Financing Decisions of REITs and the Switching Effect

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Abstract

Real estate investment is characterized by a high degree of opacity that could impact the capability of real estate investment trusts (REITs) to raise new capital. International evidence suggests that the choice of lender (relationship versus transaction lending) could impact the success of raising new capital for industrial and financial firms but there are no such evidence in the real estate industry regarding financing solutions alternative to loans.

The paper considers a representative sample of US REITs to evaluate the frequency of switching decisions in the industry and its relation with leverage policy. The empirical analysis demonstrates a higher likelihood of creating a new financing consortium when the REIT is planning to increase leverage and the current level of leverage is still far from the target value. Results obtained are robust with respect to the new consortium definition and the initial public offering (IPO) effect.

1. Introduction

Given asymmetric information, all the counterparties involved in issuing shares or bonds or offering loan have an informational advantage over other market participants due to their specific role in the transaction. Real estate investment trusts (REITs) have to evaluate the convenience of establishing a long-term relationship with a few intermediaries against their turnover over time.

Empirical evidence, prevalently focused on bank loans (e.g. Harrison, Luchtenberg, and Seiler, 2011), demonstrates that REITs raising financial resources using the same counterparties as previously offers a stronger signal to the market, especially if the counterparties are highly reputable financial institutions that investors consider able to collect and process information not publicly available.

On the other hand, the availability of a set of new counterparties interested in offering their services increases REITs' capability of raising capital on the basis of the quality of assets owned and the new investment planned. The existence of multiple relationships normally signals a lack of credit constraints and, in a crisis scenario, an REIT's excessive use of a few financing solutions, especially loans, could lead to its default (Ooi, Wong, and Ong, 2012).

Independent of the financing instrument selected (shares, bonds, or loan), there is no evidence on the main determinants of a switching strategy for the REIT industry. This paper aims to shed light on the switching effect for the REIT industry, a unique industry for testing such a signalling effect due to the high opacity of real estate investments.

The paper presents a detailed analysis of the main drivers identified in the literature to explain the choice of financing instrument (Section 2) and presents an empirical analysis of the US market to test the difference between REITs that establish long-term relationships and those that promote a turnover of the financial intermediaries engaged in the money-raising solution (Section 3). The results show that lenders switch more frequently for multiple-issue financing solutions and the probability of the switching is driven more by trends in the REIT and bond market than the specific features of each security. A switching strategy is more frequently adopted to increase leverage instead of reduce it and the speed of adjustment to the target leverage is normally higher for REITs that borrow from relationship lenders and therefore cannot be persistently misaligned with respect to their optimal leverage.

2. Literature Review

The analysis of the financing decisions adopted by REITs considers the main advantages and disadvantages related to the use of different capital sources. It focuses on the issue/buyback of shares or bonds and the request/refund of loans. The two main theories proposed to explain REITs' choices are related to a market timing approach and to the differences in REITs' financial needs.

The market timing theory assumes that REITs' debt policy is affected by stock and bond market trends and the market's evaluation of future REIT performance.

If the ratio between price and earnings decreases , due to market trends or earnings dynamics, the market demand for REITs' increases rapidly because investors assumes that the risk of the investment (proxied by the time necessary to recover the initial expenditure) is lowering (Ambrose

and Bian, 2010). In such a scenario, the choice to issue new shares could be more profitable for the firm due to the lower cost of capital of such a financing solution.

REITs' market trend can affect the decision to raise capital because, under information asymmetry, issuing new capital instead of financing debt (both bonds and loans) is more economically convenient in a growing market (Ghosh, Nag, and Sirmans, 1997). During these uptrends, REITs have a higher incentive to issue new shares instead of other financing instruments because it reduce the cost of equity without diminishing the tax shield effect (REITs are normally tax exempt) and without increasing the risk perceived by investors (due to earnings distribution constraints).

REITs could be affected by changes in the short- and medium- to long-term market interest rates, but the degree of sensitivity depends on the type of REIT (equity versus mortgage REIT) and the amount of short-term versus medium- to long-term debt exposure (Chen and Tzang, 2001). Increasing interest rates normally imply a lower demand for issuing bonds or requesting floating rate loans (Huerta-Sanchez, Jin, and Zhang, 2012) and can have a negative impact on the growth of REITs due to the lower profit margins related to available real estate investment opportunities (Mueller and Pauley, 1995).

The sensitivity of REITs to market dynamics is significantly heterogeneous and, on the basis of the literature, the main features that justify higher or lower sensitivity to these external factors are the REIT's size, growth opportunities, and optimal level of leverage.

Larger REITs are better able to access external financing despite frictions in the public debt and equity markets and bigger firms are normally characterized by stronger and longer relationships with their lenders. Size normally positively affects a firm's relationship with its main bank and, until the relationship expires, will have a negative impact on the cost of lending, as will the incentive to raise money through the main lender (Hardin and Wu, 2009). The choice to increase debt (through both bonds and lending solutions) is also justified by the advantages related to reducing the amount of free cash flow available to REIT managers (Hardin et al., 2009).

REITs with a high book-to-market value are assumed to have low growth opportunities that can influence the convenience of raising stock over that of raising money though lenders or bondholders (Hardin and Hill, 2011). Empirical evidence demonstrates that stocks assign a premium for investing in high book-to-market value firms (Goebel et al., 2013) and such REITs therefore try to avoid seasonal equity offerings to avoid paying an extra premium to subscribers related to the expected growth.

Every firm has its own optimal level of leverage based on the characteristics and market reputation of the business and new capital-raising solutions will be affected by the misalignment of the firm's current debt/equity structure and its optimal one (Hovakimian, Opler, and Titman, 2001). Even if optimal leverage is not as relevant in selecting financing sources as in other industries, in the long run REITs adjust their capital structure towards target debt levels (Ooi, Ong, and Li, 2010).

3. Empirical Analysis

3.1 Sample

Our sample considers all REITs listed in Standard and Poor's North America REIT Index during a 10-year time horizon (2004–2013)[1], for a total of 173 REITs, and we collect quarterly data on all information related to new shares issued, new bonds issued, and new loans requested (Table 1)[2].

[INSERT TABLE 1 HERE]

The number of REITs in the sample increases over time due to new ones being launched during the last decade and none being delisted during the period. We collect detailed information for all deals during the 10-year period to evaluate differences in financing policy.

The results do not show a clear time trend in the amount of capital raised by REITs but demonstrate a change in the financing solution preferred: At the beginning of the period, in 2003, the most important source of new capital consisted of loans, whereas in 2013 REITs prefer to issue new shares to raise money and the role of both new loans and bonds has decreased significantly.

To consider REIT financing choices in greater detail, we collect all the information related to all counterparties involved in the capital-raising process and their role in the transaction. On the basis of this information, we identify the organizers of share or bond issues and the main lenders for loan purchases and we compute summary statistics on the relevance of each type of financing choice (Table 2).

[INSERT TABLE 2 HERE]

As expected firms prevalently adopt a passive strategy for all the time horizon considered (76 of the firm-quarter observations) and the frequency of new consortium structure

to analyse whether capital was raised by using the same bank(s) as before or by switching to a new lender (Table 2).

In equity financing solutions, the number of REITs modifying their financing consortiums and book runners has increased during the last decade in terms of both the number and value of issues. During the crisis period (2008–2011), this solution was more frequent for bigger transactions in terms of those managed by existing consortiums.

Bond issues have decreased over time and, in almost all years, the average size of bonds advised by new consortiums is larger than that advised by old consortiums. The amount of new loans offered by pre-existing consortiums or lenders is stable over time, while that offered by new lenders doubles in the time horizon considered and the average amount of each new loan is also higher. Nevertheless, independently with respect to the choice of considering the number of the amount of

[1] The index includes only REITs that are based in North America and have a market value of not less than 100 mln $.
[2] The Thomson Reuters database provides full information about the time scheduling, the size and all counterparties involved in a capital raising solutions released by all firms (including REITs) listed in the database starting from the 2004.

loans, the probability of switching banks is among the lowest, probably due to the existence of a strong long-term relationship lending.

[INSERT TABLE 3 HERE]

3.2 Methodology

A firm may decide to jointly issue securities or request new loans and therefore multiple nested logit models should be considered. Following the approach proposed by Huang and Ritter (2009), our model includes two decision levels but, unlike their study, we focus on bank-switching opportunities. First-level alternatives involve equity issues, bond issues, and loan requests (NM) versus no new raising of capital (NC) and second-level alternatives related to the type of consortium (old versus new). This can be written as follows:

$$\begin{cases} Pr(y = NC) = \dfrac{1}{1 + e^{X\beta(E)} + e^{X\beta(B)} + e^{X\beta(L)} + e^{X\beta(M)}} \\ Pr(y = E) = \dfrac{e^{X\beta(E)}}{1 + e^{X\beta(E)} + e^{X\beta(B)} + e^{X\beta(L)} + e^{X\beta(M)}} \\ Pr(y = B) = \dfrac{e^{X\beta(B)}}{1 + e^{X\beta(E)} + e^{X\beta(B)} + e^{X\beta(L)} + e^{X\beta(M)}} \\ Pr(y = L) = \dfrac{e^{X\beta(L)}}{1 + e^{X\beta(E)} + e^{X\beta(B)} + e^{X\beta(L)} + e^{X\beta(M)}} \\ Pr(y = M) = \dfrac{e^{X\beta(M)}}{1 + e^{X\beta(E)} + e^{X\beta(B)} + e^{X\beta(L)} + e^{X\beta(M)}} \end{cases} \quad (1)$$

where the probability of new securities, either equity (E) or bonds (B), loans (L), or the issue of multiple solutions (M) is computed with respect to the choice of not raising new money (NC).

Following the approach proposed by Ooi, Ong, and Li (2010), we consider as explanatory factors (X) variables related to both the market timing theory and firms' features (Table 3).

[INSERT TABLE 4 HERE]

The second decision level considers, once the security has been issued or the loan has been requested, the differences between REITs that raise funds using the same lenders and those that create a new consortium. This can be written as follows:

$$
\begin{cases}
Pr(y = NC) = \dfrac{1}{1 + e^{X\beta(EO)} + e^{X\beta(EN)} + e^{X\beta(BO)} + e^{X\beta(BN)} + e^{X\beta(LO)} + e^{X\beta(LN)} + e^{X\beta(MO)} + e^{X\beta(MN)}} \\
Pr(y = EO) = \dfrac{e^{X\beta(EO)}}{1 + e^{X\beta(EO)} + e^{X\beta(EN)} + e^{X\beta(BO)} + e^{X\beta(BN)} + e^{X\beta(LO)} + e^{X\beta(LN)} + e^{X\beta(MO)} + e^{X\beta(MN)}} \\
Pr(y = EN) = \dfrac{e^{X\beta(EN)}}{1 + e^{X\beta(EO)} + e^{X\beta(EN)} + e^{X\beta(BO)} + e^{X\beta(BN)} + e^{X\beta(LO)} + e^{X\beta(LN)} + e^{X\beta(MO)} + e^{X\beta(MN)}} \\
Pr(y = BO) = \dfrac{e^{X\beta(BO)}}{1 + e^{X\beta(EO)} + e^{X\beta(EN)} + e^{X\beta(BO)} + e^{X\beta(BN)} + e^{X\beta(LO)} + e^{X\beta(LN)} + e^{X\beta(MO)} + e^{X\beta(MN)}} \\
Pr(y = BN) = \dfrac{e^{X\beta(BN)}}{1 + e^{X\beta(EO)} + e^{X\beta(EN)} + e^{X\beta(BO)} + e^{X\beta(BN)} + e^{X\beta(LO)} + e^{X\beta(LN)} + e^{X\beta(MO)} + e^{X\beta(MN)}} \\
Pr(y = LO) = \dfrac{e^{X\beta(LO)}}{1 + e^{X\beta(EO)} + e^{X\beta(EN)} + e^{X\beta(BO)} + e^{X\beta(BN)} + e^{X\beta(LO)} + e^{X\beta(LN)} + e^{X\beta(MO)} + e^{X\beta(MN)}} \\
Pr(y = LN) = \dfrac{e^{X\beta(LN)}}{1 + e^{X\beta(EO)} + e^{X\beta(EN)} + e^{X\beta(BO)} + e^{X\beta(BN)} + e^{X\beta(LO)} + e^{X\beta(LN)} + e^{X\beta(MO)} + e^{X\beta(MN)}} \\
Pr(y = MO) = \dfrac{e^{X\beta(MO)}}{1 + e^{X\beta(EO)} + e^{X\beta(EN)} + e^{X\beta(BO)} + e^{X\beta(BN)} + e^{X\beta(LO)} + e^{X\beta(LN)} + e^{X\beta(MO)} + e^{X\beta(MN)}} \\
Pr(y = MN) = \dfrac{e^{X\beta(MN)}}{1 + e^{X\beta(EO)} + e^{X\beta(EN)} + e^{X\beta(BO)} + e^{X\beta(BN)} + e^{X\beta(LO)} + e^{X\beta(LN)} + e^{X\beta(MO)} + e^{X\beta(MN)}}
\end{cases}
\tag{2}
$$

where all equations use, as explanatory factors, the matrix X used in equation (1) and the results provided show the difference with respect to the base scenario of not issuing new money.

The analysis also considers also the aim of the new capital raising distinguishing on the basis of the effects on leverage. In formulas:

$$
\begin{cases}
Pr(y = SL) = \dfrac{1}{1 + e^{X\beta(ILO)} + e^{X\beta(ILN)} + e^{X\beta(DLO)} + e^{X\beta(DLN)}} \\
Pr(y = ILO) = \dfrac{e^{X\beta(ILO)}}{1 + e^{X\beta(ILO)} + e^{X\beta(ILN)} + e^{X\beta(DLO)} + e^{X\beta(DLN)}} \\
Pr(y = ILN) = \dfrac{e^{X\beta(ILN)}}{1 + e^{X\beta(ILO)} + e^{X\beta(ILN)} + e^{X\beta(DLO)} + e^{X\beta(DLN)}} \\
Pr(y = DLO) = \dfrac{e^{X\beta(ILO)}}{1 + e^{X\beta(ILO)} + e^{X\beta(ILN)} + e^{X\beta(DLO)} + e^{X\beta(DLN)}} \\
Pr(y = DLN) = \dfrac{e^{X\beta(DLN)}}{1 + e^{X\beta(ILO)} + e^{X\beta(ILN)} + e^{X\beta(DLO)} + e^{X\beta(DLN)}}
\end{cases}
\tag{3}
$$

where we compare the scenario of no effect on leverage ($y = SL$) with that of increasing or decreasing leverage using a new or existing consortium ($y = ILN$, $y = ILO$, $y = DLN$, $y = DLO$, respectively). For all the equations we used as explaining factors, the matrix X in equation (1) and the results provided consider the stable level of leverage as the base scenario for equation (3).

The choice of financing solution could also affect the speed of adjustment to the target leverage (Huang and Ritter, 2009) and, following Flannery and Rangan (2006), we measure the speed of adjustment as follows:

$$
Lev_{it} = (1 - \lambda)Lev_{it-1} + \lambda\left(Lev^{*}_{it-1} + \widetilde{\xi_{it}}\right) + \widetilde{\delta_{it}} \tag{4}
$$

where current leverage ($\mathrm{Lev_{it}}$) is a linear function of past leverage ($\mathrm{Lev_{it-1}}$) and past target leverage ($\mathrm{Lev^{*}_{it-1}}$). The coefficient λ is the speed of adjustment with respect to the target leverage and ξ_{it} is an error term related to the estimate of the target leverage that has an average of zero and

different assumed level of standard deviation. The analysis of the speed of adjustment considers the overall sample, that is, REITs that are prevalently using either existing or new consortiums (with 50% of the issues of each REIT as a threshold during the overall period).

3.3 Results

Summary statistics of the explanatory variables for the full sample as well as for the subsamples, classified according to the four mutually exclusive financing categories, reveal interesting differences among the REITs (Table 5).

REITs that are priced significantly above current earnings do not adopt, on average, a passive strategy and prefer to issue new shares and new bonds to raise money. High returns in the REIT market normally allow, on average, easier access to equity or multiple financing solutions issues, but a passive strategy is adopted when the overall REIT market is growing.

When the bond market is characterized by higher current interest rates, REITs prefer to organize multiple issues or bond issues when there is a more positive yield curve spread or the strategy adopted is prevalently passive or equity based.

Bigger players do not frequently adopt a passive strategy and, due to their reputation in the market, prefer to issue bonds or to organize multiple placements in the same quarter. Higher average growth opportunities do not seem to lead to greater activism in the capital markets.

Regarding the target leverage, as expected, REITs with leverage above the optimal level adopt equity or multiple issuing solutions, while those with leverage below the desired value try to reach the threshold by issuing new bonds or requesting new loans.

[INSERT TABLE 5 HERE]

Summary statistics are significantly affected by the high variability of the index for each subsample of REITs and the relation between REITs' and financing choices has to be tested using a multiple logit regression model (Table 6).

[INSERT TABLE 6 HERE]

REITs with a high (low) price–earnings ratio are more (less) interested in issuing new shares and requesting new loans but the relation is statistically significant only for loan requests. The results support the hypothesis of the certification effect, that is, higher amounts of credit offered by lenders lead to positive market price reactions (Campbell, Devos, and Spieler, 2008)

A share appreciation (depreciation) significantly and positively (negatively) affects the probability of issuing new shares, requesting new loans, or using a mixed financing solution. The bond solution, as expected, is not worthwhile if the share price is increasing because the choice between the two instruments is normally driven by a comparison of their relative costs (returns for equity holders and bondholders) (Howton, Howton, and McWilliams, 2003).

Overall REIT market growth has a negative impact on all capital financing solutions because empirical evidence demonstrates that REIT behaviour is comparable with that of firms with low beta risk. Given market growth, the low beta that characterizes REITs (e.g. Chiang, Lee, and Wisen,

2005) negatively affects the demand for new shares issued and other types of capital-raising procedures due to the greater performance obtained by other high-beta securities available in the market.

Normally, high bond market interest rates imply a lower probability of issuing new shares and a higher probability of a mixed issue instead of a simple one. An increasing yield curve normally lowers the probability of raising new capital and the financing solution that is penalized the most is the REIT's issue of new corporate bonds. Both results are consistent with the tax exemption of REITs: A high rate of increase in the bond yield market implies less demand for REIT-issued securities and greater demand for securities or loans offered by other firms, which can offer higher returns due to the advantages of tax shields (Howe and Shilling, 1988).

Larger firms are normally more active in the capital markets and their preferred solutions are, in order of importance, bond issues, multiple issues, and equity issues (Rovolis and Feidakis, 2014). Growth opportunities do not seem to explain REITs' financial choices and only equity issues are negatively related to the price-to-book value ratio, but the relation is not statistically significant.

The misalignment between current and optimal leverage is not one of the main drivers of REITs' financing choices and the only statistically significant relation is linked to the choice of multiple issues, which are normally used when an REIT is overindebted, to redefine the correct debt–equity mix.

Regarding the intermediaries involved in raising new capital, the choice between a new and an existing consortium allows one to identify differences between REITs that adopt one solution over the other (Table 7).

[INSERT TABLE 7 HERE]

Regarding equity issues, the results previously shown for the determinants of pure equity solutions are mostly related to using an existing consortium, while the choice of creating a new consortium is mostly determined by market timing opportunities. New consortiums are created when REITs are outperforming and the market is decreasing, to obtain advantages related to the excess demand for securities issued, while the other variables relevant to issuing shares using an existing consortium (interest rate, size, and growth opportunities) are not statistically significant. The choice to use a new consortium to issue shares seems to be economically reasonable only if the additional performance obtained is enough to eventually cover the negative effect related to the new issue, given the lack of a certification effect (Helou and Park, 2001)

The choice to issue bonds using a new consortium is essentially related to negative performance in the REIT market. Larger players, especially given decreasing interest rates, prefer to solicit bondholders using the same consortium as before to fully take advantage of the certification effect.

A high price–earnings ratio facilitates REITs' access to the lending market, independently of their choice to use the same or new lenders. If an REIT's stock price is rising during a market downturn, the most frequently adopted solution is to avoid substituting past successful consortium members that offered lending conditions the market considered sustainable in the long term.

Independently of consortium characteristics (existing or new), the choice to use multiple types of financing solutions in the same quarter is driven by REIT performance, market trends, and size. REITs prevalently substitute consortium members when current interest rates are high and current leverage is significantly below the target value. In such cases, managers will look for a new consortium that offers better financing conditions and that allows significant modifications of the previous debt strategy to more quickly achieve the target financial structure.

To evaluate whether the choice of creating a new consortium is more suitable to increase or decrease leverage strategy, we perform the same Multiple nested logit regression on a new dummy variable that considers the type of consortium and the sign of the leverage change (Table 8).

[INSERT TABLE 8 HERE]

The strategy of modifying leverage (increase or decrease) is significantly affected by the dynamics of REIT stock performance and bond market trends. If the REIT is performing well, the manager will be more interested in modifying the financial structure and the effect of the performance change will be stronger for REITs that use the same consortium. An increase in the current interest rate will negatively affect the probability of leverage changes, especially for REITs that are using the same consortium, while an increasing yield curve will positively impact the probability of leverage changes, especially for those REITs that decide to raise money through a new consortium.

REITs that are planning to increase their leverage are more interested in using a new consortium, especially if their financial structure is close to optimal, because they assume that the market will accept the new issue independently of the sponsor and promoters of the new capital issue. REITs that decide to decrease their leverage using a new consortium are normally bigger players that assume that their reputation is sufficient to ensure the success of the new placement, independently of the consortium's features. Both results support the hypothesis that security issues or debt requests that will affect leverage will use a new consortium only if they can ensure an higher REIT's reputation on the market and a lower probability of failure for the new placement.

Analysis of the speed of adjustment of REITs with respect to their target leverage demonstrates the strong time persistence of leverage choices, with differences between REITs that prevalently use existing consortiums and those that use new ones (Table 9).

The use of quarterly data implies a higher autocorrelation of the results obtained and less relevance of adjustment to target leverage with respect to other studies. Consistent with the literature, if we include the possibility of mistakes in the definition of the target leverage, the current financial structure of REITs is less affected by misalignment with respect to the target leverage.

If we classify REITs on the basis of the choice to use an old or new consortium, the speed of adjustment with respect to the target leverage is higher for REITs that switch their reference consortium at least once but do not frequently switch the reference lender; this result holds even if we allow a white noise error term in the definition of the target leverage (for a standard error of the white noise below 50%). This result is consistent with the information asymmetry theory that explains that firms that borrow from relationship lenders are most likely to be subject to an externally imposed debt capacity and are slower to reach their target leverage (Lemmon and Zender, 2010).

[INSERT TABLE 9 HERE]

3.4 Robustness test

3.4.1 Consortium structure

An alternative approach for evaluating consortium switching considers all the members and identifies switching only if a new member is added or dropped with respect to the previous raising of capital. The new proxy assumes that, inside the consortium, it is possible to change the role of the members due to the specific needs of the lenders or the debtor. Moreover, there is international evidence that the choice of increasing (decreasing) the number of consortium members (especially for loans) decreases (increases) the incentive to monitor exposure (Bae and Goyal, 2009).

Using this definition of consortium switching, the number of new consortiums used by REITs is significantly lower due to the high frequency of cases in which the turnover of the consortium leader is internally managed. The determinants of consortium switching presented in Table 10 are consistent with those presented in Table 7 and the main difference is that the inclusion/exclusion of new members is more affected by interest rate market trends than substitution of the leading player, while the role of REIT share performance is weaker.

The analysis of the aim of the new capital raising and the speed of adjustment to the target leverage with the new consortium switching definition (table 11) does not show any statistical significant with respect to the analysis released on the full sample (table 9 and 10).

[INSERT TABLE 10 HERE]

[INSERT TABLE 11 HERE]

3.4.2 Initial public offering effect

The choice of financing solution could be affected by the time since the IPO and, for REITs, the choice to use financing solutions is normally more profitable some months from the first issue (e.g. Wang, Chan, and Gau, 1992). The choice of new counterparties in a securities issue or loan request is more probable after an REIT has developed a market reputation, instead of during the first years of its life. To address this issue, we apply the same methodology as in the previous analysis, excluding from the sample all REITs that had an IPO at least two years before the new issue (independently of the type of issue).[3]

The analysis excluding the IPO effect confirms the results previously obtained with the full sample for the differences in capital-raising solutions between REITs with existing and new consortiums (Table 12).

[INSERT TABLE 12 HERE]

Equity issues are not significantly affected by the IPO effect and all the explanatory variables remain significant over time for REITs that use existing consortiums and those that use new ones.

[3] Empirical analysis demonstrates that IPOs are followed (on average) by a first seasoned equity offering in less than two years (Ghosh, Nag, and Sirmans, 2000).

The choice of consortium to issue bonds, excluding the years immediately after the IPO, is essentially driven by the issuer's size and larger REITs prefer not to switch consortiums. The choice of requesting a loan from the same lender is not affected by excluding IPO years and the main drivers remain the price–earnings ratio, REIT market performance, and overall market trends. The decision to create a new consortium for a new loan request is unaffected by the features analysed.

Focusing only on the post IPO effect period, we find that the main drivers of changes in REIT leverage do not change but the interest rate market variables have different roles. A comparison of the coefficients related to the current interest rate and the term structure for the full sample and the sample without the IPO effect show that the relevance of interest rate expectations is greater after the IPO period than before, while the results are the opposite for the current interest rate.

The speed of adjustment to the target leverage is, as expected, significantly lower if the analysis excludes the IPO effect and the results are consistent for REITs that use an existing consortium or both new and old consortiums (Table 13).

[INSERT TABLE 13 HERE]

4. Conclusion

The REIT industry has an interesting framework for testing the advantages/losses related to switching financing consortiums due to the high lack of transparency that characterizes real estate investments. The results obtained from a representative sample of the US market show that the main reason behind a switching strategy is a market timing strategy or extraordinary loss or revenue obtained by the REIT's shares. Hiring a new financing consortium is more feasible when the REIT is planning to increase leverage and the current level of leverage is far from its target leverage.

Our results offer guidelines for REIT managers in selecting the best financing solution on the basis of market trends and determining real estate vehicle characteristics on the basis of strategy adopted by the main US market players. From an investor's or lender's perspective, the results provide insight into the standard features of REITs that request money from new financing consortiums, to identify the best investing opportunity available.

International evidence demonstrates that REITs' raising of capital is affected by overall market trends, because the cost of capital will be higher if the REIT decides to raise money in a hot market (Huerta-Sanchez, Jin, and Zhang, 2012). The period analysed is prevalently characterized by a market downturn and cannot be generalized to a market upturn or bubble period. Moreover, comparison with markets characterized by less competitive capital markets or more bank-oriented markets (e.g., European ones) is necessary to test whether the results can also be generalized to less developed markets.

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Table 1. Sample description

Year	Number of REITs	New capital collected			
		Overall ($ mln)	Value of new shares issued ($ mln)	Value of new bond issued ($ mln)	Value of new loan issued ($ mln)
2004	114	35140.32 (100%)	8999.53 (25.61%)	10143.43 (28.87%)	15997.36 (45.52%)
2005	118	28258.72 (100%)	8160.88 (28.88%)	6569.58 (23.25%)	13528.26 (47.87%)
2006	121	64674.67 (100%)	23374.75 (36.14%)	14017.58 (21.67%)	27282.34 (42.18%)
2007	124	48478.70 (100%)	19121.87 (39.44%)	10637.04 (21.94%)	18719.79 (38.61%)
2008	124	30138.86 (100%)	8355.58 (27.72%)	7563.24 (25.09%)	14220.04 (47.18%)
2009	126	57080.87 (100%)	19796.17 (34.68%)	10595.09 (18.56%)	26689.61 (46.76%)
2010	138	57611.24 (100%)	23527.73 (40.84%)	11512.87 (19.98%)	22570.64 (39.18%)
2011	146	47073.42 (100%)	19452.94 (41.32%)	8008.09 (17.01%)	19612.39 (41.66%)
2012	155	51339.15 (100%)	26389.44 (51.40%)	7615.64 (14.83%)	17334.07 (33.76%)
2013	173	60202.33 (100%)	31761.99 (52.76%)	6082.2 (10.10%)	22358.14 (37.14%)

Source: Thomson Reuters data processed by the authors.

Table 2. Financing activities of REITs (2004-2013)

Mutually exclusive financial activities		Number	Percentage
Acronymus	Description		
NC	No new financing (passive strategy)	3692	76.74%
EO	Pure Equity issue from old consortium	390	8.11%
EN	Pure Equity issue from new consortium	27	0.56%
BO	Net debt issue from old consortium	121	2.52%
BN	Net debt issue from new consortium	23	0.48%
LO	Net loan issue from old consortium	187	3.89%
LN	Net loan issue from new consortium	34	0.71%
MO	Multiple issue from old consortium	266	5.53%
MN	Multiple issue from new consortium	71	1.48%

Source: Thomson Reuters data processed by the authors.

Table 2. REITs' financing solution and bank switching

The table presents the amount of new capital collected through shares issuing, bonds issuing and loans request for the overall sample of REITs and the average amount collected year by year for all the capital raisers. The switching probability is computed as the ratio of (the number or the value) of issues released by an existing consortium with respect to those in which new financial intermediaries are involved.

			2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average
Shares Issued	Overall ($ mln)	Old	7166.30	5537.68	12165.28	8974.27	2317.74	5318.94	10866.22	7826.03	15016.59	14754.32	8994.34
		New	1833.23	2623.20	11209.47	10147.60	6037.84	14477.23	12661.51	11626.91	11372.85	17007.67	9899.75
	Mean size ($ mln)	Old	140.52	167.81	233.95	289.49	121.99	151.97	194.04	173.91	288.78	254.38	201.68
		New	130.95	131.16	228.76	281.88	215.64	253.99	263.78	242.23	227.46	274.32	225.02
	Switching Probability	Num	21.54%	37.74%	48.51%	53.73%	59.57%	61.96%	46.15%	51.61%	49.02%	51.67%	48.15%
		Value	20.37%	32.14%	47.96%	53.07%	72.26%	73.13%	53.82%	59.77%	43.10%	53.55%	50.92%
Bonds Issued	Overall ($ mln)	Old	6870.63	2956.55	7219.07	4019.80	4604.05	6076.63	3385.69	3443.87	3493.15	3463.47	4553.29
		New	3272.80	3613.03	6798.51	6617.24	2959.19	4518.46	8127.18	4564.22	4122.49	2618.73	4721.19
	Mean size ($ mln)	Old	163.59	147.83	180.48	182.72	270.83	184.14	147.20	172.19	183.85	173.17	180.60
		New	204.55	172.05	219.31	287.71	211.37	225.92	325.09	240.22	242.50	261.87	239.06
	Switching Probability	Num	27.59%	51.22%	43.66%	51.11%	45.16%	37.74%	52.08%	48.72%	47.22%	33.33%	43.78%
		Value	32.27%	55.00%	48.50%	62.21%	39.13%	42.65%	70.59%	57.00%	54.13%	43.06%	50.45%
Loans requested	Overall ($ mln)	Old	11194.51	8351.59	19027.26	8337.89	6491.34	10426.32	15836.77	11800.66	11961.76	11289.50	11471.76
		New	4802.85	5176.67	8255.08	10381.90	7728.70	16263.29	6733.87	7811.73	5372.31	11068.64	8359.50
	Mean size ($ mln)	Old	243.36	269.41	328.06	277.93	309.11	260.66	293.27	310.54	306.71	282.24	288.13
		New	343.06	323.54	284.66	519.10	429.37	542.11	336.69	371.99	282.75	345.90	377.92
	Switching Probability	Num	23.33%	34.04%	33.33%	40.00%	46.15%	42.86%	27.03%	35.59%	32.76%	44.44%	35.95%
		Value	30.02%	38.27%	30.26%	55.46%	54.35%	60.93%	29.83%	39.83%	30.99%	49.51%	41.95%

Source: Thomson Reuters data processed by the authors

Table 3. Financing choice explaining factors

Type	Variable	Details
Market timing	Price–earnings ratio	Moving-average annualized P/E ratio
	REIT's performance	Yearly appreciation of REIT's share price
	Market performance	Yearly appreciation of the Standard and Poor's North America REIT Index
	Interest rate	10-Year US Government bond yield
	Term structure	Difference in the yield of 10-Year and 1-Year US Government bond
REITs' features	Size	The natural logarithm of total assets expressed in thousands of US$
	Growth opportunities	Moving-average annualized P/BV ratio
	Deviation from target leverage	Leverage ratio minus the target-leverage ratio of the REIT, as determined through a cross-sectional regression of leverage, firm's features and industry dummies following the approach proposed by Flannery and Rangan (2006)

Table 4. Sample characteristics by type of financing activities

Variable	Passive	Pure Equity Issue	Pure Bond Issue	Pure Loan Issue	Multiple Issue	Full Sample
Price–earnings ratio	23.1934 (54.7012)	27.8505 (72.5637)	22.3124 (31.3206)	34.8069 (85.6348)	27.4118 (66.4121)	23.1934 (54.7012)
REIT's performance	0.0203 (0.4105)	0.0675 (0.406)	0.0155 (0.4126)	0.0487 (0.4175)	0.1222 (0.4329)	0.0203 (0.4105)
Market performance	0.0434 (0.2597)	0.0110 (0.3073)	0.0136 (0.2755)	0.0286 (0.2603)	0.0542 (0.3111)	0.0434 (0.2597)
Interest rate	0.0340 (0.0107)	0.0319 (0.0109)	0.0348 (0.0112)	0.0327 (0.0107)	0.0360 (0.0106)	0.0340 (0.0107)
Term structure	0.0171 (0.0109)	0.0176 (0.0109)	0.0153 (0.0111)	0.0168 (0.0108)	0.0165 (0.0124)	0.0171 (0.0109)
Size	7.6809 (1.0849)	7.7797 (0.8755)	8.1263 (0.889)	7.7303 (0.8976)	7.9457 (0.9722)	7.6809 (1.0849)
Growth opportunities	1.8087 (5.2252)	1.4068 (3.2815)	1.4833 (2.1395)	1.4858 (1.5186)	1.7592 (1.0241)	1.8087 (5.2252)
Deviation from target leverage	0.0085 (0.1739)	-0.0059 (0.1347)	0.0057 (0.1380)	0.0073 (0.1407)	-0.0087 (0.122)	0.0085 (0.1739)
Observations	5524	477	171	249	379	6800

Notes: Variables are defined in Table 3. The table reports the average value and the standard deviation in brackets. The sample covers the financing activities of REITs between 2004Q1 and 2013Q4

Source: Thomson Reuters data processed by the authors

Table 5. Multiple nested logit regression for different types of financing solutions

Explanatory variables	Dependent variables: [Hyp: Base Scenario = Passive]			
	Pure Equity Issue	Pure Bond Issue	Pure Loan Issue	Multiple Issue
Constant	-2.4161***	-6.7684***	-2.486***	-5.8755***
Price–earnings ratio	0.0012	-0.0013	0.0023***	0.001
REIT's performance	0.8536***	0.3049	0.5314**	1.1113***
Market performance	-1.0967***	-0.7596*	-0.6343*	-1.085***
Interest rate	-13.8998**	9.6773	-10.0033	27.5673***
Term structure	-6.0262	-15.0773*	-7.01	-0.2629
Size	0.1002*	0.4469***	0.013	0.3169***
Growth opportunities	-0.0177*	-0.0174	-0.0133	-0.011
Deviation from target leverage	-0.3426	-0.2379	0.3665	-0.8594**
Observations	477	171	249	379

The table presents the MNL estimation results on the probability of each financing event against a no transaction alternative in a given quarter. The dependent variables are the four mutually exclusive financing choices, with the passive or no material financing activity being the base option. The explanatory variables are defined in Table 3. The sample covers the financing activities of REITs between 2004Q1 and 2013Q4

* p=0.1; ** p=0.05; *** p=0.01

Source: Thomson Reuters data processed by the authors

Table 6. Multiple nested logit regression for existing vs new consortium

Explanatory variables	Dependent variables: [Hyp: Base Scenario = Passive]							
	Equity Issue		Bond Issue		Loan Issue		Multiple issue	
	Old	New	Old	New	Old	New	Old	New
Constant	-2.8625***	-3.3671***	-9.3248***	-5.7192***	-3.9235***	-2.7031***	-9.4985***	-5.5096***
Price–earnings ratio	0.001	0.0014	-0.0018	-0.0007	0.0030**	0.0018*	0.0018	0.0007
REIT's performance	0.6809***	1.0437***	0.2429	0.3955	0.9549**	0.3084	1.1287***	1.1163***
Market performance	-1.2254***	-0.929**	-0.6988	-0.8465*	-1.2536**	-0.2789	-1.3863***	-0.9873***
Interest rate	-18.6667**	-8.9885	5.6375	12.5111	-11.6933	-9.2728	19.7966	30.0342***
Term structure	-11.455	-1.0493	-26.6257**	-4.388	-13.5071	-3.9437	10.6348	-3.3037
Size	0.1109*	0.0874	0.7083***	0.1952	0.0836	-0.0253	0.5938***	0.2317***
Growth opportunities	-0.0223**	-0.0099	-0.0172	-0.0196	-0.0122	-0.0143	0.0019	-0.0142
Deviation from target leverage	-0.5878	-0.1028	0.4666	-0.8516	0.2242	0.4481	-1.0519	-0.7873*
Observations	215	202	73	71	82	139	79	258

The table presents the MNL estimation results on the probability of each financing event against a no transaction alternative in a given quarter. The dependent variables are the nine mutually exclusive financing choices, with the passive or no material financing activity being the base option. The explanatory variables are defined in Table 3. The sample covers the financing activities of REITs between 2004Q1 and 2013Q4

* p=0.1; ** p=0.05; *** p=0.01

Source: Thomson Reuters data processed by the authors

Table 7. Multiple nested logit regression for type of leverage change

Dependent variables	Dependent variables: [Hyp: Base Scenario = leverage neutral]			
	Leverage increase		Leverage decrease	
	Old	New	Old	New
Constant	-0.7632	1.2724	1.6888	2.1019*
Price–earnings ratio	-0.0006	0.0001	0.0009	-0.0004
REIT's performance	0.9171**	0.9106**	1.1159***	0.5822*
Market performance	-1.0165	-0.3438	-1.3984**	-0.5945
Interest rate	-32.7141**	-30.8071**	-77.5142***	-44.4164***
Term structure	69.3882***	75.776***	92.5951***	100.3115***
Size	0.0677	-0.1795	-0.0705	-0.2267*
Growth opportunities	-0.0571	-0.0438	-0.0804	-0.0274
Deviation from target leverage	-1.5299	-1.8122*	-0.709	0.1171
Observations	127	194	193	289

The table presents the MNL estimation results on the probability of each financing event against a no changes alternative in a given quarter. The dependent variables are the five mutually exclusive financing effects on the current leverage, with the passive or no material financing activity being the base option. The explanatory variables are defined in Table 3. The sample covers the financing activities of REITs between 2004Q1 and 2013Q4

* p=0.1; ** p=0.05; *** p=0.01

Source: Thomson Reuters data processed by the authors

Table 8. Speed of adjustment to the target leverage

Explanatory variables		Dependent Variable: Lev_{it}					
		$\xi_{it} \sim N(0\%, 0\%)$	$\xi_{it} \sim N(0\%, 5\%)$	$\xi_{it} \sim N(0\%, 10\%$	$\xi_{it} \sim N(0\%, 20\%$	$\xi_{it} \sim N(0\%, 25\%$	$\xi_{it} \sim N(0\%, 50\%$
Overall Sample	Lev_{it-1}	0.8404***	0.8803***	0.9442***	0.9707***	0.9753***	0.9881***
	$Lev^*_{it-1} + \widetilde{\xi_{it}}$	0.1596***	0.1112***	0.0530***	0.0258***	0.0205***	0.0063***
	N	5119	5119	5119	5119	5119	5119
	R^2	0.9106	0.9103	0.9109	0.9109	0.9110	0.9113
Exclusively Existing vs New & Existing consortium							
Only Existing Consortium	Lev_{it-1}	0.8754***	0.9221***	0.9536***	0.9729***	0.9788***	0.9907***
	$Lev^*_{it-1} + \widetilde{\xi_{it}}$	0.1256***	0.0768***	0.0447***	0.0239***	0.0172***	0.0045**
	N	2640	2640	2640	2640	2640	2640
	R^2	0.8703	0.8708	0.8705	0.8708	0.8710	0.8715
New & Existing Consortium	Lev_{it-1}	0.8170***	0.8521***	0.9130***	0.9690***	0.9724***	0.9856***
	$Lev^*_{it-1} + \widetilde{\xi_{it}}$	0.1830***	0.1341***	0.0758***	0.0272***	0.0232***	0.0082***
	N	2479	2479	2479	2479	2479	2479
	R^2	0.9307	0.9299	0.9300	0.8705	0.8703	0.8710

The table presents the maximum likelihood panel linear regression of the current level of leverage with respect to the past and the target value. The sample covers the financing activities of REITs between 2004Q1 and 2013Q4

* p=0.1; ** p=0.05; *** p=0.01

Only existing consortium are REITs that never experience a consortium switch during the time horizon considered

Source: Thomson Reuters data processed by the authors

Table 9. Multiple nested logit regression for existing vs new consortium (members change)

Explanatory variables	Dependent variables: [Hyp: Base Scenario = Passive]							
	Equity Issue		Bond Issue		Loan Issue		Multiple issue	
	Old	New	Old	New	Old	New	Old	New
Constant	-2.4792***	-4.9969***	-7.7846***	-4.6483**	-3.1733***	-1.6823	-5.8794***	-8.3373***
Price–earnings ratio	0.0014*	-0.0206	-0.0009	-0.0066	0.0022**	0.0028	0.0006	0.0021
REIT's performance	0.7912***	1.9171***	0.3499	0.0491	0.5150*	0.6304	1.2668***	0.6472
Market performance	-1.1002***	-0.8261	-0.6463	-1.1698	-0.6904*	-0.3997	-1.0451***	-1.1888**
Interest rate	-12.4494**	-38.7368*	16.9228	-25.2737	-2.7528	-52.6944***	26.1704***	31.1085**
Term structure	-3.9580	-44.5601*	-13.3212	-23.1906	-8.2101	12.4911	-6.4109	22.2222*
Size	0.0895	0.2696	0.5132***	0.1235	0.0532	-0.2236	0.3048***	0.3662***
Growth opportunities	-0.0175*	-0.0163	-0.0183	-0.0106	-0.0134	-0.0125	-0.0121	-0.0073
Deviation from target leverage	-0.3331	-0.5572	-0.1095	-0.8797	0.3197	0.6337	-1.0066**	-0.3203
Observations	390	27	121	23	187	34	266	71

The table presents the MNL estimation results on the probability of each financing event against a no transaction alternative in a given quarter. The dependent variables are the nine mutually exclusive financing choices, with the passive or no material financing activity being the base option. The explanatory variables are defined in Table 3. The sample covers the financing activities of REITs between 2004Q1 and 2013Q4

* p=0.1; ** p=0.05; *** p=0.01

Source: Thomson Reuters data processed by the authors

Table 10. Multiple nested logit regression for type of leverage change and Panel linear regression for the speed of adjustment to the target leverage (members change)

Type of leverage change					*Speed of adjustment*				
Explanatory variables	Dependent variables: [Hyp: Base Scenario = leverage neutral]				Explanatory variables		Dependent Variable: Lev_{it}		
							$\xi_{it} \sim N(0\%, 0\%)$	$\xi_{it} \sim N(0\%, 20\%)$	$\xi_{it} \sim N(0\%, 50\%)$
	Leverage increase		Leverage decrease		Overall Sample	Lev_{it-1}	0.8404***	0.9707***	0.9881***
	Old	New	Old	New		$Lev^*_{it-1} + \widetilde{\xi_{it}}$	0.1596***	0.0258***	0.0063***
Constant	0.7883	0.0276	2.7554**	-0.1193		Observations	5119	5119	5119
Price–earnings ratio	-0.0004	0.0003	0.0006	-0.0077		R^2	0.9106	0.9109	0.9113
REIT's performance	1.0253**	0.2541	0.7755**	0.8824*	Only Existing Consortium	Lev_{it-1}	0.8754***	0.9729***	0.9907***
Market performance	-0.6995	-0.3037	-0.907	-0.9161		$Lev^*_{it-1} + \widetilde{\xi_{it}}$	0.1246***	0.0239***	0.0045***
Interest rate	-31.131**	-33.8304	-57.1735***	-67.3539***		Observations	2640	2640	2640
Term structure	72.7106***	78.2907***	93.4978***	113.8418***		R^2	0.8703	0.8708	0.8715
Size	-0.0571	-0.1889	-0.1960*	-0.0389	New and Old Consortium	Lev_{it-1}	0.8170***	0.9690***	0.9856***
Growth opportunities	-0.0453	-0.0366	-0.0584	0.0152		$Lev^*_{it-1} + \widetilde{\xi_{it}}$	0.1830***	0.0272***	0.0082***
Deviation from target leverage	-1.8904**	-0.5082	-0.1603	-0.3183		Observations	2479	2479	2479
Observations	279	42	407	84		R^2	0.9306	0.9303	0.9306

The table presents the MNL estimation results on the probability of each financing event against a no changes alternative in a given quarter. The dependent variables are the five mutually exclusive financing effects on the current leverage, with the passive or no material financing activity being the base option. The explanatory variables are defined in Table 3.

The table presents the maximum likelihood panel linear regression of the current level of leverage with respect to the past and the target value. Lev_{it-1} and Lev^*_{it-1} are respectively the real and the target leverage at time t-1 and ξ_{it} is an error term related to the estimate of the of the target leverage Only Existing consortium are REITs that never experience a consortium switch during the time horizon considered

The sample covers the financing activities of REITs between 2004Q1 and 2013Q4

* p=0.1; ** p=0.05; *** p=0.01

Source: Thomson Reuters data processed by the authors

Table 11. Multiple nested logit regression for existing vs new consortium excluding the IPO effect

Explanatory variables	Dependent variables: [Hyp: Base Scenario = Passive]							
	Equity Issue		Bond Issue		Loan Issue		Multiple issue	
	Old	New	Old	New	Old	New	Old	New
Constant	-3.3265***	-3.6612***	-9.6012***	-5.6249***	-4.2588***	-3.0102***	-9.3832***	-6.0115***
Price–earnings ratio	0.0005	0.0012	-0.0035	-0.0007	0.0029**	0.0013	0.0016	0.0005
REIT's performance	0.6752***	1.0898***	0.2203	0.3616	1.006**	0.3238	1.0774***	0.9020***
Market performance	-1.3164***	-1.0500***	-0.7422	-0.8031	-1.2958**	-0.339	-1.3541***	-0.9141***
Interest rate	-21.9455***	-6.2129	0.9393	7.4269	-11.7064	-3.3481	17.4283	26.7728***
Term structure	-6.0414	-3.644	-19.8758	-9.1217	-7.1186	-1.9122	13.2215	-0.0929
Size	0.1636**	0.1132	0.7442***	0.2156*	0.1065	-0.0193	0.5837***	0.2938***
Growth opportunities	-0.0200*	-0.0090	-0.0151	-0.0183	-0.0103	-0.0132	0.004	-0.0094
Deviation from target leverage	-0.6604	0.0357	0.4731	-0.9346	0.2148	0.5944	-1.0701	-0.9553**
Observations	185	172	64	66	69	123	73	218

The table presents the MNL estimation results on the probability of each financing event against a no transaction alternative in a given quarter. The dependent variables are the nine mutually exclusive financing choices, with the passive or no material financing activity being the base option. The explanatory variables are defined in Table 3. The sample covers the financing activities of REITs between 2004Q1 and 2013Q4

* p=0.1; ** p=0.05; *** p=0.01

Table 12. Multiple nested logit regression for type of leverage change and Panel linear regression for the speed of adjustment to the target leverage excluding the IPO effect

Type of leverage change					*Speed of adjustment*				
Explanatory variables	Dependent variables: [Hyp: Base Scenario = leverage neutral]				Explanatory variables		Dependent Variable: Lev_{it-1}		
							$\xi_{it} \sim N(0\%, 0\%)$	$\xi_{it} \sim N(0\%, 20\%)$	$\xi_{it} \sim N(0\%, 50\%)$
	Leverage increase		Leverage decrease		Overall Sample	Lev_{it-1}	0.9668***	0.9870***	0.9955***
	Old	New	Old	New		$Lev^*_{it-1} + \widetilde{\xi_{it}}$	0.0332***	0.0114***	0.0019*
Constant	-0.8984	1.2168	1.6497	2.2320*		Observations	4357	4357	4357
Price–earnings ratio	-0.0004	-0.0004	0.0008	-0.0005		R^2	0.9449	0.9445	0.9447
REIT's performance	0.8659*	0.8781*	1.0729**	0.5528	Only Existing Consortium	Lev_{it-1}	0.9712***	0.9959***	0.9975***
Market performance	-1.0249	-0.3373	-1.4164**	-0.6166		$Lev^*_{it-1} + \widetilde{\xi_{it}}$	0.0309***	0.0045	0.0026
Interest rate	-30.6168**	-32.2998**	-78.5665***	-41.8601***		Observations	1142	1142	1142
Term structure	75.9330***	73.3813***	101.5066***	98.5394***		R^2	0.9332	0.9331	0.9333
Size	0.0622	-0.1598	-0.0835	-0.2443**	New and Old Consortium	Lev_{it-1}	0.9608***	0.9841***	0.9955***
Growth opportunities	-0.0600	-0.0530	-0.0874	-0.0374		$Lev^*_{it-1} + \widetilde{\xi_{it}}$	0.0398***	0.0139***	0.0014
Deviation from target leverage	-1.3047	-1.6892*	-0.3925	0.3067		Observations	3215	3215	3215
Observations	114	157	179	259		R^2	0.9381	0.9376	0.9378
The table presents the MNL estimation results on the probability of each financing event against a no changes alternative in a given quarter. The dependent variables are the five mutually exclusive financing effects on the current leverage, with the passive or no material financing activity being the base option. The explanatory variables are defined in Table 3.					The table presents the maximum likelihood panel linear regression of the current level of leverage with respect to the past and the target value. Lev_{it-1} and Lev^*_{it-1} are respectively the real and the target leverage at time t-1 and ξ_{it} is an error term related to the estimate of the of the target leverage				

The sample covers the financing activities of REITs between 2004Q1 and 2013Q4
* p=0.1; ** p=0.05; *** p=0.01

Source: Thomson Reuters data processed by the authors