Brick or Treat: Shareholder Activism and Corporate Leasing*

Fang Li University of Oxford - Saïd Business School

Gaizka Ormazabal IESE Business School, CEPR, and ECGI

> Carles Vergara-Alert IESE Business School

Abstract

This paper studies the role of shareholder activism on corporate leases. We find that the presence of shareholder activists is associated with large increases in leasing. This association is stronger in periods of high real estate prices and for firms with larger amounts of real estate assets. We also find that higher leasing in the presence of activist investing is accompanied by higher dividend payments and lower investment. The leasing activity associated with shareholder activism is less common when the target firm is acquired or when there is a proxy fight. Finally, we find little evidence that this type of activism is related to corporate governance characteristics.

Keywords: shareholder activism, leasing, real estate, corporate governance, sale-and-leaseback.

JEL Classifications: G14, G23, G34

^{*}Email: fang.li@sbs.ox.ac.uk. Park End Street, Oxford, OX1 1HP. We thank Christopher Nance and Claudia Serra for excellent research assistance and participants at the European Finance Association (EFA) annual meetings. Gaizka Ormazabal acknowledge financial contributions from the Spanish Ministry of Economics, Industry and Competitiveness, grant ECO2015-63711-P, ECO2016-77579-C3-1-P, and funding from the "Cátedra de Dirección de Instituciones Financieras y Gobierno Corporativo del Grupo Santander", the BBVA Foundation (2016 grant "Ayudas a Investigadores, Innovadores, y Creadores Culturales"), the Marie Curie and Ramon y Cajal Fellowships. Vergara-Alert acknowledges financial support from the State Research Agency of the Spanish Ministry of Science, Innovation and Universities and from the European Regional Development Fund (Ref. PGC2018-097335-A-I00), and the Social Trends Institute (STI) Foundation.

1. Introduction

In recent years, shareholder activism has become pervasive in most modern economies and is growing despite a temporary deceleration at the beginning of the pandemic.¹ While few dispute the relevance of the phenomenon, the surge in shareholder activism has raised substantial controversy, both in practice and in academia (Bebchuk et al. 2015; Coffee and Palia 2016). Recent research provides important insights into the economic consequences of activist investment, but there are still several unexplored dimensions in the recent trends in activism. This paper sheds new light on the debate by examining the role of shareholder activism on one of these unexplored dimensions: corporate leasing.

There is substantial evidence that activist shareholders push firms to increase leasing activity. For example, in several well-known cases, shareholder activists have publicly encouraged firms to conduct sale-and-leaseback (SLB) transactions, which consist of selling corporate real estate assets and leasing them back. Firms targeted by shareholder activists include retail firms, manufacturers, restaurants, casinos, health clubs, hospitals, and even media companies.

The case of U.S. department store company Macy's Inc. illustrates shareholders' attempts to induce firms to sell and lease back real estate assets. In 2006, activist investor Carl Icahn took a large position in Macy's and pushed for a sale-and-leaseback transaction to unlock real estate value. Icahn was not successful and sold his stock several months later. In 2015, other shareholders –including Jana Partners LLC, David Einhorn's Greenlight Capital Inc., and Starboard Value LP– again suggested that Macy's should sell some of its real estate assets such as its flagship Herald Square location in New York. These investors explicitly mentioned that the company should use the proceeds of the sale to increase its dividend

¹ See *The Activist Investing Annual Review 2022*, February 2022 (https://www.activistinsight.com/).

payout.² Similar cases of activism that forced SLB transactions include Target in 2008³ –the activist was William Ackman through his hedge fund Pershing Square Capital Management–, and Darden Restaurants in 2015 –the activist was Starboard Value⁴–, Kohl's in 2022 –there was a consortium of activist investors⁵–, and Life Time Group Holdings in 2022 –the activist was TPG Capital.⁶ These activist campaigns are not isolated anecdotes.

In addition to widely publicized cases of shareholder activism pushing for sale-andleasebacks, activists' influence could also result in significant increases in leasing activity in less visible ways, for example by encouraging firms to lease new assets instead of purchasing them. The effect could also be indirect if the activist requests higher payouts and her request triggers liquidity-increasing actions, leasing being one of them.

The common rationale for this type of activism is that leasing favors liquidity and allows using cash holdings for purposes other than the purchase of assets. This assumes that the incumbent management had missed out on the opportunity to increase shareholder value through leasing. In other words, the previous argument implies that shareholder activism mitigates an agency friction. However, activist shareholders could also induce firms to engage in corporate leases for reasons that are less likely to generate long-term value.

² Macy's management believed that a sale-and-leaseback strategy would damage the firm with high lease expenses, eroding profitability and weakening financials. The activists failed to convince Macy's management to shed all its stores into a real estate investment. Nevertheless, Macy's made some moves to monetize its real estate, such as selling the Union Square Men's Store to Morgan Stanley for \$250 million in November 2016, and in 2017, selling its 280,000-square-foot San Francisco Stonestown Galleria store to General Growth Properties for \$41 million and leasing back a majority part of it. See "Exclusive: Hedge funds to Macy's: Sell your real estate", Reuters News, 12 May 2015. (https://www.reuters.com/article/us-macys-activists-property-exclusive/exclusive-hedge-funds-to-macys-sell-your-real-estate-idUSKBN00I1YQ20150602).

³ See Reuters, 21 November 2008, <u>https://www.reuters.com/article/target-pershing-idUSN2149409720081121</u>.

⁴ See The Wall Street Journal, 23 June 2015, <u>https://www.wsj.com/articles/darden-restaurants-to-spin-off-some-real-estate-assets-1435058666</u> and New York Post, 29 October 2008, <u>https://nypost.com/2008/10/29/ackmans-real-estate-target/</u>.

⁵ In January 2022, the retailer Kohl's received a \$9 billion offer to go private backed by a consortium of activist investors. The offer came with a request that Kohl's real estate should enter a SLB transaction. See The New York Times, 24 January 2022, <u>https://www.nytimes.com/2022/01/24/business/unilever-peloton-kohls-activist-investors.html</u>.

⁶ On October 2021, TPG Capital revealed a new stake in Life Time of 43,069,730 shares. On September 12, 2022, Life Time closes on \$200 million in SLB transactions, bringing year-to-date total to \$375 million. See PR Newswire, 12 September 2022, <u>https://www.prnewswire.com/news-releases/life-time-closes-on-200-million-in-sale-leaseback-transactions-bringing-year-to-date-total-to-375-million-301621411.html.</u>

Critically, instead of investing in positive NPV projects, activists could ask firms to use the increase in liquidity from leasing to boost shareholder payouts. Activists would do so as a "second best" strategy after failed attempts to sell the firm and/or obtain board seats. In such context, the activist might seek an exit and her investment horizon likely differs from the long-term shareholders' one.

Our study of activism on leasing is based on the universe of U.S. firms covered by CRSP-Compustat between 1995 and 2018. The amount of leasing activities in the activist targeted firms is large. In our sample, the total amount of leases in the firms with activist investment is \$62.50 billion on average, which represents 5.5% of the average total amount of leases of \$1,134.27 billion (Figure 1). Following prior literature, we identify cases of activist investment using filings of Form 13D. We find that, when targeted by activist investors, firms substantially increase their leasing activity. The probability of increasing leasing is 4.3% higher in the presence of shareholder activism, which represents 13.1% of the average leasing increase.⁷ Consistent with the notion that the higher leasing in the presence of shareholder activists relates to real estate assets –for example, SLB transactions–, we observe more pronounced patterns when real estate prices are higher and among firms with a higher volume of property assets.

[INSERT FIGURE 1 HERE]

We also find that the increase in corporate leases in the presence of shareholder activism is accompanied by increases in shareholder payouts (i.e., dividends and share repurchases). Moreover, we observe that the increase in corporate leases in the presence of

⁷ Equivalently, a one-standard deviation increases in shareholder activism results in a 0.98% rise in the increase of leasing activity, which represents a 4.3% of the average leasing increase. One standard deviation in the measure of activist investment is 0.327 (Table 1) and the coefficient of *Activist_Investment* in Table 2 is 0.03. Therefore, the increase in *Leasing_Increase* is 0.03*0.327=0.98%, which represents a 4.3% (=0.98%/0.228) of the average *Leasing_Increase* of 0.228 (Table 1). Notice that 4.3% is 13.1% of the standard deviation in the measure of activist investment, 32.7%.

shareholder activism is accompanied by decreases in corporate investment. These results hold for both CAPEX and R&D investments.

To better understand the mechanism underlying the above-mentioned patterns, we explore the association of leasing activity with other activism strategies. We find that increases in leasing activity are substantially less frequent in activism cases where the firm ends up being acquired and in cases in which there is a proxy fight. These results are consistent with the notion that leasing is a "second best" strategy followed by activists when they are not successful in implementing their first best strategy (i.e., selling the firm or gaining control of the board).

The need to understand the link between shareholder activism and corporate leases is highlighted by the pervasiveness of shareholder activism in the economy –in our sample, we observe a 13D filing announcing significant activist investment for 12.2% of the firm-year observations–. Moreover, corporate leases and their effects are large –corporate leasing induces more than 50% of capital reallocation among U.S. publicly traded firms (Li and Xi 2022).⁸ Consistently, we observe a non-trivial increase in leasing activity in 22.7% of our sample firm-year observations.

Our paper adds to the growing literature on shareholder activism. While investor activism is on the rise, there is still much to learn about the economic consequences of shareholder influence on managerial decisions. The reviews from the literature on early forms of institutional investor activism suggest that the effect of such activism on shareholder value was not first-order (Gillan and Starks 2007; Karpoff 2001). However, the literature focused on more recent forms of activism documents positive abnormal returns around announcements of activist investment, both in the U.S. and internationally (Brav et al. 2008;

⁸ Capital reallocation represents 28% of total investment by publicly traded US firms (Eisfeldt and Shi 2018).

Klein and Zur 2011; Becht et al. 2017). Consistent with these return patterns, several papers provide evidence that hedge fund activism has important disciplining effects.⁹

However, the literature has also shown that a large part of the returns following hedge fund activists' investments are concentrated in acquisitions (Greenwood and Schor 2009), and that filings by other financial firms, insiders, and blockholders are also followed by a similar return pattern. More recently, deHaan et al. (2019) argue that positive long-term returns showed in prior studies are driven by the smallest 20% of the sample firms while the larger 80% of firms experience insignificant negative long-term returns. Other papers provide evidence consistent with the notion that, rather than by wealth creation, the stock returns around hedge fund activism could be driven by a wealth transfer from other stakeholders (i.e., debtholders, taxpayers, competitors, clients, and suppliers).¹⁰

Perhaps because they are empirically elusive, the long-term consequences of hedge fund activism are also hotly debated in the literature. Using a horizon of five years after the activist intervention, Bebchuk et al. (2015) provide evidence that firms under the influence of hedge funds exhibit better performance in the long-term. However, Cremers et al. (2016) contest this evidence arguing that the results disappear when comparing the target firms with a sample of matched firms.

⁹ For example, Fidrmuc and Kanoria (2017) document that CEO pay declines in firms under the influence of hedge funds, and Brav et al. (2015) observe that labor productivity improves in those firms. Gantchev et al. (2018) document that industry peers under threat make changes that improve performance. Lim (2016) provides evidence that hedge funds can create value in distressed firms through better contracting. Other papers document a positive stock price reaction to settlements (Bebchuk et al. 2020) and appointment of directors proposed by hedge funds (Kang et al. 2022), a negative reaction to resistance to proxy fights (Boyson and Pichler, 2018), less "empire building" (Gantchev et al. 2020), and less inefficiency in internal capital markets of multi-division firms (Kim 2022).

¹⁰ Regarding debtholders, Klein and Zur (2011) document that activism announcements are followed by negative bond returns. Regarding employees, Agrawal and Lim (2021) show that employee pension plans of target firms experience greater underfunding after hedge fund activism. Regarding tax payers, Cheng et al. (2012) provide evidence that target firms exhibit an increase in tax avoidance. Regarding wealth transfer from competitors, clients and suppliers, Aslan and Kumar (2016) document substantial product market effects of hedge fund activism.

Considering this mixed evidence, an alternative way to understand the economic consequences of shareholder activism is to focus on specific actions taken by the activists to influence firm behavior. In this vein, recent examples explore the influence of activists on mergers and acquisitions (Boyson et al. 2017), settlements (Bebchuk et al. 2020), tax optimization (Cheng et al. 2015), and financial reporting choices (Cheng et al. 2017). Our paper contributes to this literature by exploring one of such actions, namely inducing the company to engage in leasing activity. Understanding activists' influence on leasing activity is particularly interesting considering that, to the extent that leasing provides a liquidity advantage, this setting allows us to explore how firms manage a potential trade-off between payout and investment policy in the presence of an activist investor.

Our paper also contributes to the finance and accounting literature studying corporate leasing. This literature has explored theoretically and empirically the economic rationale of leasing (Eisfeldt and Rampini 2009; Lin et al. 2013; Myers et al. 1976), and the accounting for leasing (e.g., Cornaggia et al. 2013; Zechman 2010). We contribute to this literature by uncovering a so-far overlooked determinant of corporate leasing, namely shareholder activism. In contrast with prior literature showing that leasing has beneficial effects on shareholder wealth, our results suggest that leasing can be instrumental in making short-term payments to shareholders at the expense of lower investment.

The paper proceeds as follows. Section 2 provides relevant background and develops our hypotheses. Section 3 describes the data sources and sample construction. Section 4 exhibits analysis of the association between shareholder activism and leases. Section 5 shows analysis of financial policy effects following activist-induced leasing activity. Section 6 presents a battery of tests aimed at providing further evidence on the economic mechanism driving the afore-mentioned results. Section 7 concludes.

2. Background and Hypotheses

The theoretical literature in finance provides several economic explanations for why firms engage in leasing activity. In a seminal paper, Myers et al. (1976) show that, in a frictionless world (e.g., a world with common tax rates and absence of market imperfections), the choice between debt and leases becomes irrelevant. Based on this theoretical framework *a la* Modigliani and Miller (1958), the literature has identified several economic determinants of leasing activity. These economic explanations relate to corporate taxation, financing frictions, and growth options.

Corporate taxation can affect leasing activity. While irrelevant in a world with common tax rates, leasing can be advantageous to both parties of the transaction depending on the tax rates of the lessor and the lessee (Schallheim et al. 2013). The tax code offers several deductions related to leasing. The lessee can obtain capital allowances (i.e., deduct a percentage of the costs associated with a piece of equipment from the taxable profits on an annual basis). The lessor can cover interest costs, client upgrades, reduce taxes on defaulting clients, and deduct maintenance costs. Depending on the marginal tax rate of the lessee and the lessor, these deductions can generate a surplus that is shared by both parties of the transaction. Graham et al. (1998) empirically find that marginal tax rates are inversely proportional to leasing.

Other economic explanations for leasing focus on *financing frictions*. Noticeably, leasing can be valuable for financially constrained firms as a source of additional external funds. As demonstrated in Eisfeldt and Rampini (2009), leasing increases debt capacity because repossession of a leased asset is easier than foreclosure on the collateral of a secured loan. This ability to repossess allows a lessor to implicitly extend more credit than a lender whose claim is secured by the same asset. Sharpe and Nguyen (1995) also argue that leasing has the potential to reduce the costs of financial distress because leasing ties the claim of the

holder directly to an asset and thus limits legal involvement in case of default. Lin et al. (2013) suggest that constrained firms tend to choose leasing over debt financing, and Lim et al. (2017) find that borrowing costs and credit ratings are less sensitive to off-balance sheet lease financing than on-balance debt financing. Schallheim et al. (2013) and Ambrose et al. (2019) examine the trade-off between leasing and using debt and provide insights into the conditions that lead to the substitutability versus complementarity views of leases and debt. These conditions rely on counterparty risk and, specifically, on the capital structure of the landlord and tenants. The authors find that tenants are compensated (penalized) in the form of lower (higher) lease rates for increasingly (decreasingly) risky financing decisions made by the landlord.

The financial advantages of leasing are not restricted to firms with financial difficulties. In certain circumstances, leasing can result in lower contracting costs than secured debt and equity. For example, since leasing is senior to debt when firms are subject to asymmetric information costs, leasing can be a lower-cost form of financing compared to both debt and equity (Wells and Whitby 2012). This is especially relevant for firms subject to capital constraints or with high external financing costs.

Regarding liquidity, leasing avoids using internal funds to acquire an asset and allows the firm to use the cash for a project whose profitability exceeds the return from the fixed asset subject to leasing. The liquidity advantage of leasing is especially pronounced in the case of sale-and-leaseback transactions (i.e., selling property and subsequently leasing it back from the new owner), as these transactions result in a substantial cash inflow for the firm from the sale of the asset.

Finally, beyond financial and tax considerations, firms with more *growth options* in their investment opportunity sets should have a lower proportion of fixed claims –including

leases– in their capital structure. Consistent with this idea, Graham et al. (1998) document that firms with more growth opportunities exhibit lower levels of leasing activity.

Overall, this prior literature suggests that it is plausible that shareholder activists perceive leasing as an opportunity to increase firm value. For example, activists could encourage firms to conduct sale-and-leaseback transactions as a way to unlock value from real estate assets. Similarly, activists could push for leasing a new asset –as opposed to purchasing it– because they perceive that cash holdings –or debt capacity– could be used for other, more profitable purposes. This view assumes that there is an underlying agency friction in the targeted firm, most likely in the form of a suboptimal level of effort, that is, managers overlook the opportunity to increase value through leasing. Accordingly, activists' push for leasing should be beneficial for shareholder value.

However, activist shareholders could also induce firms to engage in corporate leases for reasons that are less likely to generate long-term value. For instance, instead of pushing for investing in positive NPV projects, activists could push firms to use the increase in liquidity from leasing to increase shareholder payouts. The activist's push for leasing could be explicit (such in the previously mentioned cases of Macy's and Kohl's), or implicit, as the activist could indirectly induce the firm to engage in leasing through the request for higher payouts, which might require additional liquidity.

The possibility that higher shareholder payouts affect investment is supported by prior literature. In a perfect capital market, investments are independent of dividends (Miller and Modigliani 1961; Modigliani and Miller 1958). Under this "separation principle" (Fama and Miller 1972) dividend policy should not affect investment decisions (Fama 1974). In contrast, in an imperfect capital market, investment decisions can be affected by dividend policy. Paying dividends may lead firms to forego good investments because firms are reluctant to issue risky securities to finance those investments when their operating cash flows are constrained and when they have used up their ability to issue low-risk debt (Myers and Majluf 1984). The potential trade-off between shareholder payouts and investment is also supported by prior research showing that dividends are an important signal for the market (Denis et al. 1994; Yoon et al. 1995) and that managers would rather cut investments than dividends (Brav et al. 2005).

The previous argumentation raises the question of why activist investors push for leasing -as a way to increase short-term payouts- if doing so could compromise future shareholder value. One possible answer is that activists follow this strategy as a "second best" (or even as a "last resort") when other activist strategies have failed -notably selling the firm and/or obtaining board seats. In the moment that, after unsuccessful efforts to attain certain objectives, activists seek an exit, their investment horizon differs from that of long-term shareholders.

In any case, whether shareholder activists play a role in firms' leasing decisions is ultimately an intriguing empirical question. Similarly, it is also unclear ex-ante whether -and how- the induced leasing activity relates to other corporate policies, notably shareholders payouts and investment.

3. Data and Sample

Our sample includes all firm-year observations in the CRSP-Compustat universe from 1995 to 2018 with non-missing data in both databases. Requiring non-missing accounting and stock price data results in a sample of 138,692 firm-year observations.

To measure shareholder activism, we follow the approach of prior studies (Klein and Zur 2009; Brav et al. 2015; Gantchev et al. 2020; Wong 2020) and download from SEC's EDGAR all the Schedule 13D filings filed with the SEC from 1995 to 2018. The SEC requires investors to file a Schedule 13D within 10 days after acquiring more than 5% of any

publicly traded equity security class with the intent to discipline or control the firm's management. From these filings we collect the filing date, the name of the target firm, and the identity of the filer. This procedure generates a comprehensive sample of activism targets, containing 42,607 observations of 15,533 firms over the years 1995-2018. Based on this data, for each firm-year observation in the initial sample we construct *Activist_Investment*, an indicator variable that equals one if a 13D Form is filed in that year announcing a significant investment in the company, and zero otherwise. As shown in Table 1, 16,912 firm-year observations (12.2%) are coded as *Activist_Investment*=1.

We measure significant increases in leasing using accounting data from Compustat. Leases are usually classified as capital leases and operating leases, depending on whether the ownership risk is transferred or not (see the Statement of Financial Accounting Standards No.13, FAS 13, Accounting for Leases). Capital leases impose substantial risk on the lessee and are effectively treated like assets financed by conventional debt, with required recognition of an associated asset and liability. The capitalized asset is included as part of Property, Plant, and Equipment (PP&E) whereas the capitalized lease obligations are accounted for as liabilities. Firms depreciate this type of leased asset over its useful life while periodic interest accrual decreases the liability over time. If the lease contract does not meet the classification criteria of a capital lease identified in accounting standards, it qualifies as an operating lease and is not recognized on the balance sheet.¹¹ For operating leases, the lessee bears little or no risk of the obsolete asset, and only lease payments are recognized in financial statements as operating expenses (Cornaggia et al. 2013; Spencer and Webb 2015).

¹¹ In 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-02, Leases (Topic 842). The Core principle is that a lessee should recognize the assets and liabilities that arise from leases. All leases create an asset and a liability for the lessee in accordance with FASB Concepts Statement No.6, Elements of Financial Statements. The amendments in this Update are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years.

For capital leases, we collect data on capital lease obligations, estimated as the present value of all contracted lease payments meeting the definition of a capital lease. We assume the capital lease asset is the same as the capital lease obligation (Adame et al. 2020; Bratten et al. 2013). For operating leases, we follow the approach of prior studies (Bratten et al. 2013; Eisfeldt and Rampini 2009) and use the discounted value of disclosed minimum rental payments for each of the five years t + 1 through +6, as disclosed at year t, with 10 percent as discount rate for the full sample (Imhoff et al. 1991). The future rental expenses up to five years only include non-cancellable leases and have been shown to be a lower bound on actual rental expenses (from Compustat footnote data). We define *Leasing_Increase* as one (and zero otherwise) if in that year there is an increase of 50% or more in any of the following amounts: present value of operating leasing payments, present value of capital leasing payments, and value of leases at cost related to property, plant, and equipment. As shown in Table 1, 31,538 firm-year year observations (22.7%) are coded as *Leasing_Increase* =1.

[INSERT TABLE 1 HERE]

4. Shareholder Activism and Corporate Leasing

4.1 Baseline model

Our baseline specification to examine whether shareholder activism is associated with a substantial increase in leasing is based on the following OLS model:

 $Leasing_Increase_{it} = \beta_0 + \beta_1 Activist_Investment_{it} + \beta_x X_{it} + \mu_t + \gamma_i + \epsilon_{it}.$ (1) Let μ_t and γ_i denote time and firm fixed effects, respectively, and ε_{it} is the error term. Vector X_{it} includes measures of the economic determinants of corporate leasing.

As previously explained (see Section 2), leasing allows financially constrained firms to distribute cash outflows more evenly (Krishnan and Moyer 1994; Sharpe and Nguyen 1995; Graham et al. 1998; Eisfeldt and Rampini 2009; Beatty et al. 2010). Section 2 also explains

that the liquidity benefits of leasing are especially pronounced in sale and leaseback transactions, as the firm receives a substantial cash inflow at the sale of the asset.

To capture the extent to which the firm is subject to financial and liquidity constraints, the vector X_{it} includes the following variables.¹² Cash_Flows is defined as net cash flow from operating activities divided by total assets. Cash_Holdings is the sum of cash and short-term investments divided by total assets. Altman_Score is Altman (1968)'s measure of the likelihood of bankruptcy, calculated as follows: 3.3*(EBIT/Total Assets) + 0.99*(NetSales/Total Assets) + 0.6*(Market Value of Equity/Total Liabilities) + 1.2*(WorkingCapital/Total Assets) + <math>1.4*(Retained Earnings/Total Assets). Leverage is computed as total debt scaled by total assets. ROA is computed as net income scaled by total assets. Size is the natural logarithm of the firm's equity market value measured at the start of the year.

Prior work also explains that firms with more investment opportunities could resort to leasing (in particular, to sale-and-leasebacks), to finance growth and new projects. As such, *X_{it}* also includes measures correlated with firms' prospects and growth: *BM*, *Return*, *Growth*. *BM* is the ratio of book value of equity to market value of equity measured at the start of the year. *Return* is the stock return compounded over the 365 days from the start of the fiscal year (using daily data), expressed in %. *Growth* is fractional increase in sales volume.

Finally, as previously explained, firms could also benefit from the effect of leasing on tax payments. As such, we include *Tax_Rate*, defined as Blouin et al. (2010)'s measure of the firm's marginal tax rate after interest deductions. Table 1 presents descriptive statistics for the variables described above.

Table 2 presents the results of estimating equation (1). We find a positive relationship between shareholder activism and significant increases in corporate leases. In univariate tests, Column (1) shows that *Leasing_Increase* and *Activist_Investment* are strongly related. The

¹² Standard errors are clustered by industry in all regressions.

significant association remains when including controls for the economic determinants of leasing, as well as year, industry, and firm fixed effects, which control for cross-sectional heterogeneity and common annual variation. The effect is economically meaningful: the magnitude of the coefficient on *Activist_Investment* ranges from 3% to 5% when we include controls in the regressions (see Table 2), whereas the unconditional probability of a substantial increase in leasing (i.e., *Leasing_Increase* = 1) is 23% (see Table 1).

[INSERT TABLE 2 HERE]

4.2 Opportunities in the real estate market

To better understand the sources of the patterns documented in the previous section, we also explore whether the association between leasing increases and activist investment relates is shaped by the real estate market. As previously explained, shareholder activists often encourage firms to sell real estate properties and lease them back. To explore the validity of this potential channel of the effect of shareholder activism on leasing activity, we next test whether the association between *Leasing_Increase* and *Activist_Investment* is more pronounced when real estate prices are higher, that is, when there are more opportunities in the real estate market.

We measure real estate prices by the house price index (HPI), which exhibits both time-series and cross-sectional variation. We then estimate the following variant of equation (1):

$$Leasing_Increase_{it} = \beta_0 + \beta_1 Activist_Investment_{it} * High_Real_Estate + \beta_2 Activist_Investment + \beta_3 High_Real_Estate + \beta_x X_{it} + \mu_t + \delta_i + \epsilon_{it},$$
(2)

where μ_t and δ_i denote time and industry fixed effects, respectively, and ε_{it} is the error term. The vector of controls, X_{it} , is the same as equation (1). We define *High_Real_Estate* as an indicator that equals one if the change of house price index (HPI) in that year in the state where the company is headquartered is higher than the median value during the sample period.

We obtain data on the HPI from the Federal Housing Finance Agency (FHFA). The HPI is a measure of the movement of single-family house prices. To the extent that it measures average price changes in repeat sales or refinancing on the same properties, the index is often used as an indicator of house price trends at various geographic levels. For each firm-year observation, we collect data on the HPI in that year in the state where the firm's corporate headquarters are located.

To corroborate that our results indeed relate to opportunities in the real estate market, we repeat the analysis separately for firms with a higher/lower volume of real estate assets. We re-estimate equation (2) for firms in the highest and lowest quintile of property assets. For each firm, we measure the volume of property assets by the amount of property, plant, and equipment (PP&E).¹³

Table 3 presents the results of these tests. The main effect of *High_Real_Estate* is positive and significant, suggesting that leasing activity is more frequent when real estate prices are higher, either because firms are less likely to acquire new property (it is more expensive), or because firms are more likely to sell property and lease it back. As shown in Columns (1) and (2), the coefficient on the interaction between *High_Real_Estate* and *Activist_Investment* is positive and significant. This result is consistent with the notion that activist shareholders are more likely to induce an increase in leases when there are more opportunities in the real estate markets.

[INSERT TABLE 3 HERE]

¹³ Unfortunately, we do not have access to data on the breakdown of PP&E assets for the whole sample. However, the largest part of the volume of assets included in PP&E corresponds to real estate assets. Indeed, Chaney et al. (2012) document that, for the median land holding firm in COMPUSTAT, the market value of real estate represents 98% of the book value of Property, Plant and Equipment.

In Columns (3) and (4) of Table 3, we partition the sample firms based on their amount of PP&E. The interaction between *Activist_Investment* and *High_Real_Estate* is positive and significant in the highest quintile of PP&E and insignificant in the lowest quintile of PP&E. In robustness tests, we repeat the analysis using quartiles of the sample distribution of firms based on PP&E. We obtain similar results (Table OA.1). These results corroborate that the documented patterns indeed relate to property assets.

Overall, the evidence in Table 3 is consistent with the idea that the increase in leasing activity associated with activist investment documented in Table 2 is channeled through the real estate market. To the extent that the potential benefit of sale-and-leaseback (SLB) transactions involving real estate property increases with real estate prices, Table 3 suggests that it is plausible that part of the effect documented in Table 2 relates to SLB or similar real estate transactions.

4.3 Propensity score matching

Firms targeted by activists may differ from other firms across some characteristics that could be related to preferences for leasing and/or to the ability to enter leasing contracts (Boyson et al. 2017; Gantchev et al. 2020; Brav et al. 2008; deHaan et al. 2019). To mitigate this concern, we repeat the analysis in Table 2 matching firms with activist investment to firms with similar characteristics. Following prior literature (e.g., Cremers et al., 2016; deHaan et al. 2019), we use propensity-score matching. For each firm in the "treatment" group (i.e., firms with *Activist_Investment* = 1) we select the firm in the "control" group (i.e., firms with *Activist_Investment* = 0) with the highest propensity to exhibit activist investment.

Our matching procedure imposes that pairs of treatment and control observations correspond to the same year and industry code (2-digit Standard Industrial Classification). Propensity scores are computed by regressing *Activist_Investment* on *Size*, *Cash_Holdings*, *Growth*, and *Altman_Score*. This procedure results in 32,654 firm-year observations, 16,327

observations corresponding to the treatment group (i.e., firms targeted by activist investors) and 16,327 observations corresponding to the control group (i.e., firms not targeted by activist investors).

Table 4, Panel A, reports the results of the logit model used to compute propensity scores. The first set of columns shows that all the hypothesized determinants of activism are statistically significant. The second set of columns shows that there is covariate balance; the treatment and control groups are indistinguishable along key characteristics, including firm size, cash holdings, and the Altman score.

Table 4, Panel B, presents the results of re-estimating equation (1) using the previously control group obtained from propensity-score matching. As shown in Table 4, Panel B, we continue to observe a strong statistical association between *Activist_Investment* and *Leasing_Increase* in this alternative analysis. Columns (2), (3), and (4) reveal that the association survives the same demanding fixed-effect structures as in Table 2 (i.e., year, industry, and firm fixed effects). While somewhat lower than that in Table 2, the magnitude of the coefficient on *Activist_Investment* is of the same order as in the previous test (it ranges from 1.6% to 4.1%).

[INSERT TABLE 4 HERE]

4.4 Switching from Schedule 13G to Schedule 13D

One concern about our previous results is that the test on the association between shareholder activism and corporate leasing could be confounded by the endogenous determinants of the decision to invest in firms increasing leasing activity. That is, the patterns in Table 2 could be driven by omitted determinants of such decision rather than by activist investors' influence on corporate behavior.

To address this concern, prior literature exploits changes in the legal filing status of an ownership position from Schedule 13G to Schedule 13D. As explained by Brav et al. (2018)

and Boyson et al. (2017), this switch is required by law if a formerly passive investor decides that it may now want to take actions to influence target policies. According to Brav et al. (2018), such a switch in the investor stance usually does not come with significant ownership changes. Thus, focusing on cases in which investors switch from Schedule 13G to Schedule 13D allows us to control for the determinants of investors' decision to invest in the firm.

Following this prior literature, we next examine whether switches from Schedule 13G to Schedule 13D are associated with a higher probability of increasing leasing activity. To identify firms in which a major investor switches from a passive to an active strategy, we download Schedule 13G filings and 13D filings from SEC's EDGAR. We keep 13D filing observations that match to 13G filing observations by firm, investor, and filing date. Observations with switching from passive to active investment are identified based on whether the Form 13D is filed one year after the matched Form 13G.

Table 5, Panel A, presents summary statistics for the subsample of firms with investors switching from a passive to an active strategy. The subsample includes 65,952 firm-year observations with 13G filings and 1,716 switches of the filing status from Schedule 13G to 13D over 1995-2018.

Based on these data, we re-estimate equation (1) replacing *Activist_Investment* with $13G_to_13D_Switch$, an indicator variable if the firms in which an investor previously filed a 13G Form files a 13D Form in that year, and zero otherwise (i.e., if the investor previously filed a 13G Form and does *not* file a 13D in that year). As before, the specification includes investor, industry and year fixed effects. As shown in Table 5, Panel B, the coefficient on $13G_to_13D_Switch$ is positive and significant, suggesting that firms in which a major investor switches from a passive to an active strategy are more likely to engage in more leasing activity.

To ensure that the results in Table 5, Panel B, are not driven by differences in the characteristics of the groups of observations with and without 13G-to-13G switches, we repeat the analysis using propensity score matching. We match firms with 13G-to-13D switches (the "treatment" group) to the firms without 13G-to-13D switches (but with prior 13G filings) with the closest propensity scores (the "control" group). The propensity scores are estimated using *Size*, *Cash_Holdings*, *Growth*, and *Altman_Score*. For each treatment observation, we impose that the matched control observations correspond to the same year and industry code (2-digit Standard Industrial Classification). The results of this additional analysis are presented in the Online Appendix. As shown in Table OA.2, our inferences from this alternative analysis are the same as in Table 5, Panel B.

[INSERT TABLE 5 HERE]

5. Corporate Policies

Our previous tests suggest that firms targeted by shareholder activists are more likely to engage in leasing activity. In this section we take a further step to understand the potential economic consequences of the increase in leasing induced by activist investment; we analyze whether such an increase in leasing is associated with changes in corporate financial policies. First, we check the empirical validity of the notion that firms use the liquidity advantage of leasing (for example, the initial cash increase generated by sale-and-leaseback transactions) to pay back shareholders. Second, we explore the possibility that such an increase in payouts is associated with lower investment levels. This second analysis is particularly important because giving up current investment opportunities could compromise the firms' future performance.

5.1 Shareholder payouts

To analyze changes in payout policies associated with shareholder activism and increases in leasing activity, we estimate the following model:

 $Increase in Payouts_{it} = \beta_0 + \beta_1 Leasing Increase * Activist_Investment_{it} + \beta_2 Activist Investment + \beta_3 Leasing Increase + \beta_x X_{it} + \mu_t + \delta_i + \epsilon_{it}, \qquad (3)$

Increase in Payouts is one of the following variables. Increase in dividend equals one if the dividend (in \$) paid in that year is higher than in the prior year, and zero otherwise. Increase in dividend by 10% (25%) or more equals one if the dividend (in \$) paid in that year is more than 10% (25%) higher with respect to that in the prior year, and zero otherwise. Leasing_Increase, Activist_Investment, and X_{it} are as defined as in equation (1) (see also Appendix A for variable definitions).

Table 6, Panel A, presents the results of this test. The coefficient estimates suggest that, in the presence of activist investors, increases in leases are associated with higher dividends; the coefficient on the interaction between *Leasing_Increase* and *Activist_Investment* is positive and statistically significant for all three dependent variables identifying cases where the firm exhibits higher dividend payments.

[INSERT TABLE 6 HERE]

To check the robustness of these results we repeat the analysis in Panel A using three additional dependent variables. *Increase in dividend per share* equals one if the dividend per share (i.e., the dividend paid in that year scaled by the number of shares outstanding) is higher than in the prior year, and zero otherwise. *Increase in dividend yield* equals one if the dividend yield (i.e., the dividend paid in that year scaled by firm market value) is higher than in the prior year, and zero otherwise. *Increase in shares repurchased* equals one if the value of repurchased shares is higher than in the prior year, and zero otherwise.

As shown in Table 6, Panel B, the coefficient on the interaction between *Leasing_Increase* and *Activist_Investment* is positive and statistically significant when we use these alternative dependent variables. This evidence corroborates that the dividend increases are substantial; the results hold regardless of whether dividends are measured in absolute terms or in relative terms (the scaling factor does not seem to matter).

Finding results for *Increase in shares repurchased* addresses one potential difficulty in interpreting the results in Panel A; firms could be replacing share repurchases with dividend payments. In other words, firms could increase dividends but decrease buybacks, resulting in insignificant changes in the total amount of payouts. The results in column (3) of Table 6, Panel B, are at odds with this idea; the positive coefficient on the interaction between *Leasing_Increase* and *Activist_Investment* suggests that, if anything, firms with higher leases in the presence of activist investment exhibit a relative increase, rather than a relative decrease, in share repurchases.

Overall, the evidence in Table 6 is consistent with the notion that leasing activity in the presence of activist investment is associated with higher shareholder payouts. The magnitude of the coefficient on the interaction between *Leasing_Increase* and *Activist_Investment* is of the same order across specifications and panels, and ranges from 0.011 to 0.040. These figures suggest an increase of around 1% - 4% in the probability of observing significant increases in shareholder payouts. This order of magnitude is not negligible, especially considering that the boost in market value around the activism announcement mechanically reduces the dividend yield. A substantial increase in payouts could result in a net benefit for an activist exiting the firm early enough.¹⁴

¹⁴ The literature documents that hedge fund activists usually leave the firm in less than one year (around 9 months according to Brav et al. (2008)), and a substantial number of them leave within a few months after the 13D filing.

In parallel to the previous section, we re-estimate equation (3) using pairs of control observations obtained from propensity score matching (the matching procedure is conducted as described in Section 4). As in Table 6, Table 7, Panel A, reports results using dividend increases measured in absolute terms. In turn, Table 7, Panel B reports results using dividend per share, dividend yields, and shares repurchased. The coefficients reported in Table 7 corroborate our inferences from Table 6; we also observe significant increases in shareholder payouts when firm increase leasing significantly in the presence of activist investors. The magnitude of the coefficient on the interaction between *Leasing_Increase* and *Activist_Investment* is similar to that in Table 6.

[INSERT TABLE 7 HERE]

5.2 Corporate investment

We next analyze whether increases in leasing in the presence of activist investment are accompanied by decreases in investment. We estimate the following model:

Decrease in Investment_{it} = $\beta_0 + \beta_1 Leasing Increase * Activist_Investment_{it} + \beta_2 Activist Investment + \beta_3 Leasing Increase + <math>\beta_x X_{it} + \mu_t + \delta_i + \epsilon_{it}$, (4)

Decrease in Investment is one of the following variables. A decrease in CAPEX equals one if CAPEX (i.e., capital expenditures scaled by total assets) in that year is lower than in the prior year, and zero otherwise. Decrease in CAPEX by 10% (25%) or more equals one if CAPEX (in \$) paid in that year is less than 10% (25%) higher with respect to that in the prior year, and zero otherwise.

Table 8, Panel A, presents the results of this test. The coefficient estimates suggest that, in the presence of activist investors, increases in leases are associated with decreases in investment; the coefficient on the interaction between *Leasing_Increase* and

Activist_Investment is positive and statistically significant for all three dependent variables identifying cases where the firm exhibits a decrease in CAPEX.

[INSERT TABLE 8 HERE]

To check the robustness of these results we repeat the analysis in Panel A using three additional dependent variables. Δ _CAPEX is the change in CAPEX with respect to the prior year. CAPEX is the level of CAPEX in that year. R&D is defined as R&D (research and development) expenses scaled by total assets.

The coefficient on the interaction between *Leasing_Increase* and *Activist_Investment* is negative and statistically significant when we use these alternative dependent variables (see Table 8, Panel B). This evidence corroborates that the dividend increases are substantial; the results hold regardless of whether we use indicator variables for investment decreases, changes in investment, or level of investment.¹⁵

Finding results for *R&D* addresses one potential difficulty in interpreting the results in Panel A; firms could be replacing CAPEX with R&D investments, resulting in insignificant changes in the total amount of investment. The results in column (3) of Table 8, Panel B, are not consistent with this idea; the negative coefficient on the interaction between *Leasing_Increase* and *Activist_Investment* suggests that, if anything, firms with activist investments and increases in leases exhibit a relative decrease, rather than a relative increase, in R&D.

Overall, the evidence in Table 8 is consistent with the notion that, in the presence of activist investment, leasing activity is associated with lower investment. In Table 8, Panel A, the magnitude of the coefficient on the interaction between *Leasing_Increase* and *Activist_Investment* ranges from 0.022 to 0.024. These figures suggest an increase of around

¹⁵ To the extent that we include firm fixed effects, the specification in levels captures time-series variation in investment amounts.

2% in the probability of observing significant increases in shareholder payouts. This is a meaningful number considering that 27.9% of the sample observations experience a decrease in CAPEX of more than 25%. In Table 8, Panel B, the correspondent coefficients are close to -0.003 for CAPEX and -0.003 for R&D, suggesting a decrease in CAPEX (R&D) close to 0.3% (0.3%) of total assets. The mean (median) value of CAPEX in our sample is 0.047 (0.026). The mean (median) value of R&D in our sample is 0.055 (0.000).

Equivalently to the previous section, we re-estimate equation (3) using pairs of control observations obtained from propensity score matching.¹⁶ Table 9, Panel A, reports results using indicator variables for cases with decreases in CAPEX, in an equivalent format than the results exhibited in Table 8. In turn, Table 9, Panel B reports results using changes in CAPEX, levels of CAPEX, and R&D. The coefficients reported in Table 9 corroborate our inferences from Table 8; we also observe significant decreases in corporate investment when firms increase leasing significantly in the presence of activist investors. The magnitude of the coefficient on the interaction between *Leasing_Increase* and *Activist_Investment* is similar to that in Table 8.

[INSERT TABLE 9 HERE]

6. Discussion and Additional Analyses

Taken together, the evidence in Tables 6-9 is consistent with the fact that, in the presence of activists, higher leasing activity results in an increase in liquidity that is used to pay back shareholders –conceivably at the cost of reducing investment. To the extent that missing out investment opportunities potentially leads to sacrificing long-term value, our results could reflect a short-term orientation of certain activist shareholders.

¹⁶ The matching procedure is conduced as described in Section 4.

At first sight, our evidence might seem at odds with prior literature documenting that activist investment has beneficial effects on shareholder wealth (e.g., Brav et al., 2008). One possible way to reconcile our evidence with the results from prior literature is that activist investors push for leasing –and perhaps for other ways to boost liquidity with the ultimate objective of increasing shareholder payouts– when other activist strategies have failed. In this regard, prior literature documents that the positive stock returns around the filing of Schedule 13D are related to M&As (Greenwood and Shor, 2009). Prior literature also suggests that proxy fights could have beneficial effects on shareholder wealth (Boyson and Pichler 2019). However, prior literature could have overlooked the potential economic consequences of other activist strategies, especially those that are used as "second best" or as a "last resort".¹⁷

To explore the empirical validity of the above argumentation, we conduct three additional tests. First, we test whether higher leasing in the presence of shareholder activism is negatively associated with other activist strategies, notably pushing to sell the firm and efforts to obtain board representation. Second, we test whether the increases in leases in the presence of activism are associated with the economic determinants of leasing. Finding that these leasing decisions do not follow an economic logic would be consistent with the idea that activists push for leasing as an ex-post "second best" strategy (i.e., pursued after other strategies fail). Third, we analyze the association between leasing in the presence of activism and corporate governance characteristics. Finding that such characteristics are not associated with higher leasing would not be easy to reconcile with the idea that activist shareholder push for leasing because managers miss out the opportunity to increase shareholder value through leasing (which would be suggestive of more acute agency problems). Rather, the lack of

¹⁷ We hasten to point out that, while worth documenting, the potential consequences of these alternative strategies could not be large enough to affect the conclusions of prior research on the overall effect of shareholder activism.

association would be consistent with the notion that pushing for leasing is an "second best" ex-post strategy.

6.1 Alternative activism strategies

To test whether leasing increases in the presence of shareholder activism is negatively associated with other activist strategies, we collect data on corporate acquisitions and proxy fights from Thomson Reuters Securities Data Company (SDC) Platinum. Based on this data, we estimate the following model for the subsample of observations with activist investment (i.e., *Activist_Investment* = 1):

Leasing Increase_{it} =
$$\beta_0 + \beta_1 Acquired_{it} + \beta_2 Proxy Fight_{it}$$

+ $\beta_x X_{it} + \mu_t + \delta_k + \epsilon_{it}$, (5)

The dependent variable, *Leasing_Increase*, is as previously defined. *Acquired* equals one if the activism target is acquired, and zero otherwise. *Proxy_Fight* equals one if the activist wages a proxy fight to obtain board seats on the target's board, and zero otherwise. X_{it} is a vector of control variables, including *Size*, *BM* (both as previously defined) as well as *Past_Return* (i.e., the stock return compounded over the past 12 months).

Table 10 presents the results of estimating equation (5). The coefficients on *Acquired* and *Proxy_Fight* are negative and significant. That is, the probability of observing a significant increase in leasing activity in the presence of shareholder activism is significantly lower when the target firm is acquired or when there is a proxy fight. This evidence is consistent with the notion that pushing for leasing –as an approach to increase shareholder payout– is a "second best" activist strategy, that is, activists take this strategy when they fail in their attempt to sell the company or to obtain representation on the board.

[INSERT TABLE 10 HERE]

6.2 Leasing, activism, and corporate governance

We next analyze the association between activist decisions and corporate governance characteristics. We collect data on antitakeover provisions and board characteristics from Risk Metrics. Based on this data, we estimate two econometric models.

First, we estimate the following model for the whole sample of observations:

$$Activist_Investment_{it} = \beta_0 + \beta_1 Governance Characteristics_{it} + \beta_x X_{it} + \mu_t + \delta_k + \epsilon_{it},$$
(6)

Second, we estimate the following model for the subsample of observations with activist investment (i.e., *Activist_Investment* = 1):

Leasing $Increase_{it} = \beta_0 + \beta_1 Governance Characteristics_{it}$

$$+\beta_{x}X_{it} + \mu_{t} + \delta_{k} + \epsilon_{it}, \tag{7}$$

The dependent variables of equations (6) and (7), *Activist_Invesment* and *Leasing_Increase*, are as previously defined. X_{it} includes previously defined financial characteristics that have been found by prior literature to be associated with shareholder activism and leasing activity: *Size*, *BM*, *Leverage*, *Return*, *Cash_Flows*, *Cash_Holdings*, and *Growth* (see previous tests and Appendix A for variable definitions). *Governance Characteristics* is one of the following vectors of variables:

(i) Antitakeover Provisions is a vector containing the following variables related to antitakeover provisions adopted by the firm. *Dual_Class* is an indicator that equals one if the firm has dual class common stock, and zero otherwise. *Golden_Parachute* is an indicator that equals one if the firm has a golden parachute policy, and zero otherwise. *Classified_Board* is an indicator that equals one if the board is classified (i.e., directors are elected in a staggered manner), zero otherwise. *Poison_Pill* is an indicator that equals one if the firm has adopted a poison pill, and zero otherwise. *Supermajority* is an indicator that equals one if the firm has a supermajority provision for takeovers (i.e., mergers and acquisitions require more than 60%

of shareholder approval), and zero otherwise. *Unequal_Voting* is an indicator that equals one if there are unequal voting rights across common shareholders, and zero otherwise.

(ii) *Board Characteristics* is a vector containing the following variables related to the characteristics of the firm's board of directors. *Board_Absentism* is the fraction of directors that attended less than 75% of the meetings. *Board_Independence* is the fraction of non-executive directors with respect to the total number of directors. *Busy_Directors* is the fraction of directors holding three or more directorships. *Old_Directors* is the fraction of directors that are 69 or older. *CEO_Duality* is an indicator that equals one if the CEO is chairman of the board, and zero otherwise. *Directors_Stake* is the average of the percentage of shares held by each board director.

The descriptive statistics of both sets of corporate governance variables are shown in the Online Appendix (Table OA.3). Including *Antitakeover Provisions* and *Board Characteristics* in the specification causes significant sample attrition, as Risk Metrics does not cover the entire CSRP-Compustat universe (Risk Metrics only covers the S&P 1500). Because the coverage of our data source is different for *Antitakeover Provisions* and *Board Characteristics*, we re-estimate equations (6) and (7) including one of the two vectors of corporate governance variables at a time.

Table 11, Panel A, presents the results of estimating equations (6) and (7) including only financial characteristics. Consistent with prior literature, Table 11, Panel A, documents a positive association between the probability of shareholder activism and certain financial characteristics: activists tend to target smaller firms, firms that are not performing well, and firms that hold significant cash. But perhaps more interestingly, Table 11, Panel A, also shows that conditional on having an activist investing in the firm, leasing follows a different logic from that of the decision to target the firm. Remarkably, Column (2) shows that the economic determinants of leasing are not statistically significant. This evidence is consistent with the notion that activists do not push for leasing based on economic determinants, but rather as an ex-post strategy (i.e., a "second best" strategy after other activist actions fail).

[INSERT TABLE 11 HERE]

Table 11, Panel B, presents the results of estimating equations (6) and (7) including the vectors *Antitakeover Provisions* and *Board Characteristics*. Table 11, Panel B, documents a positive association between the probability of being targeted by activist investment and certain corporate governance characteristics (classified board, dual class shares, director ownership, percentage of "old" directors, and board independence). In contrast, Table 11, Panel B, shows that corporate governance characteristics exhibit no significant association with the probability that the firm increases leasing activity conditional on experiencing shareholder activism (i.e., *Activist_investment* = 1). This lack of association is consistent with the notion that leasing increases are the outcome of a later stage in the activism game, when the uncertainty about the possibility of selling the firm is resolved and the activist is looking for alternative, short-term ways of obtaining a payout.

To ensure that sample attrition does not affect our interpretation of the analysis in Table 11, we repeat the analysis in Table 2 for the observations with non-missing corporate governance data. To check whether our inferences are affected by potential agency frictions in our sample companies, we also estimate equation (1) including the previously described corporate governance characteristics. Table 12 presents the results of this additional analysis. The coefficient on *Activist_Investment* remains positive and statistically significant across all specifications, suggesting that our main inference (i.e., corporate leasing is often induced by shareholder activism) is also holds in these restricted samples we use in Table 11. The coefficient on *Activist_Investment* also remains positive and statistically significant when we include in the model corporate governance characteristics, which indicates that our main result does not simply reflect the presence of agency problems in the firm.

[INSERT TABLE 12 HERE]

7. Conclusions

This paper studies the effect of shareholder activism on corporate leasing. Based on the universe of CRSP-Compustat firm-year observations between 1995 and 2018, we find a strong association between shareholder activism and increases in corporate leasing activity. Consistent with a substantial number of publicized cases where activists encouraged firms to sell property and lease it back, we observe that the documented association between leasing and activism is shaped by real estate prices and is more pronounced for firms with a higher amount of real estate assets.

We also study the economic consequences of leasing in the presence of activism. We observe a substantial increase in shareholder payouts accompanied by a remarkable decline in investment in years with activism and higher leasing. We also find that leasing activity is negatively correlated with acquisitions and proxy fights, suggesting that leasing could be a way for the management of the firm to obtain the liquidity necessary to increase short-term payouts for investors.

Overall, our evidence highlights that shareholder activism plays an important role in corporate leasing activity. Critically, the results also hint at a trade-off between short-term payouts and long-term investment opportunities. Our evidence contributes to the on-going debate on the role of activist investors in the economy and uncovers the so-far unexplored determinant of corporate leasing activity.

References

- Adame, K., J. L. Koski, K. Lem, and S. E. MacVay. 2020. Free Cash Flow Disclosure in Earnings Announcements. *Working Paper*.
- Agrawal, A., and Y. Lim. 2021. The Dark Side of Hedge Fund Activism: Evidence from Employee Pension Plans. *Journal of Financial and Quantitative Analysis* forthcoming.
- Altman, E. I. 1968. Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy. *The Journal of Finance* 23 (4):589-609.
- Ambrose, B. W., T. Emmerling, H. H. Huang, and Y. Yildirim. 2019. Capital Structure and the Substitutability versus Complementarity Nature of Leases and Debt. *Review of Finance* 23 (3):659-695.
- Aslan, H., and P. Kumar. 2016. The Product Market Effects of Hedge Fund Activism. *Journal of Financial Economics* 119 (1):226-248.
- Beatty, A., S. Liao, and J. Weber. 2010. Financial Reporting Quality, Private Information, Monitoring, and the Lease-versus-Buy Decision. *The Accounting Review* 85 (4):1215-1238.
- Bebchuk, L. A., A. Brav, and W. Jiang. 2015. The Long-Term Effects of Hedge Fund Activism. *Columbia Law Review* 115 (5):1085-1156.
- Bebchuk, L. A., A. Brav, W. Jiang, and T. Keusch. 2020. Dancing with Activists. *Journal of Financial Economics* 137 (1):1-41.
- Becht, M., J. Franks, J. Grant, and H. F. Wagner. 2017. Returns to Hedge Fund Activism: An International Study. *The Review of Financial Studies* 30 (9):2933-2971.
- Blouin, J., J. E. Core, and W. Guay. 2010. Have the Tax Benefits of Debt Been Overestimated? *Journal of Financial Economics* 98 (2):195-213.
- Boyson, N. M., N. Gantchev, and A. Shivdasani. 2017. Activism Mergers. *Journal of Financial Economics* 126 (1):54-73.
- Boyson, N. M., and P. Pichler. 2019. Hostile Resistance to Hedge Fund Activism. *The Review of Financial Studies* 32 (2):771-817.
- Bratten, B., P. Choudhary, and K. Schipper. 2013. Evidence that Market Participants Assess Recognized and Disclosed Items Similarly when Reliability is Not an Issue. *The Accounting Review* 88 (4):1179-1210.
- Brav, A., J. R. Graham, C. R. Harvey, and R. Michaely. 2005. Payout Policy in the 21st Century. *Journal of Financial Economics* 77 (3):483-527.
- Brav, A., W. Jiang, and H. Kim. 2015. The Real Effects of Hedge Fund Activism: Productivity, Asset Allocation, and Labor Outcomes. *The Review of Financial Studies* 28 (10):2723-2769.

- Brav, A., W. Jiang, S. Ma, and X. Tian. 2018. How Does Hedge Fund Activism Reshape Corporate Innovation? *Journal of Financial Economics* 130 (2):237-264.
- Brav, A., W. Jiang, F. Partnoy, and R. Thomas. 2008. Hedge Fund Activism, Corporate Governance, and Firm Performance. *The Journal of Finance* 63 (4):1729-1775.
- Chaney, T., D. Sraer, and D. Thesmar. 2012. The Collateral Channel: How Real Estate Shocks Affect Corporate Investment. *American Economic Review* 102 (6):2381-2409.
- Cheng, C. S. A., H. H. Huang, and Y. Li. 2015. Hedge Fund Intervention and Accounting Conservatism. *Contemporary Accounting Research* 32 (1):392-421.
- Cheng, C. S. A., H. H. Huang, Y. Li, and J. Stanfield. 2012. The Effect of Hedge Fund Activism on Corporate Tax Avoidance. *The Accounting Review* 87 (5):1493-1526.
- Cheng, C. S. A., K. M. Jo, J. Ng, and H. Wu. 2017. Financial Statement Comparability and Hedge Fund Activism. *Working Paper*.
- Coffee, J., and D. Palia. 2016. The Wolf at the Door: The Impact of Hedge Fund Activism on Corporate Governance. *The Journal of Corporation Law* 41 (3):545-607.
- Cornaggia, K. J., L. A. Franzen, and T. T. Simin. 2013. Bringing Leased Assets Onto the Balance Sheet. *Journal of Corporate Finance* 22:345-360.
- Cremers, K. J. M., E. Giambona, S. M. Sepe, and Y. Wang. 2016. Hedge Fund Activism and Long-Term Firm Value. *Working Paper*.
- deHaan, E., D. F. Larcker, and C. McClure. 2019. Long-Term Economic Consequences of Hedge Fund Activist Interventions. *Review of Accounting Studies* 24 (2):536-569.
- Denis, D. J., D. K. Denis, and A. Sarin. 1994. The Information Content of Dividend Changes: Cash Flow Signaling, Overinvestment, and Dividend Clienteles. *Journal of Financial* and Quantitative Analysis 29 (4):567-587.
- Eisfeldt, A.L. and Shi, Y., 2018. Capital Reallocation. NBER Working Paper 25085.
- Eisfeldt, A. L., and A. A. Rampini. 2009. Leasing, Ability to Repossess, and Debt Capacity. *The Review of Financial Studies* 22 (4):1621-1657.
- Fama, E. F. 1974. The Empirical Relationships between the Dividend and Investment Decisions of Firms. *The American Economic Review* 64 (3):304-318.
- Fama, E. F., and M. H. Miller. 1972. *The Theory of Finance*. New York: Holt, Rinehart and Winston.
- Fidrmuc, J., and S. Kanoria. 2017. Hedge Fund Activism and CEO Compensation. *Working Paper*.
- Gantchev, N., O. R. Gredil, and C. Jotikasthira. 2018. Governance under the Gun: Spillover Effects of Hedge Fund Activism. *Review of Finance* 23 (6):1-38.

- Gantchev, N., M. Sevilir, and A. Shivdasani. 2020. Activism and Empire Building. *Journal* of Financial Economics 138 (2):526-548.
- Gillan, S. L., and L. T. Starks. 2007. The Evolution of Shareholder Activism in the United States. *Journal of Applied Corporate Finance* 19 (1).
- Graham, J. R., M. L. Lemmon, and J. S. Schallheim. 1998. Debt, Leases, Taxes, and the Endogeneity of Corporate Tax Status. *The Journal of Finance* 53 (1):131-162.
- Greenwood, R., and M. Schor. 2009. Investor Activism and Takeovers. *Journal of Financial Economics* 92 (3):362-375.
- Imhoff, E. A., Jr., R. C. Lipe, and D. W. Wright. 1991. Operating Leases: Impact of Constructive Capitalization. *Accounting horizons* 5 (1):51.
- Kang, J.-K., H. Kim, J. Kim, and A. Low. 2022. Activist-Appointed Directors. *Journal of Financial and Quantitative Analysis* 57 (4):1343-1376.
- Karpoff, J. M. 2001. The Impact of Shareholder Activism on Target Companies: A Survey of Empirical Findings. *Working Paper*.
- Kim, S. 2022. Disappearing Discounts: Hedge Fund Activism in Conglomerates. *Working Paper*.
- Klein, A., and E. Zur. 2009. Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors. *The Journal of Finance* 64 (1):187-229.

—. 2011. The Impact of Hedge Fund Activism on the Target Firm's Existing Bondholders. *The Review of Financial Studies* 24 (5):1735-1771.

- Krishnan, V. S., and R. C. Moyer. 1994. Bankruptcy Costs and the Financial Leasing Decision. *Financial Management* 23 (2):31.
- Li, K. and Xu, Y., 2022. Leasing as Capital Reallocation. Working Paper.
- Lim, J. 2016. The Role of Activist Hedge Funds in Financially Distressed Firms. *Journal of Financial and Quantitative Analysis* 50 (06):1321-1351.
- Lim, S. C., S. C. Mann, and V. T. Mihov. 2017. Do Operating Leases Expand Credit Capacity? Evidence from Borrowing Costs and Credit Ratings. *Journal of Corporate Finance* 42:100-114.
- Lin, J.-R., C.-J. Wang, D.-W. Chou, and F.-C. Chueh. 2013. Financial Constraint and the Choice between Leasing and Debt. *International Review of Economics and Finance* 27:171-182.
- Miller, M. H., and F. Modigliani. 1961. Dividend Policy, Growth, and the Valuation of Shares. *The Journal of Business* 34 (4):411-433.
- Modigliani, F., and M. H. Miller. 1958. The Cost of Capital, Corporation Finance and the Theory of Investment. *The American Economic Review* 48 (3):261-297.

- Myers, S. C., D. A. Dill, and A. J. Bautista. 1976. Valuation of Financial Lease Contracts. *The Journal of Finance* 31 (3):799-819.
- Myers, S. C., and N. S. Majluf. 1984. Corporate Financing and Investment Decisions When Firms Have Information that Investors Do Not Have. *Journal of Financial Economics* 13:187-221.
- Schallheim, J., K. Wells, and R. J. Whitby. 2013. Do Leases Expand Debt Capacity? *Journal* of Corporate Finance 23:368-381.
- Sharpe, S. A., and H. H. Nguyen. 1995. Capital Market Imperfections and the Incentive to Lease. *Journal of Financial Economics* 39 (2):271-294.
- Spencer, A. W., and T. Z. Webb. 2015. Leases: A Review of Contemporary Academic Literature Relating to Lessees. *Accounting horizons* 29 (4):997-1023.
- Wells, K., and R. Whitby. 2012. Evidence of Motives and Market Reactions to Sale and Leasebacks. *Journal of Applied Finance* 22 (1):56-69.
- Wong, Y. T. F. 2020. Wolves at the Door: A Closer Look at Hedge Fund Activism. Management Science 66 (6):2347-2371.
- Yoon, P. S., Y. Pyung Sig, L. T. Starks, and L. T. Starks. 1995. Signaling, Investment Opportunities, and Dividend Announcements. *Review of Financial Studies* 8 (4).
- Zechman, S. L. C. 2010. The Relation Between Voluntary Disclosure and Financial Reporting: Evidence from Synthetic Leases. *Journal of Accounting Research* 48 (3):725-765.

Appendix A. Variable Definitions

Main variables:

Leasing_Increase	Equals one (and zero otherwise) if in that year there is an increase of 50% or more in any of the following amounts: present value of operating leasing payments, present value of financial leasing payments, value of leases at cost related to property, plant and equipment.
Activist_Investment	Indicator that equals one if there is a 13D filing in that year announcing a significant investment in the firm, and zero otherwise.
13G_to_13D_Switch	Indicator that equals to one for firms in which the activist's filing status switches from passive ownership (13G filing) to activist investment (13D filing).
Control variables:	
Size	Firm's equity market value measured at the start of the year.
BM	The ratio of book value of equity to market value of equity measured at the start of the year.
CAPEX	Capital expenditures divided by total assets.
Cash_Flows	Net cash flow from operating activities divided by total assets.
Cash_Holdings	Sum of cash and short-term investments divided by total assets.
Dividend per share	The dividend paid in that year scaled by the number of shares outstanding.
Growth	The growth rate of revenue, or earnings per share.
Leverage	Financial leverage, total debt scaled by total assets.
ROA	Computed as net income scaled by total assets.
Tax_Rate	Marginal tax rate after interest deductions or post-financing MTR from Marginal Tax Rates Database created by Professor Jennifer Blouin, John Core, and Wayne Guay using Compustat data (Blouin et al. 2010).
Altman_Score	Defined by Altman (1968) model to determine the likelihood of bankruptcy amongst companies, calculated by: 3.3*(EBIT/Total Assets) + 0.99*(Net Sales/Total Assets) + 0.6*(Market Value of Equity/Total Liabilities) + 1.2*(Working Capital/Total Assets) + 1.4*(Retained Earnings/Total Assets).
High_Real_Estate	Indicator that equals one if the real estate prices in the state where the company is headquarters are higher than the median value during the sample period.
Governance variables:	
Board_Absentism	Fraction of directors that attended less than 75% of the meetings.
Board_Independence	Fraction of non-executive directors with respect to the total number of directors.
Busy_Directors	Fraction of directors holding three or more directorships.
CEO_Duality	Indicator that equals one if the CEO is chairman of the board, and zero otherwise.
Classified_Board	Indicator that equals one if the board is classified (i.e., directors are elected in a staggered manner), zero otherwise.

Directors_Stake	Average of the percentage of shares held by each board director.
Dual_Class	Indicator that equals one if the firm has dual class common stock, and zero otherwise.
Golden_Parachute	Indicator that equals one if the firm has a golden parachute policy, and zero otherwise.
Old_Directors	Fraction of directors that are 69 or older.
Poison_Pill	Indicator that equals one if the firm has adopted a poison pill, and zero otherwise.
Supermajority	Indicator that equals one if the firm has a supermajority provision for takeovers (i.e., mergers and acquisitions require more than 60% of shareholder approval), and zero otherwise.
Unequal_Voting	Indicator that equals one if there are unequal voting rights across common shareholders, and zero otherwise.

Figure 1. Leases in Firms with Activist Investment

This figure presents the amount of leases in firms with activist investment over the years 1995-2018. Operating leases and capital leases are calculated as described in Section 3.



Table 1. Descriptive Statistics

This table presents descriptive statistics of the sample including a panel of 138,692 firm-year observations from 1995 to 2018 corresponding to the Compustat-CRSP universe. *Leasing_Increase*, equals one (and zero otherwise) if in that year there is an increase of 50% or more in any of the following amounts: present value of operating leasing payments, present value of financial leasing payments, value of leases at cost related to property, plant and equipment. *Activist_Investment*, equals one if there is a Schedule 13D filing in that year announcing a significant investment in the company, and zero otherwise. The rest of the variables are defined in Appendix A.

Variable	Mean	Median	Std. dev
Leasing_Increase	0.227	0.000	0.419
Activist_Investment	0.122	0.000	0.327
Size	5.639	5.573	2.134
ВМ	1.501	0.547	5.974
Leverage	0.230	0.171	0.316
Return (%)	12.932	4.454	67.351
Cash_Flows	0.010	0.060	0.546
Cash_Holdings	0.261	0.120	0.350
Growth	0.218	0.090	0.732
Tax_Rate	0.259	0.290	0.093
Altman_Score	4.576	3.000	8.199
ROA	-0.006	0.044	1.450
Increase in dividend (Dummy)	0.342	0.000	0.474
Increase in dividend by 10% or more (Dummy)	0.218	0.000	0.413
Increase in dividend by 25% or more (Dummy)	0.138	0.000	0.345
Decrease in CAPEX (Dummy)	0.461	0.000	0.498
Decrease in CAPEX by 10% or more (Dummy)	0.386	0.000	0.487
Decrease in CAPEX by 25% or more (Dummy)	0.279	0.000	0.449

Table 2. Leasing and Activism: Baseline Analysis

This table presents the baseline OLS analysis of the relation between the corporate leases and shareholder activism. The dependent variable, *Leasing_Increase*, equals one (and zero otherwise) if in that year there is an increase of 50% or more in any of the following amounts: present value of operating leasing payments, present value of financial leasing payments, value of leases at cost related to property, plant and equipment. *Activist_Investment*, equals one if there is a Schedule 13D filing in that year announcing a significant investment in the company, and zero otherwise. The rest of the variables are defined in Appendix A. Panel A presents results on the association between *Leasing_Increase* and *Activist_Investment*. Standard errors are clustered by industry. *t*-statistics are in parentheses. *, ** and *** denote significance at the 10%, 5%, and 1% level (two-tail) respectively. Returns are expressed in per mille (‰). Intercepts are omitted.

	Dependent Variable: Leasing_Increase			
Independent Variables	(1)	(2)	(3)	(4)
Activist_Investment	0.067***	0.048^{***}	0.042***	0.029***
_	(11.258)	(9.317)	(6.733)	(5.603)
Controls:	, ,		, ,	, ,
Size		-0.001	-0.000	0.028^{***}
		(-0.216)	(-0.211)	(6.827)
BM		-0.000	-0.001***	0.001***
		(-0.919)	(-3.202)	(3.756)
Leverage		0.024	0.007	0.014^{*}
		(0.789)	(1.119)	(1.827)
Return		-0.042**	-0.009	-0.051***
		(-2.174)	(-1.028)	(-4.131)
Cash_Flows		-0.006	-0.007**	-0.001
		(-1.339)	(-2.040)	(-0.350)
Cash_Holdings		0.097^{***}	0.034***	-0.030***
		(2.681)	(7.272)	(-6.214)
Growth		0.081^{***}	0.069^{***}	0.049***
		(6.673)	(7.122)	(4.605)
Tax_Rate		-0.223***	-0.112***	0.088^{**}
		(-2.759)	(-3.742)	(2.062)
Altman_Score		0.003***	0.002^{***}	0.001^{**}
		(4.367)	(3.737)	(2.553)
Observations	138,692	138,692	138,692	137,149
R-squared	0.003	0.043	0.103	0.252
Industry FE	NO	NO	YES	n.a.
Firm FE	NO	NO	NO	YES
Year Fixed Effects	NO	NO	YES	YES

Table 3. Leasing and Activism: The Impact of Real Estate Opportunities

This table presents results of interacting *Activist_Investment* with *High_Real_Estate*, which equals one if the real estate prices in the state where the company's headquarters is located are higher than the median value during the sample period. *t*-statistics are in parentheses. *, ** and *** denote significance at the 10%, 5%, and 1% level (two-tail) respectively. Intercepts are omitted.

	Dependent Variable: Leasing_Increase			
			Volume of P	roperty Assets
_	Pooled Ob	servations	High Quintile	Low Quintile
Independent Variables	(1)	(2)	(3)	(4)
Activist_Investment*High_Real_Estate	0.031***	0.025***	0.046***	0.007
-	(4.002)	(3.234)	(2.680)	(0.684)
Activist_Investment	0.077^{***}	0.070^{***}	0.066^{***}	0.042^{*}
	(6.992)	(6.763)	(4.752)	(1.891)
High_Real_Estate	0.061^{***}	0.047^{***}	0.038^{***}	0.017
	(6.971)	(6.165)	(4.124)	(1.363)
Controls	YES	YES	YES	YES
Observations	124,549	122,814	23,345	22,850
R-squared	0.211	0.362	0.354	0.432
Industry FE	YES	NO	NO	NO
Firm FE	NO	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES

Table 4. Leasing and Activism: Propensity Score Matching

This table presents an analysis of activist target firms and propensity score matched firms. We match each target firm (firm with activist investment) in year *t* with a non-target firm from the same year and 2-digit Standard Industrial Classification (SIC) industry code that has the closest propensity score, estimated using variables identified as predictors of activist investing, including firm size, cash holdings, growth rate, and Altman score. Standard errors are clustered by industry. *t*-statistics are in parentheses. *, ** and *** denote significance at the 10%, 5%, and 1% level (two-tail) respectively. Intercepts are omitted.

	Logit: Activist	Investment	1	Mean: (Treat	ed - Cont	rol)
Covariates	Non-matched	Matched	Matched:	Matched:	%bias	Matched:
	Sample	Sample	Treated	Control		Difference
Size	-0.169***	0.002	4.910	4.908	0.1	0.003
	(-19.54)	(0.17)				(0.130)
Cash_Holdings	0.188^{***}	-0.024	0.284	0.288	-1.2	-0.005
	(2.70)	(-0.31)				(-1.103)
Growth	0.150^{***}	-0.045	0.222	0.251	-3.3	-0.029***
	(6.87)	(-1.21)				(-3.317)
Altman_Score	-0.011**	-0.001	3.839	3.912	-0.9	-0.073
	(-2.04)	(-0.08)				(-0.861)
Observations	138,692	32,654	16,327	16,327		
Pseudo R ²	0.0239	0.0003				

Panel A. Estimation of the Propensity Score and Covariate Balance

Panel B. Regression Analysis

	Dependent Variable: Leasing_Increase				
Independent Variables	(1)	(2)	(3)	(4)	
Activist_Investment	0.041***	0.040^{***}	0.029***	0.016**	
	(5.312)	(7.024)	(5.127)	(2.286)	
Controls	NO	YES	YES	YES	
Observations	32,654	32,654	32,653	28,245	
R-squared	0.002	0.040	0.110	0.395	
Industry FE	NO	NO	YES	n.a.	
Firm FE	NO	NO	NO	YES	
Year Fixed Effects	NO	NO	YES	YES	

Table 5. Leasing and Activism: 13G-to-13D Switch

This table presents the results of activists' switch in filing status from Schedule 13G to Schedule 13D. The sample includes all firms in which we observe the filing of a Schedule 13G form, and the subsample of 13G to 13D switches includes those for which we observe a subsequent switch to a filing of a Schedule 13D. $13G_{to}_{13D}_{Switch}$, equals to one if there is a 13G to 13D switch for a firm during the year (as opposed to remaining with the Schedule 13G status). Panel A presents descriptive statistics of the sample of 13G to 13D switches, including a panel of 65,952 firm-year observations from 1995 to 2018. Panel B presents the results of this sample. Panel C and Panel D present the results of a matched sample. We match treated firms (firms with activists' switch in filing status from 13G to 13D) with control firms from the same year and 2-digit Standard Industrial Classification (SIC) industry code that has the closest propensity scores, estimated using variables identified as predictors of activist investing, including firm size, cash holdings, growth rate, and Altman score. Standard errors are clustered by firm. t-statistics are in parentheses. *, ** and *** denote significance at the 10%, 5%, and 1% level (two-tail) respectively. Intercepts are omitted.

Panel A. Descriptive	Statistics of the Sam	ple of 13G to 13D Switches

Variable	Mean	Median	Std. dev
Leasing Increase	0.204	0.000	0.403
13G-to-13D_Switch	0.026	0.000	0.159
Size	5.956	5.934	1.951
BM	0.753	0.524	1.008
Leverage	0.232	0.172	0.356
Return (%)	13.316	3.335	84.011
Cash_Flows	0.016	0.060	0.278
Cash_Holdings	0.281	0.142	0.353
Growth	0.204	0.090	0.532
Tax_Rate	0.259	0.290	0.096
Altman_Score	4.545	3.000	6.559

Panel B. Regression Analysis

	Dependent Variable: Leasing_Increase			
Independent Variables	(1)	(2)	(3)	(4)
13G-to-13D_Switch	0.085^{***}	0.057***	0.049***	0.037***
	(7.061)	(5.269)	(4.698)	(3.119)
Controls	YES	YES	YES	YES
Observations	65,952	65,952	65,952	63,182
R-squared	0.001	0.107	0.155	0.340
Industry FE	NO	NO	YES	n.a.
Firm FE	NO	NO	NO	YES
Year Fixed Effects	NO	NO	YES	YES

Table 6. Dividends, Leasing, and Activism: Baseline Analysis

This table presents the results of analyzing firms' changes in payout policies when the firm increases leasing significantly and an activist investor invests in the firm. The dependent variables are as follows. In Panel A, *Increase in dividend* equals one if the dividend (in \$) paid in that year is higher than in the prior year, and zero otherwise. *Increase in dividend by 10% (25%) or more* equals one if the dividend (in \$) paid in that year is more than 10% (25%) higher with respect to that in the prior year, and zero otherwise. In Panel B, *Increase in dividend per share* equals one if the dividend per share (i.e., the dividend paid in that year scaled by the number of shares outstanding) is higher than in the prior year, and zero otherwise. *Increase in dividend yield* equals one if the dividend paid in that year scaled by firm market value) is higher than in the prior year, and zero otherwise. *Increase in dividend yield* equals one if the dividend paid in that year scaled by firm market value) is higher than in the prior year, and zero otherwise. *Increase in shares repurchased* equals one if the value of repurchased shares is higher than in the prior year, and zero otherwise. *Leasing_Increase* and *Activist_Investment* are as defined in prior tables. The rest of the variables are defined in Appendix A. *t*-statistics are in parentheses. *, ** and *** denote significance at the 10%, 5%, and 1% level (two-tail) respectively. Intercepts are omitted.

Independent Variables	Increase in dividend (1)	Dependent Variable: Increase in dividend by 10% or more (2)	Increase in dividend by 25% or more (3)
•	· · ·		
Leasing_Increase*Activist_Investment	0.026***	0.015**	0.014**
y • y	(3.656)	(2.232)	(2.341)
Leasing_Increase	-0.022***	-0.012***	-0.010***
	(-6.084)	(-3.503)	(-3.408)
Activist_Investment	-0.009	0.011***	0.015***
	(-1.240)	(2.812)	(4.752)
Size	0.067^{***}	0.057***	0.028^{***}
	(6.736)	(6.078)	(7.025)
BM	0.002^{***}	0.002^{***}	0.000
	(4.938)	(3.886)	(0.771)
Leverage	-0.017**	-0.023**	-0.025**
	(-2.208)	(-2.058)	(-2.092)
ROA	-0.001***	0.000	-0.000
	(-3.227)	(0.557)	(-0.637)
Return	-0.000	0.000	0.000^{***}
	(-0.529)	(0.791)	(3.378)
Cash_Flows	-0.003	-0.003	-0.002
-	(-1.125)	(-1.017)	(-0.932)
Cash_Holdings	-0.024***	-0.012*	-0.006
- 0	(-3.074)	(-1.675)	(-1.218)
Growth	0.014**	0.021**	0.024**
	(2.617)	(2.567)	(2.535)
Tax_Rate	0.142***	0.063	0.100***
	(2.813)	(1.122)	(2.883)
Altman_Score	-0.003***	-0.003***	-0.002***
	(-4.656)	(-4.038)	(-3.961)
Observations	133,360	133,360	. ,
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	133,360
R-squared	0.568 VES	0.363	0.257 VES
Firm FE	YES	YES	YES
Year Fixed Effects	YES	YES	YES

Panel A. Increase in Dividend

Table 6. Dividends, Leasing, and Activism: Alternative Dependent Variables

	Dependent Variable:			
	Increase in	Increase in	Increase in	
	dividend per share	dividend yield	shares repurchased	
Independent Variables	(1)	(2)	(3)	
Leasing_Increase*Activist_Investment	0.023***	0.040^{***}	0.011^{*}	
	(2.963)	(3.450)	(1.698)	
Main effects	YES	YES	YES	
Controls	YES	YES	YES	
Observations	126,131	126,131	124,290	
\mathbb{R}^2	0.493	0.382	0.321	
Firm Fixed Effects	YES	YES	YES	
Year Fixed Effects	YES	YES	YES	

Table 7. Dividends, Leasing, and Activism: Propensity Score Matching

This table presents an analysis of activist target firms and propensity score matched firms. We match target firms (firms with activist investment) with non-target firms from the same year and 2-digit Standard Industrial Classification (SIC) industry code that has the closest propensity scores, estimated using variables identified as predictors of activist investing, including firm size, cash holdings, growth rate, and Altman score. Standard errors are clustered by firm. *t*-statistics are in parentheses. *, ** and *** denote significance at the 10%, 5%, and 1% level (two-tail) respectively. Intercepts are omitted.

Panel A. Increase in Dividend

		Dependent Variable:	
	Increase in dividend	Increase in dividend by 10% or more	Increase in dividend by 25% or more
Independent Variables	(1)	(2)	(3)
Leasing_Increase*Activist_Investment	0.028^{***}	0.019***	0.019***
	(3.862)	(2.854)	(3.063)
Leasing_Increase	-0.025***	-0.016***	-0.014***
	(-5.870)	(-4.242)	(-4.414)
Activist_Investment	-0.009	0.009^{**}	0.014^{***}
	(-1.163)	(2.163)	(4.427)
Controls	YES	YES	YES
Observations	95,479	95,479	95,479
R-squared	0.574	0.392	0.293
Firm Fixed Effects	YES	YES	YES
Year Fixed Effects	YES	YES	YES

		Dependent Variable:				
	Increase in dividend Increase in Increase in					
	per share	dividend yield	shares repurchased			
Independent Variables	(1)	(2)	(3)			
Leasing_Increase*Activist_Investment	0.022**	0.041***	0.010^{*}			
	(2.508)	(3.380)	(1.714)			
Main effects	YES	YES	YES			
Controls	YES	YES	YES			
Observations	89,194	89,194	88,451			
R-squared	0.472	0.379	0.353			
Firm Fixed Effects	YES	YES	YES			
Year Fixed Effects	YES	YES	YES			

Table 8. Investment, Leasing, and Activism: Baseline Analysis

This table presents the results of analyzing firms' changes in payout policies when the firm increases leasing significantly, and an activist investor invests in the firm. The dependent variables are as follows. In Panel A, *Decrease in CAPEX* equals one if CAPEX (i.e., capital expenditures scaled by total assets) in that year is lower than in the prior year, and zero otherwise. *Decrease in CAPEX by 10% (25%) or more* equals one if CAPEX (in \$) paid in that year is less than 10% (25%) higher with respect to that in the prior year, and zero otherwise. In Panel B, Δ_{CAPEX} is change in CAPEX with respect to the prior year. *cAPEX* is the level of CAPEX in that year. *R&D* is R&D expenses scaled by total assets. *Leasing_Increase* and *Activist_Investment* are as defined in prior tables. The rest of the variables are defined in Appendix A. *t*-statistics are in parentheses. *, ** and *** denote significance at the 10%, 5%, and 1% level (two-tail) respectively. Intercepts are omitted.

Panel A. Decrease in Investment

	Dependent Variable:				
	Decrease in	Decrease in CAPEX	Decrease in CAPEX		
	CAPEX	by 10% or more	by 25% or more		
Independent Variables	(1)	(2)	(3)		
Leasing_Increase*Activist_Investment	0.024**	0.024**	0.022**		
0	(2.161)	(2.004)	(2.107)		
Leasing_Increase	-0.059***	-0.055***	-0.043***		
	(-6.563)	(-5.786)	(-4.974)		
Activist_Investment	0.024***	0.029***	0.028***		
	(3.794)	(4.514)	(4.778)		
Size	-0.020***	-0.024***	-0.029***		
	(-4.252)	(-5.426)	(-7.678)		
BM	0.002^{***}	0.002^{***}	0.001^{**}		
	(3.501)	(2.714)	(2.003)		
Leverage	0.112***	0.109***	0.099***		
-	(5.645)	(5.629)	(6.465)		
ROA	0.001	0.001	0.001		
	(0.976)	(1.115)	(1.205)		
Return	0.000^{***}	0.000^{***}	0.000^{***}		
	(5.046)	(6.729)	(6.714)		
Cash_Flows	0.033^{*}	0.030	0.025		
	(1.907)	(1.642)	(1.252)		
Cash_Holdings	0.139***	0.143***	0.144^{***}		
-	(7.025)	(7.690)	(8.431)		
Growth	-0.051***	-0.046***	-0.039***		
	(-7.445)	(-7.599)	(-8.064)		
Tax_Rate	0.043	0.011	-0.035		
	(1.110)	(0.283)	(-1.183)		
Altman_Score	0.002^{***}	0.002^{***}	0.002^{***}		
	(3.196)	(3.340)	(3.346)		
Observations	134,955	134,955	134,955		
R-squared	0.167	0.159	0.172		
Firm Fixed Effects	YES	YES	YES		
Year Fixed Effects	YES	YES	YES		

	Dependent Variable:				
	Δ _CAPEX	CAPEX	R&D		
Independent Variables	(1)	(2)	(3)		
Leasing_Increase*Activist_Investment	-0.002**	-0.003***	-0.003*		
	(-2.202)	(-3.770)	(-1.950)		
Main effects	YES	YES	YES		
Controls	YES	YES	YES		
Observations	132,928	133,420	133,942		
R-squared	0.142	0.664	0.861		
Firm Fixed Effects	YES	YES	YES		
Year Fixed Effects	YES	YES	YES		

Table 9. Investment, Leasing, and Activism: Propensity Score Matching

This table presents an analysis of activist target firms and propensity score matched firms. We match target firms (firm with activist investment) with non-target firms from the same year and 2-digit Standard Industrial Classification (SIC) industry code that has the closest propensity scores, estimated using variables identified as predictors of activist investing, including firm size, cash holdings, growth rate, and Altman score. Standard errors are clustered by firm. *t*-statistics are in parentheses. *, ** and *** denote significance at the 10%, 5%, and 1% level (two-tail) respectively. Intercepts are omitted.

Panel A. Decrease in Investment

		Dependent Variable:	
	Decrease in CAPEX	Decrease in CAPEX by 10% or more	Decrease in CAPEX by 25% or more
Independent Variables	(1)	(2)	(3)
Leasing_Increase*Activist_Investment	0.022^{*}	0.024^{*}	0.025^{**}
	(1.958)	(1.901)	(2.339)
Leasing_Increase	-0.059***	-0.055***	-0.044***
	(-6.616)	(-5.904)	(-5.174)
Activist_Investment	0.024^{***}	0.029***	0.026***
	(3.575)	(4.363)	(4.418)
Controls	YES	YES	YES
Observations	97,335	97,335	97,335
R-squared	0.199	0.188	0.194
Firm Fixed Effects	YES	YES	YES
Year Fixed Effects	YES	YES	YES

	Dependent Variable:				
	Δ _CAPEX	CAPEX	R&D		
Independent Variables	(1)	(2)	(3)		
Leasing_Increase*Activist_Investment	-0.002***	-0.003***	-0.003*		
	(-2.797)	(-3.964)	(-1.723)		
Main effects	YES	YES	YES		
Controls	YES	YES	YES		
Observations	95,787	96,191	96,623		
R-squared	0.165	0.659	0.864		
Firm Fixed Effects	YES	YES	YES		
Year Fixed Effects	YES	YES	YES		

Table 10. Leasing and Alternative Activism Strategies

This table presents an analysis of the association between increases in leasing and two important activism strategies: the target firm is acquired and there is a proxy fight for board seats in the target firm. *Leasing_Increase* is defined as in prior tables. *Acquired* equals one if the activism target is acquired, and zero otherwise. *Proxy_Fight* equals one if the activist wages a proxy fight to obtain board seats on the target's board, and zero otherwise. The rest of variables are as defined in prior tables. *t*-statistics are in parentheses. *, ** and *** denote significance at the 10%, 5%, and 1% level (two-tail) respectively.

	Dependent variable	e: Leasing_Increase
Independent Variables	(1)	(2)
Acquired	-0.084***	-0.063***
-	(-5.105)	(-4.421)
Proxy_Fight	-0.079***	-0.049***
	(-4.518)	(-3.913)
Size		0.006^{***}
		(2.835)
BM		-0.000
		(-0.105)
Past_Return		0.000^{***}
		(6.585)
Observations	16,910	14,807
R-squared	0.003	0.089
Industry FE	NO	YES
Year Fixed Effects	NO	YES

Table 11. Leasing, Activism, and Corporate Governance

This table presents an analysis of the role of corporate governance practices on the association between the probability of increasing leases significantly and investments by activist shareholders. *Leasing_Increase* and *Activist_Investment* are as defined as in prior tables. The rest of the variables are defined in Appendix A. Panel A presents results of financial characteristics. Panel B presents results analyzing the role of antitakeover provisions and board characteristics. Panel B includes firm-year observations from the 1995-2018 Compustat-CRSP universe with non-missing data on antitakeover provisions and board characteristics, respectively. Column (2) in Panels B restricts the analysis to observations with *Activist_Investment* =1 (i.e., firms have the presence of shareholder activism). Standard errors are clustered by industry. *t*-statistics are in parentheses. *, ** and *** denote significance at the 10%, 5%, and 1% level (two-tail) respectively. Intercepts are omitted.

	All Observations with Non-missing Data	Observations with Activist_Investment = 1
	Dep. Var: Activist_Investment	Dep. Var: <i>Leasing_Increase</i>
Independent Variables:	(1)	(2)
Financial characteristics:		
Size	-0.020***	0.003
	(-22.619)	(1.394)
ВМ	-0.002***	-0.000
	(-21.453)	(-0.148)
Leverage	0.034***	-0.012**
	(2.697)	(-2.219)
Return	-0.000***	0.000***
	(-4.005)	(4.765)
Cash_Flows	-0.005	-0.003
—	(-1.589)	(-0.676)
Cash_Holdings	0.008*	-0.017
_ 0	(1.803)	(-0.858)
Growth	0.022***	0.074***
	(5.981)	(6.594)
Observations	126,108	14,507
\mathbb{R}^2	0.036	0.113
Controls	YES	YES
Industry FE	YES	YES
Year Fixed Effects	YES	YES

Panel A. Financial Characteristics

Table 11. Leasing, Activism, and Corporate Governance (cont.)

Panel B. Corporate Governance Characteristics:

Independent Variables	Non-miss Dep. Activist_I	All Observations with Non-missing Data Dep. Var: Activist_Investment (1)		Observations with Activist_Investment = 1 Dep. Var: Leasing_Increase (2)	
Antitakeover provisions:					
Supermajority	-0.005 (-1.327)		-0.004 (-1.181)		
Golden_Parachute	-0.003		0.001 (0.145)		
Classified_Board	-0.007** (-2.130)		0.006 (1.329)		
Poison_Pill	0.004 (0.670)		-0.003 (-0.619)		
Dual_Class	0.019 ^{**} (2.201)		0.004 (0.510)		
Unequal_Voting	-0.011 (-0.988)		-0.011 (-1.244)		
Board Characteristics:					
Old_Directors		-0.031** (-2.553)		-0.027 (-1.220)	
Busy_Directors		0.024 (0.987)		-0.050 (-1.510)	
Directors_Stake		0.027*** (3.825)		0.001 (0.148)	
Board_Independence		0.044 ^{**} (2.200)		0.061 (1.269)	
CEO_Duality		-0.023 (-0.589)		-0.080** (-2.311)	
Board_Absentism		-0.034 (-0.530)		-0.196 (-1.311)	
Financial characteristics	YES	YES	YES	YES	
Observations	35,337	16,130	2,613	926	
R-squared	0.034	0.032	0.396	0.468	
Industry FE	YES	YES	YES	YES	
Year Fixed Effects	YES	YES	YES	YES	

Table 12. Leasing and Activism: Controlling for Corporate Governance

This table repeats the analysis in Table 2 controlling for corporate governance characteristics. *Leasing_Increase* and *Activist_Investment* are as defined as in prior tables. The rest of the variables are defined in Appendix A. The sample includes firm-year observations from the 1995-2018 Compustat-CRSP universe with non-missing data on antitakeover provisions and board characteristics, respectively. Standard errors are clustered by industry. *t*-statistics are in parentheses. *, ** and *** denote significance at the 10%, 5%, and 1% level (two-tail) respectively. Intercepts are omitted.

	Dep. Var: Leasing_Increase				
		Obs. with Non-missing Data on Antitakeover Provisions		n-missing Data	
Independent Variables	(1)	(2)	(3)	(4)	
Activist_Investment	0.011***	0.011***	0.020***	0.020***	
	(5.709)	(5.695)	(3.969)	(3.892)	
Financial characteristics	YES	YES	YES	YES	
Governance characteristics:					
Antitakeover provisions	NO	YES	NO	NO	
Board characteristics	NO	NO	NO	YES	
Year fixed effects	YES	YES	YES	YES	
Industry fixed effects	YES	YES	YES	YES	
Observations	35,337	35,337	16,130	16,130	
R ²	0.311	0.311	0.260	0.260	

Shareholder Activism and Corporate Leasing

Online Appendix

Contents

Table OA.1. Partition analysis in Table 3 using quartiles (and terciles) Table OA.2. Leasing and Activism: 13G-to-13D Switch with Propensity Score Matching Table OA.3. Descriptive Statistics of Corporate Governance Variables

Table OA.1. Partition analysis in Table 3 using quartiles (and terciles)

This table presents results of interacting *Activist_Investment* with *High_Real_Estate*, which equals one if the real estate prices in the state where the company's headquarters is located are higher than the median value during the sample period. *t*-statistics are in parentheses. *, ** and *** denote significance at the 10%, 5%, and 1% level (two-tail) respectively. Intercepts are omitted.

	Dependent Variable: Leasing_Increase					
				Volume of Pa	roperty Assets	
			High	Low	High	Low
	Pooled Ob	servations	Quartile	Quartile	Tercile	Tercile
Independent Variables	(1)	(2)	(3)	(4)	(5)	(6)
Activist Investment*						
High_Real_Estate	0.031***	0.025***	0.035**	0.012	0.034**	0.019**
0 – –	(4.002)	(3.234)	(2.355)	(0.921)	(2.415)	(2.080)
Activist_Investment	0.077^{***}	0.070^{***}	0.071^{***}	0.043**	0.074^{***}	0.045^{**}
	(6.992)	(6.763)	(5.258)	(1.977)	(6.036)	(2.527)
High_Real_Estate	0.061^{***}	0.047^{***}	0.044^{***}	0.021	0.047^{***}	0.028^{**}
	(6.971)	(6.165)	(5.617)	(1.436)	(6.987)	(2.030)
Controls	YES	YES	YES	YES	YES	YES
Observations	124,549	122,814	29,188	28,663	38,978	38,503
R-squared	0.211	0.362	0.360	0.429	0.366	0.413
Industry FE	YES	NO	NO	NO	NO	NO
Firm FE	NO	YES	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES	YES	YES

Table OA.2. Leasing and Activism: 13G-to-13D Switch with Propensity Score Matching

This table presents the results of activists' switch in filing status from Schedule 13G to Schedule 13D. The sample includes all firms in which we observe the filing of a Schedule 13G form, and the subsample of 13G to 13D switches includes those for which we observe a subsequent switch to a filing of a Schedule 13D. $13G_{to}_{13D}_{Switch}$, equals to one if there is a 13G to 13D switch for a firm during the year (as opposed to remaining with the Schedule 13G status). Panel A presents descriptive statistics of the sample of 13G to 13D switches, including a panel of 65,952 firm-year observations from 1995 to 2018. Panel B presents the results of this sample. Panel C and Panel D present the results of a matched sample. We match treated firms (firms with activists' switch in filing status from 13G to 13D) with control firms from the same year and 2-digit Standard Industrial Classification (SIC) industry code that has the closest propensity scores, estimated using variables identified as predictors of activist investing, including firm size, cash holdings, growth rate, and Altman score. Standard errors are clustered by firm. t-statistics are in parentheses. *, ** and *** denote significance at the 10%, 5%, and 1% level (two-tail) respectively. Intercepts are omitted.

	Logit: 13G-to-13D_Switch		Mean: (Treated – Control)			trol)
Covariates	Non-matched	Matched	Matched:	Matched:	%bias	Matched:
	Sample	Sample	Treated	Control		Difference
Size	-0.212***	-0.011	5.109	5.166	-0.9	-0.057
	(-15.659)	(-0.754)				(-1.213)
Cash_Holdings	0.314***	0.017	0.343	0.340	1.0	0.003
	(4.274)	(0.219)				(0.303)
Growth	0.056	0.008	0.213	0.212	0.7	0.001
	(1.143)	(0.167)				(0.070)
Altman_Score	-0.020***	-0.006	3.325	3.606	2.0	-0.280^{*}
	(-3.024)	(-0.983)				(-1.710)
Observations	65,952	17,422	1,716	15,706		
Pseudo R ²	0.0243	0.0003				

Panel A. Estimation of the Propensity Score and Covariate Balance

Panel B. Regression Analysis

	Dependent Variable: Leasing_Increase				
Independent Variables	(1)	(2)	(3)	(4)	
13G-to-13D_Switch	0.063*** (4.723)	0.059*** (5.113)	0.049*** (4.547)	0.023* (1.800)	
Controls	YES	YES	YES	YES	
Observations	17,422	17,422	17,421	13,673	
R-squared	0.002	0.081	0.138	0.478	
Industry FE	NO	NO	YES	n.a.	
Firm Fixed Effects	NO	NO	NO	YES	
Year Fixed Effects	NO	NO	YES	YES	

Variable	Observations	Mean	Median	Std. dev
Supermajority	35,442	0.201	0.000	0.401
Golden_Parachute	35,442	0.369	0.000	0.482
Classified_Board	35,442	0.510	1.000	0.500
Poison_Pill	35,442	0.337	0.000	0.473
Dual_Class	35,442	0.093	0.000	0.290
Unequal_Voting	35,442	0.030	0.000	0.171
Old_Directors	16,175	0.237	0.222	0.178
Busy_Directors	16,175	0.072	0.000	0.102
Directors_Stake	16,175	0.329	0.143	0.396
Board_Independence	16,175	0.785	0.800	0.120
CEO_Duality	16,175	0.980	1.000	0.139
Board_Absentism	16,175	0.007	0.000	0.030

 Table OA.3. Descriptive Statistics of Corporate Governance Variables