 35% withholding tax rate. Additional complexities arise from this type of income. Specifically, capital gains are also treated as income that is "effectively connected with" the conduct of a U.S. trade or business (Effectively Connected Income, ECI). Foreign investors that receive ECI have an obligation to file a U.S. federal tax return and become subject to the subpoena powers of the IRS with respect to all of its US investments. Foreign investors reportedly go to great lengths to avoid the requirement of filing a U.S. tax return.[9]

In 2004, Congress carved out an exception to the FIRPTA treatment of capital gains dividend distributions as part of the American Jobs Creation Act of 2004 (AJCA).[10] This legislation was in response to assertions that FIRPTA taxes were depressing the value of U.S. commercial real estate by constraining the supply of foreign capital in U.S. REITs.[11] The AJCA provides that a REIT capital gain dividend distribution is treated as ordinary dividend income if

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[9] Additionally, if a foreign investor is a corporation and receives ECI, a second entity level tax applies to distributions by the corporation called "branch profits" tax. This is levied at 30% rate on the after-tax proceeds of an ECI investment, and is intended to mirror the tax that US taxpayers pay on dividends received from US corporations. Consequently, a U.S. REIT capital gain distribution to a foreign investor can carry an effective tax rate as high as 54.5% (35% capital gains tax plus 30% branch profits tax on 65% after-tax proceeds (30% of remaining 65% is 19.5%).

[10] The proposed law was introduced in the House as H.R. 4520 on June 4, 2004, but at that point did not contain any FIRPTA revisions. That bill passes the House on June 17, 2004. An amended bill that included the FIRPTA revisions passed in the Senate on July 15, 2004. Due to differences in the two passed bills, it was sent to conference committee. Conference report H. Rept. 108-755 was filed on October 7, 2004 and included the Senate's FIRPTA revisions. It was agreed to by the House on October 7, 2004 and the Senate on October 11, 2004. The bill became Public Law 108-351 on October 22, 2004. The FIRPTA change applied with respect to REIT taxable years after December 31, 2004.

[11] For instance, see testimony in the *Congressional Record* (August 1, 2003, p. 20,862) asserting that foreign investors steered away from buying REITs because of FIRPTA taxes. Also see Tony Edwards (NAREIT Senior Vice President and General Counsel) Barriers to Foreign Investment in REITs Removed, AFIRE Newsletter, November/December 2004, http://www.afire.org/newsletter/2004/ajca.shtm.

(1) the REIT is traded on an established securities market in the U.S., and (2) the foreign

shareholder owns 5% or less of the REIT (at all times during the previous year).[12] Consequently,

beginning in 2005 foreign shareholders faced a rate that varied from zero to 30% if and only if

the REIT was publicly-traded and the foreign investor owned no more than 5% of the REIT. In

2010, the U.S. House of Representatives passed legislation that would have raised the ownership

cap from 5% to 10%, but the bill died in the U.S. Senate.[13] Similar bills were introduced in

2011 and 2013. In December 2015, a law passed increasing the cap and making other changes

related to the FIRPTA treatment of foreign investors in US REITs.[14] One of the possible

contributions of this paper is to provide some insights into the responsiveness of investors and

managers to the adoption of the 5% exemption and thus shed some light on the likely impact of

expanding to 10%.

REITs may also have cash to make distributions greater than their taxable income, since

real estate depreciation is a significant non-cash expense taken into account when calculating

income. This type of distribution is deemed a return of a shareholder's original investment, and

referred to as a return of capital. For U.S. shareholders, it is not taxed as ordinary income, but

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[12] The FIRPTA revision basically removed capital gains distributions from treatment as Effectively Connected Income for a foreign investor provided the two requirements are met. This means that a foreign investor is not required to file a U.S. federal income tax return by reason of receiving such a distribution, and the branch profits tax no longer applies to the distribution.

[13] The U.S. House of Representations passed the Real Estate Jobs and Investment Act of 2010 on July 29, 2010, by a 406-11 vote. On December 1, 2010, fourteen Senate Finance Committee members from both parties asked Committee leadership to consider FIRPTA reforms "as soon as possible." They asserted that foreign capital was needed to help the U.S. commercial real estate industry solve its equity problem, which would restart credit markets and create jobs.

[14] The House introduced the Real Estate Jobs and Investment Act of 2011, H.R. 2989, (REJIA2011) on September 21, 2011. The Senate introduced the Real Estate Investment and Jobs Act of 2011, S. 1616, (REIJA2011) on September 21, 2011. The House introduced the Real Estate Investment and Jobs Act of 2013, H.R. 280 on June 6, 2013, and the Senate introduced the Real Estate Investment and Jobs Act of 2013, S. 1181 on July 31, 2103 (REIJA 2013). The 114th Congress did reform FIRPTA. On February 12, 2015, the Senate Finance Committee unanimously approved the Real Estate Investment and Jobs Act of 2015, S. 915; it was sent to the Senate as a whole for consideration on April 14, 2015. The House again introduced a similar bill, H.R. 2128: Real Estate Investment and Jobs Act of 2015 that was assigned to a congressional committee on April 30, 2015. These proposals culminated in a tax amendment to H.R. 2029, a defense department appropriations bill; which was passed by the House and Senate in December 2015, and became law on December 18, 2015.

reduces the tax basis of shares by the amount distributed. In general, FIRPTA views income

received from the return of capital similarly to the sale of REIT stock, which is discussed below.

Foreign shareholders in U.S. REITs can also profit from selling their shares. In general,

foreign shareholders that sell U.S. REIT stock are subject to a 10% withholding on any gain.

This contrasts with the sale of other U.S. securities, where foreign shareholders are not taxed.

There are two exceptions to FIRPTA that can exempt foreign shareholders from any tax on a

sale. First, gain from the sale of a U.S. REIT by a foreign shareholder is not subject to FIRPTA

if (1) the REIT is regularly traded on an established securities market, and (2) the shares are sold

by a foreign investor that owns 5% or less of the REIT (at all times during the previous five

years). (The previously discussed recent legislation expands this exception by increasing this

foreign ownership threshold from 5% to 10%.) Second, foreign shareholders are not taxed if the

owned REIT is domestically controlled.[15]

We have found no non-domestically-controlled publicly-traded U.S. REITs.[16] However,

it may be difficult for a foreign shareholder to determine domestically controlled status, as there

does not seem to be any type of REIT reporting requirement regarding shareholder composition.

Therefore we surmise that many foreign shareholders rely more on the 5% of less exemption

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[15] The term "domestically controlled" is defined to mean that less than 50 percent in value of the REIT has been owned (directly or indirectly) by foreign shareholders during the five-year period ending on the date of stock sale. Given the tax rules for gain on sale of REIT shares (domestically controlled requirement) in comparison to REIT capital gains dividend distributions (5% of less and publicly traded requirement), it has been suggested that a foreign investor might consider a "dividend play" to convert impending REIT dividends into gain from the sale of REIT shares by selling REIT shares after a dividend has been declared but before the ex-dividend date and then repurchasing the shares. Such a strategy is not costless. It involves transaction costs and potential home country tax consequences.

[16] See Data section of this paper. While the authors have seen that most publicly-traded REITs appear to be domestically controlled, it is not clear how a foreign investor could make such a determination, especially given that the definition refers to shares being held directly or indirectly. This has led one commentator to declare that "Nothing in FIRPTA is clear." Levy (2008). As of December 2015, this confusion was clarified by PATH, which created a presumption that all shareholders holding less than 5% of a REIT are U.S. persons unless the REIT has actual knowledge to the contrary.

from U.S. income tax on gain from the sale of REIT shares than on the domestically controlled exception.

3. **Hypothesis Development**

As noted above, as long as a REIT distributes 90% of its profits to its investors, it can avoid entity-level income taxes on these distributed profits. One source of profits is gains on the sale of appreciated real estate. From 1980 to 2004, when REITs distributed these gains to foreign investors, FIRPTA tax withholding applied with no exceptions and REITs were required to determine their foreign investors and withhold 35% of the profit and remit it to the federal government.[17] Responding to assertions that the FIRPTA 35% withholding tax and the concurrent U.S. tax return filing requirement was depressing the value of U.S. commercial real estate by constraining the supply of foreign capital in U.S. REITs, Congress provided an exception to FIRPTA treatment of capital gains distributions under certain circumstance, effectively reducing the capital gains withholding tax equal to the ordinary dividend withholding rate. Specifically, the post-2004 capital gains withholding rate equals the one levied on distributions arising from rents and other sources of ordinary income *if* the REIT is publicly-traded *and* the foreign investor owns no more than 5% of the REIT (10% of the REIT after 2015). The effect was to lower the withholding tax for qualifying foreign investors from 35% to no more than 30%, the maximum dividend withholding rate. This leads to the paper's first hypothesis, which concerns the investors' reaction to the withholding rate reduction:

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[17] Anecdotal accounts report that before the 2004 change is was unclear who was the responsible for FIRPTA withholding. REITs took the view that the proper withholding agent was the street name broker; the street name brokers took the view that the proper withholding agents were the REITs. As described by an attorney advising clients on REIT tax withholding, there was a lot of confusion and some withholding may not have occurred.

H1: 2005 foreign investments in U.S. REITs moved inversely with the withholding

tax rate on REIT capital gains, ceteris paribus.

Figure 1 details foreign investment in U.S. REITs in our sample. No evidence of a

positive correlation between the tax rate reductions and increased foreign investment in US

REITs is immediately visible. Investment steadily increases from 2001 through 2004, is flat

from 2004 to 2005, rises from 2005 to 2006, falls nearly back to 2004 levels by 2008, and soars

thereafter.

Besides the usual lack of power that thwarts empirical research, we may fail to find a

positive correlation between tax rate reductions and foreign investment for at least four reasons.

First, withholding taxes on REIT sales of real estate may have little impact on foreign portfolio

investments. Instead, fundamentals, such as rental income, price appreciation, inflation,

currency exchange rates, liquidity, and other non-tax considerations may dominate withholding

taxes when foreign investor make decisions. Second, home country taxes may absorb any

reduction in U.S. taxes, e.g., the home country may provide a credit for the U.S. REIT

withholding taxes. If so, the reduction in U.S. withholding taxes will not affect the total global

taxes of foreign investors. Third, some assert that foreign investors can structure their REIT

investments to avoid negative tax implications. [18] Fourth, the U.S. tax return filing requirements

under FIRPTA may be far more onerous than the actual cash taxes paid. If so, the 2004 relief

from FIRPTA would have increased foreigners' incentives to invest in U.S. REITs, however, the

change in incentives would have been constant across REITs regardless of the change in

withholding rates. Thus, we may find that foreign investment increased overall, but that the

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[18] For a good discussion of FIRPTA 'blocker' avoidance structures in general, see Bear et al. (2010). However anecdotal evidence suggest that blocker structures caused too much tax friction to be used in publicly-traded REITs, and prior to 2004 the preferred capital gains evasion strategy for foreign investors was to sell REIT stock prior to the ex-dividend date. For a discussion of how lagged withholding rules complicated this strategy, see Ponda (1997).

increases from countries where withholding rates tumbled the most were no different than the increases from those countries where rates fell little. Thus, it is an empirical question whether the 2004 change in withholding rates affected foreign investments in U.S. REITs.

We now turn to the implications of the 2004 legislation on publicly-traded REIT managers. Before the FIRPTA capital gains carve out, REITs managers may have been sensitive to FIRPTA costs and complexities associated with the sale of appreciated real estate for both themselves and their foreign investors, creating disincentives to sell appreciated property. We speculate that this feedback loop may have been generated by either REIT manager concern about the significant penalties for non-compliance with FIRPTA withholding, or advice from investment brokers or traders about the impact of capital gains on foreign investment.[19] If so, the 2004 legislation may have reduced REIT manager sensitivity to FIRPTA, and in particular, those REITs whose foreign investors benefited the most from the legislation may have sold off more appreciated properties than other REITs did once the new law became effective. This potential relaxing of the FIRPTA lock-in effect leads to the second hypothesis:

> H2: A REIT's change in realized capital gains after 2004 moved inversely with the capital gains withholding tax rates of its foreign investors, ceteris paribus.

If attracting and retaining foreign investment is important to REIT managers, we anticipate that there was a negative correlation between the realized capital gains and the capital gains withholding rates of its foreign investors. Figure 2 seems to provide support for our hypothesis. We see increases in capital gains distributions from 2002 to 2004 that become steeper from 2004 to 2007. For comparison, we also graph the Moody's/RCA real estate index

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[19] The FIRPTA tax withholding system requires a publicly-traded REIT or other withholding agent to properly determine whether the recipient of tax withholding distributions is a foreign person, the applicable tax rate that applies for the type of distribution, and relevant tax treaties. If the recipient of the distribution is a pass-through entity, there is a requirement that the beneficial owner be identified, and the pass-through withholding agent must be qualified and registered with the U.S. Internal Revenue Service.

to show general commercial real estate appreciation over the same time period. Although the distributions generally follow the index trend, the rise in the index through 2007 is less pronounced than the increase in distributions during that time. However, we are still likely to detect no managerial response to the liberalization of FIRPTA rules if attracting and retaining a foreign investor (whose ownership must be less than 5% of the REIT) is less important to REIT managers than other goals, such as holding an efficient portfolio of real estate properties. If few REITs are sufficiently desirous of foreign investors, we may fail to have enough power to detect any managerial response to FIRPTA liberalization. Furthermore, we may fail to reject the null hypothesis because the foreign investors are too few in number to influence the REIT managers or the REIT managers are not incentivized to act in consideration of FIRPTA withholding requirements or the after-tax interests of their REIT investors.

4. Research Design

4.1. *Regression Equation*

To test the first hypothesis about the responsiveness of investors to tax changes, we start by expressing the investment from all investors in a foreign country into a single U.S. REIT (*ForInvt*) as a function of the REIT (*REIT*), the country (*COUNTRY*), and the capital gains withholding tax rate the U.S. applies to investors from that country (*taxrate*):

$$ForInvt_{ijt} = f\ (REIT_i, COUNTRY_j, taxrate_{jt}) \qquad (1)$$

Since the REIT and the country are the same in both years for any pair and the 2004 capital gains withholding tax rate is a constant 35% for all observations, we can focus on the new withholding tax rate for the given investor country. The lower the 2005 withholding tax rate, the larger the decrease in tax rate for a given country. This leaves the following expression to estimate:

$$ln \ ForInvt_{ij \ 2005} = \beta_0 + \beta_1 ln \ ForInvt_{ij \ 2004} + \beta_2 ln \ taxrate_{j \ 2005} + \varepsilon_{ij} \qquad (2)$$

We will interpret a negative coefficient on β_2 as consistent with the capital gains withholding taxes under FIRPTA constraining foreign investment in U.S. REITs.

The second hypothesis concerns the sensitivity of REIT managers to changes in the withholding taxes for foreign investors. We begin by stating the capital gains distributions for any U.S. REIT (*CG*) as a function of the characteristics of that REIT (*REIT*) and the aggregate tax incentives of its foreign investors. We estimate the latter using a measure we term the "weighted, mean tax rate" (*wmτ*):

$$CG_{it} = f \ (REIT_i, wm\tau_t) \qquad (3)$$

The *wmτ* is intended to provide a single statistic that captures the aggregate tax position of the foreign investors in a particular REIT. To compute *wmτ*, we compute a weighted tax rate for all foreign investors in a particular REIT. For example, suppose 2% of the REIT's investors are Japanese facing a 10% withholding tax rate; 1% are Canadian with a 30% withholding tax rate; and the remainder are Americans not subject to any withholding. Then, that REIT's weighted average tax rate (*wmτ*) would be 0.5%.[20] We expect capital gains to be decreasing in the weighted average tax rate because REIT managers can mitigate withholding taxes for their foreign investors by minimizing their sales of appreciated property. The greater a REIT's *wmτ*, the greater its incentives to avoid liquidating real estate that will generate capital gains. Since the REIT term falls out of the equation, we can focus on the weighted foreign investor tax rate in the following expression:

$$lnCG_{i \ 2005} = \beta_0 + \beta_1 lnCG_{i \ 2004} + \beta_2 ln \ wm\tau_{i \ 2005} + \beta_3 ln \ wm\tau_{i \ 2004} + \varepsilon_i \qquad (4)$$

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[20] (10% * 2%) + (30% * 1%) = 0.5%.

We will interpret a finding that $\beta_2 < \beta_3$ as evidence that REIT managers incorporate U.S. withholding taxes of their foreign investors into their portfolio management decisions. A negative β_2 is consistent with avoiding capital gains when aggregate withholding taxes are relatively high. A positive β_3 is consistent with realizing capital gains in 2005 after a year of relatively high withholding taxes (2004) has elapsed, a withholding tax version of the well-known capital gains tax lock-in effect (for further discussion, see Burman, 1999, and Dai et al., 2008, among many others). By comparing the coefficients on the two weighted mean tax measures, we can assess whether capital gains realizations are consistent with foreign investors' tax incentives mattering to REIT managers.

4.2. *Data*

To conduct these tests, we use data from FactSet, the National Association of Real Estate Investment Trusts (NAREIT), Compustat, the Center for Research in Security Prices (CRSP), and SNL Financial. FactSet provides institutional shareholder records, including country of residence, type of investor (e.g. pension fund, investment adviser, or mutual fund manager), and investor position (number of shares held), for U.S. REITs in 2004 and 2005. The shareholders identified are primarily based on 13F filings with the Securities and Exchange Commission (SEC), and include institutional investment managers with over $100 million of equity investments that bought REIT stock for either their own account or as an investment manager with discretion over which securities are bought and sold for the accounts of others.[21] They

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[21] Ideally, we would like to have the names and countries of all shareholders of record. Tracking individual investors is problematic since they tend to hold securities in "street name", meaning that the name of the beneficial owner of the stock does not appear on the REIT shareholder record file; instead, the stock is registered in the beneficial owner's broker's name. However, the SEC 13F filing requirements allow us to have access to specific information about the holdings of large institutional investment managers regardless of holdings in street name rather than beneficial ownership. This is in keeping with the data used by Chan, Leung, and Wang (1998), when

include investment funds, banks, insurance companies, broker-dealers, pension funds, and corporations.[22]   For each year, we determine the percentage of shares held by all non-pension, non-governmental, foreign institutional investors for each REIT as well as the percentage of shares held by specific country institutional investors for all REITs.

Our sample comprises investments from 17 foreign countries into 95 U.S. REITs for which we have complete information for both 2004 and 2005. Table 2, Panel A indicates that the typical REIT in our sample is large with revenues of nearly $600 million and assets of $3.8 billion but has little foreign ownership (1.53%). The relatively few shares owned by investors from abroad is consistent with both home bias and FIRPTA's dampening foreign interest in U.S. REITs. It also raises doubts about whether the tax considerations for such a small set of investors matters to REIT managers and, even if they do, whether the standard crude instruments available to an empiricist will be capable of detecting their importance.

Table 2, Panel B shows that the sample REITs come from all forms of real estate, led by multi-family (12%), office (12%), shopping center (12%), and health care (9%). In short, the sample is not concentrated in any particular property type. Table 2, Panel C shows that foreign investors in these U.S. REITs are similarly dispersed across the 17 countries. In 2005, 20% of the investors are British; 19% are Canadian; 19% are Japanese; 7% are Belgian. In untabulated results, we find that of the sample's 95 REITs, eleven have investors in 2005 from ten or more countries. Eleven REITs have foreign investors from only one country.

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they examined the strategies of institutional investors investing in REITs, and is reasonable given that institutions tend to dominate trading in REITs.

[22] Foreign institutional investment managers are required to file Form 13F if they: (1) use any means or instrumentality of United States interstate commerce in the course of their business; and (2) exercise investment discretion over $100 million or more in Section 13(f) securities. For our analyses we focus on the non-pension/non-governmental investors since pensions and governmental entities may be subject to different tax rates and/or have different tax treatment in the home country.

5. Results

5.1. H1: Responsiveness of Foreign Investors

Table 3, Panel A shows that the dependent variable in equation (2), i.e., investment from investors in a specific country to a particular U.S. REIT, soared from 2004 to 2005. Specifically, the mean (median) foreign investment jumped from $5.34 million ($1.2) in 2004 to $10.1 ($1.8) million in 2005. Although this is consistent with the liberalization of the FIRPTA rules beginning a boost in foreign investment in U.S. REITs, a mere increase in investment is insufficient to establish causality because changes in macroeconomic factors or overall heightened interest by foreigners in U.S. real estate could account for this increase. To establish a link between the 2004 legislation and the increase in foreign investment, we need evidence that the increase in investment varied with the differential change in tax treatment. To test such a proposition, we next estimate equation (2).

Table 3, Panel B provides summary statistics from estimating equation (2). As predicted, the coefficient on the capital gains withholding tax rate (τ) is negative and significant at the 0.001 level, indicating that 2005 inbound investments in U.S. REITs moved inversely with each country's withholding rate, conditional on 2004 investments. The tax coefficient implies that the impact of the 2004 legislation was economically significant. Evaluated at the mean of the dependent variable, an interquartile reduction in *taxrate* (i.e., from 30% to 15%) boosted foreign investment from $2 million to $3.6 million.[23] In other words, if the 2004 legislation resulted in a country's capital gains withholding rate dropping from 35% to 15%, the residents from that country invested 78% more in 2005 in a particular U.S. REIT than they did if the rate only fell to 30%, ceteris paribus. In short, the evidence suggests that when the FIRPTA taxes were cut,

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[23] The mean dependent variable is 14.51 or $2 million. 14.51 less -0.5961 (the product of the τ coefficient and the interquartile shift in the natural logarithm of τ) is 15.11 or $3.6 million.

investment rose, and the increases varied across countries depending on the amount of the rate reductions. Not surprisingly, the other regression coefficient, the one on lagged investment, is positive and highly significant, consistent with investment being sticky.

The parsimony of the research design might suggest that the model lacks adequate controls. However, it is difficult to conjecture alternative explanations for these findings. By using a "changes" model, we have allowed each country-REIT combination to control for itself. Any alternative explanation must explain how the relationship between the investors from 17 countries and 95 U.S. REITs changed between 2004 and 2005 in a way that was correlated with the pre-existing dividend withholding rates that only became effective for capital gains when the 2004 legislation was enacted. Unable to think of any such explanations, we conclude that these findings are consistent with FIRPTA taxes constraining foreign investment in U.S. REITs.

The theory supporting our prediction for the relation between changes in investment and withholding rates from 2004 to 2005 should hold for all years. While we would have expected the most dramatic shift to have occurred with the initial relaxing of the FIRPTA rules in 2004 for all countries, the U.S. and its trading partners occasionally revise their tax treaties. Sometimes the revisions alter the dividend withholding rates. Consequently, some capital gains withholding rates for REITs change most years.[24] Thus, we would expect to find the same negative relation between investment and withholding rates in other years. When we expand equation (2) beyond the 2004-2005 pair, we need to add a new lagged tax term, thus the expanded model is:[25]

$$ln\ ForInvt_{ijt} = \beta_0 + \beta_1 ln\ ForInvt_{ijt-1} + \beta_2 ln\ taxrate_{jt} + \beta_3 ln\ taxrate_{jt-1} + \varepsilon_{ij} \qquad (5)$$

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[24] It is possible that U.S. REITs and foreign investors could be lobbying to affect tax treaty negotiations. However, to our knowledge, no one has reported or suggested such an impact. Treaty negotiations are often complex and involve a various issues beyond just the dividend withholding rates. Therefore we conclude it is unlikely that foreign REIT investor pressure on treaty terms is solely driving our results.

[25] Recall that all capital gains withholding tax rates were 35% in 2004. Thus, no lagged tax rate was needed in the equation (2).

We now predict that $\beta_2 < \beta_3$. As before, a negative β_2 is consistent with U.S. REIT investment coming from (withdrawing from) countries when withholding tax rates have fallen (risen). We expect the coefficient on the lagged tax rate will be greater than the coefficient on the current tax rate because the former will capture low (high) investment in the previous year when tax rates were higher (lower) then than in the present year. By comparing the two tax coefficients, we can assess whether foreign investment into U.S. REITs is sensitive to U.S. capital gains withholding taxes.

The second column in Table 3, Panel B reveals a negative and significant β_2 and an insignificant β_3. When we compare the two coefficients, as predicted, we find $\beta_2 < \beta_3$ and significant at the 0.01 level. This is consistent with capital gains withholding taxes adversely affecting foreign investment in U.S. REITs from 2005-2010, i.e., more than just the year of the initial legislative change.

H2: Responsiveness of REIT Managers

Table 4, Panel A shows that mean realized capital gains increased by nearly half from $25.3 million in 2004 to $34.7 million in 2005. Did macroeconomic factors, such as an improving real estate market, fully explain this increase in capital gains realizations? Or could the relaxation in FIRPTA withholding taxes have contributed to the surge? To identify whether any of the increase in capital gains may have had a tax motivation, we search for a link between the increase in the capital gains by a specific REIT and the change in the withholding taxes faced by the foreign investors in that REIT.

The first column of Table 4, Panel B shows summary statistics from estimating equation (4). Recall that we predict that $\beta_2 < \beta_3$, indicative of REIT managers considering the U.S.

withholding taxes of their foreign investors in their real estate portfolio management. We find

that neither tax variable is significantly different from zero. Thus, we are unable to reject the

null hypothesis.

One reason that regression equation (4) may be insufficiently powerful to reject the null

is that the tax measures ($wm\tau$) include both the effect of changes in the tax rates *and* the effect

of changes in the mix of foreign ownership. For example, recall that *wmτ* is 0.5% if 2% of the

REIT's investors are Japanese with a 10% withholding tax rate and 1% are Canadian with a 30%

withholding tax rate. However, suppose that the rates are unchanged, but Canadian investors

purchase all of the Japanese shares. Then, the *wmτ* would jump to 0.9%, implying that the U.S.

increased its withholding tax rates when actually the mix of foreign investors was the only

change. Therefore, to tease out the effect related to rate changes alone, we need a refined tax

measure that is unimpeded by ownership changes.

We start by recognizing that $wm\tau_t$ is the foreign ownership at the beginning of *t* times

the applicable withholding tax rates for *t*. Taking differences between two years:

$$wm\tau_{2005} - wm\tau_{2004} = rate_{2005} * own_{2005} - rate_{2004} * own_{2004}$$

$$= (rate_{2005} - rate_{2004}) * own_{2004}$$

$$+(own_{2005} - own_{2004}) * rate_{2005} \qquad (6)$$

The first term, $(rate_{2005} - rate_{2004}) * own_{2004}$, becomes the primary variable of interest. It

captures the change in tax rates, holding constant foreign ownership. We now substitute it for

$wm\tau_{2005}$ and $wm\tau_{2004}$ and reestimate equation (4).[26] We predict a negative sign on the change

in tax rates, consistent with REIT managers realizing more capital gains as tax rates fall for their

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[26] Unlike the weighted mean tax variables, we cannot take natural logarithms of these new two terms because they are sometimes negative.

foreign investors. We have no prediction for the second term, the change in ownership. It serves solely as a control.

The second column of Table 4, Panel B shows that the coefficient on the change in rates is negative, as predicted, but the coefficient is insignificant. This failure to reject the null could arise for at least a variety of reasons. First, the sample size is small (n = 61). Second, the sale of large commercial properties typically involves a significant lag time. Third, REIT managers may not know or care about foreign investors.

To address the first two concerns, we expand the analysis to include all observations through 2009, adjusting the other regression variables and adding annual categorical variables:[27]

$$lnCG_{ijt} = \beta_{0t} + \beta_1 lnCG_{ijt-1} + \beta_2 ratechange_{it} - \beta_3 ownchange_{it} + \varepsilon_{ijt} \qquad (7)$$

Table 4, Panel B shows that, when we estimate equation (7), β_2 remains negative and is now significant. This finding is consistent with REIT managers altering their portfolio rebalancing to minimize their foreign investors' U.S. withholding taxes. The coefficient on *ownchange* is also significant. We also estimate equation (7), but without *ownchange* (results untabulated). The coefficient on *ratechange* remains negative (-0.11) and statistically significant. Together, these results suggest that the separation of rate and ownership effects is necessary to understand the tax impact on portfolio management decisions.[28]

6. Robustness Tests

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[27] We do not extend our sample to 2010 here because there were no withholding rate changes in our sample from 2009 to 2010.

[28] To be sure that our results in this longer time period are not being affected by the fact that some listed U.S. REITs were sold to private investors during this time period we examine the REITs in this sample. None of the REITs in our sample went private during this time period. The majority of the REITs have observations for at least four of the five years in this sample. In addition, results (untabulated) remain unchanged if we limit our sample to REITs that appear all five years in the sample.

Given the construction of our *ratechange* and *ownchange* measures, it is highly unlikely that another unobserved factor is driving our results. Specifically, since we capture not only the mix of investor countries for a given REIT, but also the weight of each country's investment as a percentage of overall investment in that REIT, which is unique for each REIT-year, it is highly unlikely that an unobserved variable is both correlated with our main variable of interest, *ratechange*, and a determinant of the capital gains paid by REITs. However, to provide further assurance of our results, we close with three sensitivity tests.

First, our results in Table 4, Panel B indicates that there is an inverse correlation between U.S. REITs' realized capital gains and the U.S. withholding taxes for their foreign investors. Perhaps foreign investors tend to be drawn to larger, more liquid U.S. REITs. To test for size effects, we re-estimate equation (5), including a control for REIT size:

$$lnCG_{it} = \beta_{0t} + \beta_1 lnCG_{it-1} + \beta_2 ratechange_{it} - \beta_3 ownchange_{it} + \beta_4 size_{it} + \varepsilon_{it} \qquad (8)$$

Table 5, Panel A shows that including a control for size (REIT sales in Column 1 and REIT total assets in Column 2) has little impact on the coefficient of interest, β_2.

Second, as discussed previously, the law change only affected the withholding taxes on capital gains distributions. Thus, we would not expect similar patterns in and after 2005 for other forms of REIT distributions. To ensure that this is the case, we undertake falsification tests, estimating equation (8) with ordinary distributions and return of capital distributions in lieu of capital gains distributions. If we find significant results, using distributions for which taxes were not altered, the conclusions from above would be drawn into question. Consistent with our original inferences, we find no significant results. In Table 5, Panel B, we find that the coefficients on *ratechange* and *ownchange* remain insignificant across all specifications.

Finally, to test whether the response by REIT managers is limited to a particular subset of REITs, we classify the REITs based on the type of property they hold.[29] Therefore we rerun the regression from Table 4, Panel B, Column 3, excluding each REIT property-type group one at a time. Results (untabulated) remain unchanged from those reported in Table 4, indicating that no single REIT property-type group drives the results.[30] Together, the robustness findings are consistent with REIT managers responding to foreign investor withholding tax changes by managing REIT capital gains distributions.

7. Closing Remarks

Although tax policy plays an important role in the real estate industry, remarkably little empirical research has been conducted about the impact of taxes on real estate at the investor and manager level. This paper exploits the identification provided by a change in the taxation of REIT capital gains for foreign investors to expand our understanding of both investor and manager behavior. Specifically, an exogenous shock to the tax system enables us to explore both the responsiveness of real estate investors to changes in their own taxes and the responsiveness of real estate managers to changes in their investors' taxes. We find evidence consistent with foreign investors responding to the 2004 reduction in capital gains withholding taxes, as well as evidence that rate reductions impacted REIT managers' real asset disposition strategies. We

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[29] These categories are listed in Table 2, Panel B. Our sample for the capital gains tests varies from the investment test sample described in Table 2, Panel B. However, there is a great deal of variation in this sample as well. The two most popular categories, Office and Shopping Center REITs, each only make up approximately 13% of our observations in the capital gains sample.

[30] Ideally we would also like to confirm that no single investor country is driving our results. Unfortunately, it is not possible to remove a given country from our sample since our observations are at the REIT level, not the country level. Our tests rely on the weighted average (for a given REIT) of investors from various countries and the tax rates in those countries. To remove a given country while calculating those ownership and rate variables would essentially leave us with meaningless data with no tie to the REIT's actual investor base.

interpret these results as evidence that FIRPTA restricts the flow of foreign capital into U.S. REITs and affects the management of REITs.

Our findings add a contrary observation to prior research that found that individual taxes of investors—unless they are very large shareholders or insiders—rarely affect the payout decisions of managers of publicly traded companies and mutual funds (Brown et al. 2007). In contrast, we find that the rate reductions of a small group of individual investors did have an impact on the portfolio decisions of publicly-traded REITs. These results are worthy of further work to determine the unique factors in the REIT setting and/or the other considerations that explain this divergence from prior work.

More generally, this paper should encourage further study about the role of taxes in real estate investment and management. Few industries are so large, so influenced by tax policy, and so understudied by financial empiricists. Second, more generally, the findings in this paper should expand our understanding of the role of taxes in foreign portfolio investment, which is increasingly important in a global capital market. Finally, the inferences from this paper should be useful to Congress and other policymakers as they continue to consider additional liberalization of the FIRPTA rules. The results from this investigation would imply that further changes, e.g., the 2015 ownership cap increase from 5% to 10%, would increase the flow of foreign capital to U.S. REITs. This does not necessarily mean that it would substantially increase foreign investment in U.S. real estate. Perhaps foreign investors already employ tax plans that enable them to avoid the deleterious effects of FIRPTA. If so, the results from the 2004 change would suggest that U.S. REITs may be a more efficient means for at least some of foreign investors to invest in U.S. real estate.

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Figure 1

Foreign Investment in U.S. REITs
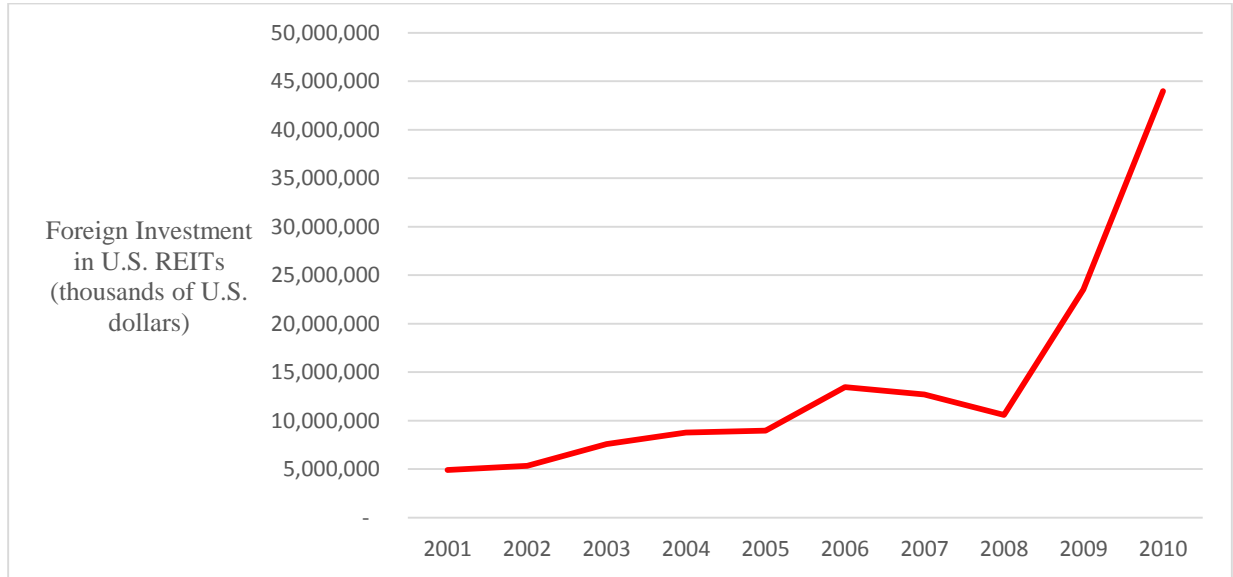
Investment in the publicly-traded U.S. REITs in our sample. Amounts in thousands of U.S. dollars. Investment each year is calculated as *Position* (number of shares held by the investor, FactSet) multiplied by *Price* for December (CRSP monthly stock files) of that year for that U.S. REIT, summed over all foreign/domestic owners across all U.S. REITs for that year.

Figure 2

Capital Gains Distributions from U.S. REITs
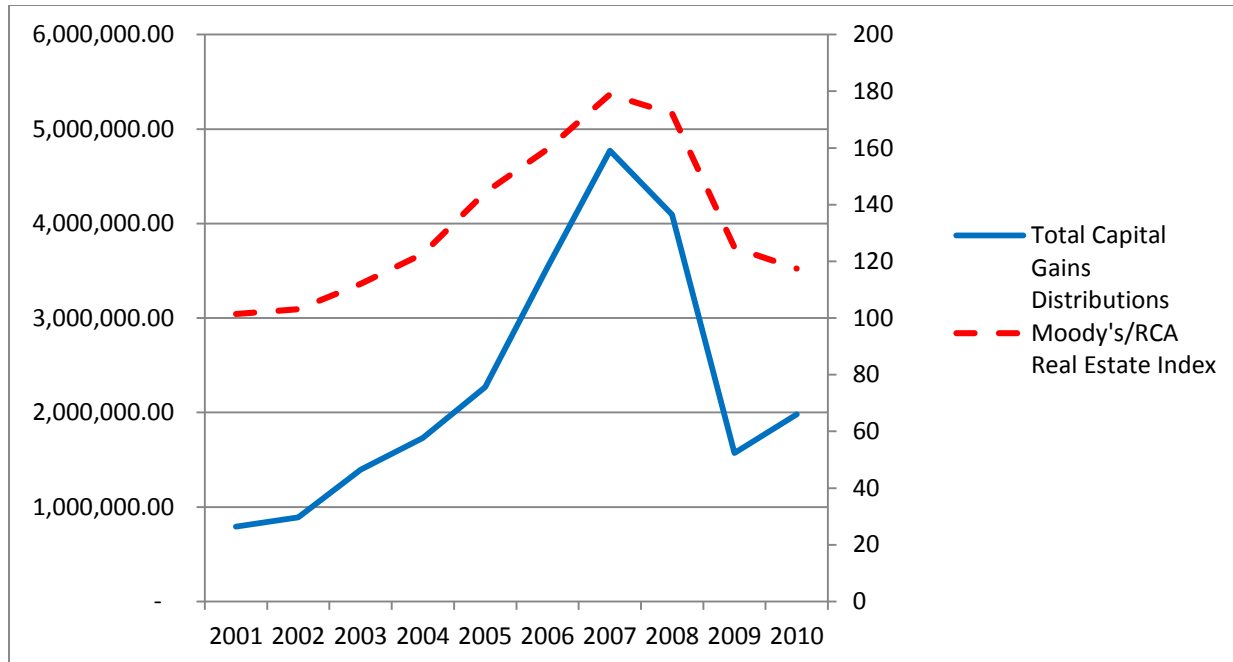
Left-hand axis: Capital gains distributions paid by U.S. REITs in our sample. Calculated as capital gains distribution per share (NAREIT) multiplied by number of common shares outstanding (CRSP). Figures in thousands of U.S. dollars. Right-hand axis: Moody's/RCA CPPI (Commercial Property Price Indices).

Table 1

	U.S. Investors	Foreign Investors *pre-AJCA 2004*	Foreign Investors *post-AJCA 2004 pre-PATH 2015*	Foreign Investors *post-PATH 2015*
Distribution: **Ordinary Dividends (from rental income)**	Taxed at investors' ordinary income tax rate.	FIRPTA doesn't apply. 0-30% withholding rate for dividends based on tax treaties	No change	No change
Distribution: **Capital Gain Dividends (from sales of real estate owned)**	Taxed at investors' capital gains tax rate.	FIRPTA applies, no exceptions. 35% withholding; U.S. tax return required to be filed; tax treaties don't provide relief for	Exception: treated as ordinary dividend if (1) REIT traded on established securities market in the U.S., and (2) foreign investor owns 5% or less of REIT (at any time during 1 year prior)	Increased foreign ownership threshold exception from 5% to 10%; FIRPTA no longer applies to foreign pension funds and qualified collective investment vehicles
Distribution: **Return of Capital**	Not taxed (but reduces the tax basis of shares).	FIRPTA applies, with exceptions for (1) domestically controlled REITs, and (2) 5% or less ownership in publicly-traded REITs	No change	Increased foreign ownership threshold exception from 5% to 10%; FIRPTA no longer applies to foreign pension funds and qualified collective investment vehicles
Sale of Stock	Taxed at investors' capital gains tax rate.	FIRPTA applies, with exceptions for (1) domestically controlled REITs, and (2) 5% or less ownership in publicly-traded REITs	No change	Increased foreign ownership threshold exception from 5% to 10%; FIRPTA no longer applies to foreign pension funds and qualified collective investment vehicles

Table 2

Descriptive Statistics

Panel A

	Mean	Std Dev	Min	25%	Median	75%	Max
Sales (millions of dollars)	570	714	26	150	333	685	3,901
Total Assets (millions of dollars)	3,816	4,501	197	1,189	2,160	4,542	25,307
Foreign Investment (thousands of dollars)	45,699	69,367	12	3,516	20,913	55,022	403,304
Foreign Ownership (percent)	1.53%	1.27%	0.01%	0.36%	1.18%	2.69%	4.46%
Capital Gains (thousands of dollars)	28,765	58,640	0	0	1,819	33,228	242,949

N = 95 for all variables except *Capital Gains*, where N=78. *Sales* is the REIT's annual net sales (Compustat). *Total Assets* is the REIT's year-end total assets (Compustat). *Foreign Investment* is calculated as *Position* (number of shares held by the owner, FactSet) multiplied by *Price* for December (CRSP monthly stock files) of the corresponding year, summed over all foreign owners for that REIT in a given year. *Foreign Ownership* is calculated as *Position* divided by *Common Shares Outstanding* (CRSP), summed over all foreign owners for that REIT in a given year. *Capital Gains* is calculated as total capital gains distribution per share (NAREIT) multiplied by *Common Shares Outstanding*.

Table 2

Descriptive Statistics

Panel B – REIT Property Type (SNL)

Property Type	Number of REITs – 2005 sample	Number of REITs – 2005-2010 sample
Diversified	7	8
Health Care	9	10
Hotel	8	10
Industrial	4	5
Manufactured Home	2	3
Multi-family	11	11
Office	11	15
Regional Mall	7	8
Retail: Other	6	6
Self-Storage	3	3
Shopping Center	11	13
Specialty	5	8
Undisclosed	11	24
Total	95	124

Table 2

Sample

Panel C – Country Frequency (FactSet)

Country	2005	2005-2010
Australia	0	208
Austria	7	100
Belgium	31	276
Bermuda	0	178
Canada	80	614
Denmark	12	121
France	17	408
Germany	8	264
Hong Kong	0	142
Ireland	16	146
Italy	2	112
Japan	80	564
Luxembourg	10	115
Netherlands	12	248
New Zealand	0	460
Norway	15	123
Singapore	1	195
Spain	21	110
Sweden	17	350
Switzerland	13	354
United Kingdom	88	635
Total	430	5,723

Table 3
Foreign Investment

Panel A
Descriptive Statistics – 2005 sample

Variable	Mean	Std Dev	Min	25%	Median	75%	Max
$\ln Y_{2005}$	14.51	1.84	9.36	13.19	14.42	15.59	18.96
$\ln Y_{2004}$	13.96	1.77	9.85	12.67	14.00	15.09	18.61
$\ln \tau$	2.97	0.41	2.40	2.77	2.77	3.43	3.43
Y_{2005} (in millions)	10.1	22.6	0.01	0.5	1.8	5.9	171.8
Y_{2004} (in millions)	5.3	14.0	0.02	0.3	1.2	3.6	120.6
τ	20.2%	8.4%	10.0%	15.0%	15.0%	30.0%	30.0%

Panel B
Regression Results

$$2005:\ \ln ForInvt_{ij\ 2005} = \beta_0 + \beta_1 \ln ForInvt_{ij\ 2004} + \beta_2 \ln taxrate_{j\ 2005} + \varepsilon_{ij\ 2005}$$

$$2005 - 2010:$$
$$\ln ForInvt_{ij\ t} = \beta_0 + \beta_1 \ln ForInvt_{ij\ t-1} + \beta_2 \ln taxrate_{jt} + \beta_3 \ln taxrate_{j\ t-1} + \varepsilon_{ijt}$$

Variable	2005 (n = 430)		2005-2010 (n = 5,723)	
Intercept	7.21	***	4.88	***
	(<0.0001)		(<0.0001)	
$\ln Y_{t-1}$	0.71	***	0.79	***
	(<0.0001)		(<0.0001)	
$\ln \tau_t$	-0.86	***	-0.66	***
	(<0.0001)		(<0.0001)	
$\ln \tau_{t-1}$			0.15	
			(0.1047)	

ForInvt is *Foreign Ownership*, as described in Table 1, summed for each REIT-country pair. *ln ForInvt* is the natural log of *ForInvt*. *taxrate* is the relevant withholding tax rate for each country. *ln taxrate* is the natural log of τ. Firm-clustered standard errors. The 2005-2010 regression also includes year indicator variables, but coefficients are not shown. P-values in parentheses. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively.

Table 4
Capital Gains Distributions

Panel A
Descriptive Statistics – 2005 sample

Variable	Mean	Std Dev	Min	25%	Median	75%	Max
$lnCG_{2005}$	11.79	7.56	0	0	15.03	17.41	19.31
$lnCG_{2004}$	11.04	7.63	0	0	14.73	16.83	19.85
$ln\ wm\tau_{2005}$	2.43	0.83	0.31	1.85	2.34	3.10	3.96
$ln\ wm\tau_{2004}$	2.87	1.53	-0.87	1.89	3.32	4.06	5.26
CG_{2005} (in millions)	34.7	63.9	0	0	3.4	36.5	242.9
CG_{2004} (in millions)	25.3	65.2	0	0	2.5	20.4	418.9

Panel B
Regression Results

Column 1: $lnCG_{i\ 2005} = \beta_0 + \beta_1 lnCG_{i\ 2004} + \beta_2 ln\ wm\tau_{i\ 2005} + \beta_3 ln\ wm\tau_{i\ 2004} + \varepsilon_{ij}$
Columns 2 and 3: $lnCG_{it} = \beta_{0t} + \beta_1 lnCG_{it-1} + \beta_2 ratechange_{it} - \beta_3 ownchange_{it} + \varepsilon_{it}$

Variable	2005 (n = 61)		2005 (n = 61)		2005-2009 (n = 353)	
Intercept	4.55	*	5.25	***	5.53	***
	(0.0649)		(0.0038)		(<0.0001)	
$lnCG_{t-1}$	0.53	***	0.54	***	0.46	***
	(0.0002)		(<0.0001)		(<0.0001)	
$lnwm\tau_{2005}$	0.45					
	(0.6770)					
$lnwm\tau_{2004}$	0.10					
	(0.8909)					
ratechange			-0.07		-0.14	***
			(0.2942)		(0.0034)	
ownchange			0.02		0.04	**
			(0.5739)		(0.0258)	

lnCG is the natural log of *Capital Gains* (as described in Table 1, Panel A). *lnwmτ* is the natural log of the weighted mean tax rate as described on Section 4.1. *Ratechange* is calculated as $(\tau_t - \tau_{t-1})*CountryPercentOwn_{t-1}$. τ is the relevant withholding tax rate for each country. *CountryPercentOwn* is the percentage of foreign ownership, summed for each REIT-country-year. *Ownchange* is calculated as $(CountryPercentOwn_t - CountryPercentOwn_{t-1})*\tau_t$. Firm-clustered standard errors. The 2005-2009 regression also includes year indicator variables, but coefficients are not shown. P-values in parentheses. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively.

Table 5
Robustness Test

Panel A – REIT Size Controls

Variable	REIT Sales (n = 351)		REIT Total Assets (n = 351)	
Intercept	5.43	***	5.45	***
	(<0.0001)		(<0.0001)	
lnCG$_{t-1}$	0.45	***	0.45	***
	(<0.0001)		(<0.0001)	
ratechange	-0.12	***	-0.12	***
	(0.0090)		(0.0077)	
ownchange	0.03	**	0.03	**
	(0.0387)		(0.0429)	
sales	0.00			
	(0.1788)			
assets			0.00	
			(0.2534)	

Panel B – Ordinary and Return of Capital Distributions

Variable	Ordinary (n = 351)		Ordinary (n = 351)		Return of Capital (n = 351)		Return of Capital (n = 351)	
Intercept	4.88	***	5.04	***	6.57	***	6.53	***
	(0.0028)		(0.0021)		(<0.0001)		(<0.0001)	
lndistributions$_{t-1}$	0.74	***	0.72	***	0.43	***	0.43	***
	(<0.0001)		(<0.0001)		(<0.0001)		(<0.0001)	
ratechange	0.02		0.03		0.09		0.09	
	(0.2965)		(0.1676)		(0.2084)		(0.1554)	
ownchange	0.01		0.00		-0.02		-0.02	
	(0.3779)		(0.5205)		(0.2841)		(0.2947)	
sales	0.00				-0.00	**		
	(0.4429)				(0.0428)			
assets			0.00	***			-0.00	
			(0.0051)				(0.1525)	

In each regression the dependent variable is the natural log of current year ordinary distributions (columns 1 and 2) or return of capital distributions (columns 3 and 4). *lndistributions$_{t-1}$* is the natural log of prior year ordinary distributions or return of capital distributions. All other variables defined in previous tables. Regressions also include year indicator variables, but coefficients are not shown. Firm-clustered standard errors. P-values in parentheses. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively.