**National Security Policies and Corporate Investment**

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**Abstract**

We examine national security policies implemented by the Committee on Foreign Investment in the United States (CFIUS) and how they affect corporate investment. CFIUS can deny regulatory approval of foreign takeovers on national security grounds. We document a sharp increase in CFIUS denials of regulatory approval during the 2008-2019 sample period in which the Foreign Investment and National Security Act (FINSA) was in place. CFIUS denials are followed by a negative market reaction, a decrease in foreign takeovers, and a reduction in corporate investment in industries of the blocked-acquisition targets. The decreases in corporate investment are more pronounced among firms that are ex-ante financially constrained. Our results may be of interest to regulators who have recently adopted CFIUS-like mechanisms to protect critical assets from foreign hands.

*JEL classification*: D22, D25, F02, F21

*Keywords*: National security policies; Corporate investment; Foreign takeovers

1. **Introduction**

Protecting national security interests through limiting foreign takeovers has been on the rise in the past two decades in the United States and internationally. As of May 2020, 77% of the 62 OECD-investigated countries had at least some policies in place to address national security threats arising from foreign investments (Pohl & Rosselot, 2020).

In this paper we examine the implementation of national security policies by the Committee on Foreign Investment in the United States (CFIUS) following the adoption of the Foreign Investment and National Security Act (FINSA).[[1]](#footnote-1) CFIUS is a governmental body that reviews foreign investments to determine their effects on national security. More precisely, CFIUS can block foreign takeovers on national security grounds. The scope of CFIUS is broad as it can deny regulatory approval of any transactions involving domestic firms above the 10% equity stake, ban sales of U.S. based assets and/or impose costly conditions on approval.[[2]](#footnote-2)

CFIUS denials of regulatory approval are particularly suitable for our analysis as they have a potential to deter similar transactions among peers (Connell & Huang, 2014). CFIUS denials represent an incremental adjustment in the likelihood of future blocks, relative to the ex-ante estimated probability assigned to the same event (Priest & Klein, 1984). In this vein, we investigate publicly announced CFIUS denials involving listed targets in the 2008-2019 period in which FINSA was in place.

First, we describe CFIUS denials of regulatory approval (see Table 1). We document a sharp increase in CFIUS denials notably after 2016, the year in which Trump was elected president. Moreover, most CFIUS denials are issued to Chinese acquirers (92%) and involve targets in tech industries, consistent with threats that such investments pose to national security of the United States (Griffin, 2017). We show that CFIUS denials are followed by a negative market reaction for firms in industries of the blocked-acquisition targets. After an acquisition is denied by CFIUS, there is a decrease in foreign takeovers in the target’s industry, an effect that remains uncompensated by domestic buyers (for similar results after the introduction of national security policies see Frattaroli, 2020; Godsell, Lel, & Miller, 2023).[[3]](#footnote-3)

Second, we examine how CFIUS denials of regulatory approval affect corporate investment. Although CFIUS denials protect critical assets from foreign hands, they also risk hampering corporate investment among the firms they aim to protect. This is because restrictions on access to capital constrict funding opportunities (Hoberg & Maksimovic, 2015; Frattaroli, 2020; Santioni, Schiantarelli, & Strahan, 2020), increase the cost of capital (Forbes, 2007; Alfaro, Chari, & Kanczuk, 2017), and reduce real activities such as corporate investment (Rauh, 2006; Almeida & Campello, 2007; Campbell, Dhaliwal, & Schwartz, 2012). CFIUS denials impose restrictions on access to capital that deter foreign takeovers of similar firms, reduce equity values, and consequently are deemed to decrease corporate investment in industries of the blocked-acquisition targets.

Using CFIUS denials of regulatory approval rather than the introduction of FINSA, which preceded them, or of FIRRMA, which followed them, allows us to avoid confounding effects of other concurrent events that could bias our results. Notably, the financial crisis of 2008 occurred when FINSA was introduced, and Covid-19 pandemic happened when FIRRMA went into effect. This choice provides a series of staggered events with a better identified treatment group. Unlike FINSA and FIRRMA, which have economy-wide effects, CFIUS denials impact targets’ peers, allowing us to better distinguish between treatment and control groups.[[4]](#footnote-4) To define targets’ industries, we use the textual network-based industry classification (TNIC) (Hoberg & Phillips, 2010, 2016). As explained by Hoberg and Phillips (2010, 2016), this classification has evident advantages over other industry classifications based on header codes.[[5]](#footnote-5) Finally, we limit our sample to the 2008-2019 period because it matches the years in which FINSA was effective. This choice ensures we have a stable regulatory environment during our sample period. For completeness, we also test for the impact of FINSA.

We find that CFIUS denials of regulatory approval are followed by a 20% percent decrease in corporate investment in affected industries. Such magnitude is similar that of studies examining the impact of capital controls or tax laws on corporate investment (Desai, Foley, & Hines, 2006; Moon, 2022). Since CFIUS interventions are staggered over time, we address the issues raised by Baker, Larcker, and Wang (2022). In particular, we estimate our models using the methodology proposed by Sun and Abraham (2021) and find similar results.

As restrictions on access to capital imposed by CFIUS limit funding opportunities and increase the cost of capital, the reduction in corporate investment should be bigger among firms that are already financially constrained (Campbell et al., 2012; Hoberg & Maksimovic, 2015).[[6]](#footnote-6) The effects we document should also be bigger in those industries that rely more on foreign investments. Our results support these two predictions. We find that the reduction in corporate investment is more pronounced among financially constrained firms and among industries with high foreign investments.

Our results are robust to alternative proxies for corporate investment. In addition to capital expenditures, our results are confirmed when we test for changes in research and development expenses, and the sum of capital expenditures, research and development expenses, and acquisitions. These additional proxies for corporate investment significantly decrease following CFIUS denials of regulatory approval. Throughout our analyses, we include firm and year fixed effects to control for firm and time invariant characteristics and control variables for time-varying attributes. A battery of robustness tests confirms our results.

To our knowledge, this paper is the first one to analyze a comprehensive sample of CFIUS denials of regulatory approval, their pattern, and consequences. Prior works, mostly case studies, investigate a small number of selected CFIUS actions (Connell & Huang, 2014; Josselyn, 2014; Tipler, 2014; Griffin, 2017; Deen Westbrook, 2019; Tarbert, 2020). It is also the first paper to examine whether and how the implementation of national security policies by CFIUS affects corporate investment. It extends and complements empirical papers on economic facets of national security policies (Connell & Huang, 2014; Frattaroli, 2020; Godsell et al., 2023). As such, our results may be of interest to regulators in countries that have recently adopted or plan to expand CFIUS-like mechanisms to protect critical assets from foreign hands (see Pohl & Rosselot, 2020). Our paper also provides new evidence to the existing literature that examines restrictions on access to capital and their impact on corporate investment (Rauh, 2006; Almeida & Campello, 2007; Forbes, 2007; Campbell et al., 2012; Hoberg & Maksimovic, 2015; Alfaro et al., 2017; Santioni et al., 2020), as well as to prior research that explores the interplay between compliance and investment decisions (Averch & Johnson 1962; Alesina, Ardagna, Nicoletti, & Schiantarelli, 2005; Grajek & Roller 2012). Our findings indicate that restrictions on access to capital imposed by CFIUS deter foreign takeovers of similar firms, decrease equity values, and increase the cost of capital, thus resulting in a reduction in corporate investment. Prior research examines similar restrictions in developing economies such as Brazil and Chile and in developed economies such as France (Forbes, 2007; Alfaro et al., 2017; Frattaroli, 2020). We contribute to this literature by showing how bans on foreign takeovers affect corporate investment in the U.S. economy.

The remainder of the paper is organized as follows. In the next section, we illustrate CFIUS and its process of reviewing foreign investments. In Sections 3 and 4, we describe CFIUS denials of regulatory approval and then analyze their impact on corporate investment. In Section 5, we perform the endogeneity analysis. In Section 6, we explore the moderating role of financial constraints. In Sections 7 and 8, we conduct additional analyses and robustness tests. In Section 9, we conclude.

1. **Institutional background**

The Committee on Foreign Investment in the United States (CFIUS), which has operated since 1975, comprises top government officials, such as the heads of the departments of the Treasury (chair), Commerce, Defense, Energy, Homeland Security, Justice, and State.[[7]](#footnote-7) The goal of this committee is to advise the president on national security implications of foreign investments. CFIUS is therefore a governmental body under the direct authority of the president that can block foreign takeovers on national security grounds, pursuant to Section 721 of the Defense Production Act of 1950 as amended with the Exon-Florio Provision in 1988 (Jackson, 2020). These powers are exercised if two criteria are met: there is no other adequate law to protect national interests, and credible evidence about a national security threat is available.

According to the final regulations of the department of the Treasury, all foreign takeovers are within the scope of CFIUS with the exceptions of “an acquisition of any part of an entity or of assets that do not constitute a U.S. business” and transactions involving less than 10% of the equity capital of the target. Unlike laws and statutes that allow targets to fend off hostile takeovers, which have been investigated already (Bertrand & Mullainathan, 2003; Gompers, Ishii, & Metrick, 2003; Bebchuk, Cohen, & Ferrell, 2009), restrictions on access to capital imposed by CFIUS prevent firms from selling equity stakes to foreign buyers. They are also different from antitrust decisions (see Seldeslachts, Clougherty, & Barros, 2009, on the deterrence effects of M&A policies). More precisely, the Federal Trade Commission can block transactions whose closing impairs fair competition and most of its decisions refer to domestic takeovers creating a dominant position in a market.

The Foreign Investment and National Security Act of 2007 (FINSA) codified CFIUS structure, practices, and internal procedures (Georgiev, 2008). With the enactment of FINSA, CFIUS must submit a classified annual report to the U.S. Congress briefly overviewing its activities. Declassified versions of these annual reports become publicly available within two years after the reporting period. Our sample period matches the years in which FINSA was effective (2008–2019). The final regulations of FINSA were in place from November 2008 to February 2020.

CFIUS review consists of four steps. First, CFIUS screens foreign takeovers for potential national security threats. Since CFIUS can nullify transactions even years after the closing, parties involved usually submit a voluntary notice about the pending foreign takeover, especially when the target operates in a critical industry (Jackson, 2020). FINSA contains a list of critical industries whose foreign takeovers could raise national security threats, but our analysis shows CFIUS regularly intervenes in industries outside of such list (see Section 3 for details). Second, CFIUS completes a national security review in the next 30 days. During this stage, the director of national intelligence carries out an analysis of “any threat to the national security” related to the pending transaction. Third, if there are unresolved risks, CFIUS launches a national security investigation in the next 45–60 days. FINSA mandates this investigation when the buyer is controlled by a foreign government. During this stage, CFIUS and parties involved may negotiate mitigation agreements, such as the establishment of a corporate security committee, or the restriction of certain technologies only to authorized personnel (see CFIUS annual reports for details). Fourth, if such national security threats are still not mitigated, CFIUS recommends the president to block the transaction. The president has 15 days to do so. If a mitigation agreement has been reached, CFIUS enforces its compliance and could impose civil penalties or nullify the transaction. Figure 1 shows the steps of CFIUS review.

[Insert Figure 1 here]

The definition of what constitutes a national security threat under FINSA is vague (Tipler, 2014) and has been subject to interpretations of the incumbent administration, whose stances could develop during the term (Josselyn, 2014). For example, the Trump administration was characterized by an elevated turnover of top government officials, including members of CFIUS, such as the secretary of Defense. Moreover, national security threats are identified by the incumbent administration, according to the geopolitical backdrop, which unfolds depending on foreign actors. For instance, supplies of natural gas did not raise major national security threats until the Russian invasion of Ukraine in 2022. Similarly, increasing ties between the Chinese industrial and military apparatuses, such as the Chinese military-civil fusion of 2017, prompted closer scrutiny of dual-use technological transfers. As abandoned deals are costly to board members, directors do not initiate a transaction whose closing seems unlikely (Harford, 2003). A case in point is the blocked acquisition of Lattice Semiconductor by Canyon Bridge Capital Partners in 2017. Darin G. Billerbeck, at that time CEO of the target, when asked to make a comment on CFIUS denial of regulatory approval stated: “And in the end, it ended up being a political decision. So no matter what you heard or what you read, this is a political decision” (October 12, 2017).

1. **Data and sample**
   1. **Sample construction**

CFIUS activities have increased significantly in recent years. CFIUS received 231 notices and performed 113 investigations in 2019, up from 155 notices (+49%) and 23 investigations (+391%) in 2008. Among CFIUS activities, we focus on presidential decisions and withdrawals for denial of regulatory approval, which we collectively refer to as CFIUS interventions. Given the huge visibility of presidential decisions, foreign buyers usually abandon the transaction earlier when CFIUS sends negative feedback during the review process (Jackson, 2020). CFIUS annual reports indicate that there were only five presidential decisions in the 2008-2019 period. As a result, the majority of CFIUS interventions are withdrawals for denial of regulatory approval.

We manually collect data on CFIUS interventions from Factiva and SEC EDGAR. We search for all news related to CFIUS in the period from 2007 to 2020. We cross-check this information in other public sources—Google, company websites, and the financial press—and remove what we cannot confirm from these sources. We identify 45 CFIUS interventions. For every deal, we collect detailed information regarding the target name, buyer name, deal size, deal structure, and event date. We exclude deals whose national security threats were raised because of the target’s proximity to military facilities (two deals—beyond the scope of this paper), and whose target industry classification is not available (three deals involving startups or greenfield investments and four asset deals). Lastly, we exclude private targets (15 deals). This choice is motivated by the need to match the type of firms whose takeovers were blocked to the firms whose investments we analyze—namely U.S. incorporated listed firms. Moreover, the TNIC classification (Hoberg & Phillips, 2010, 2016) has evident advantages over other industry classifications based on header codes but is available only for listed firms. Including CFIUS interventions with private targets yields similar results (see Section 8). We describe the data construction process in Panel A of Table 1. This process yields a sample of 23 CFIUS interventions involving listed targets.

Arguably, listed and private firms differ in characteristics such as visibility. We cannot rule out the possibility that some CFIUS interventions are not detected in our data construction process, especially in case of private targets which are invisible.[[8]](#footnote-8) This concern is mitigated for transactions involving listed targets because of their timely communication requirements that inform market participants about the pending transaction. The materiality of undetected CFIUS interventions involving listed targets appears limited. In case of undisclosed CFIUS interventions, market participants could not act on them because they were not aware. Moreover, in case of disclosed but undetected CFIUS interventions, their effects would eventually be against our findings. We exclude transactions cleared with mitigation measures because the content of these agreements negotiated on a case-by-case basis is not publicly disclosed. We present CFIUS interventions involving listed targets and provide identifying information in Panel B of Table 1.

Figures from CFIUS annual reports confirm that almost 60% of withdrawals were followed by new resubmissions (162/280).[[9]](#footnote-9) CFIUS annual reports started to provide detailed information regarding notices withdrawn only from 2015. More precisely, there were 64 withdrawals for denial of regulatory approval and four presidential decisions over the 2015-2019 period (68 CFIUS interventions).[[10]](#footnote-10) CFIUS annual reports however provide aggregate figures. Without previous filters, our data construction process yields a sample of 37 CFIUS interventions during such period, thus resulting in a coverage of almost 55% (37/68). Since certain private transactions are invisible, it is impossible to perfectly reconcile our figures with those from CFIUS annual reports. Please refer to Appendix A for the validation of our data construction process.

**3.2. CFIUS interventions**

We present the distribution of CFIUS interventions over time and across industries in Panels C and D of Table 1 respectively. There has been a surge in the number of CFIUS interventions since 2016, the year of the Trump election (Panel C). Twenty-one cases involved Chinese buyers (91%). The remaining two had foreign bidders from Japan and Singapore. CFIUS interventions occurred across a range of 16 industries, but most can be classified as technology ones, including four in the semiconductor industry (Panel D). Twenty CFIUS interventions were withdrawals for denial of regulatory approval, and three were presidential decisions. The deal value of the proposed takeovers ranged from $12 million to $117 billion. Finally, the equity stake ranged from 15% to 100%: most transactions were public tender offers to acquire majority equity stakes (twenty cases).

[Insert Table 1 here]

We use CFIUS interventions as events that update the implementation of national security policies by CFIUS. We first examine the industry market reaction. Cumulative abnormal returns are estimated using the Fama-French three factor and the Fama-French plus momentum models from WRDS Event Study. We present the target and industry market reaction respectively in Panels A and B of Table 2.

[Insert Table 2 here]

Targets experience a negative and statistically significant market reaction after CFIUS interventions. The cumulative abnormal returns in the three- and five-day windows are -6% (columns 1 and 2). This evidence suggests that CFIUS interventions are informative for market participants.

The industry market reaction after CFIUS interventions is also negative and statistically significant. The cumulative abnormal returns in the one-, six- and twelve-month windows are -3%, -9% and -8% respectively (columns 1 and 2). Consistent with prior research (Forbes, 2007; Hoberg & Maksimovic, 2015; Alfaro et al., 2017), this evidence suggests that restrictions on access to capital imposed by CFIUS reduce equity values, thus increasing the cost of capital in affected industries. Similarly, Frattaroli (2020) documents a negative industry market reaction after the enactment of a national security policy in France.[[11]](#footnote-11) The results of Table 2 overall indicate that market participants revise their expectations about further national security actions after CFIUS interventions.

**3.3. Main variables**

To investigate whether and how CFIUS interventions affect corporate investment, we create a sample of 41,918 firm-year observations (6,392 U.S. incorporated listed firms) from Compustat in the 2008–2019 period. Our sample matches the years in which FINSA was in place. In the light of CFIUS jurisdiction, we retain only U.S. incorporated listed firms. Removing this filter yields similar results. We exclude financial institutions (SIC code from 6,000 to 6,999) and firms with negative sales. We only include the nonmissing variables filter.

Using the textual network-based industry classification (Hoberg & Phillips, 2010, 2016), the treatment group consists of the peers belonging to the industry of the target of every blocked acquisition (Treatment group).[[12]](#footnote-12) Each target represents a different affected industry. Other firms belong to the control group. CFIUS Block, our variable of interest,equals one in the three-year period after CFIUS interventions and zero otherwise (post CFIUS intervention # treatment group). We use this variable to capture the implementation of national security policies by CFIUS. In the main analyses, we limit the length of the treatment effectto three years because its duration is uncertain. In a robustness test, we vary the length from one to four years and find similar results (see Table 15).

To measure corporate investment, we use capital expenditures (Capex). Capex is defined as capital expenditures (Compustat item: CAPX) scaled by lagged net property, plant, and equipment (PPENT) (Dessaint, Foucault, Frésard, & Matray, 2019). The amount of capital expenditures is typically determined in relation to sales and asset usage. Scaling capital expenditures for sales or total assets yields similar results. We also use a comprehensive set of investment proxies to rule out the possibility of any shifts from capital expenditures to other types of investments. Acquisitions is defined as acquisition expenditures (AQC) scaled by total assets (AT). R&D is equal to research and development expenditures (XRD) divided by total assets (AT). Investments is the sum of research and development (XRD), capital (CAPX), and acquisition expenditures (AQC) minus cash receipts from sale of property, plant, and equipment (SPPE), scaled by total assets (AT) (Balakrishnan, Core, & Verdi, 2014). We replace missing values of XRD, AQC, and SPPE with zeros. We do not use Investments in our main analyses because R&D is a metric that firms report on a voluntary basis and is not always accurate (Koh & Reeb, 2015).

In our models, we control for a number of variables related to corporate investment (Dessaint et al., 2019). Cash flow is defined as the ratio of operating activities net cash flow (OANCF) over total assets (AT). Leverage equals the current portion of debt (DLC) plus the long-term portion of debt (DLTT) scaled by total assets (AT). Size equals the logarithm of total assets (AT). Tobin’s Q is the market value of equity (PRCC\*CSHO) plus the book value of debt (AT – CEQ), scaled by total assets (AT).

[Insert Table 3 here]

We provide variable definitions in Appendix C. We present descriptive statistics and correlation matrix in Panels A and B of Table 3 respectively. All continuous variables are winsorized at the 1st and the 99th percentiles. Treatment group covers almost 15% of the sample. CFIUS Block impacts 4.5% of firm-year observations. Firms spend 37% of net property, plant, and equipment on Capex, on average, with a median of 19%, and spend 16% of total assets on Investments, on average, with a median of 8%.

1. **CFIUS interventions and corporate investment**

We investigate whether and how the implementation of national security policies by CFIUS affects corporate investment. We perform this test by estimating the following ordinary least squares (OLS) regression model:

We use a staggered difference-in-difference identification design in which CFIUS interventions are shocks at industry level (the industry of the target). This is a standard specification in settings in which the treatment effect occurs at different times and for different treated groups (Angrist & Pischke, 2009). Across our models, we control for firm and year fixed effects. Given the difference-in-difference specification, standard errors are clustered at industry level (Bertrand, Duflo, & Mullainathan, 2004). Clustering standard errors at the SIC three-digit code or firm level yields similar results.

In the models with control variables, we additionally control for four firm time-variant characteristics: Cash flow, Leverage, Size, and Tobin’s Q. They are lagged by one year to capture fundamental information about investment needs that was known to managers when they made decisions (Dessaint et al., 2019). These control variables proxy for both firms’ available financial resources (Cash flow, Leverage, and Size) and investment opportunities (Tobin’s Q).[[13]](#footnote-13)

If restrictions on access to capital imposed by CFIUS reduce (increase) capital expenditures, we should observe a negative (positive) and statistically significant coefficient on CFIUS Block. We tabulate estimates of our models in Table 4. The coefficient on CFIUS Block is negative and statistically significant across the models (columns 1 and 2). We document a 20% decrease in corporate investment following CFIUS interventions (column 2).[[14]](#footnote-14) These results indicate that firms in affected industries significantly reduce corporate investment in response to restrictions on access to capital imposed by CFIUS. Control variables across the models have expected signs, with investments increasing with Cash flow and Tobin’s Q, and decreasing with Leverage and Size.

[Insert Table 4 here]

1. **Endogeneity analysis**

Our identification design is the staggered difference-and-differences in which shocks (CFIUS interventions) occur in different industries at different points in time. The assessment of national security threats is partly a political construct framed by the incumbent administration (Jackson, 2020). Yet, this political facet alone does not guarantee that staggered CFIUS interventions are exogenous with respect to corporate investment. To address concerns regarding potential violations of the parallel trends assumption, we perform a battery of endogeneity tests.

It could be argued that foreign buyers do not seek to acquire targets randomly and that takeover incentives are endogenous (Alvarez & Stenbacka, 2006; Loderer & Waelchli, 2015). In this vein, the existing literature has provided however mixed evidence (Cao, Li, & Liu, 2019). Notably, this potential self-selection is not a concern because our paper is centered on CFIUS interventions as shocks at industry level instead of takeover decisions.

It could be argued that CFIUS interventions do not cause the decreases in investments but are rather jointly determined by the takeover bid. This would lead to investment changes occurring in anticipation. To test for this potential explanation, we conduct a series of placebo tests. Instead of the year of the CFIUS intervention, as a shock, we use the year preceding (CFIUS Block one-year before) and alternatively the two years before it (CFIUS Block two-year before). We provide the results in Table 5. None of the coefficients on these variables is statistically significant across the models (columns 1 and 2). These results are not consistent with decreases in corporate investment occurring in anticipation, thus mitigating this potential concern.

[Insert Table 5 here]

We also estimate a regression model to test whether there is any trend in corporate investment and whether there is any discontinuity from this trend. We add several time variables capturing the effects around the shock. More precisely, we include indicator time variables that capture the effects in the single years before (t-3, t-2, t-1), and after the shock (t+1, t+2, t+3), while remaining years serve as benchmark in the regression model. We tabulate our results in Table 6. Control variables are included but not tabulated for parsimony.

[Insert Table 6 here]

The coefficients on the indicator time variables in the period before the shock (t-3, t-2, and t-1) are statistically insignificant (column 1). We also plot such coefficients separately in a graph (Figure 2). Our findings indicate that the parallel trends assumption holds.

[Insert Figure 2]

Since the coefficient on CFIUS Block is the weighted average of different treatment effects, this identification design could yield biased estimates of the true average treatment effect (Callaway & Sant’Anna, 2021; Goodman-Bacon, 2021). To further validate our findings, we adopt another empirical approach that directly takes into account concerns that treated units could act as comparison units. We follow the methodology of Sun and Abraham (2021) whose estimates are not contaminated by the effects of other periods. We present the results in column 2 of Table 6. The coefficients on the indicator time variables in the period before the shock (t-3, t-2, and t-1) are statistically insignificant (column 2). The coefficients in the period after the shock (t+1 and t+2) are negative and statistically significant. In sum, this empirical approach confirms our findings.

On the one hand, the staggered occurrence of CFIUS interventions mitigates concerns regarding confounding events. On the other hand, recent works in econometrics document that the staggered difference-and-differences design renders more difficult the interpretation of the average treatment effect (Baker et al., 2022). Our results are less likely to suffer from such concerns. Many CFIUS interventions can be traced to the Trump administration. More precisely, 19 out of the 23 CFIUS interventions occurred from the 2016 U.S. presidential campaign, thus alleviating concerns that treated units could act as comparison units.

Baker et al. (2022, p. 371) show that difference-and-differences estimates are unbiased in settings with a single treatment period even in the presence of different treatment effects. We therefore use the election of Trump in 2016 as a shock to the probability of CFIUS denials of regulatory approval in affected industries. The outcome of the 2016 U.S. presidential election was a surprise—many polls predicted a low chance of a Trump victory. We create the variable CFIUS Trumpequals one for the treatment group after the 2016 U.S. presidential election (post 2016 U.S. presidential election # treatment group), and zero otherwise.[[15]](#footnote-15) This empirical approach is the difference-and-differences design with a single treatment period and different treatment effects, which yields unbiased estimates (Baker et al., 2022).We present the results in Table 7. The coefficient on CFIUS Trumpis negative and statistically significant across the models (columns 1 and 2), thus confirming our results. We perform the battery of endogeneity tests (see previous paragraphs for more details) and find that the parallel trends assumption holds also for the 2016 U.S. presidential election. Results are not tabulated for parsimony.

[Insert Table 7 here]

We also examine whether and how FINSA affects corporate investment. FINSA and its final regulations were adopted in November 2008 and contained a list of critical industries. We provide the detailed list in Appendix B. Despite the limited overlap between this list and our treatment group, it could be argued that CFIUS interventions do not cause the changes in corporate investment but are rather jointly determined by the adoption of FINSA. To test for this potential concern, we take a closer look at FINSA.

In this analysis, the treatment group comprises firms belonging to such list of critical industries. We test both the SIC four-digit code and three-digit code classifications. The length of the treatment effect is equal to the period in which FINSA was in place. FINSA is the interaction term and equals one for critical industries after its adoption (post FINSA adoption # treatment group). We retain only U.S. incorporated listed nonfinancial firms and include the non-missing variable filter. This process yields a sample of 80,686 firm-year observations (9,952 U.S. incorporated listed firms) in the 2000–2019 period. We present the results in Table 8. The coefficient on FINSA is statistically insignificant across the models (columns 1 and 2). In sum, our findings indicate that the implementation of national security policies by CFIUS rather than the adoption of FINSA leads our results, thus confirming the role of enforcement in the United States (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998; Christensen, Hail, & Leuz, 2013).

[Insert Table 8 here]

1. **Financial constraints analysis**

Campbell et al. (2012) disentangle the moderating role of financial constraints as explanatory variable in the relation between cost of capital and corporate investment. Increases in the cost of capital can turn a positive net present value project into a negative one, which consequently affects firms’ investment decisions. Financial constraints amplify this impact because of increased difficulties in raising capital to fund positive net present value projects. Building on the existing literature (Hoberg & Maksimovic, 2015; Alfaro et al., 2017), we predict that the effects we document depend on firms’ financial position, with firms that are more financially constrained potentially suffering the greatest reduction in corporate investment, while the ones with easy access to capital likely not suffering major decreases.

Following Almeida, Campello, and Weisbach (2004), Whited and Wu (2006), and Chaney, Sraer, and Thesmar (2012), we create three measures of financial constraints to identify constrained and unconstrained firms. We then test the difference in coefficients between the two subsamples.

Size is measured as the logarithm of total assets. Bigger firms are less likely to be financially constrained as they have greater access to funding. Firms belonging to the top and bottom three deciles of the annual size distribution are assigned to the unconstrained and constrained subsamples respectively. Payoutis measured as total distributions. Firms distributing resources to shareholders are less likely to be financially constrained. Firms with and without positive distributions belong respectively to the unconstrained and constrained subsamples. Whited and Wu (2006) develop a composite index (Whited-Wu index) capturing several components of financial constraints. Firms with lower scores are less likely to be financially constrained and vice versa. Firms belonging to the bottom and top three deciles of the annual Whited-Wu index distribution refer respectively to the unconstrained and constrained subsamples.

[Insert Table 9 here]

We tabulate our results in Panels A–C of Table 9 using Size, Payout, and Whited-Wu index as proxies for financial constraints respectively. Control variables are included but not tabulated for parsimony. The coefficient on CFIUS Block is negative and statistically significant only in the constrained subsample (column 1), while it is statistically insignificant in the unconstrained subsample (column 2).[[16]](#footnote-16) The t-test of equality between the two coefficients is statistically significant at the 1% level. These results support our prediction that the impact of restrictions on access to capital imposed by CFIUS depends on firms’ financial position. These findings also allow us to rule out alternative explanations, such as financial distresses of the overall industry, generalized reductions in investment opportunities, or higher industry entry barriers.[[17]](#footnote-17)

1. **Additional analyses**

First, we delve into foreign investments. We collect data on inward foreign investments from the Bureau of Economic Analysis (BEA). Data are available only at industry level, so we rely on the NAICS four-digit code classification.[[18]](#footnote-18) We predict that the effects we document depend on firms’ exposure to foreign investments. Firms belonging to the top and bottom half of the inward foreign investments distribution are respectively assigned to the High FDI and Low FDI subsamples. We tabulate the results in Table 10. The coefficient on CFIUS Block is negative and statistically significant only in the High FDI subsample (column 2), thus confirming our prediction. The t-test of equality between the two coefficients is significant at the 10% level. Overall, these results suggest that the reduction in corporate investment is more pronounced among industries with high foreign investments.

[Insert Table 10 here]

Second, instead of Capex, in Table 11, we show our results using Acquisitions, R&D, and Investments as dependent variables. The coefficient on CFIUS Block is negative and statistically significant in the R&D and Investments models (columns 3–5). Taken together, this evidence suggests that there is not any major shift from capital expenditures to other types of investments.

[Insert Table 11 here]

Third, we replace Capex with takeover activity. We argue that CFIUS denials of regulatory approval impose restrictions on access to capital that deter foreign takeovers of similar firms, reduce equity values, and consequently decrease corporate investment. The results of Table 2 indicate that CFIUS interventions are followed by lower equity values and higher cost of capital in affected industries. Yet, it is unclear how big this deterrence effect is and to what extent domestic capital supply can adequately compensate for the foreign shortfall. Notably, Frattaroli (2020) and Godsell et al. (2023) document that national security policies in France and in the United States lead to a reduction in foreign takeovers without major changes in domestic M&A. Building on their findings, we directly examine whether and how CFIUS interventions affect domestic and foreign takeovers to better relate the decrease in equity values to the increase in financing costs. Domestic takeover is an indicator variable equal to one if a firm is taken over by a domestic buyer in the next year and zero otherwise. Similarly, Foreign takeover is equal to one if a firm is taken over by a foreign buyer and zero otherwise. We collect data on takeover activity from SDC Platinum.

We tabulate our results in Table 12. The coefficient on CFIUS Block is negative and statistically significant in the foreign takeover model (column 2). This table provides further evidence that foreign takeovers decline in affected industries following the implementation of national security policies by CFIUS. We do not observe any major changes in domestic takeovers (column 1). The results of Table 12 coupled with those of Table 2, overall, suggest that CFIUS interventions lead to an increase in financing costs of capital expenditures and that the decrease in equity values is likely a cause rather than a consequence of the decline in corporate investment.

[Insert Table 12 here]

Fourth, we take a closer look at the political facet of CFIUS interventions. In particular, we examine whether restrictions on access to capital imposed by CFIUS have a bigger impact on investments when the incumbent administration is more protectionist, especially during the Trump administration. We perform a cross-sectional test to compare the effects of CFIUS interventions before (from 2008 to 2016) and during the Trump administration (from 2017 to 2019). Results are tabulated in Table 13. We find that the coefficient on CFIUS Block is negative and statistically significant during the Trump administration (columns 1 and 2). The difference between the two coefficients is statistically significant at the 5% level. This is consistent with our prediction the implementation of national security policies by CFIUS during a protectionist government represents a more credible threat to foreign investments.

[Insert Table 13 here]

1. **Robustness tests**

We conduct a battery of robustness tests to further validate our findings. First, a potential concern could be that CFIUS activities target transactions depending on a set of industry characteristics, such as decreasing investments. As we show in Table 1 and explain in Section 3, CFIUS interventions occurred across a range of industries and are motivated by the politics of the incumbent administration. In this test, we retain only firm-year observations in industries with at least one transaction covered by CFIUS review in a given year. As a result, both the treatment and control groups consist of industries that CFIUS considered relevant. We hand-collect data on notices by industry and by year from declassified CFIUS annual reports. We tabulate our results in column 1 of Table 14. The coefficient on CFIUS Block is negative and statistically significant, thus confirming our findings.

[Insert Table 14 here]

Second, we want to rule out the possibility that heterogenous industry effects could drive our results. This concern is mitigated by our choice of peers, namely the TNIC classification (Hoberg & Phillips, 2010, 2016). Nevertheless, almost 30% of the treatment group belongs to the semiconductor and pharmaceutical industries (SIC Code 283 and 367), which have been targeted by multiple CFIUS interventions. In this test, we remove these industries from the sample. Results are tabulated in column 2 of Table 14. The coefficient on CFIUS Block is still negative and statistically significant, suggesting that heterogeneous industry effects do not drive our findings.

Third, we restrict the sample to firms with one business segment. In the light of the TNIC classification, peers are characterized by greater affinities than other industry classifications based on header codes (Hoberg & Phillips, 2010, 2016). Yet peers could still run different activities within the same industry. In this test, we retain only firms with a unique business segment. This choice further mitigates potential concerns that firms could exhibit different features. We tabulate our results in column 3 of Table 14. The coefficient on CFIUS Block remains negative and statistically significant. In sum, industry misclassifications do not appear to drive our results.

Fourth, our analysis is centered on CFIUS interventions involving listed targets and omits private targets and asset deals. This choice is motivated by a few reasons. First, we want to match the type of firms whose takeovers were blocked to the firms whose investments we analyze—namely U.S. incorporated listed firms. Second, the TNIC classification (Hoberg & Phillips, 2010, 2016) is available only for listed firms. Third, asset deals refer to set of assets and it is therefore difficult to identify their industry classification. Finally, our data construction process (see Appendix A for more details) suggests that some CFIUS interventions involving private targets were invisible and remained undetected. As we show in column 4 of Table 14, including all types of transactions—asset deals, listed and private targets—yields similar results. Using the SIC three-digit code classification, the treatment group consists of the peers belonging to the industry of the target of every blocked acquisition. In case of asset deals, we use the industry classification of the vendor. The coefficient on CFIUS Block all deals is negative and statistically significant (column 4).

Finally, we analyze the length of the treatment effect. CFIUS Block takes the value of one in the three-year period after CFIUS interventions and zero otherwise. In Table 6, we employ several indicator time variables that capture the effects in the single years before and after the shock. In this test, we examine additional lengths of the treatment effect, such as one, two, and four years. We tabulate the results in Table 15. The coefficient on CFIUS Block is negative and statistically significant across the models (columns 1–4). Notably, the economic magnitude of the effects is bigger in the two-year period after the shock. The size of the coefficient on CFIUS Blockdecreases as the duration increases, suggesting that the effects tend to decline over time.

[Insert Table 15 here]

1. **Conclusion**

The Committee on Foreign Investment in the United States (CFIUS) is a governmental body that can deny regulatory approval of foreign takeovers on national security grounds. We document a sharp increase in CFIUS interventions during the 2008-2019 sample period, and especially after 2016, the year of the Trump election. Most CFIUS interventions refer to Chinese buyers and involve targets in tech industries. Our results indicate that CFIUS interventions are followed by a negative market reaction, a decrease in foreign takeovers, and a reduction in corporate investment in industries of the blocked-acquisition targets. The reduction in corporate investment is more pronounced among firms that are financially constrained. We find no evidence of our results being driven by anticipation, a violation of the parallel trends assumption, or CFIUS selecting industries based on characteristics that could be correlated with (future) declines in investments. Finally, we conduct a battery of additional analyses and robustness tests to further validate our results.

Our findings are subject to certain caveats and some caution should be used when interpreting them. First, our analysis does not address other potential externalities of CFIUS activities. We acknowledge that there might be other channels through which CFIUS could affect U.S. firms. As such, given the limited empirical evidence on economic facets of national security policies, we do not argue that they are on balance beneficial or costly to firms or the U.S. economy. These questions remain outside of our scope. Second, our findings cannot be generalized without further considerations to other contexts. Finally, various policies such as trade tariffs changed the U.S. regulatory framework, especially during the Trump administration. We acknowledge that this could also affect corporate investment. Yet the limited overlap between the scope of such protectionist policies and our treatment group based on CFIUS interventions mitigates such concerns.

Our study makes several contributions to this research stream. We analyze a comprehensive sample of CFIUS denials of regulatory approval, their pattern, and consequences, thus contributing to the ongoing debate on this policy area (Josselyn, 2014; Tipler, 2014; Griffin, 2017; Deen Westbrook, 2019; Tarbert, 2020). To our knowledge, this paper is the first one to examine how the implementation of national security policies by CFIUS affects corporate investment, thus complementing empirical papers on economic facets of national security policies (Connell & Huang, 2014; Frattaroli, 2020; Godsell et al., 2023). Finally, prior research examines restrictions on access to capital in developing economies such as Brazil and Chile and in developed economies such as France (Forbes, 2007; Alfaro et al., 2017; Frattaroli, 2020). We contribute to this literature by documenting how bans on foreign takeovers affect corporate investment in the U.S. economy.

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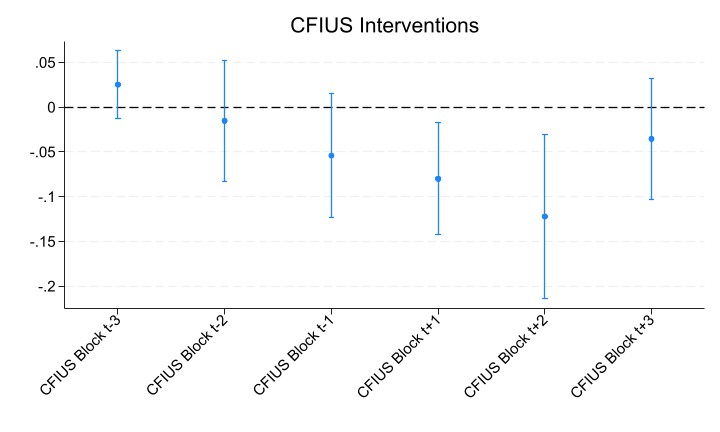
**Figure 1**

**The timeline of CFIUS review**

This figure plots the four steps of CFIUS review.



|  |  |  |
| --- | --- | --- |
| **Figure 2** | |  |
| **Parallel trends assumption** | |  |
| This figure plots the results of the difference-in-difference analysis comparing investments of the treatment group to investments of the control group. We include indicator time variables around CFIUS interventions (CFIUS Block). The continuous bars indicate the 95% confidence interval. | | |
|  |  |  |



|  |  |  |
| --- | --- | --- |
| **Table 1 – Panel A** | |  |
| **Data construction process** | |  |
|  |  |  |
|  | We define CFIUS interventions as presidential decisions and withdrawals for denial of regulatory approval. |  |
|  |  |  |
|  | We search for all news related to CFIUS from Factiva and SEC EDGAR. We cross-check this information with other public sources such as company websites and the financial press. We identify 45 CFIUS interventions in the period from 2008 to 2019. | 45 |
|  |  |  |
|  | For every CFIUS intervention, we collect detailed information regarding the target name, buyer name, deal size, deal structure, and event date. We collect the industry classification of listed and private targets from Compustat and Bureau van Dijk (BvD) Orbis respectively. | 45 |
|  |  |  |
|  | We remove CFIUS interventions whose national security threats refer to the target’s proximity to military facilities. | (3) |
|  |  |  |
|  | We remove CFIUS interventions involving asset deals with missing industry classification. | (4) |
|  |  |  |
|  | We remove CFIUS interventions involving private targets. | (15) |
|  |  |  |
|  | We retain CFIUS interventions involving listed targets. | 23 |
|  |  |  |
|  | | |
| This table presents the steps of the data construction process. | | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 1 – Panel B** | | | | | | |
| **CFIUS interventions involving listed targets during FINSA** | | | | | | |
|  | | | | | | |
| **ID** | **DATE** | **BUYER** | **TARGET** | **GVKEY TARGET** | **SIC TARGET** | **VALUE ($ mln)** |
| 1 | 2/21/2008 | HUAWEI TECHNOLOGIES CO | 3COM CORP | 010553 | 3576 | 2,200 |
| 2 | 6/24/2010 | TANGSHAN CAOFEIDIAN INVESTMENT CORP | EMCORE CORP | 064637 | 3674 | 28 |
| 3 | 7/1/2010 | HUAWEI TECHNOLOGIES CO | MOTOROLA SOLUTIONS INC | 007585 | 3663 | 16,000 |
| 4 | 10/18/2012 | SUPERIOR AVIATION BEIJING CO | HAWKER BEECHCRAFT INC | 186559 | 3720 | 1,800 |
| 5 | 2/16/2016 | CHINA RESOURCES MICROELECTRONICS LTD | FAIRCHILD SEMICONDUCTOR INC | 134932 | 3674 | 2,460 |
| 6 | 2/23/2016 | UNISPLENDOUR CORPORATION | WESTERN DIGITAL CORP | 011399 | 3572 | 3,780 |
| 7 | 3/28/2016 | ORIGIN TECHNOLOGIES CORP | AFFYMETRIX INC | 010530 | 3826 | 1,600 |
| 8 | 5/27/2016 | ZOOMLION HEAVY INDUSTRY SCIENCE AND TECHNOLOGY | TEREX CORP | 007991 | 3530 | 3,400 |
| 9 | 11/5/2016 | LEECO GLOBAL HOLDING | VIZIO HOLDINGS INC | 025529 | 3651 | 2,250 |
| 10 | 12/2/2016 | FUJIAN GRAND CHIP INVESTMENT FUND LP | AIXTRON SE | 216019 | 3559 | 723 |
| 11 | 12/26/2016 | HYBRID KINETIC GROUP LIMITED | UQM TECHNOLOGIES INC | 022772 | 3621 | 48 |
| 12 | 6/1/2017 | ONEWEB AND SOFTBANK GROUP CORP | INTELSAT SA | 012010 | 4899 | 1,700 |
| 13 | 7/26/2017 | BEIJING SHARECO TECHNOLOGIES CO | GLOBAL EAGLE ENTERTAINMENT INC | 187215 | 4899 | 416 |
| 14 | 8/4/2017 | SDIC FUND MANAGEMENT CO | MAXWELL TECHNOLOGIES INC | 007124 | 3612 | 47 |
| 15 | 9/13/2017 | CANYON BRIDGE CAPITAL PARTNERS | LATTICE SEMICONDUCTOR CORP | 016597 | 3674 | 1,300 |
| 16 | 10/4/2017 | DRAGON GEM LIMITED AND ABSOLUTE FRONTIER LTD | PEDEVCO CORP | 013460 | 1311 | 12 |
| 17 | 11/13/2017 | ZHONGWANG | ALERIS CORPORATION | 013712 | 3350 | 2,330 |
| 18 | 01/02/2018 | ANT FINANCIAL | MONEYGRAM INTERNATIONAL INC | 005342 | 6099 | 1,200 |
| 19 | 2/20/2018 | BLUEFOCUS INTERNATIONAL LIMITED | FLUENT INC | 183799 | 8742 | 100 |
| 20 | 2/22/2018 | UNIC CAPITAL MANAGEMENT CO | XCERRA CORPORATION | 003158 | 3825 | 580 |
| 21 | 3/1/2018 | JINZI HAM CO LTD | NOVABAY PHARMACEUTICALS INC | 177228 | 2834 | 27 |
| 22 | 3/12/2018 | BROADCOM LIMITED | QUALCOMM INC | 024800 | 3674 | 117,000 |
| 23 | 5/9/2018 | CHINA HEAVY DUTY TRUCK GROUP CO | UQM TECHNOLOGIES INC | 022772 | 3621 | 29 |

|  |  |  |
| --- | --- | --- |
| **Table 1 – Panel C** | | |
| **Distribution of CFIUS interventions by year** | | |
|  | | |
|  |  |  |
| Year |  | CFIUS interventions |
| 2008 |  | 1 |
| 2009 |  | - |
| 2010 |  | 2 |
| 2011 |  | - |
| 2012 |  | 1 |
| 2013 |  | - |
| 2014 |  | - |
| 2015 |  | - |
| 2016 |  | 7 |
| 2017 |  | 6 |
| 2018 |  | 6 |
| 2019 |  | - |
| Total |  | 23 |
|  |  |  |
| This table presents the distribution of CFIUS interventions by year. | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 1 – Panel D** | | | | |
| **Distribution of CFIUS interventions by industry** | | | | |
|  | | | | |
|  |  |  |  |  |
| SIC code |  | Classification | CFIUS interventions |  |
| 131 |  | Crude petroleum and natural gas | 1 |  |
| 283 |  | Pharmaceutical preparations | 1 |  |
| 335 |  | Aluminium rolling and drawing | 1 |  |
| 353 |  | Construction machinery and equipment | 1 |  |
| 355 |  | Special industry machinery | 1 |  |
| 357 |  | Computer peripheral equipment | 2 |  |
| 361 |  | Power, distribution, and specialty transformers | 1 |  |
| 362 |  | Motors and generators | 2 |  |
| 365 |  | Household audio and video equipment | 1 |  |
| 366 |  | Broadcasting and communications equipment | 1 |  |
| 367 |  | Semiconductors and related devices | 4 |  |
| 372 |  | Aircraft parts and auxiliary equipment | 1 |  |
| 382 |  | Laboratory analytical instruments | 2 |  |
| 489 |  | Communications services | 2 |  |
| 609 |  | Functions related to depository banking | 1 |  |
| 874 |  | Management consulting services | 1 |  |
| Total |  |  | 23 |  |
|  |  |  |  |  |
| This table presents the distribution of CFIUS interventions by industry. The industry classification is from Compustat. | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 2 – Panel A** | | | | |
| **CFIUS interventions and target market reaction** | | | | |
|  | | | | |
|  |  |  | CAR | |
|  |  |  | (1) | (2) |
|  |  |  | Obs. = 16 | Obs. = 16 |
| [-1,+1] |  |  | -.0539\*\* | -.0564\*\* |
|  |  |  | (0.016) | (0.012) |
|  |  |  |  |  |
| [-2,+2] |  |  | -.0618\*\* | -.0683\*\* |
|  |  |  | (0.042) | (0.024) |
|  |  |  |  |  |
| This table presents the target market reaction to CFIUS interventions. Cumulative abnormal returns are estimated using the Fama-French three factor (column 1) and the Fama-French plus momentum models (column 2). Cumulative abnormal returns are collected from WRDS Event Study. P-values are reported in brackets. \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% levels respectively. | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 2 – Panel B** | | | | |
| **CFIUS interventions and industry market reaction** | | | | |
|  | | | | |
|  |  |  | CAR | |
|  |  |  | (1) | (2) |
|  |  |  | Obs. = 704 | Obs. = 704 |
| [-1,+1] |  |  | -.0047\*\* | -.0043\*\* |
|  |  |  | (0.020) | (0.034) |
|  |  |  |  |  |
| [-2,+2] |  |  | -.0062\*\* | -.0056\*\* |
|  |  |  | (0.024) | (0.039) |
|  |  |  |  |  |
| [0,+21] |  |  | -.0352\*\*\* | -.0264\*\*\* |
|  |  |  | (0.000) | (0.000) |
|  |  |  |  |  |
| [0,+63] |  |  | -.0382\*\*\* | -.0275\*\* |
|  |  |  | (0.000) | (0.018) |
|  |  |  |  |  |
| [0,+126] |  |  | -.1013\*\*\* | -.0817\*\*\* |
|  |  |  | (0.000) | (0.000) |
|  |  |  |  |  |
| [0,+252] |  |  | -.0849\*\*\* | -.0590\* |
|  |  |  | (0.006) | (0.067) |
|  |  |  |  |  |
| The table presents the industry market reaction to CFIUS interventions. Cumulative abnormal returns are estimated using the Fama-French three factor (column 1) and the Fama-French plus momentum models (column 2). Cumulative abnormal returns are collected from WRDS Event Study. P-values are reported in brackets. \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% levels respectively. | | | | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 3 – Panel A** |  |  |  |  |  |  |
| **Descriptive statistics** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | Obs. | Mean | Median | Sd | Min | Max |
| **Independent variables** |  |  |  |  |  |  |
| Treatment group | 41,918 | .1474068 | 0 | .3545153 | 0 | 1 |
| CFIUS Block | 41,918 | .0451119 | 0 | .207552 | 0 | 1 |
| CFIUS Block one year | 41,918 | .0171048 | 0 | .1296636 | 0 | 1 |
| CFIUS Block two years | 41,918 | .0349969 | 0 | .1837741 | 0 | 1 |
| CFIUS Block four years | 41,918 | .0500501 | 0 | .218051 | 0 | 1 |
|  |  |  |  |  |  |  |
| **Dependent variables** |  |  |  |  |  |  |
| Capex | 41,918 | .3716634 | .192714 | .6742482 | 0 | 5.203926 |
| Acquisitions | 41,918 | .0197477 | 0 | .0552164 | -.002572 | .3240523 |
| Investments | 41,888 | .1610236 | .0836288 | .243242 | -.016317 | 1.643505 |
| R&D | 41,918 | .0946141 | .0013977 | .2344682 | 0 | 1.574963 |
|  |  |  |  |  |  |  |
| **Control variables** |  |  |  |  |  |  |
| Cash flow | 41,918 | -.1199003 | .0633963 | .6815324 | -4.87096 | .3598355 |
| Leverage | 41,918 | .3492916 | .1918096 | .7564487 | 0 | 6.129283 |
| Size | 41,918 | 5.538868 | 5.744908 | 2.720763 | -1.87731 | 11.09755 |
| Tobin’s Q | 41,918 | 4.702488 | 1.629396 | 14.54697 | .5279381 | 123.5122 |
|  |  |  |  |  |  |  |
| This table presents the descriptive statistics for the sample of 41,918 firm-year observations (6,392 unique firms) over the period from 2008 to 2019. The sample consists of U.S. incorporated listed nonfinancial firms. Financial data are collected from Compustat. Please refer to Appendix C for variable definitions. | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 3 – Panel B** | | |  |  |  |  | |  | |  |  |  |
| **Correlation matrix** | | | | |  |  | |  | |  |  |  |
|  | | | | |  |  | |  | |  |  |  |
| Variables |  | (1) | (2) | (3) | (4) | (5) | (6) | | (7) | (8) | (9) | (10) |  |
| (1) Treat. group |  | 1.000 |  |  |  |  |  | |  |  |  |  |
| (2) CFIUS Block |  | 0.523 | 1.000 |  |  |  |  | |  |  |  |  |
| (3) Capex |  | 0.038 | 0.010 | 1.000 |  |  |  | |  |  |  |  |
| (4) Acquisitions |  | 0.009 | -0.006 | 0.026 | 1.000 |  |  | |  |  |  |  |
| (5) Investments |  | 0.110 | 0.061 | 0.183 | 0.155 | 1.000 |  | |  |  |  |  |
| (6) R&D |  | 0.092 | 0.062 | 0.104 | -0.087 | 0.918 | 1.000 | |  |  |  |  |
| (7) Cash flow |  | 0.036 | 0.011 | -0.106 | 0.091 | -0.435 | -0.483 | | 1.000 |  |  |  |
| (8) Leverage |  | -0.062 | -0.032 | 0.001 | -0.049 | 0.151 | 0.162 | | -0.567 | 1.000 |  |  |
| (9) Size |  | 0.115 | 0.055 | -0.192 | 0.120 | -0.300 | -0.352 | | 0.537 | -0.285 | 1.000 |  |
| (10) Tobin’s Q |  | -0.059 | -0.034 | 0.125 | -0.051 | 0.240 | 0.244 | | -0.674 | 0.534 | -0.428 | 1.000 |
|  |  |  |  |  |  |  |  | |  |  |  |  |
| This table presents the correlation matrix for the sample of 41,918 firm-year observations (6,392 unique firms) over the period from 2008 to 2019. The sample consists of U.S. incorporated listed nonfinancial firms. Financial data are collected from Compustat. Please refer to Appendix C for variable definitions. | | | | | | | | | | | | |

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| **Table 4** |  |  | | |
| **CFIUS interventions and corporate investment** | | | | |
|  |  |  | | |
|  |  | Capex | | |
| Variable: |  | (1) | (2) | (3) |
|  |  |  |  |  |
| CFIUS Block |  |  | -0.087\*\* | -0.076\*\* |
|  |  |  | (-2.59) | (-2.44) |
| Cash flow |  | 0.160\*\*\* |  | 0.160\*\*\* |
|  |  | (4.61) |  | (4.62) |
| Leverage |  | -0.066\*\*\* |  | -0.066\*\*\* |
|  |  | (-5.31) |  | (-5.32) |
| Size |  | -0.130\*\*\* |  | -0.129\*\*\* |
|  |  | (-9.84) |  | (-9.75) |
| Tobin’s Q |  | 0.007\*\*\* |  | 0.007\*\*\* |
|  |  | (6.29) |  | (6.31) |
| Constant |  | 1.103\*\*\* | 0.372\*\*\* | 1.103\*\*\* |
|  |  | (14.41) | (251.68) | (14.34) |
|  |  |  |  |  |
| Firm fixed effects |  | Yes | Yes | Yes |
| Year fixed effects |  | Yes | Yes | Yes |
| Observations |  | 41,918 | 41,918 | 41,918 |
| Adjusted R-squared |  | 0.2097 | 0.1944 | 0.2101 |
|  |  |  |  |  |
| This table presents the results of the difference-and-differences analysis comparing investments of the treatment group to investments of the control group. The shock events are CFIUS interventions (CFIUS Block = post CFIUS intervention # treatment group). Please refer to Appendix C for variable definitions and data sources. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively. | | | | |
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| **Table 5** |  | |  | |
| **Placebo tests** | | | | |
|  |  | |  | |
|  |  |  | Capex | |
| Variable: |  |  | (1) | (2) |
|  |  |  |  |  |
| CFIUS Block two-year before |  |  | 0.017 |  |
|  |  |  | (0.49) |  |
| CFIUS Block one-year before |  |  |  | -0.021 |
|  |  |  |  | (-0.95) |
| Cash flow |  |  | 0.160\*\*\* | 0.160\*\*\* |
|  |  |  | (4.62) | (4.62) |
| Leverage |  |  | -0.066\*\*\* | -0.066\*\*\* |
|  |  |  | (-5.32) | (-5.32) |
| Size |  |  | -0.130\*\*\* | -0.130\*\*\* |
|  |  |  | (-9.90) | (-9.89) |
| Tobin’s Q |  |  | 0.007\*\*\* | 0.007\*\*\* |
|  |  |  | (6.30) | (6.29) |
| Constant |  |  | 1.104\*\*\* | 1.103\*\*\* |
|  |  |  | (14.46) | (14.45) |
|  |  |  |  |  |
| Firm fixed effects |  |  | Yes | Yes |
| Year fixed effects |  |  | Yes | Yes |
| Observations |  |  | 41,918 | 41,918 |
| Adjusted R-squared |  |  | 0.2097 | 0.2097 |
|  |  |  |  |  |
| This table presents the results of the difference-and-differences analysis comparing investments of the treatment group to investments of the control group in the period before the shock. The shock events are CFIUS interventions. Please refer to Appendix C for variable definitions and data sources. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively. | | | | |

|  |  |  |
| --- | --- | --- |
| **Table 6** | |  |
| **Parallel trends assumption** | |  |
|  |  |  |
|  | Capex | |
| Variable | (1) | (2) |
|  |  |  |
| t-3 | 0.025 | 0.009 |
|  | (1.31) | (0.24) |
| t-2 | -0.015 | -0.023 |
|  | (-0.44) | (-0.74) |
| t-1 | -0.054 | -0.052 |
|  | (-1.54) | (-1.49) |
| t+1 | -0.080\*\* | -0.097\*\*\* |
|  | (-2.52) | (-4.54) |
| t+2 | -0.122\*\*\* | -0.150\*\*\* |
|  | (-2.62) | (-4.25) |
| t+3 | -0.035 | -0.036 |
|  | (-1.03) | (-1.24) |
|  |  |  |
| Control variables | Yes | Yes |
| Firm fixed effects | Yes | Yes |
| Year fixed effects | Yes | Yes |
| Observations | 41,918 | 41,918 |
| Adjusted R-squared | 0.2102 | 0.2108 |
|  |  |  |
| This table presents the results of the difference-and-differences analysis comparing investments of the treatment group to investments of the control group. We include indicator time variables that capture the effects before and after the shock. The shock events are CFIUS interventions. In column 2, we follow the methodology of Sun and Abraham (2021). Please refer to Appendix C for variable definitions and data sources. Specifications include the full set of control variables, but results are not presented for parsimony. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively. | | |

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| **Table 7** |  | |  | |
| **2016 U.S. presidential election** | | | | |
|  |  | |  | |
|  |  |  | Capex | |
| Variable: |  |  | (1) | (2) |
|  |  |  |  |  |
| CFIUS Trump |  |  | -0.092\*\* | -0.083\*\* |
|  |  |  | (-2.45) | (-2.48) |
| Cash flow |  |  |  | 0.160\*\*\* |
|  |  |  |  | (4.64) |
| Leverage |  |  |  | -0.066\*\*\* |
|  |  |  |  | (-5.33) |
| Size |  |  |  | -0.129\*\*\* |
|  |  |  |  | (-9.79) |
| Tobin’s Q |  |  |  | 0.007\*\*\* |
|  |  |  |  | (6.29) |
| Constant |  |  | 0.373\*\*\* | 1.104\*\*\* |
|  |  |  | (229.98) | (14.37) |
|  |  |  |  |  |
| Firm fixed effects |  |  | Yes | Yes |
| Year fixed effects |  |  | Yes | Yes |
| Observations |  |  | 41,918 | 41,918 |
| Adjusted R-squared |  |  | 0.1944 | 0.2101 |
|  |  |  |  |  |
| This table presents the results of the difference-and-differences analysis comparing investments of the treatment group to investments of the control group. The shock event is the 2016 U.S. presidential election (CFIUS Trump = post 2016 U.S. presidential election # treatment group). Please refer to Appendix C for variable definitions and data sources. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively. | | | | |

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| --- | --- | --- | --- | --- |
| **Table 8** |  | |  | |
| **FINSA and corporate investment** | | | | |
|  |  | | Capex | |
| Variable: |  |  | (1) | (2) |
|  |  |  |  |  |
| FINSA SIC four-digit |  |  | 0.018 |  |
|  |  |  | (1.47) |  |
| FINSA SIC three-digit |  |  |  | 0.008 |
|  |  |  |  | (0.49) |
| Cash flow |  |  | 0.181\*\*\* | 0.181\*\*\* |
|  |  |  | (6.66) | (6.66) |
| Leverage |  |  | -0.099\*\*\* | -0.098\*\*\* |
|  |  |  | (-9.13) | (-9.08) |
| Size |  |  | -0.110\*\*\* | -0.110\*\*\* |
|  |  |  | (-10.44) | (-10.43) |
| Tobin’s Q |  |  | 0.015\*\*\* | 0.015\*\*\* |
|  |  |  | (12.94) | (12.96) |
| Constant |  |  | 0.939\*\*\* | 0.940\*\*\* |
|  |  |  | (16.77) | (17.14) |
|  |  |  |  |  |
| Firm fixed effects |  |  | Yes | Yes |
| Year fixed effects |  |  | Yes | Yes |
| Observations |  |  | 80,686 | 80,686 |
| Adjusted R-squared |  |  | 0.1966 | 0.1966 |
|  |  |  |  |  |
| This table presents the results of the difference-and-differences analysis comparing investments of the treatment group to investments of the control group. The shock event is the adoption of FINSA and its final regulations in 2008 (FINSA = post FINSA adoption # treatment group). The sample covers the 2000-2019 period (80,686 firm-year observations). Please refer to Appendix C for variable definitions and data sources. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively. | | | | |

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| **Table 9** |  | |  | |
| **Financial constraints** | | | | |
|  | | | | |
|  |  |  | Capex | |
| Panel A |  |  | Constrained | Unconstrained |
| Size |  |  | (1) | (2) |
| CFIUS Block |  |  | -0.238\*\*\* | -0.019 |
|  |  |  | (-5.41) | (-1.23) |
|  |  |  |  |  |
| Control variables |  |  | Yes | Yes |
| Firm fixed effects |  |  | Yes | Yes |
| Year fixed effects |  |  | Yes | Yes |
| Test Con. = Uncon. |  | | 0.000 | |
| Observations |  |  | 12,573 | 12,573 |
| Adjusted R-squared |  |  | 0.1243 | 0.4939 |
| Panel B |  |  | (1) | (2) |
| Payout |
| CFIUS Block |  |  | -0.116\*\*\* | -0.003 |
|  |  |  | (-3.51) | (-0.18) |
|  |  |  |  |  |
| Control variables |  |  | Yes | Yes |
| Firm fixed effects |  |  | Yes | Yes |
| Year fixed effects |  |  | Yes | Yes |
| Test Con. = Uncon. |  | | 0.001 | |
| Observations |  |  | 22,370 | 19,548 |
| Adjusted R-squared |  |  | 0.1389 | 0.3731 |
| Panel C |  |  | (1) | (2) |
| Whited-Wu index |
| CFIUS Block |  |  | -0.172\*\*\* | -0.001 |
|  |  |  | (-5.87) | (-0.11) |
|  |  |  |  |  |
| Control variables |  |  | Yes | Yes |
| Firm fixed effects |  |  | Yes | Yes |
| Year fixed effects |  |  | Yes | Yes |
| Test Con. = Uncon. |  | | 0.000 | |
| Observations |  |  | 11,612 | 11,612 |
| Adjusted R-squared |  |  | 0.1098 | 0.5178 |
|  |  |  |  |  |
| This table presents the results of the financial constraints analysis. Observations are assigned to the constrained and unconstrained subsamples depending on Size (Panel A), Payout (Panel B), and Whited-Wu index (Panel C). Test Constrained = Unconstrained is a t-test of equality of the coefficients between the subsamples. Specifications include the full set of control variables, but results are not presented for parsimony. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively. | | | | |

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| --- | --- | --- | --- | --- |
| **Table 10** |  | |  | |
| **Foreign investments** | | | | |
|  |  | |  | |
|  |  |  | Capex | |
|  |  |  | Low FDI | High FDI |
| Variable: |  |  | (1) | (2) |
|  |  |  |  |  |
| CFIUS Block |  |  | -0.035 | -0.102\*\* |
|  |  |  | (-1.24) | (-2.56) |
| Cash flow |  |  | 0.135\*\*\* | 0.199\*\*\* |
|  |  |  | (3.35) | (6.76) |
| Leverage |  |  | -0.087\*\*\* | -0.077\*\*\* |
|  |  |  | (-3.35) | (-4.98) |
| Size |  |  | -0.120\*\*\* | -0.151\*\*\* |
|  |  |  | (-4.82) | (-7.32) |
| Tobin’s Q |  |  | 0.008\*\*\* | 0.008\*\*\* |
|  |  |  | (4.77) | (6.68) |
| Constant |  |  | 1.020\*\*\* | 1.286\*\*\* |
|  |  |  | (7.27) | (12.62) |
|  |  |  |  |  |
| Firm fixed effects |  |  | Yes | Yes |
| Year fixed effects |  |  | Yes | Yes |
| Test Low FDI = High FDI |  | | 0.108 | |
| Observations |  |  | 14,360 | 14,102 |
| Adjusted R-squared |  |  | 0.2213 | 0.1552 |
|  |  |  |  |  |
| This table presents the results of the foreign investments analysis. Observations are assigned to the Low FDI and High FDI subsamples depending on inward foreign investments*.* Test Low FDI = High FDI is a t-test of equality of the coefficients between the subsamples. Please refer to Appendix C for variable definitions and data sources. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively. | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 11** |  |  |  |  |  |
| **Additional investment variables** | | | | | |
|  |  |  |  |  |  |
|  | Capex | Acquisitions | R&D | R&D | Investments |
| Variable: | (1) | (2) | (3) | (4) | (5) |
|  |  |  |  |  |  |
| CFIUS Block | -0.076\*\* | -0.003 | -0.009\* | -0.017\* | -0.020\*\*\* |
|  | (-2.44) | (-1.18) | (-1.87) | (-1.88) | (-3.63) |
| Cash flow | 0.160\*\*\* | 0.003\*\*\* | -0.048\*\*\* | -0.086\*\*\* | -0.043\*\*\* |
|  | (4.62) | (2.61) | (-4.99) | (-9.04) | (-3.60) |
| Leverage | -0.066\*\*\* | -0.005\*\*\* | -0.009\* | -0.010 | -0.024\*\*\* |
|  | (-5.32) | (-4.68) | (-1.75) | (-0.75) | (-4.29) |
| Size | -0.129\*\*\* | -0.007\*\*\* | -0.005 | -0.007 | -0.015\*\*\* |
|  | (-9.75) | (-4.60) | (-1.38) | (-1.17) | (-2.60) |
| Tobin’s Q | 0.007\*\*\* | 0.000\* | -0.000 | -0.000 | 0.000 |
|  | (6.31) | (1.93) | (-0.95) | (-0.43) | (0.17) |
| Missing ACQ |  | -0.028\*\*\* |  |  |  |
|  |  | (-12.54) |  |  |  |
| Missing R&D |  |  | -0.060\*\*\* |  |  |
|  |  |  | (-4.01) |  |  |
| Constant | 1.103\*\*\* | 0.063\*\*\* | 0.145\*\*\* | 0.194\*\*\* | 0.248\*\*\* |
|  | (14.34) | (6.84) | (6.77) | (5.45) | (7.37) |
|  |  |  |  |  |  |
| Firm fixed effects | Yes | Yes | Yes | Yes | Yes |
| Year fixed effects | Yes | Yes | Yes | Yes | Yes |
| Observations | 41,918 | 41,918 | 41,918 | 25,550 | 41,888 |
| Adjusted R-squared | 0.2101 | 0.1495 | 0.7397 | 0.6779 | 0.6409 |
|  |  |  |  |  |  |
| This table presents the results of the additional investment variables analysis. Please refer to Appendix C for variable definitions and data sources. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively. | | | | | |

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| --- | --- | --- | --- | --- |
| **Table 12** |  | |  | |
| **Takeover activity** | | | | |
|  |  | |  | |
|  |  |  | Domestic takeover | Foreign takeover |
| Variable: |  |  | (1) | (2) |
|  |  |  |  |  |
| CFIUS Block |  |  | -0.007 | -0.005\*\*\* |
|  |  |  | (-0.66) | (-2.83) |
| Cash flow |  |  | -0.006\*\*\* | -0.001 |
|  |  |  | (-3.59) | (-0.73) |
| Leverage |  |  | 0.004\*\* | -0.001\* |
|  |  |  | (2.34) | (-1.84) |
| Size |  |  | 0.007\*\*\* | 0.001 |
|  |  |  | (3.70) | (1.13) |
| Tobin’s Q |  |  | -0.000\*\*\* | 0.000 |
|  |  |  | (-3.17) | (0.24) |
| Constant |  |  | 0.002 | 0.001 |
|  |  |  | (0.21) | (0.20) |
|  |  |  |  |  |
| Firm fixed effects |  |  | Yes | Yes |
| Year fixed effects |  |  | Yes | Yes |
| Observations |  |  | 38,628 | 38,628 |
| Adjusted R-squared |  |  | 0.0988 | 0.0884 |
|  |  |  |  |  |
| This table presents the results of the takeover activity analysis. Please refer to Appendix C for variable definitions and data sources. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively. | | | | |

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| --- |
| **Table 13** |
| **Incumbent administration** | |  |
|  |  |  |
|  | Capex | |
| Variable: | (1) | (2) |
|  |  |  |
| CFIUS Block pre-Trump [a] | -0.021 | -0.016 |
|  | (-1.00) | (-0.76) |
| CFIUS Block post-Trump [b] | -0.124\*\*\* | -0.111\*\*\* |
|  | (-2.80) | (-2.69) |
| Cash flow |  | 0.160\*\*\* |
|  |  | (4.64) |
| Leverage |  | -0.066\*\*\* |
|  |  | (-5.32) |
| Size |  | -0.129\*\*\* |
|  |  | (-9.67) |
| Tobin’s Q |  | 0.007\*\*\* |
|  |  | (6.31) |
| Constant | 0.372\*\*\* | 1.102\*\*\* |
|  | (292.91) | (14.27) |
|  |  |  |
| Firm fixed effects | Yes | Yes |
| Year fixed effects | Yes | Yes |
| Test [a] = [b] | 0.053 | 0.056 |
| Observations | 41,918 | 41,918 |
| Adjusted R-squared | 0.1946 | 0.2102 |
|  |  |  |
| This table presents the results of the incumbent administration analysis. CFIUS Block pre-Trump and CFIUS Block post-Trump are defined using CFIUS interventions before and after the 2016 U.S. presidential election respectively. Test [a] = [b] is a t-test of equality between the two coefficients. Please refer to Appendix C for variable definitions and data sources. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively. | | |

|  |  |  |  |  |
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| **Table 14** |  | |  | |
| **Robustness tests** | | | | |
|  |  | |  | |
|  | Capex | | | |
| Variable: | (1) | (2) | (3) | (4) |
|  |  |  |  |  |
| CFIUS Block | -0.072\*\* | -0.053\*\*\* | -0.070\*\* |  |
|  | (-2.45) | (-3.15) | (-2.13) |  |
| CFIUS Block all deals |  |  |  | -0.041\* |
|  |  |  |  | (-1.78) |
| Cash flow | 0.153\*\*\* | 0.109\*\*\* | 0.140\*\*\* | 0.160\*\*\* |
|  | (4.27) | (3.91) | (3.54) | (4.63) |
| Leverage | -0.058\*\*\* | -0.061\*\*\* | -0.069\*\*\* | -0.065\*\*\* |
|  | (-3.94) | (-4.10) | (-5.21) | (-5.34) |
| Size | -0.121\*\*\* | -0.131\*\*\* | -0.151\*\*\* | -0.130\*\*\* |
|  | (-6.28) | (-7.82) | (-5.64) | (-9.77) |
| Tobin’s Q | 0.006\*\*\* | 0.006\*\*\* | 0.009\*\*\* | 0.007\*\*\* |
|  | (4.40) | (4.56) | (4.11) | (6.31) |
| Constant | 1.071\*\*\* | 1.100\*\*\* | 1.155\*\*\* | 1.106\*\*\* |
|  | (9.98) | (10.89) | (8.64) | (14.29) |
|  |  |  |  |  |
| Firm fixed effects | Yes | Yes | Yes | Yes |
| Year fixed effects | Yes | Yes | Yes | Yes |
| Observations | 29,401 | 35,278 | 18,389 | 41,918 |
| Adjusted R-squared | 0.1920 | 0.2318 | 0.2170 | 0.2100 |
|  |  |  |  |  |
| This table presents the results of the CFIUS review (column 1), the heterogenous industry effects (column 2), the unique business segment (column 3), and the all deals (column 4) analyses. Please refer to Appendix C for variable definitions and data sources. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively.. | | | | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 15** | |  | |  | |  |
| **Length of the treatment effect** | | | | | | |
|  | | | | | | |
|  |  |  | Capex | | | |
| Variable: |  |  | (1) | (2) | (3) | (4) |
|  |  |  |  |  |  |  |
| CFIUS Block one year |  |  | -0.045\*\*\* |  |  |  |
|  |  |  | (-2.61) |  |  |  |
| CFIUS Block two years |  |  |  | -0.088\*\*\* |  |  |
|  |  |  |  | (-2.72) |  |  |
| CFIUS Block three years |  |  |  |  | -0.076\*\* |  |
|  |  |  |  |  | (-2.44) |  |
| CFIUS Block four years |  |  |  |  |  | -0.072\*\* |
|  |  |  |  |  |  | (-2.43) |
| Cash flow |  |  | 0.160\*\*\* | 0.160\*\*\* | 0.160\*\*\* | 0.160\*\*\* |
|  |  |  | (4.62) | (4.63) | (4.62) | (4.63) |
| Leverage |  |  | -0.066\*\*\* | -0.066\*\*\* | -0.066\*\*\* | -0.066\*\*\* |
|  |  |  | (-5.31) | (-5.32) | (-5.32) | (-5.31) |
| Size |  |  | -0.130\*\*\* | -0.129\*\*\* | -0.129\*\*\* | -0.129\*\*\* |
|  |  |  | (-9.81) | (-9.73) | (-9.75) | (-9.75) |
| Tobin’s Q |  |  | 0.007\*\*\* | 0.007\*\*\* | 0.007\*\*\* | 0.007\*\*\* |
|  |  |  | (6.30) | (6.31) | (6.31) | (6.31) |
| Constant |  |  | 1.103\*\*\* | 1.101\*\*\* | 1.103\*\*\* | 1.103\*\*\* |
|  |  |  | (14.39) | (14.35) | (14.34) | (14.33) |
|  |  |  |  |  |  |  |
| Firm fixed effects |  |  | Yes | Yes | Yes | Yes |
| Year fixed effects |  |  | Yes | Yes | Yes | Yes |
| Observations |  |  | 41,918 | 41,918 | 41,918 | 41,918 |
| Adjusted R-squared |  |  | 0.2098 | 0.2102 | 0.2101 | 0.2101 |
|  |  |  |  |  |  |  |
| This table presents the results of the length of the treatment effect analysis. The length of the treatment effect ranges from one to four years (columns 1–4). Please refer to Appendix C for variable definitions and data sources. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively. | | | | | | |

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| **Table ADDITIONAL** | | | | | | | | | |
| **CFIUS interventions and corporate investment** | | | | | | | | | |
|  | | | | | | | | | |
|  | Capex | | | | | | | | |
| Variable: |  |  | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|  |  |  |  |  |  |  |  |  |  |
| CFIUS Block |  |  | -0.076\*\* | -0.079\*\* | -0.063\*\*\* | -0.081\*\* | -0.079\*\* | -0.079\*\* | -0.079\*\* |
|  |  |  | (-2.44) | (-2.53) | (-3.10) | (-2.50) | (-2.47) | (-2.48) | (-2.49) |
| Cash flow |  |  | 0.160\*\*\* | 0.159\*\*\* | 0.155\*\*\* | 0.160\*\*\* | 0.160\*\*\* | 0.160\*\*\* | 0.160\*\*\* |
|  |  |  | (4.62) | (4.60) | (4.80) | (4.61) | (4.62) | (4.61) | (4.62) |
| Leverage |  |  | -0.066\*\*\* | -0.066\*\*\* | -0.067\*\*\* | -0.066\*\*\* | -0.066\*\*\* | -0.066\*\*\* | -0.066\*\*\* |
|  |  |  | (-5.32) | (-5.32) | (-5.19) | (-5.33) | (-5.33) | (-5.32) | (-5.32) |
| Size |  |  | -0.129\*\*\* | -0.129\*\*\* | -0.130\*\*\* | -0.129\*\*\* | -0.130\*\*\* | -0.129\*\*\* | -0.129\*\*\* |
|  |  |  | (-9.75) | (-9.72) | (-9.73) | (-9.78) | (-9.79) | (-9.75) | (-9.75) |
| Tobin’s Q |  |  | 0.007\*\*\* | 0.007\*\*\* | 0.007\*\*\* | 0.007\*\*\* | 0.007\*\*\* | 0.007\*\*\* | 0.007\*\*\* |
|  |  |  | (6.31) | (6.29) | (6.35) | (6.29) | (6.29) | (6.29) | (6.29) |
| Constant |  |  | 1.103\*\*\* | 1.101\*\*\* | 1.102\*\*\* | 1.104\*\*\* | 1.104\*\*\* | 1.103\*\*\* | 1.102\*\*\* |
|  |  |  | (14.34) | (14.29) | (14.24) | (14.38) | (14.39) | (14.34) | (14.34) |
|  |  |  |  |  |  |  |  |  |  |
| Subsample |  |  | All | [-1,+1] | [-2,+2] | [0,+21] | [0,+63] | [0,+126] | [0,+252] |
| Firm fixed effects |  |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Year fixed effects |  |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations |  |  | 41,918 | 41,850 | 41,612 | 41,798 | 41,855 | 41,835 | 41,845 |
| Adjusted R-squared |  |  | 0.2101 | 0.2101 | 0.2134 | 0.2099 | 0.2100 | 0.2099 | 0.2099 |
|  |  |  |  |  |  |  |  |  |  |
| This table presents the results of the difference-and-differences analysis comparing investments of the treatment group to investments of the control group. The treatment group is restricted to only industries with negative market reactions after CFIUS interventions using the Fama-French three factor model. Please refer to Appendix C for variable definitions and data sources. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively. | | | | | | | | | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table ADDITIONAL** | | | | | | | | | |
| **CFIUS interventions and corporate investment** | | | | | | | | | |
|  | | | | | | | | | |
|  | Capex | | | | | | | | |
| Variable: |  |  | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|  |  |  |  |  |  |  |  |  |  |
| CFIUS Block |  |  | -0.076\*\* | -0.079\*\* | -0.063\*\*\* | -0.080\*\* | -0.088\*\* | -0.083\*\* | -0.084\*\* |
|  |  |  | (-2.44) | (-2.53) | (-3.10) | (-2.47) | (-2.34) | (-2.59) | (-2.26) |
| Cash flow |  |  | 0.160\*\*\* | 0.159\*\*\* | 0.155\*\*\* | 0.160\*\*\* | 0.160\*\*\* | 0.160\*\*\* | 0.160\*\*\* |
|  |  |  | (4.62) | (4.60) | (4.80) | (4.61) | (4.64) | (4.62) | (4.63) |
| Leverage |  |  | -0.066\*\*\* | -0.066\*\*\* | -0.067\*\*\* | -0.066\*\*\* | -0.066\*\*\* | -0.066\*\*\* | -0.066\*\*\* |
|  |  |  | (-5.32) | (-5.32) | (-5.19) | (-5.33) | (-5.32) | (-5.33) | (-5.29) |
| Size |  |  | -0.129\*\*\* | -0.129\*\*\* | -0.130\*\*\* | -0.129\*\*\* | -0.130\*\*\* | -0.130\*\*\* | -0.129\*\*\* |
|  |  |  | (-9.75) | (-9.72) | (-9.73) | (-9.77) | (-9.77) | (-9.77) | (-9.71) |
| Tobin’s Q |  |  | 0.007\*\*\* | 0.007\*\*\* | 0.007\*\*\* | 0.007\*\*\* | 0.007\*\*\* | 0.007\*\*\* | 0.007\*\*\* |
|  |  |  | (6.31) | (6.29) | (6.35) | (6.29) | (6.29) | (6.29) | (6.29) |
| Constant |  |  | 1.103\*\*\* | 1.101\*\*\* | 1.102\*\*\* | 1.103\*\*\* | 1.106\*\*\* | 1.104\*\*\* | 1.102\*\*\* |
|  |  |  | (14.34) | (14.29) | (14.24) | (14.37) | (14.35) | (14.36) | (14.29) |
|  |  |  |  |  |  |  |  |  |  |
| Subsample |  |  | All | [-1,+1] | [-2,+2] | [0,+21] | [0,+63] | [0,+126] | [0,+252] |
| Firm fixed effects |  |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Year fixed effects |  |  | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations |  |  | 41,918 | 41,850 | 41,612 | 41,801 | 41,626 | 41,779 | 41,672 |
| Adjusted R-squared |  |  | 0.2101 | 0.2101 | 0.2134 | 0.2099 | 0.2092 | 0.2099 | 0.2091 |
|  |  |  |  |  |  |  |  |  |  |
| This table presents the results of the difference-and-differences analysis comparing investments of the treatment group to investments of the control group. The treatment group is restricted to only industries with negative market reactions after CFIUS interventions using the Fama-French plus momentum model. Please refer to Appendix C for variable definitions and data sources. All continuous variables are winsorized at the 1st and the 99th percentiles. All regressions include firm and year fixed effects. Standard errors are clustered at industry level (t-stat in brackets). \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% two-tails levels respectively. | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |

**Appendix A – Data construction process**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table A1** | | | | |
| **CFIUS activities during FINSA** | | | | |
| CFIUS annual report | Number of notices | Number of investigations | Notices withdrawn | Of which resubmitted |
| 2008 | 155 | 23 | 23 | 5 |
| 2009 | 65 | 25 | 7 | 4 |
| 2010 | 93 | 35 | 12 | 7 |
| 2011 | 111 | 40 | 6 | 6 |
| 2012 | 114 | 45 | 22 | 12 |
| 2013 | 97 | 48 | 8 | NA |
| 2014 | 147 | 51 | 12 | NA |
| 2015 | 143 | 66 | 13 | 9 |
| 2016 | 172 | 79 | 27 | 15 |
| 2017 | 237 | 172 | 74 | 44 |
| 2018 | 229 | 158 | 66 | 42 |
| 2019 | 231 | 113 | 30 | 18 |
| Total | 1,794 | 855 | 300 | 162 |
| This table presents CFIUS activities during FINSA. Data are collected from CFIUS annual reports. NA indicates that figures are not available in CFIUS annual reports. | | | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Table A2** | | | | | | | |
| **Validation CFIUS activities** | | | | | | | |
| CFIUS annual report | Notices withdrawn | Notices resubmitted | Commercial reasons | Denial of regulatory approval | Presidential decisions | CFIUS interventions | CFIUS interventions detected |
|  | (A = B + C+ D) | (B) | (C) | (D) | (E) | (F = D + E) |  |
| 2015 | 13 | 9 | 1 | 3 | 0 | 3 | 1 |
| 2016 | 27 | 15 | 4 | 8 | 1 | 9 | 9 |
| 2017 | 74 | 44 | 4 | 26 | 1 | 27 | 13 |
| 2018 | 66 | 42 | 5 | 19 | 1 | 20 | 14 |
| 2019 | 30 | 18 | 4 | 8 | 1 | 9 | 4 |
| Total | 210 | 128 | 18 | 64 | 4 | 68 | 41 (60%) |
| This table presents CFIUS activities over the period from 2015 to 2019. Data are collected from CFIUS annual reports, Factiva, SEC EDGAR, and the financial press. CFIUS unwindings are included among denials of regulatory approval. | | | | | | | |
|  | | | | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table A3** | | | | |
| **List of CFIUS interventions during FINSA** | | | | |
| **ID** | **Date** | **Buyer** | **Target** | **Description** |
| 1 | 2/21/2008 | Huawei technologies co | 3com corp | Public target |
| 2 | 12/21/2009 | Northwest nonferrous int. investment co | Firstgold corp | Proximity to military facilities |
| 3 | 6/24/2010 | Tangshan caofeidian investment corp | Emcore corp | Public target |
| 4 | 7/1/2010 | Huawei technologies co | Motorola inc | Public target |
| 5 | 7/1/2010 | Huawei technologies co | 2wire | Private target |
| 6 | 8/19/2010 | Anshan iron & steel group | Steel development co | Private target |
| 7 | 10/18/2012 | Superior aviation beijing co | Hawker beechcraft inc | Public target |
| 8 | 11/16/2013 | Roscosmos | 6 gps sites | Proximity to military facilities |
| 9 | 08/13/2014 | Goldleaf jewelry co | Erg resources llc | Proximity to military facilities |
| 10 | 12/22/2014 | Oao rosneft | Oil-trading unit | Asset deal (missing sic) |
| 11 | 10/26/2015 | Go scale capital | Lumileds unit | Asset deal (missing sic) |
| 12 | 2/16/2016 | China resources microelectronics ltd | Fairchild semiconductor inc | Public target |
| 13 | 2/23/2016 | Unisplendour corporation | Western digital corp | Public target |
| 14 | 3/28/2016 | Origin technologies corp | Affymetrix inc | Public target |
| 15 | 5/27/2016 | Zoomlion heavy industry science and tech. | Terex corp | Public target |
| 16 | 8/1/2016 | San’an optoelectronics co ltd | Global communication semiconductors llc | Private target |
| 17 | 11/5/2016 | Leeco global holding | Vizio holdings inc | Public target |
| 18 | 12/2/2016 | Fujian grand chip investment fund lp | Aixtron se | Public target |
| 19 | 12/26/2016 | Hybrid kinetic group limited | Uqm technologies inc | Public target |
| 20 | 2/16/2017 | Infineon technologies ag | Wolfspeed power and rf division | Asset deal (missing sic) |
| 21 | 6/1/2017 | Oneweb and softbank group corp | Intelsat sa | Public target |
| 22 | 6/7/2017 | Tcl industries holdings | Novatel wireless inc | Private target |
| 23 | 7/26/2017 | Beijing shareco technologies co | Global eagle entertainment inc | Public target |
| 24 | 8/3/2017 | Idg energy investment group ltd | Texas eagle ford shale | Asset deal (missing sic) |
| 25 | 8/4/2017 | Sdic fund management co | Maxwell technologies inc | Public target |
| 26 | 9/2/2017 | Netposa technologies | Arecont vision llc | Private target |
| 27 | 9/13/2017 | Canyon bridge capital partners | Lattice semiconductor corp | Public target |
| 28 | 9/26/2017 | Navinfo co ltd | Here europe b v | Private target |
| 29 | 10/4/2017 | Dragon gem limited and absolute frontier ltd | Pedevco corp | Public target |
| 30 | 11/13/2017 | Zhongwang | Aleris corporation | Public target |
| 31 | 11/21/2017 | Orient hontai capital | Applovin ltd | Private target |
| 32 | 12/6/2017 | Hna capital group co | Jersey holding corp | Private target |
| 33 | 1/2/2018 | Ant financial | Moneygram international inc | Public target |
| 34 | 2/20/2018 | Bluefocus international limited | Fluent inc | Public target |
| 35 | 2/22/2018 | Unic capital management co | Xcerra corporation | Public target |
| 36 | 3/1/2018 | Jinzi ham co ltd | Novabay pharmaceuticals inc | Public target |
| 37 | 3/2/2018 | Beijing dabeinong technology group co | Waldo farms inc | Private target |
| 38 | 3/12/2018 | Broadcom limited | Qualcomm inc | Public target |
| 39 | 3/19/2018 | Zhejiang vie science & technology | Evatran group inc | Private target |
| 40 | 5/9/2018 | China heavy duty truck group co | Uqm technologies inc | Public target |
| 41 | 5/10/2018 | Shenzhen selen science & technology co ltd | Akron polymer systems inc | Private target |
| 42 | 8/8/2018 | Shenzhen energy group co ltd | Recurrent energy development holdings llc | Private target |
| 43 | 10/22/2018 | Grandland holdings group ltd | Permasteelisa spa | Private target |
| 44 | 11/14/2018 | Voltabox ag | Navitas systems llc | Private target |
| 45 | 4/11/2019 | Enn ecological holdings co | Toshiba america lng corp | Private target |
|  |  |  |  |  |
| This table presents the list of detected CFIUS interventions during FINSA. Data are collected from Factiva, SEC EDGAR, and the financial press. We remain available to provide any additional identifying information regarding CFIUS interventions. | | | | |

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| --- | --- | --- | --- | --- |
| **Table A4** | | | | |
| **List of CFIUS informal actions during FINSA** | | | | |
| **ID** | **Date** | **Buyer** | **Target** | **Description** |
| 1 | 9/5/2012 | China National Offshore Oil Corporation | Nexen inc (cleared) | Public target |
| 2 | 7/21/2015 | Tsinghua unigroup ltd | Micron technology inc (blocked) | Public target |
| 3 | 4/10/2017 | Rosneft | CITGO (cleared) | Private target |
| 4 | 11/27/2019 | ByteDance | Musical.ly (blocked) | Private target |
|  |  |  |  |  |
| This table presents the list of detected CFIUS informal actions during FINSA. Data are collected from Factiva, SEC EDGAR, and the financial press. We remain available to provide any additional identifying information regarding CFIUS interventions. | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table A5** | | | | |
| **List of CFIUS mitigation agreements before closing during FINSA** | | | | |
| **ID** | **Date** | **Buyer** | **Target** | **Description** |
| 1 | 10/21/2016 | Anbang insurance group co | Strategic hotels & resorts inc | Proximity to military facilities |
| 2 | 11/29/2016 | Apex technology co | Lexmark international inc | Public target |
| 3 | 12/29/2017 | Hna innovation finance group co | Hg storage international ltd | Private target |
| 4 | 01/19/2018 | Creat group co | Biotest ag | Private target |
| 5 | 06/11/2018 | China Oceanwide Holdings Group | Genworth Financial | Public target |
| 6 | 11/20/2018 | Cosco shipping holdings co | Orient overseas international ltd | Private target |
|  |  |  |  |  |
| This table presents the list of detected CFIUS mitigation agreements before closing during FINSA. Data are collected from Factiva, SEC EDGAR, and the financial press. We remain available to provide any additional identifying information regarding CFIUS interventions. | | | | |

|  |  |  |  |  |
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| **Table A6** | | | | |
| **List of CFIUS unwindings after closing during FINSA** | | | | |
| **ID** | **Date** | **Buyer** | **Target** | **Description** |
| 1 | 02/02/2011 | Cmail.ru | Icq unit | Asset deal (missing sic) |
| 2 | 02/21/2011 | Huawei technologies co | 3leaf systems inc | Private target |
| 3 | 06/11/2012 | Far east golden resources investment ltd | Hk battery technology inc | Proximity to military facilities |
| 4 | 9/28/2012 | Ralls corp | Butter creek projects | Proximity to military facilities |
| 5 | 11/20/2012 | Polaris financial technology ltd | Identrust inc | Private target |
| 6 | 06/18/2013 | Procon mining and tunnelling ltd | Lincoln gold mining inc | Proximity to military facilities |
| 7 | 9/27/2016 | Fosun International Limited | Ironshore Inc | Public target (financial) |
| 8 | 10/30/2018 | Pamplona capital management llp | Cofense inc | Private target |
| 9 | 11/09/2018 | Hna capital group co | Palace 850 third avenue | Proximity to military facilities |
| 10 | 04/04/2019 | Icarbonx | Patientslikeme inc | Private target |
| 11 | 05/13/2019 | Beijing kunlun wanwei technology co | Grindr llc | Private target |
| 12 | 05/22/2019 | Icarbonx | HealthTell | Private target |
|  |  |  |  |  |
| This table presents the list of detected CFIUS unwindings after closing during FINSA. Data are collected from Factiva, SEC EDGAR, and the financial press. We remain available to provide any additional identifying information regarding CFIUS interventions. | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table A7** | | | | |  |
| **Validation of CFIUS interventions involving listed targets during FINSA** | | | | |  |
| **ID** | **Date** | **Target** | **Industry notices** | **Deal value ($ mln)** | **Industry average total assets ($ mln)** |
| 1 | 2/21/2008 | 3com corp | 33 | 2,200 | 1,643 |
| 2 | 6/24/2010 | Emcore corp | 17 | 28 | 2,218 |
| 3 | 7/01/2010 | Motorola solutions inc | 17 | 16,000 | 2,218 |
| 4 | 10/18/2012 | Hawker beechcraft inc | 5 | 1,800 | 8,319 |
| 5 | 2/16/2016 | Fairchild semiconductor inc | 25 | 2,460 | 3,963 |
| 6 | 2/23/2016 | Western digital corp | 25 | 3,780 | 3,963 |
| 7 | 3/28/2016 | Affymetrix inc | 25 | 1,600 | 3,963 |
| 8 | 5/27/2016 | Terex corp | 11 | 3,400 | 3,045 |
| 9 | 11/5/2016 | Vizio holdings inc | 25 | 2,250 | 3,963 |
| 10 | 12/2/2016 | Aixtron se | 11 | 723 | 3,045 |
| 11 | 12/26/2016 | Uqm technologies inc | 5 | 48 | 1,659 |
| 12 | 6/1/2017 | Intelsat sa | 11 | 1,700 | 20,032 |
| 13 | 7/26/2017 | Global eagle entertainment inc | 11 | 416 | 20,032 |
| 14 | 8/4/2017 | Maxwell technologies inc | 6 | 47 | 1,828 |
| 15 | 9/13/2017 | Lattice semiconductor corp | 27 | 1,300 | 4,699 |
| 16 | 10/4/2017 | Pedevco corp | 5 | 12 | 5,432 |
| 17 | 11/13/2017 | Aleris corporation | 4 | 2,330 | 2,850 |
| 18 | 1/2/2018 | Moneygram international inc | 3 | 1,200 | 3,278 |
| 19 | 2/20/2018 | Fluent inc | 25 | 100 | 2,426 |
| 20 | 2/22/2018 | Xcerra corporation | 28 | 580 | 4,677 |
| 21 | 3/1/2018 | Novabay pharmaceuticals inc | 14 | 27 | 2,751 |
| 22 | 3/12/2018 | Qualcomm inc | 28 | 117,000 | 4,677 |
| 23 | 5/9/2018 | Uqm technologies inc | 7 | 29 | 1,408 |
|  |  |  |  |  |  |

**Appendix B – FINSA**

|  |  |  |  |
| --- | --- | --- | --- |
| **List of critical industries according to FINSA** | | |  |
|  | | | |
| SIC code |  | Description | FINSA list |
| 1381 |  | Energy Storage | 1 |
| 2821 |  | Fiber-reinforced Composites and Metal Matrix Composites | 1 |
| 2833 |  | Medicinal and Botanical Manufacturing | 1 |
| 2834 |  | Pharmaceutical Preparation Manufacturing | 1 |
| 2835 |  | Medical Diagnostics | 1 |
| 2836 |  | Human, Animal, Agricultural and Industrial Biotechnology | 1 |
| 2892 |  | Energetic Materials (explosives, propellants, etc.) | 1 |
| 2899 |  | Semiconductor Materials | 1 |
| 3087 |  | Polymeric Materials, Plastic Fabricators, Homogenous Injections, Extrusions, etc. | 1 |
| 3229 |  | Space Optics | 1 |
| 3299 |  | Ceramics | 1 |
| 3313 |  | Processes for Super Alloys, Polymers, etc. | 1 |
| 3341 |  | Super Alloys | 1 |
| 3542 |  | Lathes 2-axes or more with < 4 Micron Positioning Accuracy | 1 |
| 3544 |  | Precision Super Alloy Investment Casting | 1 |
| 3549 |  | Laser Sintering | 1 |
| 3559 |  | Fabrication Equipment – Nano-manipulation Equipment | 1 |
| 3569 |  | Battlefield Robotics | 1 |
| 3571 |  | Electronic Computers | 1 |
| 3572 |  | Data Storage | 1 |
| 3575 |  | Computer Terminals | 1 |
| 3577 |  | Peripherals | 1 |
| 3661 |  | Routers | 1 |
| 3663 |  | Communications Satellites | 1 |
| 3672 |  | Bare Printed Circuit Boards | 1 |
| 3674 |  | Semiconductors | 1 |
| 3679 |  | Monolithic Microwave Integrated Circuit (MMIC) Power Amplifiers | 1 |
| 3699 |  | Electronic Warfare Systems, Subsystems, or Components | 1 |
| 3711 |  | Surface Transportation Technologies | 1 |
| 3721 |  | Commercial Air Vehicle Products | 1 |
| 3724 |  | Gas Turbine Engine Products, Manufacturing and Controls | 1 |
| 3731 |  | Undersea Vehicles | 1 |
| 3761 |  | Space Launch Vehicles | 1 |
| 3764 |  | Launch Propulsion for Space Systems | 1 |
| 3812 |  | Passive Radiolocation/ Emitter Measurement/ Targeting Systems | 1 |
| 3822 |  | Power and Thermal Management | 1 |
| 3823 |  | Industrial Automation, Robotics | 1 |
| 3825 |  | Automated Test Equipment | 1 |
| 3826 |  | Analytical and Scientific Instrumentation | 1 |
| 3827 |  | Nano-imaging Equipment | 1 |
| 3829 |  | Chemical Detection, Warning, and Identification | 1 |
| 3841 |  | Surgical and Medical Instrument Manufacturing | 1 |
| 3842 |  | Surgical Appliance and Supplies Manufacturing | 1 |
| 3843 |  | Dental Equipment and Supplies Manufacturing | 1 |
| 3844 |  | X-ray Tomography Inspection Tools | 1 |
| 3845 |  | Laser Related Equipment | 1 |
| 3851 |  | Ophthalmic Goods Manufacturing | 1 |
| 4499 |  | Ocean Salvage | 1 |
| 4812 |  | Wireless Data | 1 |
| 4813 |  | Telecommunications Carriers | 1 |
| 4899 |  | Satellite Telecommunication Carriers | 1 |
| 4911 |  | Hydroelectric Power Generation | 1 |
| 7371 |  | Computer Programming Services | 1 |
| 7372 |  | Prepackaged Software | 1 |
| 7373 |  | Computer Graphics and Scanning, CAD/CAM, CAE systems | 1 |
| 7374 |  | Data Processing Services, Hosting | 1 |
| 7375 |  | Internet Service Providers and Web Search Portals | 1 |
| 8243 |  | Data Processing Schools | 1 |
| 8711 |  | Space Survivability | 1 |
| 8731 |  | Metamaterials (nanostructures with special properties) | 1 |
| 8733 |  | Biotech Research and Production Equipment | 1 |
| Total |  |  | 61 |
| This table presents the FINSA list of 61 SIC four-digit code critical industries (see CFIUS annual report, 2007, available at: <https://home.treasury.gov/system/files/206/CFIUS-Annual-Rpt-2008.pdf> ). | | | |

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| **Appendix C – Variable definitions and data sources** | | |
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| **Independent:** | **Definition:** | **Source:** | |
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| Treatment group | It is an indicator variable equal to one for peers belonging to the industry of the target of a blocked acquisition and zero otherwise. According to Hoberg and Phillips (2010), (2016), industry classifications are based on firm pairwise similarity scores from textual analysis of firm 10-K product descriptions. Data are publicly available at: <https://hobergphillips.tuck.dartmouth.edu/industryclass.htm> | Hoberg Phillips | |
|  |  |  | |
| CFIUS Block | This variable is the interaction term between the “treatment group” and “post CFIUS interventions”. It is an indicator variable equal to one for the three firm-year observations after CFIUS interventions and zero otherwise. | Factiva, SEC EDGAR | |
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| **Dependent:** |  |  | |
|  |  |  | |
| Capex | Capital expenditures (CAPX) scaled by lagged net property, plant and equipment (PPENT). | Compustat | |
|  |  |  | |
| Acquisitions | Acquisition expenditures (AQC) scaled by total assets (AT). Missing values are replaced with zero. | Compustat | |
|  |  |  | |
| Investments | Research and development expenditures (XRD) + capital expenditures (CAPX) + acquisition expenditures (AQC) – cash receipts from sale of property, plant, and equipment (SPPE), scaled by total assets (AT). | Compustat | |
|  |  |  | |
| R&D | Research and development expenditures (XRD) scaled by total assets (AT). Missing values are replaced with zero. | Compustat | |
|  |  |  | |
|  |  |  | |
| **Control:** |  |  | |
|  |  |  | |
| Cash flow | Operating activity net cash flow (OANCF) scaled by total assets (AT). | Compustat | |
|  |  |  | |
| Leverage | Short term debt (DLC) + long term debt (DLTT) scaled by total assets (AT). | Compustat | |
|  |  |  | |
| Size | The natural logarithm of total assets (AT). | Compustat | |
|  |  |  | |
| Tobin’s Q | Market value of equity (PRCC\*CSHO) + book value of debt (AT – CEQ) scaled by total assets (AT). | Compustat | |
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| **Additional:** |  |  | |
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| CAR | Fama-French three factor model and the Fama-French plus momentum model cumulative abnormal returns. | WRDS Event Study | |
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| CFIUS Block one-year before | Indicator variable defined as the variable CFIUS Block. It takes the value of one for the year before CFIUS interventions. | Factiva, SEC EDGAR | |
|  |  |  | |
| CFIUS Block two-year before | Indicator variable defined as the variable CFIUS Block. It takes the value of one for the two years before CFIUS interventions. | Factiva, SEC EDGAR | |
|  |  |  | |
| CFIUS Trump | This variable is the interaction term between the “treatment group” and “post 2016 U.S. presidential election”. It is an indicator variable equal to one for the three firm-year observations after the 2016 U.S. presidential election and zero otherwise. | Factiva, SEC EDGAR | |
|  |  |  | |
| CFIUS Block pre-Trump | Indicator variable defined as the variable CFIUS Block. Only CFIUS interventions before the 2016 U.S. presidential election are included. | Factiva, SEC EDGAR | |
|  |  |  | |
| CFIUS Block post-Trump | Indicator variable defined as the variable CFIUS Block. Only CFIUS interventions after the 2016 U.S. presidential election are included. | Factiva, SEC EDGAR | |
|  |  |  | |
| CFIUS Block one year | Indicator variable defined as the variable CFIUS Block. It takes the value of one for the first year after CFIUS interventions. | Factiva, SEC EDGAR | |
|  |  |  | |
| CFIUS Block two years | Indicator variable defined as the variable CFIUS Block. It takes the value of one for the two years after CFIUS interventions. | Factiva, SEC EDGAR | |
|  |  |  | |
| CFIUS Block four years | Indicator variable defined as the variable CFIUS Block. It takes the value of one for the four years after CFIUS interventions. | Factiva, SEC EDGAR | |
|  |  |  | |
| CFIUS Block all deals | Indicator variable defined as the variable CFIUS Block. We include asset deals, listed and private targets. Using the SIC three-digit code classification, the treatment group consists of the peers belonging to the industry of the target of a blocked acquisition. | Factiva, SEC EDGAR | |
|  |  |  | |
| FINSA | FINSA contains a list of 61 SIC four-digit code (32 SIC three-digit code) critical industries. The treatment group consists of firms belonging to the list of critical industries according to FINSA. This variable is the interaction term between the “treatment group” and “post FINSA adoption”. It is an indicator variable equal to one for all observations after the adoption and zero otherwise. | CFIUS annual report | |
|  |  |  | |
| Payout | Total dividends (DVT) + share buybacks (PRSTKC). It is an indicator variable equal to one if the firm has positive distributions and zero otherwise. | Compustat | |
|  |  |  | |
| Domestic takeover | Indicator variable equal to one if a firm is taken over by a domestic buyer in the next year and zero otherwise. | SDC Platinum | |
|  |  |  | |
| Foreign takeover | Indicator variable equal to one if a firm is taken over by a foreign buyer in the next year and zero otherwise. | SDC Platinum | |
|  |  |  | |
| Whited-Wu index | The Whited-Wu index is equal: -0.091\*CF - 0.062\*DIVPOS + 0.021\*TLTD - 0.044\*LNTA + 0.102\*ISG - 0.035\*SG. CF is the ratio of income before extraordinary items (IB) plus depreciation (DP), scaled by total assets (AT). DIVPOS is an indicator variable equal to one if the firm pays dividends (DVT) in year t and zero otherwise. TLTD is equal to long term debt (DLTT) scaled by total assets (AT). LNTA is the natural logarithm of total assets (AT). SG is the annual sale growth (SALE – L1.SALE/L1.SALE). ISG is industry average of SG calculated at the SIC three-digit code level. | Compustat | |
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1. The final regulations of the Foreign Investment and National Security Act (FINSA) were effective from November 2008 to February 2020. Section 721 of the Defense Production Act of 1950 was revised again through the Foreign Investment Risk Review Modernization Act of 2018 (FIRRMA), whose final regulations became effective from February 13, 2020. See also <https://home.treasury.gov/policy-issues/international/the-committee-on-foreign-investment-in-the-united-states-cfius>. For a review of FIRRMA see Tarbert (2020). [↑](#footnote-ref-1)
2. For example, Marvell Technologies reported, in its 10-Q dated May 4, 2019: “We have been subject to regulatory conditions imposed by the Committee on Foreign Investment in the United States pursuant to a Letter of Assurance (LA) where we have agreed to implement certain cyber security, physical security and training measures to protect national security, which may materially and adversely affect our operating results due to the increased costs of compliance with these measures. If we fail to comply with our obligations under the LA, our ability to operate our business may be adversely affected.” [↑](#footnote-ref-2)
3. According to the U.S. Treasury, as of December 2022, foreign holdings of U.S. equities stood at $10.283 trillion, making foreign investments an important source of capital for the U.S. economy (see <https://home.treasury.gov/news/press-releases/jy1451>) that would be difficult to replace from domestic sources. Frattaroli (2020) and Godsell et al. (2023) fail to find that a decrease in foreign takeovers is compensated by domestic M&A following the enactment of national security policies. [↑](#footnote-ref-3)
4. It is difficult to know which industries FINSA has an impact on. For example, FINSA provides a list of critical industries, which could be potentially used as a treatment group, but our analysis shows that 50% of CFIUS denials occurred in industries outside of such list (see Section 3 for details). [↑](#footnote-ref-4)
5. Using the SIC classification yields similar results. Restricting the sample to firms with a unique business segment also yields similar results. [↑](#footnote-ref-5)
6. Campbell et al. (2012) document the moderating role of financial constraints in the relationship between cost of capital and corporate investment. [↑](#footnote-ref-6)
7. See Executive Order 11858 (as amended by Executive Order 13456) and <https://home.treasury.gov/policy-issues/international/the-committee-on-foreign-investment-in-the-united-states-cfius>. [↑](#footnote-ref-7)
8. This is another reason for our decision to focus on CFIUS interventions involving listed targets. [↑](#footnote-ref-8)
9. CFIUS reviewed 1,794 transactions, of which 17% were withdrawals, over the 2008-2019 period. Parties involved often resubmit a new notice after previously withdrawing an old one before a full review is completed. This is a common practice to gain time during CFIUS review (Jackson, 2020). [↑](#footnote-ref-9)
10. The information content of presidential decisions and withdrawals for denial of regulatory approval is likely higher because they represent less than 8% of the number of notices in the 2015-2019 period (68/869). As a result, we focus on CFIUS interventions instead of non-denial CFIUS activities. [↑](#footnote-ref-10)
11. Moreover, Wan and Wong (2009) document a negative industry market reaction to CNOOC’s unsuccessful takeover of Unocal. CNOOC withdrew its bid for Unocal citing “unprecedented political opposition” before CFIUS reviewed the transaction (p. 3). Finally, Connell and Huang (2014) find a positive industry market reaction to CFIUS interventions. Yet, their analysis is centered on five CFIUS interventions, with only one during FINSA. [↑](#footnote-ref-11)
12. Targets are included in the treatment group. Excluding them (24 firms) from the sample yields similar results. [↑](#footnote-ref-12)
13. In an untabulated analysis, we also control for Loss, Profit, Sales growth, Slack, and Tangibility. Loss is an indicator variable equal to one if the net income (NI) is lower than zero and zero otherwise. Profit is the income before extraordinary items (IB) scaled by total assets (AT). Sales growth is the annual growth rate of sales ((SALE –L.SALE)/L.SALE). Slack is the ratio of cash and cash equivalents (CHE) to net property, plant, and equipment (PPENT). Tangibility is the net property, plant, and equipment (PPENT) scaled by total assets (AT). Including these control variables reduces the sample by 3,031 firm-year observations (almost 10%) and yields similar results. [↑](#footnote-ref-13)
14. Capital expenditures decrease by 7.6% of net property, plant, and equipment which, compared to its mean of 37%, represents a reduction of 20%. [↑](#footnote-ref-14)
15. The treatment group remains the same in this endogeneity test. In other words, instead of staggered CFIUS interventions in the 2008-2019 period, we use the 2016 U.S. presidential election as a unique shock. Notably, the Trump administration adopted other protectionist policies such as trade tariffs during its term. This is not a concern because there is only a limited overlap between these policies and our treatment group based on CFIUS interventions. These policies, in fact, targeted a different set of industries. [↑](#footnote-ref-15)
16. Capital expenditures decrease by 22.7% of net property, plant, and equipment which, compared to its mean of 53%, represents a reduction of 42% in the constrained subsample (Panel A of Table 9). Such magnitude is similar in Panels B and C. [↑](#footnote-ref-16)
17. Our analysis does not address other potential externalities of CFIUS activities. As such, given the embryonic literature on the economic facets of national security policies, we acknowledge that this is one of the potential channels through which CFIUS activities could affect corporate investment. [↑](#footnote-ref-17)
18. In an untabulated analysis, we document a reduction in inward foreign investments toward affected industries following CFIUS interventions. [↑](#footnote-ref-18)