

ERASMUS UNIVERSITY ROTTERDAM

Erasmus School of Economics

Master Thesis Financial Economics

Do anti-takeover laws lead to managerial entrenchment?

A study to the consequences of the enactment of the Foreign Investment and National Security Act of 2007 in the United States on the managerial entrenchment.

Name student: Rianne van der Horst Jansen

Student ID number: 431751

Supervisor: Dr. S. Gryglewicz

Date final version: 27/08/2020

The views stated in this thesis are those of the author and not necessarily those of the supervisor, second assessor, Erasmus School of Economics or Erasmus University Rotterdam.

Abstract

This thesis is a study to the effects of anti-takeover regulation on the managerial entrenchment. Since the amount of anti-takeover regulations has been increasing in different countries, it is important to know what consequences these regulations have on the market for mergers and acquisitions. This study, particularly, focuses on the managerial entrenchment impacted by the U.S. Foreign Investment and National Security Acts (FINSA). This American protectionist law, enacted in 2007, changed the role of the Committee on Foreign Investments in the United States (CFIUS) by reviewing foreign transactions. Possibly, this law limits the threat of a takeover and lead to managerial entrenchment. First, a difference-in-differences analysis performed to test whether the takeover probability is limited for the affected firms after the enactment. Next, the difference-in-differences method is used to test whether the CEO becomes entrenched. This research includes 111.128 firm-years over the period 1998 – 2017. The results do not show a decrease in takeover probability for foreign takeovers, they even show an increase in takeover probability. Furthermore, there is no strong evidence of managerial entrenchment after the passage of FINSA. The only evidence for managerial entrenchment is found for the quiet life hypothesis, as affected firms experience a significant increase in employment rates after the enactment. However, this cannot be explained by a lower level of monitoring by the takeover market. Other significant results show evidence in contrast to managerial entrenchment.

Keywords: Corporate governance, M&A, FINSA, managerial entrenchment, protectionist interventions.

Table of content

- 1. *Introduction*..... 4
- 2. *Theoretical framework*..... 7
 - 2.1 The Foreign Investment and National Security Act..... 7
 - 2.2 Literature review and hypotheses..... 10
- 3. *Data*..... 15
 - 3.1 Data collection..... 15
 - 3.2 Descriptive statistics..... 17
- 4. *Research design*..... 20
 - 4.1 Treatment assignment 20
 - 4.2 Empirical methodology 20
 - 4.3 Endogeneity issues 23
- 5. *Results* 24
 - 5.1 Takeover probability 24
 - 5.2 Empire building or quiet life 26
 - 5.3 Free cash flow 28
 - 5.4 Pay-for-performance sensitivity 30
- 6. *Conclusion*..... 31
 - 6.1 Conclusion..... 31
 - 6.2 Limitations and future research..... 33
- References* 35
- Appendix*..... 39

1. Introduction

In 2018 the U.S. committee blocked several acquisitions of American firms by Chinese-linked buyers, and the U.S. seems to have some criticism regarding these Chinese takeovers (Alderman, 2018). The Committee on Foreign Investment in the United States (hereafter CFIUS) can block transactions when it endangers the national security. However, the U.S. is not the only country protecting their industries and national security as China has been gaining influence and spreading their wealth in many other countries (Alderman, 2018). All over the world, governments have been expressing their concerns regarding the issue of foreign companies and investors taking over vital companies in order to obtain control of key technologies, infrastructure or expertise (Harper, 2020). Recently, European governments increased their regulation to prevent foreign takeovers. For example, amongst others, Italy, Germany and Spain introduced new protective measures to intervene in the mergers and acquisitions (hereafter M&A) market (Clark & Dummett, 2020). Over the years and across different countries, governments have paid attention to unwanted foreign takeovers. Nowadays, the policy of protecting the national market of M&A is still developing, and interventions by governments to control takeovers are likely to continue (Frattaroli, 2019).

The liberalization of international capital movements and investments led to closer integration of nations' markets and increased the number of cross-border M&As (Kang & Johansson, 2000). The rise in international integration made it easier to acquire companies across the border. Simultaneously, the probability of becoming a target in a cross-border transaction increased as well. Thus, while the nations' markets continued to become more closely integrated, concerns rose about the consequences of the increasing cross-border M&As. Ultimately, the amount of laws to regulate the M&A market increased as more and more economies enacted laws to review cross-border takeovers (Evenett, 2004). These regulations do not only have consequences for certain transactions, but they can also affect the behavior of managers. The interests of a firm's manager and its shareholders are not perfectly aligned, and there are different mechanisms to control the manager's behavior in favor of the shareholders. One of the mechanisms to harmonize interests is the threat of a takeover (Jensen & Meckling, 1976). The takeover market can serve as an external disciplinary mechanism to managers. It can reduce agency costs within a firm, because the presence of a takeover threat will put pressure on the management to maximize the firm value. When the threat of a takeover is limited, managers can become entrenched at the cost of shareholders (Manne, 1965). Entrenched managers will act in their own interests and they will seek for private benefits. For example, they make themselves necessary by making certain investments for which the

manager's knowledge and skills are required, increasing their bargaining power towards their shareholders (Meyers, 2003).

A lot of research has already been done in the area of anti-takeover laws and their impact on the firm value and other governance mechanisms. However, the regulation law for the M&A market has changed over the years and thus the effect of a takeover as a corporate governance mechanism may also have changed. For example, because of the collapse of Enron and Worldcom in 2001, the Sarbanes-Oxley Act was implemented which led to much stricter corporate governance standards in the U.S. (Frattaroli, 2019). Furthermore, takeover laws vary in strength and effect (Catan & Kahan, 2014). This makes it unclear whether takeovers as a governance mechanism are relevant today, and what impact they could have. Therefore, the question remains: what is the impact of government takeover protection on the corporate governance mechanisms of the affected firms, and specifically how do managers behave after the implementation of protectionist anti-takeover laws?

This thesis examines whether there is any evidence of managerial entrenchment in the U.S. after the enactment of an U.S. anti-takeover law, the Foreign Investment and National Security Act (hereafter FINSIA). After an increase in M&A activity, the U.S. Congress enacted this law in 2007, which is based on the Defense Production Acts of 1950 (Department of Treasury, 2008). This new act, FINSIA, allows CFIUS to review any 'critical infrastructure' or 'critical technologies' foreign M&A deal. This power of the CFIUS creates uncertainties for potential foreign bidders and increases the political barriers towards foreign investments in the U.S (Godsell, Lel & Miller, 2016). Godsell et al. (2016) find that firms that are affected by FINSIA have a significantly lower probability of being acquired by foreign investors. Furthermore, they find that firms that are affected by FINSIA experience a decrease in their stock prices around the enactment of FINSIA, while firms that are not affected by the law do not experience any significant change in their stock prices. This might be because the manager became entrenched after the passage of the act, since a lower takeover threat can reduce the managerial discipline (Manne, 1965). To examine whether a lower takeover threat will result in managerial entrenchment, a difference-in-differences analysis is performed. For this analysis, the enactment of FINSIA is used as an exogenous event. First, the takeover probability of firms which are and are not affected by this new act is analyzed by a difference-in-differences analysis. Second, several tests are performed to find out what the effect of FINSIA is on the alignment of managers and shareholders, and whether indeed a lower takeover probability leads to more entrenched managers. In contrast to Godsell et al. (2016), who use the E-index of Bebchuk, Cohen and Ferrell (2009), this research will measure the level of management

entrenchment by following the methodology of Frattaroli (2019). In this research of Frattaroli (2019), the level of management entrenchment is measured by several hypotheses regarding the behavior of an entrenched manager. Based on a difference-in-differences analysis, each hypothesis is either accepted or rejected. Frattaroli (2019) finds that a protectionist anti-takeover law introduced in France in 2014 did decrease the likelihood of firms being a target of a merger or acquisition. Next, he examines whether this lower takeover probability leads to managerial entrenchment. However, he does not find any strong evidence of managerial entrenchment after the introduction of the anti-takeover regulation in France. Godsell et al. (2016) find also a decrease in takeover probability by foreign investors for U.S. firms after enactment of a protectionist law. Furthermore, they find that this law has harmful effects for shareholders as it has a negative effect on firm value. In contrast to both studies, this thesis does not find a significant lower takeover probability by foreign takeovers, and an even higher takeover probability is found for domestic takeovers. Even though no decrease in takeover probability is found, this thesis does find some evidence of managerial entrenchment.

This thesis contributes to the literature on the firm-level consequences of takeover protectionism. In a globalizing world, where companies from all over the world become more closely integrated, the possibility of foreign takeovers increases, and cross-border takeovers have become more common. Nevertheless, countries with a globalized economy are also vulnerable, as those countries may have important economic, political and social interests at stake (Jackson, 2010). These takeovers might not always be beneficial and can affect a country in many ways, which is why there is an increasing number of countries adopting regulation to control these cross-border takeovers (Heinemann, 2012). Existing literature shows that protectionist interventions for corporate transactions and related laws can substantially reduce the number of takeovers in a country (Frattaroli, 2019; Dinc & Erel, 2013). However, these recent protectionist laws may affect the manager's behavior differently than previous protectionist laws as they differ in nature. Furthermore, the corporate governance standards have become stricter over the last two decades which is another reason why the recent protectionist laws can have a different impact (Frattaroli, 2019). Therefore, results of previous studies might not be applicable nowadays, and hence, it becomes important to examine how firm outcomes and governance mechanisms change in response to this recent increase in takeover regulation. Furthermore, this thesis is an extension to the results of Godsell et al. (2016), by examining more precisely how FINSA affects the corporate governance within U.S. firms. Especially, this thesis clarifies how the behavior of the management changes after the enactment of FINSA, as it examines the level of entrenchment of managers after the passage of

this protectionist law. For shareholders it is useful to know how the behavior of managers change and what the consequences are for firm value. This enables shareholders to adapt their governance strategy to potential changes as a result of FINSA, so that they can optimize the alignment of interests. Furthermore, it is also valuable for governments to be aware of the consequences of the implementation of the takeover regulation, so that they are able to take these external effects into account when introducing new protectionist laws. Lastly, the results may also be applicable for other countries all over the world. Not only within the U.S., but also across the globe protection against foreign takeovers have become more common. Recently, a lot of European countries propose introducing more protectionist laws (Clark & Dummett, 2020), and for them it is meaningful to know what the consequences of these laws can be.

The remainder of this thesis is organized as follows. The next section starts with a description of the origins and aims of FINSA. Furthermore, theory relating to takeover protection and managerial entrenchment is described and the hypotheses are formulated. In section 3, the data collection and the descriptive statistics are reported. Section 4 describes the empirical design of this research and section 5 presents the empirical results. Lastly, section 6 contains the conclusion as well as a description of the limitations and recommendations for future research.

2. Theoretical framework

This section starts with an overview of FINSA describing the history and development of the act. Next, the section continues with a description of the existing literature about protectionist laws as well as theory on the possible consequences of implementing these laws. Lastly, the hypotheses are drawn from the theory described before.

2.1 The Foreign Investment and National Security Act

Foreign investments have brought a lot of wealth to the U.S., and over the years the number of cross-border M&As increased. However, this inflow of money and power from abroad comes with the threat of losing control over the national security. Therefore, the government is trying to find a balance between an open economy policy and protecting the national security (Cox, 2008). As a result, in 2007 the U.S. Congress passed the Foreign Investments and National Security Act (FINSA). On the one hand, this act has the purpose to ensure the national security, and on the other hand, it should promote foreign investments and create and maintain employment as well (Foreign Investments and National Security Act of 2007). Under this law,

the Committee on Foreign Investment in the U.S. (CFIUS) has the right to review foreign transactions more strictly and prohibit cross-border takeovers which threaten the national security.

The origins of CFIUS go back to the Defense Production Act of 1950. This act, enacted on September 8, 1950, was the first attempt to monitor and, if necessary, prevent direct investment in the U.S. It permitted the American President to reject foreign investments that potentially threaten the national security. Furthermore, the President could delegate this power freely to others (Field, 1950). In 1975, CFIUS was set up to delegate the power to review foreign transactions for potential security risks. However, the tasks and activities of CFIUS remained unclear and obscure for many years (Jackson, 2010). After the Exon-Florio amendment in 1988, the role of CFIUS got more structured and formalized, and from now on they had more power to intervene in the market of M&As (Godsell, Lel & Miller, 2016). The Exon-Florio amendment gave CFIUS the authority to review and prohibit takeovers which threaten the national security. The definition of national security was interpreted very broadly, but CFIUS was instructed to focus their reviews exclusively on the transactions that involve ‘products or key technologies essential to the U.S. defense industrial base’ (Jackson, 2010). The Exon-Florio amendment also gave more structure to the reviewing process of a transaction by the CFIUS, and it resulted in a four-element procedure. The review process by CFIUS starts with a notice of a foreign transaction, either through voluntary disclosure or at CFIUS’s request. After this notice, CFIUS has 30 days to determine whether the transactions raise any national security concerns. If it does, CFIUS has 45 days to investigate the transaction and determine whether the concerns require action by the president. When action is required, the President is the only person who has authority to permit, suspend or prohibit the transaction within 15 days (Cox, 2008). Even though a lot of changes were made, people remained dissatisfied by this amendment. Despite the amendments, the new regulation did not seem to control the foreign investments made in the U.S. and critics believed Exon-Florio was weak and ineffective. Furthermore, some were afraid that the increasing power of CFIUS might harm the U.S. economy in the future. Therefore, critics claimed that another modification was required (Cappucci, 1992).

In 2006, the process of CFIUS attracted a lot of attention as it came under public and congressional criticism after approval of an acquisition made by Dubai Port World. This company was owned by the United Arab Emirates and planned to acquire a U.K.-based company by which they were able to gain control over six major U.S. ports. While CFIUS did approve the transaction, the U.S. Congress was not informed either before or after the approval of the transaction by CFIUS (Rotemberg, 2007). The Congress was not satisfied with the Exon-

Florio provision, which was partly because of this Dubai Port World case, and partly because of the terrorist attacks of 11 September 2001. Since the terrorist attacks in 2001, the Congress had more concerns about the foreign takeovers and already strengthened the national protection by providing special support for critical infrastructures (Jackson, 2010). Overall, the Congress threatened to block this approved deal as they had their concerns about this transaction. Also, other critics complained that the deal would endanger the port security (Rotemberg, 2007). Eventually, the deal went only partially through as Dubai Port World sold the U.S. portion of the business that had been taken over and so the U.S. was able to keep control over the six major U.S. ports (Heineman, 2012).

After the Dubai Port World controversy, all parties agreed that the process of CFIUS was not sufficiently transparent and that another amendment had to be made (Rotemberg, 2007). As a result, many debates were held, and proposals were written. After two years, on 26 July 2007, President Bush signed the FINSAs into law. With the implementation of this act, the Congress was able to strengthen their position, as a consequence of two changes. First, from now on CFIUS was required to report all reviews and investigations to the Congress, and they had to comply to strict requirements for the report. Second, the Congress could add extra requirements for CFIUS to use when assessing foreign transactions and make implications for national's critical infrastructure (Jackson, 2010). Furthermore, the scope of regulation of the CFIUS increased, and the role formalized due to a statutory framework. However, the composition of the committee itself remained fairly the same (Pudner, 2007). Overall, the major change of FINSAs was the increasing authority of CFIUS due to several factors. First, the likelihood that CFIUS could start an investigation or review increased, due to an extended definition of a covered transaction. Several factors determined whether a transaction was reviewed or not, and these factors increased. Furthermore, CFIUS created political uncertainty for foreign investors, as they were somewhat able to decide whether or not to review and investigate transactions (Godsell et al, 2016). Moreover, the task of proving that a transaction was no threat to the national security shifted from the members of CFIUS to the foreign acquirers themselves (Jackson, 2010).

Whereas all amendments before FINSAs did not lead to an active research policy, FINSAs did lead to an increase in the percentage of foreign investment investigations by the CFIUS, starting in 2007 (Godsell et al., 2016). Furthermore, FINSAs required that CFIUS provided an annual report to the Congress. This first annual report to the Congress of 2008, provides the definition for 'critical technologies' which are subject to the regulations. These 'critical technologies' are defined by 'critical technology, critical components, and critical technology

items which are essential to the national defense'. Furthermore, this annual report contains a list of industries, reported by the historical four-digit SIC code, that are defined as critical and CFIUS should focus their reviews and investigations on these industries (CFIUS, 2008).

2.2 Literature review and hypotheses

Following theory, takeovers are beneficial for the national economy. When a company is willing to take over another company, the acquirer believes that either the target is undervalued, or that the firm value will increase after restructuring the company or after a replacement of the existing management. Therefore, an efficient market for M&As is valuable, especially for the shareholders, and will lead to a higher productivity (Macey, 1988). Having an efficient market for M&As, involves a continuous threat of replacement for the current management. This continuous threat of replacement provides the management a strong incentive to maximize firm value (Macey, 1988). When the current management maximizes the firm value, the probability that another company is able to further increase the firm value, and is willing to acquire the company, will be lower. Between the 1950s and 1960s a new strategy to acquire a company arose, the tender offer. By these tender offers, acquirers offer a price, greater than the market value, in order to buy the shares of the company from the shareholders. After the introduction of this new takeover strategy many tender offers were made, and many of them were hostile (Armour & Skeel, 2007). While these offers are beneficial for the shareholders, they are not for the management. The management often lost their job after a hostile tender offer, as they were often replaced by a new management. For these managers it was beneficial to lobby for laws which could protect them against these hostile takeovers (Macey, 1988). After the increase of hostile takeovers, the Williams Act enacted in 1968. This act aimed to protect shareholders to the increasing number of tender offers, by giving them more information on the acquirer and more time to decide whether to tender or not (Jarrell & Bradley, 1980). However, not only shareholders did benefit from this protection, managers did benefit from as well. The act gave managers more time to come up with an effective strategy to convince shareholders not to tender their shares. Furthermore, the bidders did not benefit from this act. From now on, the tender offers took more time, which created more uncertainty to whether the takeover would complete or not. Due to the uncertainty, the costs of an offer increased (Armour & Skeel, 2007). According to Manne (1965), these regulations have a negative effect on the takeover market as a governance mechanism, as he described the benefits of an efficient and freely moving takeover market. Having an efficient market, without any regulation, will improve the governance, as firms can easily being taken over and inefficient managements can easily be

replaced. Due to regulation, inefficient management can stay in place, while the shareholders would benefit from a more efficient management (Manne, 1965). From the 1980s the number of takeovers in the U.S. increased massively, and the anti-takeover provisions proposed in the 1980s showed a significant negative effect on the stock value (Mahoney & Mahoney, 1993). Furthermore, Hackl and Testani (1988) found that the anti-takeover laws enacted till 1988 led to a lower takeover probability. Moreover, a decrease in takeover activity was found, and less offer attempts proved to be successful.

From the 1990s, the share of foreign takeovers increased in the overall increase of takeovers. The number of cross-border M&As, where firms from different nations are involved in the transaction, increased (Kang & Johansson, 2000). These cross-border takeovers differ from domestic takeovers and have different consequences for a country. When there is a cross-border takeover countries often see their interests affected, and the governments want to prevent M&A deals which might damage the national market, the shareholders or other stakeholders (Heinemann, 2012). For example, a country may favor domestic ownership over foreign ownership, to keep more control on the business operations. The increase in foreign takeovers changed the focus of the regulations according takeovers, and resulted in the Exon-Florio Amendment of 1988, which enabled the U.S. to manage foreign takeovers. Over time, more and more mechanisms were introduced to control the cross-border takeovers, including FINSA (Heinemann, 2012). As well as all previous regulations, this intervention in the takeover market can discourage takeover bids. Either because it increases the costs for the bidder through delays or less favorable deal terms, or because the acquirer suspects the transaction might not be approved and will not complete at all. Consequently, when the costs of a takeover increase, the probability of being a target will decrease (Frattaroli, 2019). To verify whether FINSA, a protectionist anti-takeover law, comes at a cost and lead to a decrease in takeover probability, the following hypothesis is formulated:

Hypothesis 1: The FINSA reduces the probability of affected firms to become a target of a merger or acquisition.

The management of a firm and its shareholders have an agency relationship. Within this relationship, the management will perform tasks delegated by the shareholders, and there is a separation of ownership and control. This separation of ownership and control ensures that when both parties are willing to maximize their utility, the management is not maximizing the utility of the shareholders as their interests are not fully aligned (Jensen & Meckling, 1976). To

align the interests and control the manager's behavior in favor of the shareholders, contractual terms can be set up with the right incentives for the management. However, these contracts will never cover all actions which should be taken by the management, and thus there is still some space for managers to make decisions that benefit themselves at the cost of the firm (Jensen & Meckling, 1976). The market of corporate control is seen as a useful way in which managers receive incentives and are forced to maximize the firm value, consequently reducing agency problems (Sundaramurthy, 1996). Theory suggests that the threat of a takeover is one of the most important external mechanisms for aligning the interests of managers and shareholders (Lel & Miller, 2015). The takeover market is a market in which alternative managerial teams compete to manage corporate resources (Ruback & Jensen, 1983). Shareholders and other third parties can use this market to replace unproductive management by a management which creates more value. Therefore, the possibility of a takeover can be an effective corporate governance mechanism and can reduce the moral hazard problem (Bertrand & Mullainathan, 2003). For example, the threat of a hostile takeover, where the manager might lose his job, disciplines the manager to act in the shareholders' interest. In contrast, if the manager is protected by anti-takeover legislation, the power of decision making and the control over the firms' resources increases. By the implementation of anti-takeover laws, the takeover market might lose its function to act as an effective corporate governance mechanism. Consequently, managers can continue to engage in inefficiently managing the resources of a firm, without the threat of being replaced. Ultimately, managers who have less incentives to behave in the interest of the shareholders will make self-maximizing decisions and become entrenched (Sundaramurthy, 1996). Entrenched managers can act in different ways, and one possibility is that the manager turn into an empire builder (Meyers, 2003). As an empire builder, managers will aggressively grow the firm and make excessive investments which reduce the profitability and destroy the firm value (Hope & Wayne, 2008). These investments are made because the managers receive private benefits from these investments or because the compensation scheme gives these incentives. One of the private benefits could be the fact that the manager would receive more prestige of managing a greater firm. Due to the increasing utility for every investment made, managers continue to make investments even though they might not always be profitable to the firm (Aggarwal & Samwick, 2006). Following the theory, the enactment of FINSA would decrease the effectiveness of the takeover market as a governance mechanism. Therefore, managers can become entrenched and act like an empire builder. Consequently, they will increase their capital expenditures and R&D expenses to grow the firm.

Hypothesis 2: Firms affected by FINSA increase their capital expenditures and R&D expenses.

On the other hand, managers can also act following the quiet life hypothesis. This hypothesis states that indeed managers do pursue their own goals, but this goal may not be growing the firm by making excessive investments. Bertrand and Mullainathan (2003) find that managers are not involved in investments to enlarge the firm, rather they prefer to enjoy the quiet life by avoiding difficult decisions and conflicts. This includes avoiding conflicts with employees or their unions, by increasing employment and the wages. Several papers find evidence in support of the quiet life hypothesis. Giroud and Mueller (2010) find an increase in wages in the non-competitive industries after the implementation of the business combination laws in the U.S. Furthermore, Cronqvist, Heyman, Nilsson, Svaleryd and Vlachos (2009) find that entrenched CEOs avoid conflicts with their unions, as they increase the wages of employees of aggressive unions. Moreover, they find that employees close to the CEO in the corporate hierarchy have higher wages. This increase of wages does fit into this quiet life view as higher wages are a way for managers to buy peace with their workers.

Hypothesis 3: Firms affected by the FINSA increase wages and employment.

The takeover laws have an impact on the managerial discipline as a corporate governance mechanism, and therefore, these anti-takeover laws do affect the way in which managers act. In turn, this can lead to managers who act in their own interest following the empire building or quiet life hypothesis as described above. Another consequence of the imperfect alignment of interests between management and shareholders is that managers can spend excess free cash flows in their own interest. The free cash flow hypothesis assumes that the existing corporate governance structures are not present or ineffective to control the conflicting interests of managers and shareholders (Gibbs, 1993). The theory on the agency cost of free cash flow argues that when managers have excess cash, the agency conflicts between managers and shareholders become more severe. Excess cash flows allow managers to avoid monitoring by the financial market as they are not in need for external financing and make more investments which may be not always value increasing. The management may even shift the free cash to fund unprofitable growth investments at the expense of shareholder value, in order to increase the personal benefits and status (Gibbs, 1993). Furthermore, by limiting the threat of a takeover the free cash flow problem increases, since usually takeovers lead to distribution of the firm's profits to investors over time. One way in which managers prefer to retain the free cash flow is

by avoiding debt financing. However, shareholders would like to see a higher level of debt, because the interest payments on debt should restrict the manager to spend free cash flows in their own interest (Jensen, 1986). Berger, Ofek and Yermack (1997) find evidence in favor of the free cash flow theory, as they find managerial entrenchment does affect the firm leverage in a way that the entrenched managers are willing to avoid debt. Other ways in which managers prefer to retain the free cash flow is by avoiding cash dividends and stock buybacks. In this way, managers can act independently of the shareholders (Jensen, 1986). Nonetheless, shareholders rather see this cash distributed back to them through dividends or when firms have limited growth potential, they would like to see share repurchase programs to lower the agency costs (Lil & Lil, 2014). Following this theory, firms affected by the FINSA will reduce cash dividends and the level of leverage.

***Hypothesis 4:** Firms affected by the FINSA will reduce cash distributions to shareholders and the level of leverage.*

Lastly, the design of executive's compensation is of interest from a corporate governance perspective as it aligns the interest of executives with the interests of their shareholders (Andrade, Mitchell & Stafford, 2001). The optimal contract design links the compensation of the manager to the performance of the firm and by doing so this will generate the right incentives for the manager (Conyon & Leech, 1994). The passage of an anti-takeover law has implications for the executive's compensation, and basically two theories exist (Bertrand & Mullainathan, 1999a). On the one hand, the executive pay can increase as entrenched managers take whatever benefit them privately away from the company. Due to a weakened market for corporate control, it is possible for executives to increase their pay (Borokhovich, Brunarski & Parrino, 1997). On the other hand, executives will be compensated for the risks they are bearing, and when the probability of a takeover decreases, the risk that an executive face will decrease as well. Due to this decrease in risk, the executive will have a lower compensation, and so the executive pay will decrease (Knoeber, 1986). Regardless of any change in the level of executive pay, an increase in the pay-for-performance is expected. If there is any concern among the shareholders or the board of directors that the enactment of FINSA will lead to a decrease in managerial discipline, they increase the performance sensitivity of executive compensation. This increase of the pay-for-performance is used to overcome the loss in monitoring by the takeover market (Bertrand and Mullainathan, 1999a). By increasing the sensitivity of the CEO's to the stock price, the incentives of managers are more in line with the interests of shareholders,

because now the managers and shareholders share the gains and losses (Coles et al., 2006). Furthermore, by increasing the sensitivity pay, the manager will be exposed to more firm risk depending on firm performance. When the compensation and the firm performance are linked to each other, there should be an incentive for the manager to achieve higher performance and increase the firm value (Mishra, McConaughy & Gobeli, 2000). This theory implies an increase in the pay-for-performance sensitivity of executive after the passage of FINSA.

***Hypothesis 5:** The FINSA lead to an increase in the pay-for-performance sensitivity of executive compensation.*

3. Data

This section describes the data used for the analysis. First, the collection of the data and the creation of the dataset is described. Second, the descriptive statistics are presented and discussed.

3.1 Data collection

The data is collected for the period 1998-2017. By using this time frame, there is data 10 years prior to the enactment of FINSA and 10 years after the enactment. Furthermore, in 2018 a new amendment was made to the Defense Production Act of 1950 after growing national security concerns about the foreign exploitation of certain investment structures, which were not included under FINSA. This amendment is called the Foreign Investment Risk Review Modernization Act (hereafter FIRRMA) and it broadens the scope of covered transactions (U.S. Department of the Treasury, 2018). Therefore, using the period 1998-2017 prevents that effects of this new amendment are included in the research.

To examine all hypotheses, different databases are used to collect the data. The databases used are SDC Thomson One, Compustat and Execucomp. First, I used the Thomson One database to retrieve data on all mergers and acquisitions with a U.S. public target, in which an equity stake of 2% or more is bought. CFIUS can intervene whenever a foreign company achieves control after an investment. Control is defined by purchasing an equity stake of minimal 2%. Therefore, in all targets a minimum stake of 2% should be bought. Next, Compustat is used to collect data on the financials and employment data. The data is retrieved from the Fundamentals Annual file within Compustat North America Daily. Next to the financial and employment data, the historical four-digit Standard Industrial Classification

(hereafter SIC) is collected from this database. Moreover, Execucomp is used to collect data on executive compensation. To identify the compensation of the CEO, the Annual CEO Flag is included. After retrieving all the variables, the different databases are merged by the cusip identifier and the fiscal year. First, the transactions are merged into the Compustat datafile. Even though only public targets are included, many transactions do not match. Second, the data on the executive compensation is merged into the Compustat datafile. After merging all these datasets, there is one dataset which contains all the different variables. After dropping the missing values, the full sample consists of 111.128 unique firm-years over the period 1998-2017.

As stated above, when merging the transaction data, many transactions did not match and are dropped. Only a small portion of the 12.889 transactions retrieved from Thomson One are included in the dataset. This occurs because some of the deals do not match when merging the data, and some others are dropped after dropping the missing values. From all the 111.128 firms within the dataset, only 2256 firms were a target in the sample period. This might be a problem for the first hypothesis, where the takeover probability is examined, if the loss of transactions is biased. However, when this loss is random, it might not be a problem, as the small sample is still representative for all the transactions. Table 1 in the Appendix shows the different samples. It seems that all different industries are included in the smaller sample and almost the same proportion of each industry is included. This indicates that the small sample of transactions, used to examine the takeover probability, is representative.

Besides the dataset described above, the dataset of Coles, Daniel and Naveen (2006) is used to examine the fifth hypothesis. The authors use this dataset, the Compensation Data, to examine managerial incentives and risk taking and their calculations are based on the methodology of Core and Guay (2002). In this thesis, their dataset is used to determine the pay-for-performance hypothesis. Specifically, the variable Delta is used to measure the pay-for-performance sensitivity. Delta is the change in dollar value for the manager, when there is one percentage point change in the stock price of the firm. By using this dataset, a shorter time period is used, because the observations end in the year of 2014. To keep the amount of years constant before and after the enactment of FINSA, the first years of observation are dropped. Thus, this sample period is from 2001 till 2014. Even though, the time period is shorter, this dataset is still very useful as it contains all relevant variables. There are still several years before and after the event, and the time period is balanced. The dataset is merged with the Compustat dataset, which includes the control variables that will be used in the regressions. After merging and dropping missing value, the full sample of this dataset consists of 122.379 firm-years over

the period 2001-2014.

3.2 Descriptive statistics

The descriptive statistics for all variables are showed in Table 1. All continuous variables are winsorized at the 1 and 99 percent level, and for the construction of the variables, mainly the methodology of Frattaroli (2019) is followed. The exact construction for all variables can be found in Table 2 in the Appendix. For the variables book-to-market ratio and R&D assumptions are made. The book-to-market ratio includes deferred taxes and investment tax credit, and these are assumed to be zero when the values are missing. Furthermore, all missing values for R&D expenses are equal to zero as well, because these expenses are assumed to be negligible.

First, looking at Table 1, there are two variables with a lower number of observations. Following Frattaroli (2019), the current wage divided by the wage of previous should be between $7/4$ and $4/7$, which is in line with the study of Bertrand and Mullainathan (1999b). Wages above and below these numbers show an irrational increase or decrease in wage growth. This means that the observations are dropped when the current wage divided by the previous year's wage is above $7/4$ or below $4/7$. Due to this assumption, there is a low number of observations for the variable employees. Furthermore, the number of observations for the variable wage is low as well, this is due to the limited data provided by Compustat. Moreover, the variable wage is not equal to the variable wage in the research of Frattaroli (2019). In this thesis the variable wage includes the total staff expenses, because when the variable 'staff expenses - wages and salaries' was retrieved from Compustat, there were zero observations. However, data on the total expenses is limited as well which is why there are few observations. Lastly, the variables 'firm acquired' and 'acquired cross-border' have a very small mean. The variables are both dummy variables, and they are either equal to zero or one. The descriptive statistics show that the mean is 0.02 and 0.003 for 'firm acquired' and 'acquired cross-border', respectively. These numbers show that only a small number of all firms are acquired, and even a smaller number of firms have been a target of a foreign takeover. This low number of observations can be detrimental to the first hypothesis, which examines the takeover probability.

Table 1 Descriptive Statistics

This table shows the descriptive statistics. All variables are winsorized at the 1 and 99 percent level and all financial variables are in millions of dollars. Total assets represent the total assets/liabilities of a company. Book leverage is debt in current liability plus long term debt, divided by the total assets. The book-to-market ratio is the total of common equity plus the deferred taxes and investment tax credit, divided by the market value. Capex are the capital expenditures. Dividend over equity is common dividend divided by common equity. Employees represents the number of people employed by the company and is showed in thousands. Market leverage is debt over total assets minus book equity plus market equity. R&D are the research and development expenses. PPE is the net total of property, plant and equipment. Revenues are the total revenues. R&D are the research and development expenses. ROA are the earnings before interest and taxes divided by the average of the lagged total assets and total assets. Repurchases over equity is the purchase of common and preferred stocks divided by equity. Sales is the gross sales reduced by cash discounts, trade discounts, and returned sales and allowances for which credit is given to customers, for each operating segment. Wage is are the average labor and related expenses per employee. Firm is acquired indicates whether a U.S. firm has been a target within a transaction. Firm is acquired cross-border indicates a transaction in which the acquirer is a non-U.S. firm.

Variable	Obs	Mean	Std.Dev.	Min	Max
Total assets	111128	3764.869	14700.2	.763	149000
Book leverage	111128	.196	.196	0	.763
Book-to-market	111128	.841	.978	.02	6.372
Capex	111128	168.63	559.364	0	3961
Capex/assets	111128	.059	.077	0	.422
(Capex + R&D)/assets	111128	.106	.128	0	.702
Dividend/equity	110635	.026	.068	0	.459
Employees	85437	9.830	26.513	0.003	180
Market leverage	111128	.156	.179	0	.75
PPE/assets	111128	.293	.278	0	.956
Revenues	111128	2317.34	7339.853	0	53105
R&D	111128	39.154	173.48	0	1350.505
ROA	111128	-.033	.283	-1.427	.387
Repurchases/equity	111128	.031	.093	0	.62
Sales	111128	2329.034	7421.255	0	54289
Wage	19699	83.41	102.536	.427	635
Firm acquired	111128	.02	.141	0	1
Acquired cross-border	111128	.003	.055	0	1

In Table 2, the mean of all variables is showed by control and treatment group. In Column 1 and 2 the mean is showed for the control and treatment group, respectively. Column 3 shows the difference in mean from both groups to test for their equality. The full descriptive statistics from the control and treatment group is found in Table 3 in the Appendix. Table 2 shows that almost all variables are significantly different from each other. On average, treated firms have more assets, more capital expenditures and R&D expenses and have a higher average wage per employee. These results are similar to the differences that Frattaroli (2019) find between the treatment and control group in his research. To account for the differences between the control and treatment group, multiple control variables are included for all regressions. These control variables are similar to the variable used in the study of Frattaroli (2019). These variable are sales, revenues, the ratio between PPE and the assets, the return on assets, book-to-market ratio and the book and market leverage.

Table 2 Two-sample t test with equal variances

This tables shows the descriptive statistics by control and treatment group. All variables are winsorized at the 1 and 99 percent level. For the control and treatment group the mean is showed in column 1 and 2, respectively. In column 3 the difference in means is showed, and in column 4 the associated standard error is showed. A full description of the variables can be found in Table 2. Treated firms are firms which are active in one of the critical industries as mentioned by CFIUS. *, **, *** indicate significance at 10%, 5% and 1% level, respectively.

	Control	Treatment	Difference	St Err
Total assets	3517.12	4360.389	-843.269***	96.778
Book leverage	.215	.15	.065***	.002
Book to market	.932	.623	.31***	.006
Capex	161.38	186.056	-24.677***	3.683
Capex/assets	.066	.043	.024***	.001
(Capex + R&D)/assets	.083	.164	-.081***	.001
Dividend/equity	.029	.017	.013***	.001
Employees	10.619	8.134	2.485***	.195
Market leverage	.177	.102	.075***	.001
PPE/assets	.341	.18	.161***	.002
R&D	20.964	82.879	-61.915***	1.127
ROA	-.005	-.098	.092***	.002
Repurchases/equity	.033	.029	.004***	.001
Sales	2357.872	2259.717	98.156**	48.873
Wage	81.331	89.954	-8.623***	1.707
Firm acquired	.02	.021	-.001	.001
Acquired cross border	.003	.004	-.002***	.001
Revenues	2346.512	2247.216	99.297**	48.337

For the pay-for-performance hypothesis a separate dataset is used. Therefore, the descriptive statistics are showed separately as well, in Table 3. Compared to the main dataset, the sales and return on assets are somewhat higher, but the PPE over assets and market leverage have a similar mean. To compare the control and treatment group, again a two-sample t test is done. The results are showed in Table 4, and show the different means of the control and treatment group for the dataset of hypothesis 5. Similar to the main dataset, both groups differ significantly from each other for all variables. Therefore, the control variables are as well included in the regressions of hypothesis 5. The full descriptive statistics by control and treatment group can be found in Table 4 in the Appendix.

Table 3 Descriptive statistics pay-for-performance

This tables shows the descriptive statistics for pay-for-performance dataset. All variables are winsorized at the 1 and 99 percent level and all financial variables are in millions of dollars. Delta is the change in the manager's dollar value for a one percentage point change in stock price, and is presented in thousands. A full description of the other variables can be found in Table 2.

Variable	Obs	Mean	Std.Dev.	Min	Max
Delta	104000	198.142	478.97	.203	3431.92
Sales	122000	5650.67	12725.1	47.374	86451
ROA	122000	.09	.091	-.213	.383
PPE/assets	122000	.248	.229	.002	.877
Market leverage	122000	.149	.142	0	.612

Table 4 Two-sample t test with equal variances pay-for-performance

This tables shows the descriptive statistics by control and treatment group for the pay-for-performance dataset. All variables are winsorized at the 1 and 99 percent level. For the control and treatment group the mean is showed in column 1 and 2, respectively. In column 3 the difference in means is showed, and in column 4 the associated standard error is showed. Delta is the change in the manager’s dollar value for a one percentage point change in stock price, and is presented in thousands. A full description of the other variables can be found in Table 2. Treated firms are firms which are active in one of the critical industries as mentioned by CFIUS. *, **, *** indicate significance at 10%, 5% and 1% level, respectively.

	Control	Treatment	Difference	St Err
Delta	202.551	185.975	16.576***	3.361
Sales	6134.811	4310.326	1824.486***	82.215
ROA	.163	.114	.049***	.001
PPE/assets	.268	.193	.074***	.002
Market leverage	.093	.081	.013***	.001

4. Research design

This section contains the research design of the thesis. First, the assignment of firms to the treatment and control group is described. Second, the empirical methodology of every different hypothesis is described. Finally, the section ends with a description of possible endogeneity issues.

4.1 Treatment assignment

To conduct the research, all firms are assigned to either the treatment group or the control group. The treatment group contains all firms which are affected by the FINSA from 26 July 2007. FINSA allowed CFIUS to review any ‘critical infrastructure’ or ‘critical technologies’ foreign M&A deals. These critical industries are reported by the historical four-digit SIC code in the first CFIUS annual report following the enactment of FINSA (CFIUS, 2008). Therefore, the assignment to the treatment group is based on the historical four-digit SIC code reported for the year 2007. The full list of critical industries, as defined by CFIUS in the annual report, can be found in Table 5 of the Appendix. Overall, almost 30% of all firms are assigned to the treatment group.

4.2 Empirical methodology

To test all different hypotheses of this research, a difference-in-differences analysis is performed. By using this methodology, the average treatment effect is examined. First, the difference prior and after the enactment of FINSA is examined for the treated firms. Next, for the control firms, this difference is examined as well. Then, the difference of control firms is subtracted from the difference of treated firms, and this will show the average treatment effect for the treated firms. To conduct the analysis, the following OLS regression will be used:

$$y_{it} = \alpha + \beta_1 Treatment_i \times Post_t + \beta_2 Treatment_i + \beta_3 Post_t + \Gamma'X_{it} + \delta_t + \theta_i + \varepsilon_{it}$$

In the regression i , and t refers to firms and years. y_{it} is the variable of interest, α is the intercept, δ_t are year fixed effects based on the fiscal year, θ_i are industry fixed effects based on the two-digit SIC code, X_{it} vector of control variables, and ε_{it} is the error term. The term $Treatment_i$ equals one if the variable belongs to the industry that is reported as critical industry in the annual report of CFIUS and zero otherwise. The term $Post_t$ equals one if the date of observation is after the enactment of FINSA, from 26 of July 2017 onwards, and zero otherwise. The control variables are included to account for different firm characteristics between the firms in the control and treatment group. In line with prior literature, the following control variables are included: the book-to-market ratio, the natural logarithm of revenues and sales, return on assets, book and market leverage, and the plant property equity (PPE) over assets ratio (Frattaroli, 2019). The natural logarithm of revenues and sales are used to control for firm size. The return on assets controls for the firm's profitability and performance, the book and market leverage controls for the capital structure, and the PPE over assets ratio is used to measure the asset tangibility (Karpoff, Schonlau & Wehrly, 2016). Furthermore, following Frattaroli (2019), the book-to-market ratio is included as a control variable in the regression for investments and capital structure, as this variable controls for the growth and investment opportunities.

First, to examine the effect of FINSA on the takeover probability, a difference-in-differences analysis is conducted by using an OLS regression. The dependent variable is a dummy and equals one if the firm is acquired in the year of observation and zero otherwise. The variable of interest is the interaction term of treatment and post. This interaction term will show whether firms affected by FINSA will have a lower takeover probability after the enactment of the law. Furthermore, the firm-level control variables are included. These variables are the natural logarithm of revenues, return on assets, book leverage and the PPE over assets ratio.

$$Takeover\ probability = \alpha + \beta_1 Treatment_i \times Post_t + \beta_2 Treatment_i + \beta_3 Post_t + \ln(revenues)_{it} + ROA_{it} + book\ leverage_{it} + PPE/asset_{it} + \delta_t + \theta_i + \varepsilon_{it}$$

Next, to assess the effect of a decreased takeover probability on corporate policies, the empire building hypothesis and quiet life hypothesis are tested. This is done by testing the different

managerial characters belonging to each hypothesis. Starting with the empire building hypothesis, it is tested whether the capital expenditures and R&D expenses will increase. Three different dependent variables are used. These are the natural logarithm of the total capital and R&D expenses, the ratio of capital and R&D expenses to total assets, and the ratio capital expenditures to total assets. Following Fratelli (2019), the natural logarithm of sales and return on assets, book-to-market and market leverage are included as control variables. In addition, a dummy called ‘R&D missing’ is included in the regressions in which R&D is part of the dependent variable. It is possible that firms which report R&D expenses are systematically different from firms which do not report any of these expenses. To account for these differences, the ‘R&D missing’ dummy is included in the regression.

$$\text{Capital expenditures} = \alpha + \beta_1 \text{Treatment}_i \times \text{Post}_t + \beta_2 \text{Treatment}_i + \beta_3 \text{Post}_t + \text{R\&D missing} + \ln(\text{sales})_{it} + \text{ROA}_{it} + \text{book-to-market}_{it} + \text{market leverage}_{it} + \delta_t + \theta_i + \varepsilon_{it}$$

For the quiet life hypothesis, it is examined whether the management of the affected firms try to prevent any conflicts, by increasing the average wage and employment after enactment of FINSA. From both variables the natural logarithm is taken, and these are included as dependent variable. Following Frattaroli (2019), the natural logarithm of sales, the return on assets, the PPE over assets ratio and the market leverage are included as control variable to determine the effect on the average wage and employment.

$$\ln(\text{wage}) = \alpha + \beta_1 \text{Treatment}_i \times \text{Post}_t + \beta_2 \text{Treatment}_i + \beta_3 \text{Post}_t + \ln(\text{sales})_{it} + \text{ROA}_{it} + \text{PPE/assets}_{it} + \text{market leverage}_{it} + \delta_t + \theta_i + \varepsilon_{it}$$

$$\ln(\text{employment}) = \alpha + \beta_1 \text{Treatment}_i \times \text{Post}_t + \beta_2 \text{Treatment}_i + \beta_3 \text{Post}_t + \ln(\text{sales})_{it} + \text{ROA}_{it} + \text{PPE/assets}_{it} + \text{market leverage}_{it} + \delta_t + \theta_i + \varepsilon_{it}$$

Moreover, the hypothesis of the free cash flow is also tested by a difference-in-differences analysis. Managers prefer to retain free cash flow and therefore, debt financing may be avoided as well as cash dividends. First, the change in the book or market leverage ratio is examined for the treated firm to determine whether the amount of debt financing decreases. Second, the change in cash returned to shareholders is measured in two ways, by cash dividends as a fraction of the total book value of common equity is measured and by the repurchase of stock as a

fraction of the total equity. The following control variables are included: natural logarithm of sales, return on assets, book-to-market ratio and PPE over assets ratio.

$$\text{Free cash flow indicator} = \alpha + \beta_1 \text{Treatment}_i \times \text{Post}_t + \beta_2 \text{Treatment}_i + \beta_3 \text{Post}_t + \ln(\text{sales})_{it} + \text{ROA}_{it} + \text{book-to-market}_{it} + \text{PPE/assets}_{it} + \delta_t + \theta_i + \varepsilon_{it}$$

Lastly, it is examined whether the executive compensation contract changes after passage of the act. Shareholders may replace the loss of the takeover governance mechanism by increasing the pay-for-performance sensitivity of executive compensation to align the interests again. The pay-for-performance sensitivity is the sensitivity of the CEO's wealth, based on the stock and options of the CEO to the firm's stock price. Specifically, it is the sensitivity of the manager's dollar value to percentage changes in firm value. By using this variable, the sensitivity does not only depend on the incentives of the stock and options, but this variable includes also the effect of the growth options on the pay-for-performance sensitivity. To estimate the change in sensitivity, the natural logarithm of the variable is used as dependent variable. Furthermore, the natural logarithm of sales, the return on assets, the PPE to assets ratio and the market leverage are included as control variables.

$$\ln(\text{pay-for-performance}) = \alpha + \beta_1 \text{Treatment}_i \times \text{Post}_t + \beta_2 \text{Treatment}_i + \beta_3 \text{Post}_t + \ln(\text{sales})_{it} + \text{ROA}_{ijt} + \text{PPE/assets}_{it} + \text{market leverage}_{it} + \delta_t + \theta_i + \varepsilon_{it}$$

4.3 Endogeneity issues

In this paper, the impact of the passage of FINSA on the corporate governance mechanisms is examined. Corporate takeovers can provide discipline to managers and can serve as a governance mechanism. The enactment of FINSA is used as a laboratory setting to assess the role of the takeover probability on managerial entrenchment. This laboratory setting is used to overcome the endogeneity problem, and to use the enactment of FINSA as an exogenous shock. For this setting it is important that firms cannot choose whether they are treated or not and that the shock is expected to be permanent. First, FINSA is passed by the state and this indicates that it is not endogenously driven by firm specific conditions. It is enacted from a national perspective, which makes it less likely that firms were able to affect the implementation of the law and its content in their own interests. Furthermore, as the law was an amendment to an existing law, it is likely that this change is permanent. These arguments are in favor of using

this enactment as an exogenous shock. However, there still could be some concerns on whether the law and its effect is really new. Before the enactment of FINSA, the Exon-Florio amendment was effective. Derived from this law CFIUS already had authority to review and prohibit takeovers. Therefore, it is possible that this law already affected the firms in the treatment group, as both laws might have the same implications for firms. However, as previous literature stated, the amendment of 1988 was a weak and ineffective mechanism and did not seem to control the foreign takeovers. CFIUS did not have much impact and the committee was not actively reviewing transaction. Since the enactment of FINSA, the role of CFIUS changed and the amount of foreign investment investigations increased. Therefore, it is not likely that firms before FINSA were exposed to the same effects and thus FINSA can be used as an exogenous shock.

5. Results

In this section, the results of each regression are separately discussed and the findings are compared to prior literature. Based on the results, the hypotheses are either accepted or rejected, and a conclusion can be made in the next section.

5.1 Takeover probability

The first difference-in-differences analysis examines whether the takeover probability decreases after the enactment of FINSA. The results are shown in Table 5. In contrast to the hypothesis, the results, including both cross-border and domestic takeovers, show a significant increase in takeover probability for the firms affected by FINSA after the enactment. These firms are 0.45-0.49 percentage points more likely to become a target in a takeover. The results of column 4 show some evidence that this increase is driven by cross-border mergers, as a positive effect is found for cross-border takeovers, significant at the 90%-level. However, no significant effect is found for the domestic takeovers. These results are remarkable, as they are in contrast with the hypothesis and previous research. Following the theory, the takeover probability for foreign transactions is expected to decrease after the enactment of FINSA, especially for foreign takeovers. As of the enactment, the government can intervene the takeover market and therefore U.S. firms should become less attractive as a target. In previous research, Frattaroli (2019) and Godsell et al. (2016) both show a significant decrease in takeover probability after the enactment of a protectionist anti-takeover law in France and the U.S. One reason why the results in this research do not show a decreasing takeover probability for the

cross-border takeovers can be the low number of takeovers in the sample. Overall, there are 2256 observations of takeovers included, which is only 2 percent of the total number of observations. It is possible that the sample does not include all transactions that occurred during the research period. Another explanation for these results might be the proxy which is used to measure the takeover probability. In this research the takeover probability is measured by the mean level of takeover activity. Mikkelsen and Partch (1997) explain that using this proxy for the threat of a takeover is likely to suffer from potential omitted-variable biases, because most of the time the takeover activity is accompanied by macroeconomic shocks. Therefore, the takeover probability can possibly be explained by other shocks that occurred during the sample period, different from the passage of FINSA.

Furthermore, some of the control variables do have a significant effect on the takeover probability. First, the natural logarithm of revenues is significant at the 99%-level and has a positive effect on all takeover probabilities in the different models. This indicates that when a firm has higher revenues, it is more likely to be involved in a takeover. Second, the book leverage is only significant at the 90%-level and has a positive effect on the takeover probability as well. Third, the return on assets is significant at the 95%-level and has a negative effect on the takeover probability. Lastly, the ratio PPE over assets does not have a significant effect on the takeover probability at all.

Table 5 Takeover probability

This table shows the likelihood that a firm becomes a target of an acquisition. The effects are examined by a difference-in-differences analysis, using ordinary least squares regression. Industry and year fixed effects are included in all regressions, based on the two-digit SIC code and the year of observation. All standard errors are clustered by industry. The sample ranges from 1998 to 2017 and includes all publicly listed U.S. firms. The dependent variable is an indicator for whether the firm is acquired within the year of observation. Treated firms are firms which are active in one of the critical industries as mentioned by CFIUS. Other variables are defined in Table 2. The regressions are reported with and without control variables. The parentheses contain the t-statistics, and *, **, *** indicate significance at 10%, 5% and 1% level, respectively.

	All bids		Cross-border		Domestic	
	(1)	(2)	(3)	(4)	(5)	(6)
Post	-0.0264*** (0.00350)	-0.0287*** (0.00387)	-0.000632 (0.00180)	-0.000369 (0.00192)	-0.0258*** (0.00288)	-0.0283*** (0.00311)
Treatment	-0.00337** (0.00165)	-0.00332** (0.00163)	0.000053 (0.000460)	0.000027 (0.000503)	-0.00343** (0.00168)	-0.00335** (0.00165)
Post x Treatment	0.00448* (0.00237)	0.00492** (0.00240)	0.000994 (0.000638)	0.00115* (0.000657)	0.00349 (0.00256)	0.00378 (0.00262)
Ln(revenues)		0.00177*** (0.000278)		0.000175** (0.000053)		0.00160*** (0.000262)
ROA		-0.00566** (0.00262)		-0.00251* (0.00135)		-0.00315 (0.00189)
Book leverage		0.00620* (0.00315)		0.00117 (0.000850)		0.00503* (0.00295)
PPE/assets		-0.00547 (0.00333)		0.000099 (0.00120)		-0.00557** (0.00263)

Constant	0.0445*** (0.00295)	0.0375*** (0.00365)	0.00519*** (0.00105)	0.00428*** (0.00123)	0.0393*** (0.00235)	0.0333*** (0.00287)
Observations	111,128	102,247	111,128	102,247	111,128	102,247
R-squared	0.003	0.004	0.001	0.001	0.003	0.004
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

5.2 Empire building or quiet life

The empire building hypothesis states that managers will increase their capital expenditures and R&D expenses to increase their empire. Table 6 shows the results of all different regressions. For all models, no significant effect is found for the interaction term. This implies that these affected firms did not change their investment policies after the passage of FINSA, in accordance to the empire building hypothesis. These insignificant results are in line with the results of Frattaroli (2019). Furthermore, Bertrand and Mullainathan (2003) also do not find strong evidence for the empire building hypothesis. They find that managers are more likely to follow the quiet life hypothesis, instead of the empire building hypothesis.

The table does show some significant results for the control variables, and these do have implications for the investment policy of firms. Starting with the sales, this variable seems to have an ambiguous effect on the capital expenditures and R&D expenses. In column 2 sales shows a positive effect for the natural logarithm of the capital expenditures and R&D expenses, while there is a negative effect found in column 4 for the ratio of capital expenditures and R&D expenses over the total assets. However, the return on assets and book-to-market ratio both have a significant negative effect on the investments. The negative relation between the book-to-market and intangible assets is confirmed by the literature, because these intangibles are reflected in the market value of equity instead in the accounting assets on the balance sheet (Anagnostopoulou, 2008).

Overall, these results do not show any evidence in line with the empire building hypothesis, and based on these results there is no indication of managers that become entrenched after the enactment of the FINSA.

Table 6 Empire builder

This table shows the impact of FINSA on the investments made by the manager. The effects are examined by a difference-in-differences analysis, using ordinary least squares regression. Industry and year fixed effects are included in all regressions, based on the two-digit SIC code and the year of observation. All standard errors are clustered by industry. The sample ranges from 1998 to 2017 and includes all publicly listed U.S. firms. The different dependent variables are all an indicator for the level of investments made by the firm. Whereas CAPEX are the capital expenditures, R&D are the research and development expenses and assets are the total assets. Treated firms are firms which are active in one of the critical industries as mentioned by CFIUS. Other variables are defined in Table 2. The regressions are reported with and without control variables. The parentheses contain the t-statistics, and *, **, *** indicate significance at 10%, 5% and 1% level, respectively.

	Ln(capex+R&D)		(Capex+R&D)/assets		Capex/assets	
	(1)	(2)	(3)	(4)	(5)	(6)
Post	0.917*** (0.104)	-0.194* (0.100)	-0.0345*** (0.00749)	-0.0404*** (0.00456)	-0.0346*** (0.00464)	-0.0336*** (0.00407)
Treatment	0.490** (0.204)	0.457*** (0.133)	0.0596*** (0.0180)	0.0341*** (0.00897)	-0.00607 (0.00668)	-0.00589 (0.00687)
Post x Treatment	0.0329 (0.146)	0.0313 (0.0533)	0.00539 (0.0117)	0.000781 (0.00685)	0.000235 (0.00253)	-0.00110 (0.00217)
R&D missing		-1.104*** (0.174)		-0.0541*** (0.0108)		
Ln(sales)		0.896*** (0.0296)		-0.00138** (0.000664)		0.000496 (0.000470)
ROA		-1.700*** (0.261)		-0.157*** (0.0329)		-0.00481 (0.00431)
Book-to-market		-0.191*** (0.0186)		-0.0137*** (0.00193)		-0.00720*** (0.00169)
Market leverage		0.171 (0.182)		-0.0317*** (0.0112)		0.00654 (0.00656)
Constant	2.129*** (0.0860)	-1.147*** (0.156)	0.111*** (0.00646)	0.172*** (0.00993)	0.0800*** (0.00265)	0.0801*** (0.00554)
Observations	106,076	99,158	111,128	102,247	111,128	102,247
R-squared	0.022	0.725	0.039	0.232	0.024	0.036
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

On the one hand, theory predicts managers to act like an empire builder, on the other hand, it is also possible that managers follow a quiet life. Following the quiet life hypothesis, managers aim to avoid conflicts with their employees by increasing the employment and wages. The results of the difference-in-differences analysis are showed in Table 7. The first model, with wage as dependent variable, does not show any significant results. This indicates that the affected firms do not experience a significant change in wages, which is defined as total staff expenses. The measurement of the average wage might be an explanation for these insignificant results. In this thesis the average wage is defined by the total staff expenses, because of limited data provided by the database. However, a variable including only wages and salaries would be more precise, and could have led to other results. Next to the average wage, there is also a regression performed for the employment within a firm. These results are showed in column 4, and this table shows that only when control variables are included, a positive significant association between the interaction term and the level of employment is found. After the

enactment of FINSA, the treated firms increase their employment with 12.98%. By increasing the employment rate, the manager might try to avoid any conflicts, and by doing this the manager can enjoy the quiet life. These results do indicate the presence of managerial entrenchment and are in line with the quiet life hypothesis. However, for the first hypothesis no evidence is found for a decrease in takeover probability after the passage of the law. Therefore, the increase in employment might not be due a lower takeover probability, but there could be another factor that affected the employment rates.

Table 7 Quiet life

This table shows the impact of FINSA on wages and employment. The effects are examined by a difference-in-differences analysis, using ordinary least squares regression. Industry and year fixed effects are included in all regressions, based on the two-digit SIC code and the year of observation. All standard errors are clustered by industry. The sample ranges from 1998 to 2017 and includes all publicly listed U.S. firms. The dependent variable $\ln(\text{wage})$ is the natural logarithm of the average labor and related expenses across the firm. $\ln(\text{employment})$ is the natural logarithm of the number of employees. Treated firms are firms which are active in one of the critical industries as mentioned by CFIUS. Other variables are defined in Table 2. The regressions are reported with and without control variables. The parentheses contain the t-statistics, and *, **, *** indicate significance at 10%, 5% and 1% level, respectively.

	Ln(wage)		Ln(employment)	
	(1)	(2)	(3)	(4)
Post	0.424*** (0.0565)	0.315*** (0.0752)	0.516*** (0.0995)	-0.513*** (0.0441)
Treatment	0.0897 (0.109)	0.0399 (0.112)	-0.331 (0.300)	-0.0260 (0.0970)
Post x Treatment	0.0446 (0.0774)	0.0137 (0.0647)	0.108 (0.234)	0.122*** (0.0432)
Ln(sales)		0.0466*** (0.0121)		0.881*** (0.0174)
ROA		-0.461** (0.205)		-0.954*** (0.136)
PPE/assets		-0.412* (0.217)		0.170 (0.265)
Market leverage		-0.489** (0.189)		-0.0660 (0.101)
Constant	3.628*** (0.0493)	3.660*** (0.107)	-0.195 (0.130)	-4.560*** (0.112)
Observations	19,699	18,562	85,437	82,685
R-squared	0.017	0.034	0.008	0.845
Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes

5.3 Free cash flow

The free cash flow hypothesis predicts that managers prefer to retain the free cash flows, because this enables them to act independently of the shareholders. In order to maximize the free cash flows, the level of leverage is expected to be low. This is because leverage will come with interest payments, which reduce the free cash flow. Column 1 to 4 of Table 8 show the results of the analysis on the book and market leverage of the affected firms. Surprisingly, these

results show a positive association with the book and market leverage, which is in contrast with the hypothesis. It seems that the level of leverage does increase after the enactment of FINSA, which indicates that managers are not maximizing their free cash flow to be able to spend it in their own interests. The book leverage is increasing with 1.94-2.16% points and the market leverage is increasing with 2.22-2.27% points. This outcome can be explained by the findings of John and Litov (2010). They find that managerial entrenchment is associated with higher leverage, because entrenched managers have better terms of access to the debt market as entrenched managers have lower asset volatility and implement more conservative investment policies. Due to this favorable term, more debt funding can be used, and leverage increases. However, the significant negative association between the return on assets and leverage seems inconsistent with the assumption that asset volatility is low. Therefore, this reasoning does not seem to fit the results and might not be explained by managerial entrenchment. Berger, Offek and Yermack (1997) find that an unsuccessful tender offer, involuntary CEO replacements, and the arrival of major stockholder directors have a positive effect on leverage. Thus, events against managerial entrenchment lead to more leverage. This can indicate that after the enactment shareholders intensify their monitoring on the management, compensating for the loss of the external control by the takeover market, preventing the managers to become entrenchment. For example, the monitoring might be increased, by increasing the number of outside directors on the board. Furthermore, the dividend and repurchase of shares is expected to decrease after the enactment of FINSA for the affected firms. The managers are expected to retain the free cash flow, rather than returning it back to the shareholders. The results are showed in column 5 to 8 of Table 8, however, the results do not show a significant decrease in dividend payment and repurchasing of equity by firms, for the firms affected by FINSA after the enactment.

Overall, no direct evidence of managerial entrenchment is found for the free cash flow hypothesis, as the leverage increases and no effect is found for the payment of dividend and repurchase of stock.

Table 8 Free cash flow

This table shows the impact of FINSA on the capital structure and distribution. The effects are examined by a difference-in-differences analysis, using ordinary least squares regression. Industry and year fixed effects are included in all regressions, based on the two-digit SIC code and the year of observation. All standard errors are clustered by industry. The sample ranges from 1998 to 2017 and includes all publicly listed U.S. firms. Book leverage is debt in current liability plus long term debt, divided by the total assets. Market leverage is debt over total assets minus book equity plus market equity. Dividend over equity is common dividend divided by common equity. Repurchase over equity is the purchase of common and preferred stocks divided by equity. Treated firms are firms which are active in one of the critical industries as mentioned by CFIUS. Other variables are defined in Table 2. The regressions are reported with and without control variables. The parentheses contain the t-statistics, and *, **, *** indicate significance at 10%, 5% and 1% level, respectively.

	Book leverage		Market leverage		Dividend/equity		Repurchase/equity	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Post	-0.0184** (0.00739)	-0.0258*** (0.00891)	-0.0366*** (0.00759)	-0.0337*** (0.00818)	0.0152*** (0.00244)	0.0135*** (0.00233)	0.000129 (0.00367)	-0.00767** (0.00349)
Treatment	-0.0537*** (0.0132)	-0.0439*** (0.00563)	-0.0494*** (0.0130)	-0.0350*** (0.00581)	-0.00728 (0.00505)	-0.00453 (0.00331)	-0.00799** (0.00345)	-0.00611** (0.00260)
Post x Treatment	0.0194** (0.00908)	0.0216*** (0.00535)	0.0227*** (0.00768)	0.0222*** (0.00402)	-0.00181 (0.00437)	-0.00182 (0.00318)	0.000118 (0.00437)	0.000442 (0.00344)
Ln(sales)		0.0188*** (0.00152)		0.0145*** (0.00145)		0.00289*** (0.000655)		0.00501*** (0.000982)
ROA		-0.0701*** (0.0105)		-0.0447*** (0.0110)		0.0336*** (0.00719)		0.0297*** (0.00458)
Book to market		0.00734*** (0.00212)		0.0624*** (0.00178)		-0.0101*** (0.000988)		-0.0112*** (0.00113)
PPE/Assets		0.200*** (0.0223)		0.173*** (0.0196)		0.0144** (0.00634)		-0.0194*** (0.00337)
Constant	0.243*** (0.00492)	0.0957*** (0.00807)	0.199*** (0.00559)	0.0312*** (0.00655)	0.0202*** (0.00254)	0.0111*** (0.00372)	0.0347*** (0.00248)	0.0281*** (0.00442)
Observations	111,128	102,247	111,128	102,247	110,635	101,762	111,128	102,247
R-squared	0.016	0.117	0.025	0.222	0.014	0.079	0.008	0.057
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

5.4 Pay-for-performance sensitivity

Following the literature, the pay-for-performance sensitivity is expected to increase. By increasing the pay-for-performance sensitivity, the shareholders are trying to increase the alignment of interests to compensate for the decrease of discipline via the threat of the takeover market. The results are showed in Table 9, and there is no significant change found for the pay-for-performance sensitivity. This could indicate that the shareholders don't experience a loss in monitoring the management after the enactment of FINSA. As they don't experience this loss, they are not in need to increase the alignment of interests by increasing the pay-for-performance sensitivity. It is also possible that the shareholders do not know how to compensate the manager for its performance, and that this makes that there is no increase found in pay-for-performance sensitivity. As Myers (2003) state, it is impossible to write a complete contract because it is hard to measure the managers' performance. Investors are willing to reward the manager for their effort, commitment and good decisions, but these factors are not perfectly observable and verifiable. Therefore, shareholders might be willing to increase the alignment of interests, but

they might be unable to do this. Although this might be the case, the results do not show any evidence of managerial entrenchment.

Table 9 Pay-for-performance sensitivity

This table shows the impact of FINSA on the pay-for-performance sensitivity. The effects are examined by a difference-in-differences analysis, using ordinary least squares regression. Industry and year fixed effects are included in all regressions, based on the two-digit SIC code and the year of observation. All standard errors are clustered by industry. The sample ranges from 2001 to 2014 and includes all publicly listed U.S. firms. Delta is the sensitivity of the manager's dollar continuation value to percentage changes in firm value. Treated firms are firms which are active in one of the critical industries as mentioned by CFIUS. Other variables are defined in Table 2 of the Appendix. The regressions are reported with and without control variables. The parentheses contain the t-statistics, and *, **, *** indicate significance at 10%, 5% and 1% level, respectively.

	Ln(Delta)	
	(1)	(2)
Post	-0.169 (0.154)	-0.119 (0.119)
Treatment	0.0581 (0.111)	0.284** (0.111)
Post x Treatment	0.0227 (0.0865)	-0.0720 (0.0864)
Ln(sales)		0.485*** (0.0159)
ROA		3.320*** (0.338)
PPE/Assets		-0.270 (0.242)
Market leverage		-1.624*** (0.208)
Constant	4.118*** (0.0585)	0.679*** (0.165)
Observations	104,029	104,029
R-squared	0.033	0.246
Industry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes

6. Conclusion

This section starts with the conclusion based on all the previous regression results. Next, the limitations of this research are discussed and some recommendations for future research are given.

6.1 Conclusion

This thesis examines whether the enactment of FINSA, a law which should protect U.S. firms for unwanted takeovers, lead to managerial entrenchment. Over time, foreign takeovers increased and so have the number of regulations which should protect a nation's security. However, not only the U.S. made regulations to protect their industries and national security. Recently, European countries introduced laws to regulate the foreign takeover market.

Additionally, the policy of protecting the national market of M&A is still developing. Therefore, it is relevant to know how these protectionist laws affect external factors. Previous research showed that due to such protectionist laws the probability that a firm becomes a target declines. This lower takeover probability makes it possible for managers to stay in place even though they are not value maximizing, as it is harder now to replace the management by a takeover. Consequently, inefficient managers can act in their own interests, and they become entrenched.

The effect of the enactment of FINSA is studied by a difference-in-differences analysis. For this analysis all U.S. firms, in which a stake of 2% or more is bought during the period 1998-2017, are used. The year after the enactment, CFIUS published a list of critical industries in their annual report to the Congress of 2008. These industries were the focus for reviewing and investigating foreign transactions by CFIUS. Using this list, all firms which belong to one of the critical industries are assigned to the treatment group and all other firms are assigned to the control group. To examine the relationship between FINSA and managerial entrenchment, different hypotheses are developed. The first hypothesis claims that after the enactment of FINSA the takeover probability of U.S. firms will decrease. The other four hypotheses claim that managers of affected firms become entrenched after the enactment of the law, and these hypotheses describe several characteristics which belong to an entrenched manager.

Overall, the results of all different hypotheses do not lead to an unambiguous conclusion according to managerial entrenchment. The first hypothesis does not show a decrease in takeover probability as expected. In contrast, the results show that the takeover probability increases, mainly for cross-border takeovers. The second and third hypothesis examine whether managers will act like an empire builder or will follow a quiet life. Entrenched managers are expected to follow one of the theories and act like one of them. For the empire building hypothesis, managers are expected to increase the firm size to show off their status. Therefore, managers are expected to increase their capital expenditures and R&D expenses. The results do not show any evidence that managers are acting as an empire builder. According to the quiet life hypothesis, instead of growing the firm, managers are willing to avoid difficult decisions and conflicts. Therefore, they will increase employment and the wages within the firm. Results do not show a significant change in the average wage but do show a significant increase in employment for the affected firms after the enactment. Continuing the research to managerial entrenchment, the fourth hypothesis examines the agency cost of free cash flow. When the free cash flow within a firm is high, managers can spend this excess cash in their own interests. Thus, they are expected to create as much free cash flow. Therefore, leverage, dividend

payments and the repurchase of stocks are likely to decrease. Results show that the leverage does increase, which would decrease the free cash flow, and is in contrast with the hypothesis. For the dividend payments and repurchase of stock, no significant effect is found. Lastly, the fifth hypothesis expects the pay-for-performance sensitivity to increase. The increase in pay-for-performance sensitivity is an incentive for the manager to maximize firm value and should compensate for the loss of the takeover market as a governance mechanism. However, no significant effect is found.

To conclude, while there is no evidence found for a decreasing takeover probability, also little evidence of managerial entrenchment is found. However, the overall results show ambiguous evidence for managerial entrenchment. On the one hand, some of the significant results show characteristics of managerial entrenchment by managers, as for the quiet life hypothesis. On the other hand, the other significant results are in contrast with the hypotheses, and together with the other hypotheses which are rejected, this shows evidence against managerial entrenchment. Besides, FINSA does not lower the takeover probability and thus the evidence in favor of managerial entrenchment cannot be explained by a decrease in monitoring by the takeover market. Therefore, no hard conclusion can be made that FINSA has led to managerial entrenchment in the U.S.

6.2 Limitations and future research

This thesis includes several limitations which should be noted. First, using a difference-in-differences analysis to examine the effects of the protectionist law on the takeover probability and behavior of the managers, makes it possible to determine a causal relation between the different factors. One of the conditions for this analysis, is that the event has to be an exogenous shock. Even though, it is argued that the passage of FINSA can be used as an exogenous shock, it is hard to have a real exogenous shock, which is not influenced by any endogenous factors. Another condition for this methodology, are parallel trends before the passage of the law. It is important that the treatment group and the control group show the same trends before the event of an exogenous shock. If there are any unobserved differences between the groups prior to the enactment, the results of the regressions will be biased and cannot show any causal effects. In this thesis parallel trends are assumed, however, there is no evidence that these trends are parallel. This should be taken in mind, with the interpretation of the results. Second, the design of FINSA has changed over time, and there may be some companies in the control group which belong to the treatment group. Despite their being a guideline for the allocation of firms to either the treatment group or the control group, eventually, all firms can belong to the treatment

group. The list with all critical industries, published by CFIUS in 2008, is not exclusive. For any transaction, within an industry that is not listed, but which could result in foreign control of an U.S. business and endanger the national security, CFIUS can start a review. Furthermore, since 2018 a new amendment, called FIRRMA, was made. It is possible that this amendment already affected certain firms before the passage of the law. Thus, the firms assigned to the treatment group may not be exclusively treated, firms of the control group might be as well.

Next to the limitations of this research, there are recommendations for future research. Future research may clarify which factors of FINSAs influence the managerial entrenchment, as in this research it seems that a lower takeover probability is not one of these factors. For governments, who are willing to implement this kind of laws, it is important to know that they have effect on the behavior of the management. Moreover, it is also important for the shareholders to know how they can react to these changes, to make sure the firm value will be maximized by the executive. In addition, future research may clarify how firm value will be maximized by executives under these protectionist laws. The results do not show strong evidence for managerial entrenchment, and thus the shareholders do not seem to be harmed by the management. Because of the lack of evidence for managerial entrenchment, managers do not seem to behave in the interests of themselves, and it seems that firm value is maximized. However, in this thesis no research is done about firm value around the enactment of FINSAs. Therefore, future research might include an analysis on the cumulative abnormal returns during the passage of FINSAs to make sure that firm value is maximized. When the results show that this is not the case, and shareholders are hurt, research should make clear which factors can explain these negative returns.

Overall, future research should be more focused on which characteristics of protectionist laws lead to a change in managerial behavior, and whether these laws hurt the shareholders or not.

References

- Aggarwal, R. K., & Samwick, A. A. (2006). Empire-builders and shirkers: Investment, firm performance, and managerial incentives. *Journal of Corporate Finance*, 12(3), 489-515.
- Alderman, L. (2018, March 15). Wary of China, Europe and Others Push Back on Foreign Takeovers. Retrieved from <https://www.nytimes.com/2018/03/15/business/china-europe-canada-australia-deals.html>
- Anagnostopoulou, S. C. (2008). R&D expenses and firm valuation: a literature review. *International Journal of Accounting & Information Management*.
- Andrade, G., M. Mitchell, and E. Stafford, 2001. New evidence and perspectives on mergers. *Journal of Economic Perspectives* 15, 103-120.
- Armour, J., & Skeel Jr, D. A. (2007). Who writes the rules for hostile takeovers, and why-the peculiar divergence of US and UK takeover regulation. *Geo. LJ*, 95, 1727.
- Bebchuk, L., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance?. *The Review of financial studies*, 22(2), 783-827.
- Berger, P. G., Ofek, E., & Yermack, D. L. (1997). Managerial entrenchment and capital structure decisions. *The journal of finance*, 52(4), 1411-1438.
- Bertrand, M., & Mullainathan, S. (1999a). Corporate governance and executive pay: Evidence from takeover legislation.
- Bertrand, M., & Mullainathan, S. (1999b). Is there discretion in wage setting? A test using takeover legislation. *The Rand Journal of Economics*, 535-554.
- Bertrand, M., & Mullainathan, S. (2003). Enjoying the quiet life? Corporate governance and managerial preferences. *Journal of political Economy*, 111(5), 1043-1075.
- Borokhovich, K. A., Brunarski, K. R., & Parrino, R. (1997). CEO contracting and antitakeover amendments. *The Journal of Finance*, 52(4), 1495-1517.
- Cappucci, R. N. (1992). Amending the Treatment of Defense Production Enterprises Under the US Exon-Florio Provision: A Move Toward Protectionism or Globalism. *Fordham Int'l LJ*, 16, 652.
- Catan, E., & Kahan, M. (2014). The law and finance of anti-takeover statutes. *European Corporate Governance Institute (ECGI)-Law Working Paper*, (274), 14-30.
- CFIUS. (2008). *Annual Report to Congress Public Version*. U.S. Treasury Government. <https://www.treasury.gov/resource-center/international/foreign-investment/Documents/CFIUS-Annual-Rpt-2008.pdf>
- Coles, J.L., Daniel, N.D., and Naveen, L., 2006. *Managerial Incentives and Risk-Taking*. *Journal of Financial Economics* 79, 431-468.
- Conyon, M. J., & Leech, D. (1994). Top pay, company performance and corporate governance. *Oxford bulletin of Economics and Statistics*, 56(3), 229-247.
- Core, J., Guay, W., 2002. Estimating the value of employee stock option portfolios and their sensitivities to price and volatility. *Journal of Accounting Research* 40, 613-630.

- Cox, J. (2008). Regulation of Foreign Direct Investment after the Dubai Ports controversy: has the US government finally figured out how to balance foreign threats to national security without alienating foreign companies. *J. Corp. L.*, 34, 293.
- Clark, S., & Dummett, B. (2020, April 10). Coronavirus accelerates European efforts to block foreign takeovers. Retrieved from <https://www.wsj.com/articles/coronavirus-accelerates-european-efforts-to-block-foreign-takeovers-11586516403>.
- Cronqvist, H., Heyman, F., Nilsson, M., Svaleryd, H., & Vlachos, J. (2009). Do entrenched managers pay their workers more?. *the Journal of Finance*, 64(1), 309-339.
- Department of the Treasury: Regulations Pertaining to Mergers, Acquisitions, and Takeovers by Foreign Persons; Final Rule. 73 Fed. Reg. 70702. (To be codified at C.F.R. Part 800).
- Dinc, S., Erel, I., 2013. Economic nationalism in mergers and acquisitions. *J. Financ.* 68 (6), 2471–2514.
- Evenett, S. (2004). The cross-border mergers and acquisitions wave of the late 1990s. In *Challenges to globalization: Analyzing the economics* (pp. 411-470). University of Chicago Press.
- Gibbs, P. A. (1993). Determinants of corporate restructuring: The relative importance of corporate governance, takeover threat, and free cash flow. *Strategic Management Journal*, 14(S1), 51-68.
- Godsell, D., Lel, U., & Miller, D. P. (2016). Financial Protectionism, Takeover Activity, and Shareholder Wealth: Evidence from the Foreign Investment and National Security Act. *Takeover Activity, and Shareholder Wealth: Evidence from the Foreign Investment and National Security Act (October 1, 2016)*.
- Field, R. H. (1950). Economic Stabilization under the Defense Production Act of 1950. *Harvard Law Review*, 64(1), 1-26.
- Foreign Investments and National Security Act of 2007, Pub. L. No. 110-49, ..., 121 Stat. 246 (2007).
- Frattaroli, M. (2020). Does protectionist anti-takeover legislation lead to managerial entrenchment?. *Journal of financial economics*, 136(1), 106-136.
- Giroud, X., & Mueller, H. M. (2010). Does corporate governance matter in competitive industries?. *Journal of financial economics*, 95(3), 312-331.
- Hackl, J. W., & Testani, R. A. (1987). Second generation state takeover statutes and shareholder wealth: An empirical study. *Yale LJ*, 97, 1193.
- Harper, J. (2020, April 17). EU helps protect weak firms from foreign takeovers. Retrieved from <https://www.bbc.com/news/business-52320435>.
- Heinemann, A. (2012). Government control of cross-border M&A: legitimate regulation or protectionism?. *Journal of International Economic Law*, 15(3), 843-870.
- Hope, O. K., & Thomas, W. B. (2008). Managerial empire building and firm disclosure. *Journal of Accounting Research*, 46(3), 591-626.

- Jackson, J. K. (2010). Foreign Investment, CFIUS, and Homeland Security: An Overview. Library of Congress. Congressional Research Service.
- Jarrell, G. A., & Bradley, M. (1980). The economic effects of federal and state regulations of cash tender offers. *The Journal of Law and Economics*, 23(2), 371-407.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American economic review*, 76(2), 323-329.
- Jensen, M.C., & Meckling, W.H. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305–360.
- John, K., & Litov, L. (2010). Managerial entrenchment and capital structure: new evidence. *Journal of Empirical Legal Studies*, 7(4), 693-742.
- Kang, N. H., & Johansson, S. (2000). ‘Cross-Border Mergers and Acquisitions: Their Role in Industrial Globalisation’. *OECD Science, Technology and Industry Working Papers, No. 2000/01*, OECD Publishing Paris, <https://doi.org/10.1787/137157251088>.
- Karpoff, J. M., Schonlau, R. J., & Wehrly, E. W. (2017). Do takeover defense indices measure takeover deterrence?. *The Review of Financial Studies*, 30(7), 2359-2412.
- Knoeber, C. R. (1986). Golden parachutes, shark repellents, and hostile tender offers. *The American Economic Review*, 76(1), 155-167.
- Lel, U., & Miller, D. P. (2015). Does takeover activity cause managerial discipline? Evidence from international M&A laws. *The Review of Financial Studies*, 28(6), 1588-1622.
- Lin, L., & Lin, D. (2014). Agency costs of free cash flow and bidders’ long-run takeover performance. *Universal Journal of Accounting and Finance*, 2(1), 1-8.
- Macey, J. R. (1988). State anti-takeover legislation and the national economy. *Wis. L. Rev.*, 467.
- Mahoney, J. M., & Mahoney, J. T. (1993). An empirical investigation of the effect of corporate charter antitakeover amendments on stockholder wealth. *Strategic Management Journal*, 14(1), 17-31.
- Manne, H. G. (1965). Mergers and the market for corporate control. *Journal of Political economy*, 73(2), 110-120.
- Mikkelsen, W. H., & Partch, M. M. (1997). The decline of takeovers and disciplinary managerial turnover. *Journal of financial economics*, 44(2), 205-228.
- Mishra, C. S., McConaughy, D. L., & Gobeli, D. H. (2000). Effectiveness of CEO pay-for-performance. *Review of Financial Economics*, 9(1), 1-13.
- Myers, S.C., 2003. Financing of corporations. In: Constantinides, G., M. Harris, and R. Stulz (eds.), *Handbook of the Economics of Finance: Corporate Finance Volume 1A*, Elsevier North Holland.
- Pudner, S. K. (2007). Moving Forward From Dubai Ports World-The Foreign Investment and National Security Act of 2007. *Ala. L. Rev.*, 59, 1277.
- Reuters. (2017, May 8). Akzo Nobel rejects third takeover proposal from PPG. Retrieved from <https://www.reuters.com/article/us-akzo-nobel-m-a-ppg-inds-idUSKBN1840GF>.

- Rotemberg, J. J. (2007). The Dubai Ports World Debacle and Its Aftermath. *Harvard Business Review*, 2-5.
- Sundaramurthy, C. (1996). Corporate governance within the context of antitakeover provisions. *Strategic Management Journal*, 17(5), 377-394.
- Toplensky, R. (2020, May 26). Europe is opening for business but isn't on sale. Retrieved from <https://www.wsj.com/articles/europe-is-opening-for-business-but-isnt-on-sale-11590488289>.
- U.S. Department of the Treasury. (2018). Summary of the Foreign Investment Risk Review Modernization Act of 2018). Retrieved from <https://www.treasury.gov/resource-center/international/Documents/Summary-of-FIRRMA.pdf>
- Zwiebel, J. (1996). Dynamic capital structure under managerial entrenchment. *The American economic review*, 1197-1215.

Appendix

Table 1 Loss of transactions

This table shows the loss of transactions after merging the transactions of Thomson One with the Compustat data. Even though many transactions are lost, the table shows that each industry remains in the sample with fairly the same proportion.

Industry		Total transactions			Transactions in sample		
		Freq.	Percent	Cum.	Freq.	Percent	Cum.
Material processing	0	12751	98.93	98.93	2241	99.34	99.34
	1	138	1.07	100.00	15	0.66	100.00
Chemicals	0	12864	99.81	99.81	2253	99.87	99.87
	1	25	0.19	100.00	3	0.13	100.00
Manufacturing	0	12744	98.88	98.88	2217	98.27	98.27
	1	145	1.12	100.00	39	1.73	100.00
IT	0	11298	87.66	87.66	2078	92.11	92.11
	1	1591	12.34	100.00	178	7.89	100.00
Telecommunications	0	12367	95.95	95.95	2146	95.12	95.12
	1	522	4.05	100.00	110	4.88	100.00
Microelectronics	0	12637	98.04	98.04	2189	97.03	97.03
	1	252	1.96	100.00	67	2.97	100.00
Fabrication equipment	0	12570	97.53	97.53	2166	96.01	96.01
	1	319	2.47	100.00	90	3.99	100.00
Military electronics	0	12646	98.11	98.11	2203	97.65	97.65
	1	243	1.89	100.00	53	2.35	100.00
Biotechnology	0	12301	95.44	95.44	2141	94.90	94.90
	1	588	4.56	100.00	115	5.10	100.00
Scientific instruments	0	12490	96.90	96.90	2167	96.05	96.05
	1	399	3.10	100.00	89	3.95	100.00
Aerospace surface instruments	0	12747	98.90	98.90	2246	99.56	99.56
	1	142	1.10	100.00	10	0.44	100.00
Energy	0	12767	99.05	99.05	2223	98.54	98.54
	1	122	0.95	100.00	33	1.46	100.00
Space systems	0	12576	97.57	97.57	2182	96.72	96.72
	1	313	2.43	100.00	74	3.28	100.00
Marine systems	0	12823	99.49	99.49	2251	99.78	99.78
	1	66	0.51	100.00	5	0.22	100.00

Table 2 Variables construction

This table shows the construction of all variables and shows which database each variable comes from. The first column shows the variable name, and the second column shows the definition.

Compustat	
Treatment	<i>SIC</i>
Assets	<i>at</i>
Average wage	<i>xlr / emp</i> (xlr is used due to all missing values for <i>xstfws</i>)
Book leverage	$(dltt+dlc)/at$
Book-to-market	$(ceq+txdite)/mv$
Capex	<i>capx</i>
Capex/assets	$capx/at$
(Capex+R&D)/assets	$(capx+xrd)/at$
Dividend/equity	<i>dvc/ceq</i> if <i>ceq</i> >0
Employees	<i>emp</i>
Market leverage	$(dltt+dlc)/(at-ceq+csho*prcc_f)$
Post	From 25 July 2007
PPE/assets	$ppent/at$
R&D	<i>xrd</i>
R&D missing	.
Repurchases/equity	$prstk/cep$ if <i>ceq</i> >0
ROA	$ebit/((at_{t-1}+at_t)/2)$
Sales	<i>sale</i>
SDC Thomson One	
Database	<i>All mergers and acquisitions</i>
Target Nation	<i>United States of America</i>
Percentage of shares acquired	<i>2 to 100</i>
Date effective/unconditional	<i>01/01/1998 – 12/31/2017</i>
Target public status	<i>Public</i>
Execucomp	
Total compensation	<i>tdc1</i>

Table 3 Descriptive Statistics treatment and control firms

All variables are winsorized at the 1 and 99 percent level. Sales is the gross sales reduced by cash discounts, trade discounts, and returned sales and allowances for which credit is given to customers, for each operating segment. Total assets represent the total assets/liabilities of a company. Book-to-market is the total of common equity plus the deferred taxes and investment tax credit, divided by the market value. Capex are the capital expenditures. R&D are the research and development expenses. PPE is the net total of property, plant and equipment. Employees represents the number of people employed by the company and is showed in thousands. ROA are the earnings before interest and taxes divided by the average of the lagged total assets and total assets.

Treatment firms	Obs	Mean	Std.Dev.	Min	Max
Total assets	32649	4360.388	16858.11	.763	149000
Book leverage	32649	.15	.178	0	.763
Book to market	32649	.622	.737	.02	6.372
Capex	32649	186.056	634.167	0	3961
Capex/assets	32649	.042	.052	0	.422
(Capex + R&D)/assets	32649	.164	.156	0	.702
Dividend/equity	32509	.017	.054	0	.459
Employees	27153	8.134	25.313	.003	180
Market leverage	32649	.103	.141	0	.75
PPE/assets	32649	.18	.198	0	.956
Revenues	32649	2247.216	7630.341	0	53105
R&D	32649	82.879	250.078	0	1350.505
ROA	32649	-.097	.338	-1.427	.387
Repurchases/equity	32649	.029	.086	0	.62
Sales	32649	2259.717	7714.159	0	54289
Wage	4748	89.955	104.89	.427	635
Firm acquired	32649	.021	.143	0	1
Acquired cross border	32649	.004	.063	0	1
Control firms	Obs	Mean	Std.Dev.	Min	Max
Total assets	78479	3517.12	13695.23	.763	149000
Book leverage	78479	.215	.201	0	.763
Book to market	78479	.932	1.049	.02	6.372
Capex	78479	161.38	524.949	0	3961
Capex/assets	78479	.066	.084	0	.422
(Capex + R&D)/assets	78479	.082	.105	0	.702
Dividend/equity	78126	.029	.072	0	.459
Employees	58284	10.619	27.018	.003	180
Market leverage	78479	.178	.188	0	.75
PPE/assets	78479	.341	.293	0	.956
Revenues	78479	2346.512	7215.408	0	53105
R&D	78479	20.964	124.387	0	1350.505
ROA	78479	-.006	.252	-1.427	.387
Repurchases/equity	78479	.033	.095	0	.62
Sales	78479	2357.872	7295.794	0	54289
Wage	14951	81.331	101.693	.427	635
Firm acquired	78479	.02	.14	0	1
Acquired cross border	78479	.003	.051	0	1

Table 4 Descriptive statistics pay-for-performance treatment and control firms

This tables shows the descriptive statistics for the second dataset, used for hypothesis 5. All variables are winsorized at the 1 and 99 percent level and all financial variables are in millions of dollars. Delta is the sensitivity of the manager's dollar continuation value to percentage changes in firm value. A full description of the other variables can be found in Table 2.

Treatment firms	Obs	Mean	Std.Dev.	Min	Max
Delta	27668	185.975	431.333	.203	3431.92
Sales	32479	4310.326	10991.02	47.374	86451
ROA	32479	.081	.102	-.213	.383
PPE/assets	32479	.193	.185	.002	.877
Market leverage	32479	.114	.133	0	.612
Control firms	Obs	Mean	Std.Dev.	Min	Max
Delta	76361	76361	202.551	495.029	.203
Sales	89918	6134.812	13262.78	47.374	86451
ROA	89918	.093	.087	-.213	.383
PPE/assets	89918	.268	.24	.002	.877
Market leverage	89918	.162	.143	0	.612

Table 5 Treatment industries

This table shows the industries which are assigned to the treatment group, by the four-digit SIC code. This list is published by CFIUS in 2008, in the year after the passage of FINSA, Committee on Foreign Investment in the United States Annual Report to Congress Public Version, December 2008, Page 39.

Category Title	SIC
Advanced Materials and Processing	3313, 2899, 3299, 2821, 3341, 3087, 2892, 8731
Chemicals	3829
Advanced Manufacturing	3823, 3559, 3827, 3559, 3544, 3549, 3829, 3844, 3542, 3549
Information Technology	3571, 3575, 7372, 7375, 7374, 7371, 8243, 7373, 3577, 3572
Telecommunications	4813, 3661, 3663, 3812, 4812, 4899
Microelectronics	3674, 3672
Semiconductor Fabrication Equipment	3559, 3674, 3825
Electronics: Military Related	3699, 3812, 3663, 3571, 3812, 3679, 3571, 3569
Biotechnology	2836, 8733, 2835, 2833, 2834, 2836
Professional/Scientific Instruments	3845, 3826, 3844, 3841, 3842, 3843, 3851
Aerospace and Surface Transportation	3721, 3724, 3711, 7371
Energy	4911, 1381
Space Systems	3663, 3571, 3761, 3229, 3822, 3764, 3812, 8711, 3663, 3845, 8711
Marine Systems	4499, 3699, 8711, 3731