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TWO ESSAYS ON GOVERNANCE AT THE NATIONAL AND CORPORATE LEVEL

By
Laura S. Miller

A DISSERTATION

Submitted to
H. Wayne Huizenga School of Business and Entrepreneurship
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in partial fulfillment of the requirements
for the degree of

DOCTOR OF BUSINESS ADMINISTRATION

2014

A Dissertation
Entitled

TWO ESSAYS ON GOVERNANCE AT THE NATIONAL AND CORPORATE LEVEL

By

Laura S. Miller

We hereby certify that this Dissertation submitted by Laura S. Miller conforms to acceptable standards, and as such is fully adequate in scope and quality. It is therefore approved as the fulfillment of the Dissertation requirements for the degree of Doctor of Business Administration.

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Nova Southeastern University
2014

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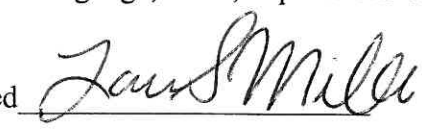
Signed 

Laura S. Miller

ABSTRACT

TWO ESSAYS ON GOVERNANCE AT THE NATIONAL AND CORPORATE LEVEL

By

Laura S. Miller

ESSAY 1

We examine the effect of governance environment on the composition of a country's external capital structure, specifically foreign equity investment. In addition to the absolute quality of the host country's governance environment, we consider the host country's governance quality relative to that of the source (investor) country. Unlike previous studies, which utilize country totals, we examine foreign investment positions between pairs of individual countries. Our sample includes 3,891 bilateral investment positions among 49 source countries and 69 host countries for years 2009 through 2011. We find that relative governance, rather than absolute governance, plays a role in foreign investment. Specifically, a host country with lower governance quality relative to the source country (a greater difference) attracts less FDI as a share of foreign equity investment. Our results suggest that prior studies, which identified absolute governance as a significant factor, were evaluating an incomplete picture. When the focus is solely on the host country, the policy prescription appears rather straightforward—all countries should pursue higher governance quality to attract more foreign investment from all sources. We challenge this notion by showing that: a) different source countries evaluate host-country governance differently; and b) this evaluation is influenced by the difference between the governance environments of the two countries.

ESSAY 2

Highly publicized governance failures in recent years have renewed research efforts to investigate the consequences of specific governance mechanisms. A better understanding of executive compensation contracts, specifically golden parachutes, is especially critical given their notorious status in the corporate governance debate. Instead of examining the explicit incentive role of golden parachutes (GPs) in influencing managerial behavior, we study their role as a tool for screening and recruiting reputable CEOs in a situation where recruitment would otherwise be difficult—severe financial distress that eventually leads to Chapter 11 bankruptcy. If GPs enable distressed firms to recruit reputable CEOs, there should be an observable link between the presence of GPs in employment contracts for newly hired CEOs and value-preserving firm outcomes. For our sample of firms, all of which filed for bankruptcy, this can be measured by the outcome of the bankruptcy proceedings, specifically the avoidance of liquidation. Thus, we hypothesize a negative relationship between the presence of GPs for newly hired CEOs and the probability of liquidation in bankruptcy. Consistent with this hypothesis, we find that firms led by newly hired CEOs with GPs are liquidated less often than other firms. This suggests that, regardless of their efficacy as corporate governance mechanisms, GPs can create value for shareholders.

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I must first thank my husband, Bradley Miller, for his constant support and encouragement through all of my educational endeavors. We met as college students more than twelve years ago, and I have been a student ever since. Although this is a familiar role for me, I am ready to begin a new chapter in my life that offers more freedom to enjoy my other roles—the ones that really matter.

Thanks is also due to Bradley and David Miller (a.k.a. Research Assistants 1 and 2), who assisted me in collecting and compiling data for this research project.

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My parents, Thomas Savory and Linda Savory, should share in this accomplishment, as they nurtured my love of learning from the very beginning and challenged me to pursue my goals.

Finally, I thank Robert Rufus, my employer and mentor, for his investment in my graduate education and professional development—both tangible and intangible. Due in major part to his generosity, I have achieved more in the past ten years than I ever thought possible.

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CHAPTER I

Introduction

Importance of the Problem

Determinants of international capital flows and their impact on economic growth are among the most important issues in the international finance literature (Alfaro, Kalemi-Ozcan, & Volosovych, 2008). In the environment of uncertainty created by the recent global financial crisis, understanding the drivers of international capital flows becomes more important. Since the beginning of the crisis, cross-border investment has slowed substantially amid a general re-pricing of risk, and many fear that financial globalization could be reversed (Cornelius, Juttmann, & Langelaar, 2009). Research suggests that the external capital structure of countries (i.e., relative shares of foreign direct investment, foreign portfolio investment, and external debt) may be a determinant of economic performance and susceptibility to financial crises (Levchenko & Mauro, 2007).

Debt financing, especially short-term debt, can be harmful because it is driven by speculative considerations regarding interest rates and exchange rates, rather than long-term considerations (Hausmann & Fernandez-Arias, 2000). In contrast, equity financing is preferable because it facilitates risk sharing between domestic producers and foreign investors (Rogoff, 1999). This risk sharing can help stabilize domestic consumption and improve domestic producers' ability to pursue projects with higher risk and return. Moreover, abrupt shifts in equity flows are less likely to trigger liquidity crises than similar disruptions in debt flows Hausmann & Fernandez-Arias, 2000; Levchenko & Mauro, 2007). Finally, a specific form of equity finance, foreign direct investment, is

especially attractive because it is associated with technological transfer (Borensztein, De Gregorio, & Lee, 1998).

Given the different benefits and costs of various external capital components, the strategic adjustment of capital structure is a worthwhile objective of public policy. However, before such policy initiatives can be formed, it is necessary to understand the factors that explain the existing capital structures of countries. One such factor that has received attention in the recent literature is governance environment, also termed institutional infrastructure. The governance environment of a country largely defines its investment environment, for both domestic and foreign investors, and thus its potential for economic growth (Globerman & Shapiro, 2002). Most studies of external capital structure focus on a single component, usually FDI, since it is considered the most desired form of investment in terms of benefits to the host country. Relatively few studies consider the factors that affect other forms of foreign investment, such as FPI, or the *relative shares* of the different components (Faria & Mauro, 2009; Li & Filer, 2007).

The Research Problem

We examine the effect of governance environment on the composition of a country's external capital structure, specifically foreign equity investment. In addition to the *absolute* quality of the host country's governance environment, we consider the host country's governance quality *relative* to that of the source (investor) country. Our research questions include the following:

- Does the quality of a host country's governance environment relative to that of a source country impact the *composition* of foreign equity investment between the

two countries, specifically foreign direct investment as a fraction of total equity investment (foreign direct investment plus foreign portfolio investment)?

- Does the level of insider ownership in the host country mediate the relationship between

  relative governance quality and the composition of foreign equity investment?

Contributions of the Study

Unlike previous studies, which utilize country *totals*, we examine foreign investment positions between pairs of *individual* countries (i.e., bilateral investment positions). This is important because policy initiatives aimed at influencing a country's external capital structure will impact investments from individual countries, which may or may not lead to the desired effect at the aggregate level. Another contribution of our study is the introduction of a new measure of governance environment. While existing studies have examined only the *absolute* quality of the host country's governance environment, we also consider the host country's governance quality *relative* to that of the source country.

By examining bilateral investment positions and relative governance quality, we investigate how a policy change can impact a country's aggregate external capital structure through separate (and perhaps offsetting) effects on investments from individual countries. The potential for offsetting effects at the individual country level challenges the notion of universal policy prescriptions for attracting foreign investment. Finally, we also examine the influence of a country's aggregate level of insider ownership on its external capital structure, specifically whether this relationship affects (mediates) the

influence of relative governance. The existence of such a mediating relationship would suggest additional complexity in governance policy decisions.

The remainder of this paper is structured as follows. Chapter 2 provides a discussion of the existing literature regarding the relationship between governance quality and foreign investment. Chapter 3 builds the research hypotheses for our study, which address the new relative governance variable and the potential mediating effect of insider ownership. Chapter 4 describes the empirical methodology and results. Finally, a summary and discussion of the results are provided in Chapter 5.

CHAPTER II

Review of Literature

International Equity Flows

International equity flows are the primary feature of the globalization of capital markets, both in developing and developed economies (Goldstein & Razin, 2006). These equity flows can generally be classified as either foreign direct investment (FDI) or foreign portfolio investment (FPI). Officially, FDI and FPI are defined as the acquisition of more or less than some specific fraction (e.g., 5% or 10%) of a foreign firm's shares. From an economic perspective, FDI is more than just the purchase of a substantial share in a foreign firm—it is an actual exercise of control and management (Razin, Sadka, & Yuen, 1998). Likewise, the critical feature of FPI is the foreign investor's lack of control over management. Thus, FDI investors take both ownership and control positions in foreign firms, while FPI investors gain ownership without control (Goldstein & Razin, 2006).

Leblang (2010) notes that, within a country, opportunities for FPI are constrained by the shares issued by corporate entities, while FDI opportunities are diverse in terms of both content and ownership stake. Leblang (2010) also highlights the greater heterogeneity of FDI relative to FPI. While portfolio investors choose from equity stakes that are offered by issuing firms on an organized exchange, direct investors can acquire any number of different ownership stakes across a variety of asset classes. In addition to a greater breadth of opportunity, FDI also differs from FPI in its greater risk of expropriation (Leblang, 2010). Portfolio investments, in contrast, are made in assets that

are publicly issued by corporations, for which information is more readily available. Finally, because FPI is more liquid (i.e., it can be easily moved among markets and asset classes), it requires less information than FDI (Leblang, 2010).

Role of Institutions in Financial Markets

New institutional economics, grounded in neoclassical theory, emphasizes the role of institutions in the effective functioning of market-based economies (Rutherford, 2001). Scott (2001, p. 49-50) defines institutions as "multifaceted, durable social structures, made up of symbolic elements, social activities, and material resources" that "provide guidelines and resources for acting as well as prohibitions and constraints on action." Institutional theory is primarily concerned with how institutions facilitate or obstruct economic activities by increasing or reducing transaction costs (North, 1990). Guler and Guillen (2010) identify three institutional factors that are relevant to investments in general, and to cross-border investments in particular: corporate law, equity markets, and political stability.

Corporate Law

Firms and investors prefer to operate in an environment where they are enabled and protected by legal institutions (Trevino, 1996). Research (e.g., La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998) has documented that owners' interests are defined and protected differently, depending on the legal tradition that provides the foundation for corporate law. The two broad legal traditions that influence corporate law and investor protection are the English common law tradition and the civil law tradition (La Porta et

al., 1998). A comparative analysis of corporate legal traditions, performed by La Porta et al. (1998), concludes that the English common law tradition provides stronger protection of investors' rights against potential agency conflicts than does the civil law tradition.

Equity Markets

Financial markets are the component of the institutional infrastructure that enables the founding and growth of organizations (Stuart & Sorenson, 2003). The stock market is particularly critical for equity investors, who do not intend to hold their investments indefinitely but rather seek to realize gains upon sale (Black & Gilson, 1998). Large and active equity markets, which offer better prospects for eventually exiting an investment, thus serve to attract, reallocate, and reward investors' capital (Guler & Guillen, 2010).

Policy Stability

Firms also benefit from the predictable execution of public policy (Trevino, 1996). Guler and Guillen (2010) note that, even with appropriate legal institutions to protect investors' rights and the availability of financial markets in which to realize capital gains, there remains the possibility that policymakers may change the rules governing these institutions in order to expropriate investors' returns. According to Scott (2001), laws, rules, and regulations are rarely completely objective, and the extent of potential changes creates uncertainty for the regulated.

Institutional Quality and External Capital Structure

Institutional deficiencies, such as unpredictable regulation, red tape, confiscatory taxation, and difficulties in enforcing contracts, are deterrents to private business in general, and especially to foreign investment (Garibaldi, Mora, Sahay, & Zettlemeyer, 2002). Thus, institutional quality is a potentially important determinant of external capital structure, a link that supports a growing research focus on institutional variables in explaining economic development (Alfaro et al., 2008; Lothian, 2006). Moreover, recent research (Acemoglu, Johnson, & Robinson, 2004) has identified a relationship between weak institutions and severe crises, although the mechanism underlying this relationship has not been identified. Faria and Mauro (2009) suggest that, if institutional quality is associated with a more crisis-prone external capital structure, this could be the mechanism through which weak institutions influence the frequency and severity of crises.

According to Guler and Guillen (2010), specific institutional factors that make a country attractive to one type of investor may not be as relevant for other types of investors. For example, the legal protection of owners' rights is certainly important to the portfolio investor but may be less so to the direct investor, who is able to exercise more control. Similarly, the size and activity of a country's equity market is critical to decision making in portfolio investments, where liquidity demands are higher, but much less relevant to direct investment. Finally, although policy stability may be of concern to a portfolio investor, it impacts direct investors to a much greater extent.

Theory

Faria and Mauro (2009) conjecture that weak institutional quality has the potential to deter both FDI and FPI. Investors considering FDI may be especially concerned about the likelihood of exposure to requests for bribes and the need to work through red tape, while lack of transparency in the corporate sector and weak corporate governance may deter international portfolio investors. Beyond such general propositions, the literature offers several formal hypotheses to explain the impact of institutions on the composition of external capital structures. Wei (2001) suggests that weak institutions may reduce the relative proportion of FDI. He explains that foreign banks are more likely than foreign direct investors to be bailed out in the event of a crisis and are thus more willing to invest (lend) in countries with weaker institutions. Thus, if countries with weaker institutions are more susceptible to crisis, they will tend to have a smaller share of FDI in their external capital structures.

Albuquerque (2003) explores the problems of expropriation and imperfect enforcement of financial contracts in international investments. He suggests that, because much FDI is intangible in nature (e.g., technology, brand names), it is generally less subject to expropriation than other forms of international investment. Under this assumption, the optimal contract between international investors and financially constrained countries (in which expropriation is more likely) will usually be FDI. Thus, Albuquerque's (2003) theory predicts that such countries will be financed primarily through FDI.

Razin et al. (1998) focus on the role of information asymmetries, suggesting the existence of a "pecking order" in countries' external capital structures, similar to the

corporate finance literature. Under this theory, firms will pursue financing first through FDI (akin to retained earnings or internal equity), then through debt, and finally through portfolio equity (external equity). Razin et al. (1998) suggest that, in the face of information barriers, foreign investors prefer FDI because it lets them place their own managers in the host country. This proximity allows FDI investors to be more informed than FPI investors regarding changes in the prospects of the firm. To the extent that weak institutional quality indicates informational asymmetries, it is expected to lead to a larger share of FDI and lower share of FPI in the external capital structure.

Building upon Razin et al.'s (1998) model, Goldstein and Razin (2006) develop a theory that explains the higher volatility of FPI relative to FDI. Like Razin et al. (1998), Goldstein and Razin (2006) note that, when information asymmetries exist, FDI facilitates more efficient management than FPI. However, Goldstein and Razin (2006) also recognize information asymmetries as a source of weakness for FDI. This weakness results from the possibility that investors may need to sell their investments in the case of liquidity shocks. In this situation, the seller faces the "lemons problem" described in Akerlof's (1970) landmark paper, which occurs when potential buyers know that the seller has more information. Thus, an FDI investor bears the cost of receiving a lower price if/when it is necessary to sell the investment prematurely.

According to Goldstein and Razin (2006), the tradeoff between management efficiency and liquidity (both sides of which are driven by information asymmetries) contributes to a high volatility of FPI relative to FDI. Specifically, investors with high liquidity needs value liquidity over management efficiency and will thus choose FPI, while investors with low liquidity needs will choose FDI. This is consistent with the

observation that FDI investors are often large multinational corporations with low liquidity needs, while FPI investors (e.g., global mutual funds) are more vulnerable to liquidity shocks.

Goldstein and Razin's (2006) theory is also consistent with several empirical observations. First, developed economies attract larger shares of FPI than developing economies. According to Goldstein and Razin (2006), this is because the greater transparency in developed economies alters the tradeoff and makes FPI more efficient. Second, since investors with high liquidity needs are attracted to FPI, this model can explain the high observed withdrawal rates of FPI relative to FDI, which contributes to the high volatility of the former relative to the latter. Finally, consistent with observations, developed economies with greater transparency are expected to have smaller differences between the volatility of FPI and FDI because the high efficiency of FPI in these economies attracts more investors with low liquidity needs.

Another information-based model is presented by Razin and Sadka (2007). This model addresses the roles of the source country's industry specialization and the host country's transparency in differentiating FDI from other forms of capital flows, such as FPI. Specifically, Razin and Sadka (2007) suggest that industry specialization in the source country provides a comparative advantage to potential FDI investors relative to domestic investors and FPI investors. Importantly, this comparative advantage is dependent on the accuracy of productivity signals in the host country, as reflected in corporate transparency and institutional quality. When the signals are more accurate, the advantage of FDI investors is less pronounced, and FDI flows to the country decrease.

Thus, higher institutional quality is expected to decrease the share of FDI in total capital flows.

Empirical Studies

Existing research has not adequately addressed the role of governance quality in determining external capital structure. Early studies of foreign investment drivers (e.g., Lane & Milesi-Ferretti, 2000, 2001) tested a limited number of factors, such as openness, economic size, and per-capita GDP. Later studies that consider governance variables have produced mixed results, largely due to differences in measurement. Globerman and Shapiro (2002) identify governance environment as a significant determinant of FDI flows for a broad sample of developed and developing countries over the period 1995 to 1997. Their results suggest this relationship is stronger for developing countries. Alfaro et al. (2008) examine determinants of equity capital inflows (including both FDI and FPI) for 47 countries averaged over the period 1970 to 2000. They find that institutional quality (measured with a composite index of political safety variables), along with legal origin, has a first-order effect over policies in explaining the pattern of capital flows.

Garibaldi et al. (2002) examine a wide range of potential determinants of both FDI and FPI inflows to a sample of 25 transition economies during the 1990s. Their results show that the cross-country pattern of FDI flows can be explained reasonably well by standard macroeconomic variables that measure economic reform and trade liberalization. In contrast, they find that FPI flows are much more difficult to model. Of the numerous factors tested, only two—financial market infrastructure and a measure of the protection of property rights—are found to be significant, and the explanatory power

of the model is low (R^2 of 0.40, vs. 0.90 for the FDI model). According to Li and Filer (2007), this finding is likely due to the lack of development of portfolio markets in transition economies.

Hausmann and Fernandez-Arias (2000) find no relationship, or possibly a negative relationship, between governance quality and the share of FDI in total capital inflows for 61 countries over the period 1996 to 1998. Similarly, in a panel including both advanced and developing countries, Albuquerque (2003) observes that the share of FDI in total capital flows is negatively related to good credit ratings but unrelated to factors representing governance quality. In contrast, Wei (2000a, 2000b, 2001) finds that weaker institutions shift capital inflows toward bank loans and away from FDI, which is consistent with his hypothesis that FDI investors are less likely than banks to be bailed out in the event of a crisis.

Li and Filer (2007) examine the relationship between governance environment and the composition of foreign capital inflows for 44 countries in the late 1990s. Their primary contribution to the literature is utilization of a broader measure of governance quality that includes not only government institutions, but also public institutions comprising culture and information infrastructure. Consistent with previous studies (e.g., Globerman & Shapiro, 2002), Li and Filer (2007) identify a significant positive relationship between their "governance environment index" (GEI) and FDI. More importantly, they identify a significant negative relationship between GEI and the share of FDI in relation to total foreign capital inflows. Together, these results imply that, the higher the quality of a country's governance environment, the more FDI it will receive; however, FDI will constitute a smaller share of total foreign capital inflows.

A recent study by Faria and Mauro (2009) differs from most earlier studies in that it examines capital *stocks* rather than capital *flows*. This approach is used because stocks are the object of capital structure theory in the finance literature, and empirical studies of the determinants of domestic capital structure usually test liability stocks. For 94 countries from year 1996 to 2004, Faria and Mauro (2009) examine the relationship between changes in governance quality and changes in the share of total equity in the external capital structure. Their primary and most robust finding is that governance quality is significantly positively related to the share of total equity. This result suggests that, holding other factors constant, a stronger governance environment shifts countries' external capital structures toward equity and away from debt.

Informational v. Institutional Effects

A shortcoming of the existing literature, particularly with regard to the application of theory, is the treatment of information frictions and institutional deficiencies as one in the same. In a very broad sense, both represent market failures—institutional deficiencies imply absent or poorly functioning markets, which serve as a mechanism that allows information asymmetries to persist. From this conceptual standpoint, the theories of Albuquerque (2003) and Goldstein and Razin (2006) appear to tell the same story. Specifically, in the presence of information frictions *and/or* market deficiencies, FDI is the more efficient form of foreign investment because it implies greater managerial control and better information. In other words, with FDI, the firm substitutes for a functioning market mechanism.

Daude and Fratzscher (2008) consider a different perspective, recognizing that information frictions and institutions may have different, although closely linked, effects on the composition of foreign investment. They empirically test this proposition by separately examining the relationships between these two factors and all components of external capital structure for 77 countries: FDI, bank loans, portfolio equity, and portfolio debt. Daude and Fratzscher (2008) find that both information frictions and institutions have a significant impact on the pecking order of foreign capital. Specifically, FDI and bank loans are the most sensitive to information frictions, while FPI equity and FPI debt are the least sensitive. In contrast, their results show that portfolio investment, particularly portfolio equity, is much more sensitive than FDI or bank loans to a broad set of institutional indicators. This finding holds even for corruption, which contradicts the common hypothesis that corruption is particularly detrimental to FDI. Another key finding is that portfolio investment is substantially more sensitive to various measures of financial development than FDI or bank loans.

Beyond Host Governance

Source Country Governance

While most studies examining the influence of governance quality on foreign investment have considered only the governance environment of the host country, Kim, Sung, and Wei (2011) take a different approach, focusing on governance characteristics in the source country. Specifically, they examine whether differences across investors in terms of corporate governance features affect their patterns of FPI abroad. They explain that, if weak corporate governance carries a risk that is not fully reflected in market prices,

investors should prefer well-governed companies in well-governed countries (i.e., a "preference for good governance"), regardless of their source countries. This is because investors from poorly-governed countries prefer a higher expected return just as much as investors from well-governed countries. However, if governance risks are fully discounted in market prices, then risk and return concerns alone cannot justify the preference for good governance that is documented in the literature. Rather, some alternative explanation is required.

According to Kim et al. (2011), a potential explanation is the "familiarity bias," which refers to investors favoring companies that are closer to the source country in terms of geography or culture. They extend this notion to characteristics of corporate governance, suggesting that the preference for good governance may be weaker for investors from countries with poor governance. Thus, the quality of corporate governance in the source country matters. Kim et al. (2011) test their hypothesis by examining foreign institutional investors' holdings of Korean stocks that are characterized by a significant control-ownership disparity. They find that investors from low-disparity countries disfavor high-disparity Korean stocks, but investors from high-disparity countries are indifferent. This suggests that the nature of corporate governance in international investors' home countries influences their portfolio choices abroad. In addition to control-ownership disparity, Kim et al. (2011) find that other common country-level governance measures, including legal origin and an anti-self dealing index, influence foreign investment patterns.

A New Application of the Gravity Model

In addition to highlighting the importance of governance characteristics in the source country, the results of Kim et al.'s (2011) study also draw attention to *differences* between the host and source countries. Specifically, their study finds that control-ownership disparity in the source country influences FPI only when it differs from control-ownership disparity in the host country. The proposition that country differences can explain foreign investment bears resemblance to the gravity model of international trade, which predicts trade flows based on various "distance" factors between countries.

Tinbergen (1962) was the first to apply Newton's model of the gravitational force between two bodies to commodity trade, and Anderson (1979) showed how it can be derived from trade theory. The standard gravity model predicts bilateral trade flows based on the sizes of two economies (usually measured by GDP) and the geographic distance between them. Although the gravity model was initially introduced to explain international trade, it has since been applied to a number of international finance topics. Empirical studies of FDI and FPI (e.g., Portes & Rey, 1998, 2005) have shown that the gravity model can be used to explain financial asset trade as well as commodity trade. In such applications, the geographic distance variable is interpreted as a proxy for transaction and transportation costs, information asymmetries, currency risk, and institutional differences.

Other Concepts of Distance

Portes and Rey (2005) added several additional variables to the gravity model to capture information asymmetries. Hypothesizing that geographically close countries are

more familiar with each other because of direct contact through business and tourism, they examined the number of telephone calls between countries, the number of overlapping trading hours, foreign bank branches, and the degree of financial sophistication. The addition of these variables reduced the role of geographic distance in their models, confirming that distance acts as a proxy for information effects. Empirical results such as these suggest the existence of other distance factors in addition to geographic distance. In a recent study, Aggarwal, Kearney, and Lucey (2012) model FPI as a function of three distinct sets of variables: 1) basic gravity variables; 2) variables that capture variation in institutional strength and information quality; and 3) cultural variables. Importantly, the set of cultural variables includes not only measures for both the host and source countries, but also a measure of cultural distance between the two countries.

While previous studies note the relevance of institutional differences between countries to foreign capital flows, Mian (2006) was the first to use and define the term "institutional distance." To investigate the widely held belief that globalization facilitates the financial development of emerging economies, Mian (2006) studies the banking sector in Pakistan, a traditionally underdeveloped market that has recently experienced a substantial expansion in foreign banking operations. He finds that, compared to domestic banks, foreign banks systematically avoid lending to "soft-information" firms that require relational contracting. Moreover, foreign banks are less likely to renegotiate in the case of default and less successful at recovering defaults. These results indicate that, while foreign banks are willing to offer arm's-length loans based on hard information, they are at a comparative disadvantage with regard to soft-information based loans.

Mian's (2006) explanation for these results is that, when foreign banks open a branch or subsidiary in a "distant" economy, they face extra information and agency costs in making relational loans. According to Mian (2006), distance in this context could reflect a number of factors, such as physical distance between the foreign bank's headquarters and the subsidiary, cultural distance, intrabank hierarchical distance due to bank size, or institutional distance between the foreign bank's country and that of the subsidiary. Mian (2006) hypothesizes that the reluctance of foreign banks to engage in relational lending could reflect the additional costs of such distance constraints. To test whether this hypothesis is valid and, if so, which distance factors are most relevant, Mian (2006) examines variation among foreign banks in their "distance travelled." He finds that both geographical and cultural distance are important factors in explaining the lending, recovery, and renegotiation differences between domestic and foreign banks lending in Pakistan. Moreover, he finds that these distance constraints are more likely to be driven by informational and agency costs rather than enforcement problems.

Insider Ownership as a Mediating Factor

Another unique empirical contribution of our study is the examination of insider ownership as a mediating variable in the relationship between relative governance quality and the composition of foreign equity investment. The identification of such a mediating relationship has significant implications. If the relationship is direct, then countries seeking to increase FPI inflows relative to FDI inflows should focus their efforts on strengthening institutions that support decentralized ownership. However, if the relationship is mediated by insider ownership, the prescription is more complicated

because insider ownership is likely to be influenced by a number of factors other than governance.

Home Bias

Although the International Capital Asset Pricing Model (ICAPM) prescribes that individuals should hold equities around the world in proportion to market capitalizations, this does not describe actual international investment behavior. Instead, research has documented disproportionately large allocations of capital to investors' home countries. French and Poterba (1991) argue that investors prefer domestic assets as a result of what they call "familiarity effects." More specifically, Tesar and Werner (1995) attribute the phenomenon to factors such as language and institutional differences. Coval and Moskowitz (1999) explain the home bias in terms of information asymmetries, arguing that investors have access to better information about assets sold in markets that are geographically closer. More recently, it has been proposed that "cultural affinity," rather than familiarity or geographic proximity, may be the key driver of the home bias (Guiso, Sapienza, & Zingales, 2005).

Optimal Insider Ownership

Kho, Stulz, and Warnock (2009) note that corporate insiders around the world display a unique form of home bias, specifically a tendency to overweight personal investment holdings of the firms they control. In an attempt to explain this concentration, Kho et al. (2009) apply corporate agency theory (Jensen & Meckling, 1976), which predicts that firm value is maximized when corporate insiders have greater ownership,

because this helps align their interests with those of minority shareholders. Under this theory, insider ownership should be larger when agency conflicts between managers and shareholders are stronger. Research suggests that agency conflicts are stronger when institutions that protect investors are weaker (Stulz, 2005). Thus, Kho et al. (2009) propose that weak governance increases the optimal level of insider ownership, which limits portfolio holdings by foreign investors and thereby increases the home bias.

According to Shleifer and Vishny (1986), conflicts created by controlling shareholders are mitigated by the presence of investors who actively monitor the controlling shareholders. Kho et al. (2009) suggest that, by changing the incentives for foreign investors to engage in such monitoring activity, governance can impact the composition of foreign investment. Specifically, they propose that FDI investors from countries with better governance than the host country are limited in their ability to consume the private benefits enjoyed by domestic insiders. As a result, FDI investors have a comparative advantage in monitoring controlling shareholders and strong incentives to use their information to limit insider benefits. Kho et al. (2009) predict that, as the governance of the host country improves, the benefits of monitoring decrease and FDI becomes less attractive relative to FPI.

The existence of an optimal level of insider ownership and an important role for monitoring shareholders forms the basis for Kho et al.'s (2009) "optimal corporate ownership theory of the home bias." As explained above, this theory proposes that an improvement in governance has an effect on the home bias, since it allows firm value to be maximized with less insider ownership and, thus, greater holdings by portfolio investors (including foreign investors). Under this theory, governance also impacts the

composition of foreign investment, because the same forces that reduce the optimal level of insider ownership also reduce the benefits of FDI compared to FPI. The key insight of Kho et al.'s (2009) theory is that share ownership does not depend only on the demand for shares by portfolio investors. Rather, there is an optimal level of ownership by insiders, which reduces the shares available to portfolio investors. Since insiders are more likely to be domestic investors, greater insider ownership should be associated with lower holdings by foreign investors.

Kho et al. (2009) predict that the share of FDI in total foreign investment is negatively related to the quality of governance and positively related to the fraction of shares held by insiders. They empirically test this theory, examining changes in U.S. equity investments in 34 countries between 1994 and 2004. Consistent with expectations, they find that the share of U.S. FDI relative to FPI decreases when insider ownership decreases. Importantly, once insider ownership is accounted for, they find no significant relationship between the composition of U.S. foreign equity investment and several governance variables. These results indicate that governance affects the composition of U.S. foreign equity investments (as reflected in changes in the home bias) through its impact on corporate ownership by insiders and monitoring shareholders.

Governance and Insider Ownership

La Porta et al. (1998) shed further light on the relationship between governance and insider ownership. They propose that firms in countries with poor investor protection have more concentrated ownership, citing two specific reasons for this pattern. First, large shareholders who monitor managers may need to own more capital, all else equal,

to exercise control rights. Second, when they have poor protection, small investors may be willing to buy shares only at such low prices that make it unattractive for firms to issue new shares. According to La Porta et al. (1998), such low demand for shares by minority investors would indirectly fuel ownership concentration. La Porta et al. (1998) test their hypothesis by examining the relationship between ownership concentration and several measures of investor protection in 45 countries. They find that countries with better accounting standards, stronger anti-director rights, and mandatory dividend rules have lower ownership concentration. These results suggest that concentrated ownership is a response to, and possibly a substitute for, weak investor protection in a corporate governance system.

CHAPTER III

Hypotheses Development

Relative Governance

The literature provides several theories of how governance impacts foreign investment. Recognizing that certain governance factors are more or less relevant to certain types of investors, these theories predict a relationship between governance and the *relative* components of foreign investment, such as FDI relative to FPI. The practical implication is that countries seeking to change their external capital structures should focus on specific governance variables that are most relevant to the specific type of investor they want to attract. Clearly, the issue is more complex than suggested by universal prescriptions for "good" governance. Although existing theory considers relativity in the dependent factor (i.e., the impact on foreign investment), it views the explanatory factor (governance) in absolute terms—looking only at the host country. This narrow view may partially explain the failure of empirical studies to establish a clear link between governance quality and variables reflecting countries' external capital structures.

As previously discussed, empirical studies utilizing the gravity model have identified a significant relationship between geographic distance and foreign investment. This distance factor is interpreted as proxying for a number of different effects, including informational asymmetries and institutional differences between the host and source countries. Mian (2006) explicitly recognized the role of such differences by examining an "institutional distance" variable that reflects the higher informational and agency costs

of foreign banks operating abroad. Kim et al. (2011) contributed to the literature by showing that source-country, as well as host-country, governance characteristics influence foreign investment patterns. If, as the literature suggests, governance characteristics of both the source and host countries are significant factors in explaining foreign investment, then the *difference* in governance quality between the source and host countries (akin to the notion of institutional distance) is likely to play a role. Our primary contribution to the literature is the introduction of a new measure of governance environment to explain foreign investment. In addition to the *absolute* quality of the host country's governance environment, we consider the host country's governance quality *relative* to that of the source country.

Relative Shares of Foreign Investment

We investigate this relative concept of governance as a potential driver of the *composition* of a country's external capital structure, i.e., relative shares of foreign investment components. Specifically, the dependent variable of interest is FDI as a share of total foreign equity investment (FDI / FE). Predicting the impact of relative governance on this fraction requires consideration of separate effects on the numerator and denominator. As previously noted, there is empirical evidence that FPI, particularly equity FPI, is much more sensitive than FDI to institutional factors (Daude & Fratzscher, 2008). Thus, we expect relative governance to impact the composition of foreign equity investment primarily through its impact on FPI.

Research Hypotheses

Although previous studies have examined various governance factors in relation to foreign investment, their results do not offer strong implications for our primary research question. First, the results of these studies are not consistent and are not strongly linked to theory. Moreover, they conceptualize governance in terms of the host country only, without any consideration of potential source country effects. Our key proposition is that relative governance plays a different, and perhaps more important, role than absolute governance in explaining foreign investment. Thus, previous studies that address only absolute governance may be of limited value in predicting relationships for relative governance. Moreover, as noted above, the ratio nature of the dependent variable introduces further complexity.

Of the various studies reviewed herein, Daude and Fratzscher (2008) provide the most useful direction for developing our hypotheses. They find that institutional factors have the greatest impact on FPI, which suggests that relative governance will influence the ratio FDI / FE primarily through its influence on the denominator, which includes both FDI and FPI. As previously discussed, the literature is much more developed with regard to individual components of foreign investment (i.e., FDI or FPI) than to relative shares of these components. The general consensus is that FDI is explained by factors such as foreign market size and costs of production, while FPI is motivated more by yield-seeking and risk reduction through portfolio diversification.

Aurelio (2006) shows that growth in U.S. foreign investment over the period 1990 to 2004 was fueled primarily by investment in foreign corporate stocks (i.e., FPI). Moreover, he examines three potential factors that may explain why U.S. investors have

become more inclined to invest in some foreign markets but not others—institutional elements, levels of return, and opportunities for risk diversification. Aurelio (2006) finds that foreign markets with low betas measured relative to the world market portfolio attract more U.S. investment, concluding that risk diversification is the best explanation. Desai and Dharmapala (2008) highlight the importance of taxes in evaluating the yield and diversification benefits of FPI. Although it is often argued that investors can achieve foreign diversification either through FPI or by investing in domestic multinational corporations that invest abroad, differential tax treatment creates an advantage for FPI (i.e., higher after-tax yields).

Thus, yield and diversification concerns should be considered in predicting the impact of relative governance on FPI. Employing this perspective, host countries with weaker governance may be more attractive to FPI investors, especially those in countries with stronger governance. In other words, the governance quality of both the host and source—that is, relative governance—matters. Investors in source countries with stronger governance are more likely to seek yield and diversification from FPI, which is provided by host countries with weaker governance (Aurelio, 2006). Thus, a higher governance disparity reflects a "match" between what source country investors seek from FPI and what the host country offers. Our first hypothesis flows from this reasoning:

H1. Countries with a lower quality of governance environment relative to that of another country (i.e., a greater difference) will attract a smaller share of FDI from that country.

On the surface, this may appear to contradict existing theory. As previously explained, the general consensus is that FDI should be the more efficient (and thus

preferred) means of foreign investment when informational asymmetries exist, because it allows for greater control. This would seem to suggest a positive relationship between relative governance and FDI / FE— a greater governance disparity leads to a larger share of FDI. While this comparative evaluation may apply in certain contexts, it is not useful: 1) for predicting aggregate results; 2) if FDI and FPI investors are segregated to some extent; 3) with the latter being more sensitive to governance factors.

With regard to the first of these three conditions, it is important to note that our study examines the "choice" of a source *country* between FDI and FPI, not an *individual* investor. The aggregate effect at the country level results from the combination of many individual investors. The next question (the second condition) is whether individual investors evaluate this decision differently. According to Goldstein and Razin (2006), they do. A key implication of their theory, which is explicitly noted in Razin and Serechetapongse (2011), is that the choice between FDI and FPI is related to investors' sensitivity to liquidity risk. Specifically, in a separating equilibrium, high liquidity risk investors tend to choose FPI, while low liquidity risk investors tend to choose FDI. Finally, as previously noted, the empirical results of Daude and Fratzscher (2008) address the third condition, suggesting a stronger governance effect for FPI than for FDI. Under these conditions, a greater governance disparity will increase FDI but will increase FPI more. Thus, existing theory is not wrong but rather *incomplete* with regard to our specific research questions.

Our first research hypothesis contemplates a direct relationship between relative governance and external capital structure. This notion is challenged by Kho et al.'s (2009)

optimal corporate ownership theory of the home bias, which suggests the relationship between governance environment and the composition of foreign investment (specifically, FDI relative to FPI) is *mediated* by insider ownership. In other words, governance affects foreign investment not directly, but rather through its impact on insider ownership: better governance reduces the optimal level of insider ownership, which makes more shares available to foreign portfolio investors. To determine whether the relationship in H1 is mediated by insider ownership, as proposed by Kho et al. (2009), an additional hypothesis is tested:

H2. The relationship between a country's quality of governance environment relative to that of another country and its share of FDI from that country is mediated by the host country's aggregate level of insider ownership.

CHAPTER IV

Methodology and Results

Variables and Data Sources

Dependent Variable

The dependent variable we examine is FDI as a share of total foreign equity investment (FDI plus FPI). Unlike previous studies, which utilize country *totals*, we examine foreign investment between pairs of *individual* countries. Data for bilateral investment positions are from the Coordinated Direct Investment Survey (CDIS) and Coordinated Portfolio Investment Survey (CPIS) compiled by the International Monetary Fund (IMF). The CDIS, which is available beginning in year 2009, collects comprehensive data on FDI positions by economy of direct investor (for inward FDI) and by economy of investment (for outward FDI). It also provides several breakdowns, including separate data on equity and debt positions. The CPIS, which is available beginning in year 1997, collects information on the stock of cross-border holdings of equity and debt securities broken down by the issuer's economy of residence.

Explanatory Variables

The two primary factors we examine are absolute governance (ABS GOV), the governance environment quality of the *host* country, and relative governance (REL GOV), the governance environment quality of the source country *relative* to that of the host country (source minus host). Following Faria and Mauro (2009), absolute governance is measured as the simple average of six institutional indicators drawn from the Worldwide

Governance Indicators (WGI) project, a research dataset that is sponsored and distributed by the World Bank. The six indicators measure six broad dimensions of governance, including:

1. *Voice and Accountability (VA)* – captures the extent to which a country's citizens are able to participate in selecting their government, as well as the freedoms of expression and association and a free media.
2. *Political Stability and Absence of Violence (PV)* – captures the likelihood of a country's government being destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.
3. *Government Effectiveness (GE)* – captures the quality of public services, the quality of the civil service and its independence from political pressure, the quality of policy development and implementation, and the credibility of the government's commitment to such policies.
4. *Regulatory Quality (RQ)* – captures the ability of the government to develop and implement sound policies and regulations that promote private sector development.
5. *Rule of Law (RL)* – captures the extent to which agents have confidence in the rules of society, especially the quality of contract enforcement, property rights, the police, and the courts.
6. *Control of Corruption (CC)* – captures the extent to which public power is exercised for private gain.

These governance indicators are subjective in nature, compiled from 30 individual data sources that combine the perceptions of many enterprise, citizen, and expert survey

respondents. The WGI project reports the indicators for 215 industrial and developing countries beginning in year 1996. Each index ranges from -2 (representing weak governance) to +2 (representing strong governance) for most countries, with a mean of zero and a standard deviation of one.

The relative governance measure is a new contribution of our study. It is measured as the simple average of the six institutional indicators for the source country minus that for the host country. This measurement (i.e., differences) mitigates the impact of potential bias due to the subjective nature of the governance indicators. In addition to the governance measures, the other explanatory factor of interest (for H2) is insider ownership (IO) in the host country. Data for this variable are from Kho et al. (2009), who measured aggregate insider ownership for 44 countries in 2004. These measures, including both an equal-weighted average and a value-weighted average, were aggregated from firm-level block holdings reported by WorldScope.

Regression Models

The following linear regression models are used to examine the two research hypotheses:

1. $FDI / FE_i = b_0 + b_1(ABS\ GOV_{i,}) + b_2(REL\ GOV_i) + b_kX_{ki} + E_i$
2. $FDI / FE_i = b_0 + b_1(ABS\ GOV_i) + b_2(REL\ GOV_i) + b_3(IO_i) + b_kX_{ki} + E_i$

where ABS GOV is the absolute governance measure for the host country, REL GOV is the relative governance measure between the host and source countries (source minus host), and X represents a vector of control variables. The regressions are estimated including ABS GOV only (specification A) and both ABS GOV and REL GOV

(specification B). To test for potential nonlinearities in the relationship between the dependent variable and REL GOV, a squared version of this explanatory variable is included in a third specification (C).

Controls

The selection of control variables is based on previous empirical work, which has focused primarily on the determinants of FDI. First is the strength of minority shareholder rights in the host country, measured by Djankov et al.'s (2008) "anti-self dealing index." Since this variable represents an element of governance, it is treated herein as an auxiliary governance variable, the behavior of which can be compared to the composite measure (WGI index) for further insight. Faria and Mauro (2009) identify several other factors that are related to host countries' capital structures, especially FDI: size of the economy, economic development, credit markets development, openness, natural resources, and whether the country is a transition economy. These are considered "pull" factors, since they represent characteristics of the host country that attract (i.e., pull) investment from other countries. Other control factors employed in previous studies (e.g., Garibaldi et al., 2002; Globerman & Shapiro, 2002, 2003; Hausmann et al., 2000; Kim et al., 2011) include physical distance between the source and host countries, host stock market development, host legal origin, and host tax burden. Finally, following Portes and Rey (2005), bilateral trade flows (i.e., trade flows between individual pairs of countries) are included in the model, with a lag of one year to avoid endogeneity issues. Definitions and data sources for all control variables are provided in Table 1.

Table 1
Control Variables

Name	Abbrev.	Description	Source
Host Anti-Self Dealing Index	HSELF	Index of the strength of minority shareholder protection against self dealing by controlling shareholders, based on legal rules prevailing in 2003	Djankov et al. (2008)
Trade Flows	TRAD	Exports reported by source to host if available; otherwise, imports reported by host from source	OECD International Trade by Commodity Statistics (ICTS), Harmonised System 1988, All Commodities
Physical Distance	DIST	Greater circle distance; shortest distance between borders for country pairs including large countries (Brazil, Canada, China, India, Russia & U.S.) and distance between capitals for all other countries; measured in deciles	Geographic coordinates from CIA World Factbook
Host Size	HSIZ	Natural log of total GDP in constant 2009 dollars	World Development Indicators, World Bank
Host Economic Development	HECON	Natural log of per-capita GDP in constant 2009 dollars	World Development Indicators, World Bank
Host Stock Market Development	HSTOCK	Stock market capitalization as % of GDP	World Development Indicators, World Bank
Host Credit Markets Development	HCRED	Domestic credit to private sector as % of GDP	World Development Indicators, World Bank
Host Openness	HOPEN	Sum of exports and imports as % of GDP	World Development Indicators, World Bank
Host Natural Resources	HNAT	Ores and metals exports as % of merchandise exports	World Development Indicators, World Bank
Host Tax Burden	HTAX	Amount of taxes and mandatory contributions payable by businesses, after accounting for allowable deductions and exemptions, as % of commercial profits	World Development Indicators, World Bank
Host Legal Origin	HLEG	Indicator variable for English, French, German or Scandinavian origin	Djankov et al. (2008)

Host Transition Economy	HTRANS	An indicator variable that equals one if the host country belonged to the former USSR, former Yugoslavia, or ex-communist countries	N/A

Table 2 presents expected directions of the relationships for the control variables, along with the previous study (or studies) on which the expectation is based. Albuquerque (2003), Hausmann et al. (2000), and Li & Filer (2007) are the most directly applicable references, as their dependent variables are ratios similar to ours. From other studies that examined only FDI or FPI, we inferred the relative impact on our ratio of interest (FDI / FE). Two control variables for which we have no clear expectation are Host Anti-Self Dealing Index and Tax Burden. HSELF is included in our model as an auxiliary governance variable to serve as a reference point for our primary governance variable. If relative governance (rather than host governance) is the driving factor in our model, and HSELF acts as a governance variable, then we do not expect it to show significance. Although HTAX has been tested in previous studies, it has not been identified as a significant factor. We nonetheless include it in our model since taxes may be more likely to play a role in explaining the relative share of FDI and FPI than either component individually. Because higher taxes imply lower after-tax returns, this factor should negatively impact both FDI and FPI. Given the tax advantage of FPI noted by Desai and Dharmapala (2008), the impact on FDI is expected to be greater, suggesting a negative relationship for the ratio FDI / FE.

Table 2
Expected Signs of Control Variables

Variable	Sign	Source
HSELF	N/A	Kim et al. (2011)
TRAD	Positive	Portes & Rey (2005)
DIST	Positive	Hausmann et al. (2000)
HSIZ	Negative	Hausmann et al. (2000)
HECON	Negative	Albuquerque, 2003; Hausmann et al. (2000)
HSTOCK	Negative	Faria & Mauro (2009), Garibaldi et al. (2002), Lane & Milesi-Ferretti (2003)
HCRED	Negative	Hausmann et al. (2000)
HOPEN	Positive	Hausmann et al. (2000), Li & Filer (2007)
HNAT	Positive	Faria & Mauro (2009), Garibaldi et al. (2002), Hausmann et al. (2000)
HTAX	Negative	Alfaro et al. (2008), Lane & Milesi-Ferretti (2003)
HTRANS	Negative	Faria & Mauro (2009)

Sample

Our sample includes all pairs of countries for which the necessary data are available for years 2009 (the first year that bilateral FDI investment positions are available) through 2011. Of the two investment data sets, CPIS and CDIS, the former contains the greater number of country-pair observations. For each year, the sample begins with the total number of CPIS observations and is reduced as follows:

- Remove observations with no/confidential CDIS data
- Remove observations with negative CDIS data
- Remove observations with no/confidential CPIS data
- Remove observations with negative CPIS data
- Remove observations that would create zero-denominator fractions in the dependent variables
- Remove countries with no WGI data (for the governance factor)

This process results in 8,682 observations across the three subject years. Of this total, control data are available for 3,891 observations, which determines the size of the final sample. This sample includes observations for 49 different source countries and 69 host countries, the distribution of which is provided in Table 3.

Table 3
Distribution of Sample Countries

	Source		Host			Source		Host	
Country	#	%	#	%	Country	#	%	#	%
Argentina	7	0.18%	48	1.23%	Kenya		0.00%	19	0.49%
Australia	52	1.34%	92	2.36%	Korea, Rep.	187	4.81%	83	2.13%
Austria	140	3.60%	81	2.08%	Latvia	47	1.21%	38	0.98%
Belgium	108	2.78%	91	2.34%	Lithuania	81	2.08%	43	1.11%
Bolivia		0.00%	19	0.49%	Luxembourg	67	1.72%	96	2.47%
Brazil	55	1.41%	67	1.72%	Malaysia	17	0.44%	51	1.31%
Bulgaria	8	0.21%	49	1.26%	Mexico	52	1.34%	71	1.82%
Chile	17	0.44%	63	1.62%	Morocco		0.00%	31	0.80%
China		0.00%	69	1.77%	Netherlands	180	4.63%	108	2.78%
China, H.K.	28	0.72%	78	2.00%	New Zealand	16	0.41%	43	1.11%
Colombia	8	0.21%	37	0.95%	Nigeria		0.00%	38	0.98%
Croatia		0.00%	42	1.08%	Pakistan	20	0.51%	27	0.69%
Czech Repub.	96	2.47%	71	1.82%	Panama	7	0.18%	18	0.46%
Denmark	171	4.39%	83	2.13%	Peru		0.00%	34	0.87%
Ecuador		0.00%	23	0.59%	Philippines	22	0.57%	44	1.13%
Egypt	6	0.15%	45	1.16%	Poland	85	2.18%	84	2.16%
El Salvador		0.00%	20	0.51%	Portugal	113	2.90%	71	1.82%
Finland	96	2.47%	78	2.00%	Russian Fed.	79	2.03%	68	1.75%
France	150	3.86%	102	2.62%	Singapore	18	0.46%	59	1.52%
Germany	183	4.70%	106	2.72%	South Africa	81	2.08%	67	1.72%
Ghana		0.00%	27	0.69%	Spain	61	1.57%	92	2.36%
Greece	95	2.44%	70	1.80%	Sri Lanka		0.00%	27	0.69%
Hungary	144	3.70%	81	2.08%	Sweden	137	3.52%	88	2.26%
Iceland	97	2.49%	37	0.95%	Switzerland	155	3.98%	91	2.34%
India	47	1.21%	67	1.72%	Thailand	70	1.80%	57	1.46%
Indonesia	4	0.10%	52	1.34%	Tunisia		0.00%	29	0.75%
Ireland	73	1.88%	89	2.29%	Turkey	135	3.47%	74	1.90%
Israel	79	2.03%	62	1.59%	Uganda		0.00%	11	0.28%
Italy	165	4.24%	101	2.60%	Ukraine		0.00%	51	1.31%

Jamaica		0.00%	17	0.44%	U.K.	111	2.85%	112	2.88%
Japan	77	1.98%	86	2.21%	U.S.	175	4.50%	119	3.06%
Jordan		0.00%	24	0.62%	Venezuela	2	0.05%	35	0.90%
Kazakhstan	67	1.72%	35	0.90%					

As illustrated in Table 3, no single country represents more than 5% of the sample as host or source. The top ten source countries comprise 42.4% of the sample, while the top ten host countries comprise 26.2% of the sample. This indicates that concentration in the sample is higher on the source side, which is explained by the nature of the investment databases. Specifically, in the CPIS database, investment positions are reported from the source side only. Thus, if a source country does not participate in the survey, its outward investment positions cannot be inferred from data reported by other participants. This data limitation is noted in other studies that utilize CPIS data (e.g., Milesi-Ferretti, Strobbe, & Tamirisa, 2010). Finally, Table 3 shows that the observations are allocated rather evenly across the three years—34.1% in 2009, 34.6% in 2010, and 31.3% in 2011.

Empirical Results

Descriptives

Table 4 provides the descriptive statistics for all variables, and pairwise correlations of the continuous explanatory variables are reported in Table 5. As illustrated in Table 5, several of the explanatory variables are significantly correlated.

Table 4
Descriptive Statistics

Variable	Mean	St. Dev.	Min.	Max.
FDI / FE	0.620	0.352	0.000	1.000
ABS GOV	0.588	0.876	-1.610	1.859
REL GOV	0.244	1.229	-3.249	3.319
HSELF	0.476	0.239	0.080	1.000
TRAD	20.661	2.177	8.730	26.200
DIST	3.164	2.160	1.000	10.000
HSIZ	26.800	1.519	23.214	30.339
HECON	9.749	1.151	6.171	11.646
HSTOCK	0.734	0.700	0.010	4.721
HCRED	1.112	0.622	0.133	2.336
HOPEN	0.975	0.786	0.221	4.461
HNAT	0.711	0.112	0.002	0.645
HTAX	0.450	0.154	0.208	1.082
HLEG (Eng)	0.270	0.446	0.000	1.000
HLEG (Scand)	0.070	0.261	0.000	1.000
HLEG (Germ)	0.230	0.419	0.000	1.000
HTRANS	0.140	0.352	0.000	1.000

Table 5
Pairwise Correlations

	ABS GOV 1	REL GOV 2	H SELF 3	TRAD 4	DIST 5	H SIZ 6	H ECON 7	H STOCK 8	H CRED 9	H OPEN 10	H NAT 11	H TAX 12
1	1											
2	-.773	1										
3	.055	-.033	1									
4	.128	-.085	.066	1								
5	-.115	.062	.261	-.274	1							
6	.127	-.144	.171	.499	-.002	1						
7	.753	-.627	.024	.215	-.166	.311	1					
8	.171	-.148	.448	.075	.153	.103	.278	1				
9	.568	-.490	.278	.207	-.119	.338	.706	.430	1			
10	.225	-.156	.201	-.098	-.047	-.358	.283	.552	.251	1		
11	.032	.012	.129	-.155	.295	-.161	-.086	.169	-.137	-.105	1	
12	-.230	.173	-.297	.114	.029	.297	-.198	-.393	-.342	-.442	-.166	1

Regressions

Our regression results are presented in Table 6. The three specifications present different pictures of the significance of the governance variables. In specification A, which includes only ABS GOV, this variable is highly significant with a positive coefficient. This finding is consistent with the results of previous studies that examined only host-country governance. However, when REL GOV is added in specification B, the significance of ABS GOV is reduced, and its sign changes. REL GOV is highly significant with a negative coefficient of substantial magnitude. Consistent with Hypothesis 1, this suggests that a host country with lower governance quality relative to the source country (a greater difference) attracts less FDI as a share of foreign equity investment.

Table 6
OLS Regressions
Model 1: FDI / FE

	A			B			C		
	Beta	p-value		Beta	p-value		Beta	p-value	
INTERCEPT	1.782	.000	***	1.909	.000	***	1.855	.000	***
ABS GOV	.091	.000	***	-.056	.063	*	-.025	.420	
REL GOV				-.195	.000	***	-.189	.000	***
REL GOV SQ							.093	.000	***
HSELF	.028	.230		.034	.138		.043	.062	*
TRAD	.244	.000	***	.252	.000	***	.263	.000	***
DIST	.007	.691		.000	.995		-.004	.838	
HSIZ	-.203	.000	***	-.215	.000	***	-.224	.000	***
HECON	-.224	.000	***	-.252	.000	***	-.244	.000	***
HSTOCK	-.046	.055	*	-.047	.050	**	-.055	.021	**
HCRED	-.013	.618		-.016	.531		-.009	.711	
HOPEN	.042	.101		.043	.091	*	.046	.071	*
HNAT	.019	.304		.025	.175		.033	.065	*
HTAX	.050	.010	**	.054	.005	***	.060	.002	***
HLEG (Eng)	-.081	.001	***	-.080	.001	***	-.083	.000	***
HLEG (Scand)	-.062	.000	***	-.062	.000	***	-.071	.000	***

HLEG (Germ)	-.018	.317		-.017	.361		-.009	.612	
HTRANS	.098	.000	***	.098	.000	***	.099	.000	***
Year 2009	-.027	.140		-.058	.001	***	-.054	.003	***
Year 2010	-.249	.000	***	-.251	.000	***	-.250	.000	***
F-Stat	54.164	.000	***	55.854	.000	***	55.213	.000	***
Adj. R-Squared	0.189			0.202			0.209		
Observations	3891			3891			3891		

*significant at 10%; ** significant at 5%; *** significant at 1%

Specification C, which shows that REL GOV is also significant in its squared form, suggests the negative relationship between relative governance and FDI / FE is non-linear— decreasing at a decreasing rate. In other words, greater governance disparities have a lesser negative impact on the share of FDI. The adjusted R^2 for the three specifications of Model 1 ranges from 0.189 to 0.209. This is comparable to the explanatory value of previous studies that examine shares of foreign investment (e.g., Albuquerque, 2003; Hausmann & Fernandez-Arias, 2000; Li & Filer, 2007).

Consistent with expectations, the auxiliary governance variable, HSELF, is not significant in specifications A and B and only marginally significant in specification C. Thus, it does not appear to contribute explanatory value distinct from other aspects of governance. All of the other control variables are highly significant except for Physical Distance, Host Credit Markets Development, Host Openness, and Host Natural Resources. DIST and HCRED are not significant in any of the three specifications, while HOPEN and HNAT are marginally significant only in specification C. This finding for DIST supports the interpretation in previous studies that physical distance can act as a proxy for institutional differences, which we explicitly address. Because our set of controls is more comprehensive than the previous studies from which the individual

controls were identified, and several of the factors have notable correlations, lack of significance for a few factors is not surprising.

Contrary to expectations, HTAX has a positive sign. A potential explanation for this finding is provided by Globerman and Shapiro (2002), who highlight the fact that average tax rates do not measure the impact of taxation at the margin. They proffer that the conceptually appropriate measure for tax differences across countries is the marginal effective tax rate, which is not employed in empirical studies due to difficulties in measurement. For example, marginal tax rates can differ among industries and even across regions within a country (Chen, 2000). Moreover, any aversion to high taxes may be moderated by their link to superior infrastructure, which is highly valuable to foreign investors (Globerman & Shapiro, 2002).

Another significant control with an unexpected sign is HTRANS. Our expectation of a negative relationship for this factor was based on Faria and Mauro (2009), who examined foreign equity investment as a share of total foreign investment. In contrast, we identified a significant positive relationship. Interpreting the results of the two studies together, it appears that host transition economies attract more FDI and less FPI, with a stronger impact on FPI. This explains a negative relationship for the share of equity investment in Faria and Mauro (2009) and a positive relationship for the share of FDI in our study.

In Model 2, insider ownership (INS) is added as an explanatory variable. The purpose of this model is to test Kho et al.'s (2009) optimal corporate ownership theory of the home bias, which suggests a negative relationship between governance quality and the share of FDI. Specifically, because lower governance quality implies greater

information asymmetries, foreign investors are more likely to be large monitoring shareholders than atomistic portfolio investors. Importantly, Kho et al.'s (2009) theory predicts this relationship is *mediated* by insider ownership, because the optimal level of insider ownership determines the amount of shares available to foreign portfolio investors.

The insider ownership measure is available for only 40 of our sample countries, which reduces the sample size for this model to 2,939 observations. In the regression results, INS is significant with a negative coefficient when measured with equal weights (Table 7) and not significant when measured with value weights (Table 8). With either measure of INS (equal or value weights), REL GOV remains highly significant in specifications B and C. Moreover, for all three specifications, the primary governance variables are similar to Model 1 in terms of both significance and size/magnitude of the coefficients.

Table 7
OLS Regressions
Model 2: FDI / FE with INS (Equal Weights)

	A			B			C		
	Beta	p-value		Beta	p-value		Beta	p-value	
INTERCEPT	1.854	.000	***	1.996	.000	***	1.886	.000	***
ABSGOV	.183	.000	***	.030	.383		.052	.131	
RELGOV				-.211	.000	***	-.184	.000	***
RELGOV SQ							.078	.000	***
HSELF	.066	.033	**	.071	.020	**	.078	.010	**
TRAD	.226	.000	***	.241	.000	***	.248	.000	***
DIST	-.004	.846		-.010	.621		-.015	.474	
HSIZ	-.128	.000	***	-.142	.000	***	-.143	.000	***
HECON	-.286	.000	***	-.298	.000	***	-.278	.000	***
HSTOCK	.009	.752		.005	.851		-.002	.946	
HCRED	-.060	.064	*	-.060	.060	*	-.060	.060	*
HOPEN	.056	.097	*	.060	.071	*	.060	.073	*
HNAT	-.036	.136		-.026	.265		-.020	.403	
HTAX	.042	.094	*	.047	.062	*	.047	.060	*
HLEG (Eng)	-.197	.000	***	-.194	.000	***	-.200	.000	***

HLEG (Scand)	-.138	.000	***	-.136	.000	***	-.146	.000	***
HLEG (Germ)	-.081	.000	***	-.077	.001	***	-.079	.000	***
HTRANS	.054	.010	**	.051	.014	**	.058	.005	***
Year 2009	-.007	.761		-.041	.060	*	-.039	.069	*
Year 2010	-.243	.000	***	-.245	.000	***	-.244	.000	***
INS Equal	-.070	.013	**	-.069	.014	**	-.072	.010	**
F-Stat	29.720	.000	***	32.376	.000	***	31.866	.000	***
Adj. R-Squared	0.150			0.169			0.174		
Observations	2939			2939			2939		

Table 8
OLS Regressions
Model 2: FDI / FE with INS (Value Weights)

	A			B			C		
	Beta	p-value		Beta	p-value		Beta	p-value	
INTERCEPT	1.843	.000	***	1.972	.000	***	1.846	.000	***
ABSGOV	.184	.000	***	.031	.365		.053	.126	
RELGOV				-.210	.000	***	-.185	.000	***
RELGOV SQ							.077	.000	***
HSELF	.070	.025	**	.074	.016	**	.081	.009	***
TRAD	.224	.000	***	.240	.000	***	.247	.000	***
DIST	.001	.971		-.005	.803		-.009	.665	
HSIZ	-.135	.000	***	-.148	.000	***	-.149	.000	***
HECON	-.298	.000	***	-.310	.000	***	-.289	.000	***
HSTOCK	.005	.868		.002	.955		-.005	.861	
HCRED	-.029	.313		-.029	.312		-.026	.364	
HOPEN	.049	.151		.052	.122		.050	.139	
HNAT	-.035	.141		-.026	.273		-.019	.415	
HTAX	.052	.038	**	.056	.023	**	.057	.020	**
HLEG (Eng)	-.178	.000	***	-.173	.000	***	-.174	.000	***
HLEG (Scand)	-.119	.000	***	-.116	.000	***	-.123	.000	***
HLEG (Germ)	-.073	.001	***	-.068	.002	***	-.070	.002	***
HTRANS	.070	.000	***	.067	.001	***	.076	.000	***
Year 2009	-.008	.694		-.043	.049	**	-.041	.055	*
Year 2010	-.244	.000	***	-.246	.000	***	-.245	.000	***
INS Value	-.033	.219		-.028	.288		-.024	.363	
F-Stat	29.416	.000	***	32.062	.000	***	31.510	.000	***
Adj. R-Squared	0.148			0.167			0.172		
Observations	2939			2939			2939		

The adjusted R^2 for Model 2 is lower than Model 1, indicating that insider ownership adds no explanatory value. More importantly, these results do not show a mediating relationship between governance and FDI / FE, so Hypothesis 2 is not supported. This implies that, contrary to Kho et al.'s (2009) theory, governance has a direct impact on a country's external capital structure aside from any effects on insider ownership. The similarity of the results for Models 1 and 2 is particularly interesting when considering the reduced sample size for Model 2, which does not include smaller developing countries. The dominance of developed countries in the reduced sample is reflected in a higher mean ABS GOV (0.792 for Model 2 v. 0.588 for Model 1) and a lower REL GOV (-0.007 for Model 2 v. 0.244 for Model 1).

CHAPTER V

Summary and Conclusions

The key finding of our study is that relative governance, rather than absolute governance, plays a role in foreign investment. Prior studies, which identified absolute governance as a significant factor, were evaluating an incomplete picture. We capture a broader perspective that reveals a more complex relationship between governance quality and foreign capital flows than previously envisioned. When the focus is solely on the host country, the prescription appears rather straightforward—all countries should pursue higher governance quality to attract more foreign investment from all sources. Our results challenge this notion by showing that: a) different source countries evaluate host-country governance differently; and b) this evaluation is influenced by the difference between the governance environments of the two countries. This implies that a broad goal, such as increasing FDI inflows, cannot be effectively addressed with policy. Rather, a host country must identify specific source countries to target and then evaluate its governance environment *relative* to those countries.

Another layer of complexity is added when considering the composition (relative shares) of foreign investment rather than specific components in isolation. From the latter perspective, both FPI and FDI should arguably be pursued, since each is beneficial to the host country in certain respects. However, different forms of foreign capital must be evaluated together, since a country's overall capital structure is the issue of primary consequence to economic growth and stability, especially for developing economies. Specifically, research (e.g., Levchenko & Mauro, 2007; Lipsey, 2001; Sarno & Taylor,

1999) has shown FDI to be more persistent and resilient, and thus less likely to trigger a financial crisis, than portfolio flows. This approach presents an empirical challenge, since explaining shares of foreign investment (e.g., FDI / FE) is more difficult than explaining individual components. When dealing with ratios, one must consider not only the directions of changes in the individual components (numerator v. denominator), but also the magnitudes of the changes. This fact limits the practical applicability of most existing research, which investigates the impact of governance on FDI flows alone. Our results suggest that governance effects are not limited to FDI but are actually stronger for FPI.

One of the noted goals for our study was to inform the strategic adjustment of capital structure. Conventional wisdom suggests that, because FDI is "bolted down" (unlike FPI, which constitutes unstable "hot money"), a higher share of FDI is better (Hattari & Rajan, 2011, p. 505). In contrast, our results suggest that an increase in the share of FDI actually paints a negative picture of a country's governance environment, since it likely reflects a decrease in FPI. Thus, it appears that strategic adjustment of external capital structure is not an appropriate undertaking because the target is not a valid measure of an economy's health. Moreover, given the complexities just discussed, it is not a clearly attainable objective. Countries should instead focus on improving the governance environment for all investment—both domestic and foreign. This is the engine for growth, which is the ultimate driver of all capital inflows, even from countries with higher governance standards. Recognizing that comprehensive governance improvement is the proper long-term goal, targeted efforts (such as focusing on

institutions that are most critical for a country's high-growth industries) are more likely to achieve short-term results.

We also contribute to the literature by challenging Kho et al.'s (2009) optimal corporate ownership theory of the home bias, which suggests that any relationship between governance quality and the composition of foreign investment is mediated by the host country's optimal level of insider ownership. As previously noted, our regression results are not changed by the addition of an insider ownership factor (in Model 2) and thus do not indicate a mediating relationship. Our results challenge Kho et al.'s (2009) "key insight" that stock ownership "does not depend on the demand for shares by portfolio investors alone" and is better explained by information asymmetries in the context of agency models. We find the opposite—that FPI is driven *more* by demand considerations. Specifically, liquidity preferences determine the identity of foreign portfolio investors, and yield/diversification considerations (which are impacted by relative governance) influence their selection of host markets. Importantly, we do not challenge the implications of agency theory for the *optimal* level of insider ownership; rather, we challenge Kho et al.'s (2009) assumption that a country's *actual* level of insider ownership can be fully explained in this context.

It should be noted that Kho et al. (2009) interpret their findings as evidence that governance affects foreign investment through its impact on insider ownership *at the country level*. Our study investigates whether this relationship is observed in investment positions between *specific pairs* of countries, which is an entirely different issue. The divergent results of these two studies suggest that valuable information about bilateral foreign investment is lost when positions are aggregated. Our results also highlight the

noted limitations of Kho et al.'s (2009) study, including its limited sample size (including only U.S. outward investment to 40 countries) and few controls. It is likely that the insider ownership factor in their model was acting as a proxy for determinants of stock ownership (domestic and/or foreign) unrelated to governance.

In conclusion, it appears that foreign investment is very much a *relative* issue. Relative shares of different foreign capital components are the focus of countries' strategic policy initiatives, which aim to promote those components with the greatest welfare benefits. Such aggregate effects are a function of investment flows from individual countries and ultimately individual investors, whose decisions are driven by relative evaluations of costs and benefits. In other words, certain factors that make a country attractive to one type of investor may not be as relevant for other types of investors, and each investor will evaluate the factors differently. We have identified one such factor as the relative governance environment of the host v. the source country. Understanding these relative conditions, it becomes clear that a universal concept of "good" governance is neither valid nor useful.

REFERENCES CITED

ESSAY 1

Acemoglu, D., Johnson, S., & Robinson, J. (2004). Institutions, volatility, and crisis. In T. Ito & A. Rose (Eds.), *Growth and productivity in East Asia*. NBER East Asia Seminar on Economics, 13, 71-108. University of Chicago Press.

Aggarwal, R., Kearney, C., & Lucey, B. (2012). Gravity and culture in foreign portfolio investment. *Journal of Banking & Finance, 36*, 525-538.

Akerlof, G. (1970). 1970. The market for 'lemons': Quality uncertainty and the market mechanism. *Quarterly Journal of Economics* 84, 488–500.

Albuquerque, R. (2003). The composition of international capital flows: Risk sharing through foreign direct investment. *Journal of International Economics, 1*(2), 353-383.

Alfaro, L., Kalemi-Ozcan, S., & Lolosovych, V. (2005). Capital flows in a globalized world: The role of policies and institutions. National Bureau of Economic Research, Working Paper No. 11696.

Alfaro, L., Kalemi-Ozcan, S., & Lolosovych, V. (2008). Why doesn't capital flow from rich to poor countries? An empirical investigation. *Review of Economics & Statistics, 90*(2), 347-368.

Anderson, J. E. (1979). A theoretical foundation for the gravity equation. *American Economic Review, 69*(1), 106-116.

Aurelio, M. (2006). Going global: The changing pattern of U.S. investment abroad. *Federal Reserve Bank of Kansas City Economic Review, 53*, 5-32.

Black, B. S., & Gilson, R. J. (1998). Venture capital and the structure of capital markets: Banks versus stock markets. *Journal of Financial Economics, 47*(3), 243-277.

Borensztein, E., De Gregorio, J., & Lee, J. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics, 45*(1), 115-135.

Chen, D. (2000). The marginal effective tax rate: The only one that matters in capital allocation. *C. D. Howe Institute Backgrounder*.

Cornelius, P., Juttmann, K., & Langelaar, B. (2009). Home bias in leveraged buyouts. *International Finance, 12*(3), 321-340.

Coval, J. D., & Moskowitz, T. J. (1999). Home bias at home: Local equity preference in domestic portfolios. *Journal of Political Economy, 109*, 811-841.

Daude, C., & Fratzscher, M., 2008. The pecking order of cross-border investment. *Journal of International Economics, 74*(1), 94-119.

Desai, M. A., & Dharmapala, D. (2008). Taxes, institutions and foreign diversification opportunities. *Journal of Public Economics, 93*(5-6), 703-714.

Djankov, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2008). The law and economics of self-dealing. *Journal of Financial Economics, 88*(3), 430-465.

Faria, A., & Mauro, P. (2009). Institutions and the external capital structure of countries. *Journal of International Money & Finance, 28*, 367-391.

French, K. R., & Poterba, J. M. (1991). Investor diversification and international equity markets. *American Economic Review, 81*, 222-226.

Garibaldi, P., Mora, N., Sahay, R., & Zettlemeyer, J. (2002). What moves capital to transition economies? International Monetary Fund, Working Paper No. 02/64.

Globerman, S., & Shapiro, D. (2002). Global foreign direct investment flows: The role of governance infrastructure. World Development, 30(11), 1899-1919.

Globerman, S, & Shapiro, D. (2003). Governance infrastructure and U.S. foreign direct investment. *Journal of International Business Studies, 34*(1), 19-39.

Goldstein, I., & Razin, A. (2006). An information-based trade off between foreign direct investments and foreign portfolio investment. *Journal of International Economics, 70*, 271-195.

Guiso, L., Sapienza, P., & Zingales, L. (2005). *Cultural biases in economic exchange*. Chicago, IL: The University of Chicago.

Guler, I., & Guillen, M. F. (2010). Institutions and the internationalization of US venture capital firms. *Journal of International Business Studies, 41*, 185-205.

Hattari, R., & Rajan, R. (2011). How different are FDI and FPI flows? Distance and capital market integration. *Journal of Economic Integration, 26*(3), 499-525.

Hausmann, R., & Fernandez-Arias, E. (2000). Foreign direct investment: Good cholesterol? Inter-American Development Bank, Working Paper No. 417.

Jensen, M. C., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and capital structure. *Journal of Financial Economics, 3*, 305-360.

Kho, B., Stulz, R., & Warnock, F. E. (2009). Financial globalization, governance, and the evolution of the home bias. *Journal of Accounting Research, 47*(2), 597-635.

Kim, W., Sung, T., & Wei, S. J. (2011). Does corporate governance risk at home affect investment choice abroad? *Journal of International Economics, 85*, 25-41.

Lane, P., & Milesi-Ferretti, G. M. (2000). External capital structure: theory and evidence. International Monetary Fund, Working Paper No. 00/152.

Lane, P., & Milesi-Ferretti, G. M. (2001). The external wealth of nations: Measure of foreign assets and liabilities for industrial and developing countries. *Journal of International Economics, 55*(2), 263-294.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy, 106*(6), 113-155.

Leblang, D. (2010). Familiarity breeds investment: Diaspora networks and international investment. *American Political Science Review, 104*(3), 584-600.

Levchenko, A., & Mauro, P. (2007). Do some forms of financial flows help protect against sudden stops? *World Bank Economic Review, 21*(3), 389-411.

Li, S., & Filer, L. (2007). The effects of the governance environment on the choice of investment mode and the strategic implications. *Journal of World Business, 42*, 80-98.

Lipsey, R. (2001). Foreign direct investment and the operations of multinational firms: Concepts, history, and data. National Bureau of Economic Research, Working Paper No. 8665.

Lothian, J. (2006). Institutions, capital flows, and financial integration. *Journal of International Money & Finance, 25*(3), 353-369.

Mian, A. (2006). Distance constraints: The limits of foreign lending in poor economies. *Journal of Finance, 61*, 1465-1505.

Milesi-Ferretti, G. M., Strobbe, F., & Tamirisa, N. (2010). Bilateral financial linkages and global imbalances: A view on the eve of the financial crisis. International Monetary Fund, Working Paper No. 10/257.

North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge, MA: Cambridge University Press.

Portes, R., & Rey, H. (1998). The euro and international equity flows. *Journal of the Japanese & International Economies, 12*, 406-423.

Portes, R., & Rey, H. (2005). The determinants of cross-border equity flows. *Journal of International Economics, 65*, 269-296.

Razin, A., & Sadka, E. (2007). Corporate transparency, cream skimming and FDI. *European Economic Review, 51*, 1263-1276.

Razin, A., Sadka, E., & Yuen, C. (1998). A pecking order of capital inflows and international tax principles. *Journal of International Economics, 44*, 45-68.

Razin, A., & Serechetopongse, A. (2011). Equity prices and equity flows: Testing theory of the information-efficiency tradeoff. Hong Kong Institute for Monetary Research, Working Paper No. 29/2011.

Rogoff, K. (1999). International institutions for reducing global financial stability. *Journal of Economic Perspectives, 13*(4), 21-42.

Rutherford, M. (2001). Institutional economics: Then and now. *Journal of Economic Perspectives, 15*, 173-194.

Sarno, L., & Taylor, M. P. (1999). Moral hazard, asset price bubbles, capital flows, and the East Asian crisis: The first tests. *Journal of International Money & Finance, 18*, 637-657.

Scott, W. R. (2001). *Institutions and organizations,* (2nd ed.). Thousand Oaks, CA: Sage.

Shleifer, A., & Vishny, R. (1986). Large shareholders and corporate control. *Journal of Political Economy, 94*, 461-488.

Stuart, T. E., & Sorenson, O. (2003). Liquidity events and the geographic distribution of entrepreneurial activity. *Administrative Science Quarterly, 48*(2), 175-201.

Stulz, R. M. (2005). The limits of financial globalization. *Journal of Finance, 60*, 1595-1638.

Tesar, L., & Werner, I. (1995). Home bias and high turnover. *Journal of International Money & Finance, 14*(4), 467-492.

Tingbergen, J. (1962). Shaping the world economy: Suggestions for an international economic policy. Twentieth Century Fund, New York.

Trevino, A. J. (1996). *The sociology of law: Classical and contemporary perspectives.* New York: St. Martin's.

Wei, S. J. (2000). How taxing is corruption on international investors? *Review of Economics & Statistics, 82*(1), 1-11.

CHAPTER I

Introduction

Corporate Governance

Both academic and public interest in corporate governance has peaked in recent years, precipitated by the financial scandals of 2000-2001 (e.g., Enron, WorldCom, and Tyco) and the global financial crisis of 2008. Highly compensated managers were viewed as key contributors to these problems, begging the question of why their harmful behavior was not effectively controlled by corporate governance mechanisms, particularly the board of directors and compensation methods. These perceived governance failures have led to proposals of governance reform initiatives from a variety of sources and renewed research efforts to investigate the consequences of specific governance mechanisms. In the current environment of enhanced regulation and shareholder skepticism, it is now more than ever necessary for companies to understand the importance of governance structure and how it can influence firm outcomes (Maskara, Maskara, & Aggarwal, 2013). Although this issue has been widely examined in the academic literature, researchers have yet to identify a set of "best practices" for corporate governance. Rather, the emerging consensus seems to be that no governance structure is suitable for *all* firms at *all* times because the relative costs and benefits of specific mechanisms are contingent upon the firm's unique circumstances.

Executive Compensation

An important aspect of corporate governance is executive compensation, which "plays a fundamental role in attracting and maintaining quality managers and provides motivation for executives to perform their duties in shareholders' best interests" (Anderson & Bizjak, 2003, p. 1324). Despite widespread agreement on *what* executive compensation is intended to accomplish, there is no consensus on *how* it operates. If a competitive market for managerial labor exists, then one would expect the forces of supply and demand to set the proper "price" of this labor. Many researchers have embraced this market perspective, which views executive compensation as the product of optimal contracting between boards and managers. Others adopt a more sociological perspective, highlighting the influence of network dynamics on the evaluation of executive worth and related wage negotiations. When such dynamics allow managers to accumulate power over the board, this power can be exercised to extract rent in the form of excessive compensation. This argument is often applied to the compensation of CEOs, given the inherent power they possess in the organizational structure.

Public opinion that executive compensation is excessive and inequitable has been fueled by the enormous growth of CEO pay relative to the wages of lower-level employees (Evans & Hefner, 2009). The Economic Policy Institute reports that, from 1978 to 2011, CEO compensation grew more than 725%— an increase much higher than the 5.7% wage growth experienced by the average worker, as well as stock market appreciation during the same period (Mishel & Sabadish, 2012). This vast discrepancy in growth rates is also reflected in the CEO-to-worker compensation ratio, which increased from 18.4x in 1978 to 209.4x in 2011. Such statistics illustrate the fact that CEOs have

fared much better than the average worker, the stock market, or the U.S. economy over the last several decades. This apparent inequity has been the subject of research in the field of corporate ethics, where it is identified as a highly contentious issue for stakeholders, particularly in takeover contexts (Carr & Valinezhad, 2004; Matsumara & Shin, 2005; Nichols & Subramaniam, 2001; Rodgers & Gago, 2003).

Managerial Incentives

In addition to the proper *amount* of executive compensation, another contentious issue is its proper *form*. According to agency theory, compensation contracts should be structured to maximize the alignment between managers' and shareholders' interests. Popular agency-based prescriptions include bonuses tied to the achievement of certain targets (i.e., pay for performance) and the awarding of stock options or grants. Such mechanisms serve as *explicit* incentives for managers to promote shareholder wealth. Although compensation contracts certainly influence managerial incentives, the literature also recognizes the role of emergent factors such as organizational politics and interpersonal relationships (Milkovich & Newman, 2005). For example, managers' behavior may be motivated by *implicit* incentives to protect their human capital value (or reputation), a concept known as *career concerns* (Gibbons & Murphy, 1992). The practical implication of this concept is that an optimal compensation "contract" should address not only explicit incentives provided by contractual provisions, but also the implicit incentives provided by career concerns.

Golden Parachutes

Golden parachutes are a specific type of managerial compensation that takes effect upon a change in control of the firm, such as a merger or acquisition. These severance contracts are designed to protect CEOs from the personal costs that takeovers can impose, so they will not resist wealth-maximizing takeover attempts (Buchholtz & Ribbens, 1994). Post-acquisition dismissal is a valid threat to CEOs because dismissals following a change in control are often unrelated to performance (Kidder & Buchholtz, 2002). Moreover, personal costs of displacement are significant, including loss of compensation and diminished reputation (Jensen, 1988). By offering compensation that is contingent upon a change in control, golden parachutes can reduce the risk faced by CEOs. Despite this seemingly rational explanation, golden parachutes are often perceived as an example of excessive executive compensation because they award senior management with large payouts in situations where other stakeholders, such as employees and business partners, suffer negative consequences (Brown, 2006).

The Research Problem

Existing research on the value of golden parachutes can be categorized into two broad streams. The first stream attempts to capture investors' perceptions of value by examining stock price reactions to announcements of golden parachutes. Another stream of research has focused on the effects of golden parachutes in takeover contexts, specifically the probability of acquisition and the magnitude of shareholder gains in acquisitions. This second stream considers how the presence or absence of a golden parachute impacts managerial incentives to act in the best interests of shareholders. The

results of such studies have been mixed, offering no clear conclusions for the welfare effects of golden parachutes. This ambiguity supports the proposition of a contingent nature of corporate governance—that specific mechanisms should be evaluated in specific contexts.

Instead of examining the explicit incentive role of golden parachutes (GPs) in influencing managerial behavior, we study their role as a tool for screening and recruiting reputable CEOs in a situation where recruitment would otherwise be difficult—severe financial distress. As previously noted, GPs provide a form of insurance for human capital value by protecting CEOs from the personal costs of takeovers. We focus on this risk-mitigation function of GPs by examining a sample of financially distressed firms that eventually filed for Chapter 11 bankruptcy. Because firms in financial distress are takeover targets, this situation presents greater risk to the reputable CEO and thus enhances the perceived value of the golden parachute.

If GPs enable distressed firms to recruit reputable CEOs, there should be an observable link between the presence of GPs in employment contracts for newly hired CEOs and value-preserving firm outcomes. For our sample of firms, all of which filed for bankruptcy, this can be measured by the outcome of the bankruptcy proceedings, specifically the avoidance of liquidation. Thus, we hypothesize a negative relationship between the presence of GPs for newly hired CEOs and the probability of liquidation in bankruptcy. Consistent with this hypothesis, we find that firms led by newly hired CEOs with GPs are liquidated less often than other firms. This suggests that, regardless of their efficacy as corporate governance mechanisms, GPs can create value for shareholders.

We demonstrate this in a specific context—for firms in financial distress facing the possibility of bankruptcy.

Importance of the Problem

Although corporate governance has historically been perceived as a means of mitigating the classic manager-shareholder conflict, it addresses much broader issues such as the deployment of organizational resources and the resolution of conflicts among all types of participants in organizations (Daily, Dalton, & Cannella, 2003). Given this central role, governance is an issue of interest to many players both inside and outside the corporation, including managers, shareholders, regulatory bodies, and researchers (Dowell, Shackell, & Stuart, 2011). As noted by Shleifer and Vishny (1997, p. 737), "the subject of corporate governance is of enormous practical importance." Such direct relevance creates an opportunity to bridge the gap between theory and practice, which has been a stimulant for research in the field of corporate governance. Given this strong potential influence, it is important to know whether the guidance offered by the literature is truly being embraced in practice and, if so, whether it is producing the intended results.

A better understanding of executive compensation contracts, specifically golden parachutes, is especially critical given their notorious status in the corporate governance debate. Criticisms of golden parachutes as a governance mechanism may be justified, but this does not preclude their potential for some value contribution. This proposition highlights an adverse consequence of the current focus on corporate governance. Although deficiencies in governance certainly constitute a problem, this is not the *only* problem and is likely not the most important problem facing a *given firm at a given point*

in time. Thus, it is not helpful to characterize and evaluate golden parachutes (or any other such device) in general terms. Rather, a proper evaluation requires clearly delineating a specific problem in a specific context.

Contributions of the Study

As previously noted, the dominance of agency theory in both corporate governance research and practice has produced an oversimplified perspective of managerial incentives and executive compensation. Pay-for-performance schemes are universally prescribed as a means of aligning managerial and shareholder interests. In contrast, severance contracts such as golden parachutes are negatively viewed as indicators of managerial entrenchment, creating pressure for regulations that limit the adoption of these practices. Such arguments focus only on the short-term marginal costs of CEO pay without considering potential long-term benefits. Alternative perspectives of managerial incentives, based on social exchange theory, identify several such benefits, including mitigation of CEO risk, preservation of the CEO's psychological contract with the firm, and the encouragement of innovation (Evans & Hefner, 2009; Kidder & Buchholtz, 2002).

Our research setting offers unique insight on how explicit and implicit incentives in the CEO compensation contract interact to promote value-preserving behavior. Reputable CEOs, who require a compensation premium, are thought to enhance shareholder value through their superior abilities. Assuming that reputation is indeed an indicator of ability, hiring a reputable CEO captures only the *potential* for value creation. To actually *realize* this value, agency theory suggests that some explicit incentive is

necessary for the CEO to direct his or her superior abilities toward the pursuit of shareholder interests. However, if reputation also indicates an *implicit incentive* to protect that reputation, a reputable CEO may act to preserve shareholder wealth even without explicit incentives to do so. With our sample of bankrupt firms, we are able to test both the efficacy of a golden parachute in recruiting a reputable CEO and the value created by the reputable CEO's implicit incentive to continue working for the shareholders after the bankruptcy filing, when the GP loses its explicit incentive value. Thus, bankruptcy provides a unique setting where only implicit incentives are present.

We seek to identify a link between a specific governance mechanism (golden parachutes) and a specific firm outcome (avoidance of liquidation) in a specific context (bankruptcy). Such a focused approach is a departure from previous studies, which examine numerous mechanisms or a composite index and broad firm outcomes such as performance or financial distress. Narrowing the focus of this study facilitates the application of theory to not only predict a relationship, but also to explain the relationship and interpret its implications. Importantly, the theoretical framework for our study extends beyond the confines of agency theory, which has so far failed to adequately capture the complexities of managerial incentives. Another unique aspect of our empirical approach is consideration of the different components of golden parachute contracts. Unlike most previous studies, which utilize a generic definition that captures multiple types of benefits, we consider the different benefits to identify specific one/s that contribute to the incentive functions addressed in our research questions.

In addition to its implications for managerial incentives and executive contracting, our study helps to explain the failure of research to identify a relationship between

governance structure and firm outcomes. While there is no doubt that corporate governance matters to the firm, the empirical literature has yet to provide clear evidence of how and why. This is attributable in part to the measurement difficulties involved in studies that attempt to connect general governance factors (such as board characteristics) with corporate performance. Our study highlights the importance of context in research examining the efficacy of any corporate mechanism, a factor that has been largely ignored in previous studies. If context does indeed matter, there can be no universal prescriptions for governance structure, including executive compensation.

A final contribution of our study is the insight gained from interviews with several of the CEOs from our sample, i.e., the individuals serving as CEO at the time of bankruptcy filings. Specifically, we were able to contact eight of these CEOs, who provided information about their decision to accept employment at the firm, the contract negotiation process, the condition of the firm at the time of hire, and the personal consequences of the bankruptcy. This information was useful in both developing our hypotheses and interpreting our results. Moreover, it supports the practical implications of the study.

The remainder of this paper is structured as follows. Chapter 2 builds a foundation from the literature, highlighting the critical role of the CEO and discussing the incentive effects of various contracting mechanisms, including golden parachutes. This discussion considers not only the classic agency perspective, but also a sociological perspective that offers a more comprehensive picture of the CEO. Drawing on both perspectives, Chapter 3 builds the research hypotheses for the study, which examine golden parachutes a tool for distressed firms to recruit reputable CEOs. Chapter 4

describes the empirical methodology and results. Finally, a summary and discussion of the results are provided in Chapter 5.

CHAPTER II

Review of Literature

Corporate Governance Defined

Corporate governance encompasses the processes and policies used by organizations to ensure that business is conducted for the mutual benefit of both the corporation and society as a whole (Maskara et al., 2013). Although numerous definitions exist, which are framed from the perspective of different stakeholders, researchers agree that the resolution of agency problems is the core purpose of corporate governance (Shleifer & Vishny, 1997). The extant literature on corporate governance is quite deep, with different researchers focusing on different aspects of this broad concept. According to Bhagat, Bolton, and Romano (2008), the board of directors (BOD), shareholder meetings/voting, and executive compensation are the basic parts of a corporate governance system. Bebchuk and Weisbach (2010) embrace a wider perspective, identifying seven areas of corporate governance: shareholders and shareholder activism, directors, executive compensation, controlling shareholders, comparative corporate governance, cross-border investments in global capital markets, and the political economy of corporate governance.

The Dominant Paradigm: Agency Theory

For many years, the dominant theoretical paradigm in corporate governance research has been agency theory. In their seminal paper, Jensen and Meckling (1976) introduced agency theory to explain the existence of public corporations, where

ownership is separate from control. Although the public firm operates for the benefit of its shareholders, whose interests are protected by the board of directors, day-to-day decision making is performed by managers. The magnitude of managerial power has long been recognized, as evidenced by the observation of Berle and Means (1932, p. 139) that corporate executives "have almost complete discretion in management." Jensen and Meckling (1976) explained how this separation of ownership and control can lead to self-interested behavior by managers, because managers do not bear the entire wealth effects of their decisions.

Self-interested behavior by managers can be manifested in a variety of ways. For example, managers can shirk their work responsibilities (Jensen & Meckling, 1976) or consume excessive perquisites like lavish offices and private jets (Jensen, 1988). They can also make decisions according to the shorter time horizon of their expected job tenure rather than the longer time horizon over which shareholder value should be maximized (Jensen & Meckling, 1976). Yet another example is when managers forego risky investments to enhance their job security (Buchholtz & Ribbens, 1994). As a result of this potential conflict of interest, the firm must incur various types of agency costs, such as monitoring mechanisms designed to protect shareholders. According to Daily et al. (2003), the popularity of agency theory in corporate governance research is attributable to two factors. First, it is a simple theory in which corporations are reduced to only two participants—managers and shareholders—whose interests are clear and consistent. Second, the idea of humans as self-interested actors has long been embraced in economic study.

The Agency Problem in Corporate Takeovers

It is well documented in the literature that corporate mergers and takeovers are favorable events for the target firm's shareholders (Jarrell, Brickley, & Netter, 1988; Jensen & Ruback, 1983). In contrast, senior executives of target firms face a loss of their firm-specific investments in human capital. Following an acquisition, this investment may be lost if different firm-specific skills are needed to succeed in the new firm, if the executive's position is duplicated by others, or if the new firm does not base executive pay on past performance of the acquired firm (Buchholtz & Ribbens, 1994). Factors such as these explain empirical findings that managers of acquired firms often suffer loss of employment and diminished prospects for future employment (DeAngelo & DeAngelo, 1989; Gilson, 1989; Hartzell, Ofek, & Yermack, 2004; Walsh, 1988). Thus, the conflict of interest between managers and shareholders is enhanced when a firm becomes a takeover target. Born, Faria, and Trahan (1999, p. 13) proffer, "Although other principal-agent conflicts exist within the firm, few are as public or as well documented as those that arise during a contest for control."

The Managerial Labor Market

A Changing Landscape

Organizational restructuring in recent decades has drastically changed the landscape of the managerial labor market. Guarantees of lifetime (or even long-term) employment no longer exist, representing a shift of employment risk from firms to managers (Jacoby, 1999). Frydman (2007) documents an increase in the occupational mobility of top managers over the course of the 20th Century. Because managers are

moving more frequently between employers, the importance of cross-firm labor markets for managers has increased (Martin & Wajcman, 2004). In this environment, "organization assets" (i.e., the "capital" that managers create through their structural positions in stable organizations) have lost value, prompting managers to seek new forms of human capital that are less risky (Martin, 2005). According to Wajcman and Martin (2001), managers now view their relationships with companies in an entirely different way, rejecting any notion of "company man" loyalty. Rather than investing in organization assets, managers are seeking to develop dynamic skills and abilities that many companies need and are willing to pay for.

General Skills

A major impact of organizational change is a shift in the types of skills required of managers. Job-specific skills have been replaced by demands for vague capacities such as strategic thinking, adaptability, and leadership (Brown & Hesketh, 2004; Meyer, 2001). This trend is well-documented in the literature. For example, Frydman (2007) notes a rapid increase in the fraction of top managers with MBA degrees, from 10% in 1960 to more than 50% by the end of the century. In earlier years, managers were more likely to have technical degrees (e.g., science or engineering) or law degrees. Bertrand (2009) attributes the growing importance of general skills to the compression of firms' structural hierarchy at the senior management level. In other words, firms have become flatter at the top, with more managers reporting directly to the CEO rather than to intermediaries. Because CEOs are now interacting with a larger group of employees, they need a broader set of skills to effectively communicate.

External Recruitment

Along with an increase in the occupational mobility of managers, Frydman (2007) also documents a rising share of external CEO appointments—from 15% in the 1970s to 30% in the 1990s. According to Bertrand (2009), this phenomenon is a natural result of changes in the relative demand for general versus firm-specific skills. When general skills are more valuable, firms can look outside the firm for CEO candidates. Thus, a more active and competitive market for CEOs has developed, one that is very different from internal labor markets of the past (Murphy & Zabojnik, 2004, 2007). In a bureaucratically structured internal labor market, decisions regarding managerial promotion depend on direct assessment of the individual's skill within a specific organizational setting, along with considerations of seniority and political allegiances (Jackall, 1998). With the growing incidence of external recruitment, this process of the internal labor market has lost some relevance (Martin, 2005). The primary challenge of external recruitment is the assessment of skills and abilities, which is more difficult when candidates do not have a known performance history with the firm. Martin (2005, p. 748) aptly describes the modern managerial labor market as a setting where "firms must often assess managerial candidates about whom they have little direct knowledge for positions where the job requirements are quite malleable."

CEO Risk

Firm-Specific Human Capital

As previously discussed, a manifestation of the agency problem is when managers take actions to protect their own employment at the expense of shareholders, such as

rejecting value-enhancing risky projects or fighting favorable takeover bids. The desire of managers, particularly CEOs, to protect their employment stems from their high level of firm-specific investment in human capital (Buchholtz & Ribbens, 1994). They develop a variety of skills that are specific to their firms, such as specialized experience and the ability to work within a specific organizational culture (Coffee, 1988). Moreover, shareholders and managers differ in their respective investments in the firm. While most shareholders have diversified portfolios, most CEOs have only one job (Ahimud & Lev, 1981).

CEO Turnover Trends

Research suggests that the CEO's job has become riskier over time. Khurana (2002) reports that CEO turnover increased in the 1990s compared to the 1970s and 1980s. Other studies (e.g., Murphy & Zabojnik, 2007; Jensen, Murphy, & Wruck, 2004) support this trend, although the magnitude of the change they report is quite small. Kaplan and Minton (2012) examine a sample that covers years 1992 to 2007, which allows for consideration of the post-SOX period in which corporate governance and CEO performance/pay have come under intense scrutiny. They find that the job of CEO in large U.S. companies has become increasingly more risky, particularly since 2000. For the entire sample period, annual CEO turnover (including external and internal turnover) is 15.8%, implying an average tenure of less than seven years. Breaking the sample into sub-periods, turnover is 12.6% from 1992 to 1999 (tenure of less than eight years) and 16.8% from 2000 to 2007 (tenure of about six years). Kaplan and Minton (2012) note that a shorter expected tenure likely offsets some of the benefits of observed increases in

CEO pay over this period. Another finding of their study is that the sensitivity of internal (board-initiated) turnover to stock performance has become stronger since 2000.

Personal Costs of Financial Distress

Agency theory suggests that several types of policy decisions are influenced by the personal costs that managers incur when their firms default on debt. Specifically, managers will rationally favor investment and financing policies that reduce the probability of financial distress (Gilson, 1989). Examples include pursuing less risky investment projects, choosing more conservative levels of debt, diversifying into new lines of business, and purchasing insurance and other financial hedges (Smith & Mayers, 1982; Smith & Stulz, 1985). This incentive effect is driven by the negative welfare impact of job loss, the most severe form of discipline for poor performance. Managers who are forced to resign from their firms face possible losses in income and firm-specific human capital, as well as any power, prestige, and other intangible benefits they derived from their managerial roles (Gilson, 1989). Their reputations may also be adversely affected, if the departure is viewed as a sign of incompetence (Gilson, 1989).

Distress and Turnover

Khanna and Poulsen (1995) suggest that managers are blamed for a firm's financial distress for at least two reasons. First, managers of distressed firms are viewed as less competent, and the failure is blamed on poor judgment. Second, when the financial condition of a firm deteriorates, managers become more likely to take actions that harm the whole firm or certain groups of stakeholders, due to the inefficiency of

incentive contracts under these circumstances and the worsening of agency conflicts. Regardless of whether managers are actually responsible, corporate finance theory argues that states of financial distress, default, and bankruptcy present a fundamental stage in the life-cycle of firms that spurs changes in the allocation of rights to manage corporate resources (Jensen, 1988). There is also substantial empirical evidence that the market disciplines managers of poorly performing firms. Gilson (1989) and Kaplan and Reishus (1990) find that managers of financially distressed firms are more likely to be replaced and less likely to find new jobs. Similarly, a recent study by Ayotte and Morrison (2009) reports a 70% turnover rate for senior-level managers of firms that file for bankruptcy.

Economics of Executive Compensation

Supply and Demand Factors

Although some interpret the steep rise in CEO pay in recent decades as an example of rent extraction (i.e., the managerial power view, discussed later herein), others proffer valid market forces as an explanation. As previously noted, both Frydman (2007) and Murphy and Zabojnik (2004, 2007) argue that a shift from firm-specific skills to general skills has spurred external recruitment, resulting in greater competition among firms for managerial talent and thus a higher equilibrium rate of compensation for CEOs. Bertrand (2009) identifies the bull market of the 1990s as another factor impacting supply and demand for managerial talent. On the demand side, established firms must now compete with a growing number of technology firms. Moreover, increases in the market valuations of firms have driven an increase in demand for high-quality managers, given the larger financial stakes (Himmelberg & Hubbard, 2000; Hubbard, 2005). On the

supply side, rising salaries offered by Wall Street firms may have raised the expectations of general managers.

Optimal Contracting

The notion of a competitive market for scarce and valuable managerial talent is founded on the theory of optimal contracting. As described by Elson and Ferrere (2013), the basic propositions of this view are that: a) the operation of large complex business enterprises is difficult; b) those who can do it well (i.e., talented managers) are rare; and c) talented managers can create value for shareholders. In this context, wages are simply a response to the demand for and value of managerial talent, and competition precludes the extraction of rents by either contracting party. Thus, proponents of optimal contracting view high CEO compensation as the outcome of efficient bidding for talent and the related sorting of managers across firms, all of which is consistent with maximizing shareholder value (Elson & Ferrere, 2013).

Superstar CEOs

In an influential paper, Rosen (1981) provided economic justification for the trend of a growing concentration of output and income in a small group of individuals in certain occupations, which he called the "phenomenon of superstars." He attempted to explain how the most talented individuals, comprising only a tiny fraction of the population of market participants can dominate the markets for their professions and thus capture a substantial share of total rewards in the market. Rosen's (1981) explanation was based the concepts of joint consumption technology and imperfect substitution in

demand. In other words, the ability of performers (or athletes) to sell their products to a large audience with little additional effort, combined with consumers' preference for only the "best," allows them to capture most of the market (Elson & Ferrere, 2013).

Some liken the economic dynamics of the market for executives to this phenomenon of superstars. Indeed, the rapid growth of executive compensation, in both absolute and relative terms, supports this comparison. Like a performer reaching a mass audience, scholars suggest that a CEO's talent for shaping and implementing corporate policies is made more valuable by the fact this his or her actions can "roll out" to the entire firm (Edmans & Gabaix, 2009). For the largest firms, this implies that a single individual can impact the return on billions of dollars of corporate assets. Continuing with the superstars metaphor, the firm becomes the CEO's "Madison Square Garden" (Elson & Ferrere, 2013). In economics, this multiplicative production function results in a "scale of operations" effect.

Theoretical Models

Gabaix and Landier (2008), along with Tervio (2008), provide models for CEO compensation that explain the increase in such compensation over time as an increase in returns to CEO talent. These models utilize the multiplicative production function described above. As firms become larger, CEO talent becomes more valuable to the firm (i.e., higher marginal return), which drives an increase in the price of this talent (CEO compensation). This implies a positive relationship between managerial talent and firm size, where the best managers should be matched with the largest firms in the economy. Specifically, the models predict that the elasticity of average compensation to average

firm size at a given point in time should equal one. According to Gabaix and Landier (2008), this is consistent with the recent historical trend: both the average market value and the average CEO compensation of the largest 500 firms in the U.S. increased by 500% from 1980 to 2003. More generally, the implication of the models is that compensation for a CEO should depend both on changes in the size of the CEO's firm and changes in the size distribution of firms in the economy.

The "size of stakes" model has been subject to numerous criticisms. As conceded by Gabaix and Landier (2008), the fit is rather weak for the 1970-1980 period. Specifically, average CEO compensation increased at a higher rate during this period than average size. Frydman and Saks (2007) observe a stark shift in the compensation/size relationship in the 1970s. Although the relationship has been close to one since 1975, it was only 1/10 to 1/3 in the preceding 30 years. This may indicate that market mechanisms were weak until the late 1970s, when organizational changes prompted a growing demand for managerial talent. Another explanation, suggested by Levy and Temin (2007), is that more egalitarian labor market institutions and social norms in earlier decades constrained the market mechanisms.

Even when a longer time series is not considered, the fit of the size of stakes model is sensitive to both sample selection and size definition (Frydman & Saks, 2007; Gordon & Dew-Becker, 2008). Other weaknesses of the model are highlighted by Bertrand (2009). First, the model does not address the process through which managerial talent is discovered and the best managers are matched with the largest firms. Moreover, there is no empirical basis for the assumed distribution of managerial talent (i.e., CEO skills are substitutable across firms), which is necessary for the prediction of the unit-

elastic relationship between compensation and firm size. A final weakness is the assumption of exogenous changes in firm size. This is not supported by agency theory, which suggests that managers may strategically alter firm size for personal advantage (Jensen, 1986).

Despite such criticisms, the conversation generated by the size of stakes model has greatly enhanced our understanding of modern managerial labor markets. Additional insight can be gained by considering labor and capital markets together. As noted by Gabaix, Landier, and Sauvagnat (2013), the size of stakes model does not rely on perfect efficiency of capital markets. Even if market values are a poor proxy for fundamental firm values, the model still applies. This is because the labor and capital markets are highly intertwined: if shareholders overvalue stock prices, it is a natural market outcome that managerial talent is overvalued by the same factor (because shareholders, as owners of the firms, have ultimate control over hiring decisions). This interconnectedness is displayed in Gabaix et al.'s (2013) empirical examination of the relationship between CEO compensation in the years since the Great Recession. This is a fairly strong test of the size of stakes model, which predicts that proportional changes in compensation should be observed as markets drop and rebound. Gabaix et al.'s (2013) findings are largely consistent with this prediction. From 2007 to 2009, average firm values decreased 17.4%, equity values decreased 37.9%, and compensation indices decreased 27.7%. From 2009 to 2011, a rebound occurred: firm values increased 19%, equity values increased 27%, and compensation indices increased 22%.

Empirical Studies

As previously discussed, market-based theories predict that CEOs with greater ability should earn higher pay. Since ability cannot be directly observed, it is difficult to empirically test this relationship. Nonetheless, several empirical studies have contributed to our understanding of the relationship. Coles and Li (2010) and Graham, Li and Qui (2012) find that manager fixed effects explain a large part of the variation in executive compensation, which they interpret as evidence that human capital value is a significant driver of CEO compensation. Using prior stock performance as proxy for managerial ability, Fee and Hadlock (2003) find that CEOs of firms with above-average performance are more likely to be hired by other firms and receive higher pay at the new firm. Similarly, Falato, Li, and Milbourn (2011) document CEO talent (measured by media coverage, age at which the executive becomes CEO, and educational background) as an important determinant of CEO pay.

Based on the proposition that general managerial skills have become more important than firm-specific skills for CEOs, Custodio, Ferreira, and Matos (2013) test whether the composition of managerial skills is a determinant of CEO pay. This is accomplished by constructing an index for general managerial skills based on several aspects of a CEO's professional career. Custodio et al. (2013) observe an increase in this index from 1993 to 2007, as well as a positive relationship between the index and CEO pay. The estimated annual pay premium for generalist CEOs relative to specialist CEOs is 19%, which represents almost a million dollars per year.

Managerial Power View

In contrast to the concept of optimal contracting, the "managerial power view" characterizes executive pay as a manifestation of the agency problem. (Bebchuk & Fried, 2003; Bertrand & Mullainathan, 2001; Yermack, 1997). Interaction between the board and managers is viewed not as arm's-length contracting, but rather as the exercise of managerial influence over board decisions, including compensation decisions. From this perspective, executive compensation arrangements act as a means by which managers can skim corporate resources for their personal benefit. "When changing circumstances create an opportunity to extract additional rents…managers will seek to take full advantage of it and will push firms toward a new equilibrium in which they can do so" (Bebchuk, Fried, & Walker, 2002, p. 795). Proponents of the managerial power view explain the rise in CEO compensation over time as evidence of an increase in managerial entrenchment or a relaxing of social norms against excessive pay (Gabaix & Landier, 2008).

Although the two views are very different, the literature does not embrace the managerial power view as a complete replacement for the optimal contracting view. According to Bebchuk and Fried (2003), compensation arrangements are likely to be shaped both by market forces that push toward value-maximization and by managerial influence, which leads to deviations from these outcomes to the benefit of managers. In other words, there are limits to what directors will accept and what markets will permit (optimal contracting), but these constraints do not prevent managers from obtaining compensation arrangements that are substantially more favorable than would result from arm's-length bargaining (managerial power).

Contracting for Incentives

According to Hall and Liebman (1998, p. 654), aligning the incentives of executives with those of shareholders is the "most direct way to mitigate the agency problem." Thus, the design of performance incentives for managers of public firms is a critical issue. Executive compensation has long been recognized as a tool for influencing managerial incentives. Importantly, it is this role of executive compensation that qualifies it as a corporate governance mechanism. As previously discussed, the proposition of the optimal contracting view of executive compensation is that boards are able to design compensation schemes that provide managers with efficient incentives to take actions that maximize shareholder value. Although contracting is usually discussed in relation to routine annual compensation, Yermack (2006) suggests that understanding top management incentives requires looking beyond regular compensation and examining one-time events, such as mergers, acquisitions, spinoffs, or even bankruptcies. He describes payouts to CEOs upon such occurrences as a type of "compensation event" in which managers can obtain extraordinary one-time rewards in addition to their regular annual pay.

Pay for Performance

Given its roots in agency theory, most governance research conceptualizes governance mechanisms as constraints on self-interested behavior by managers (Daily et al., 2003). The goal of such mechanisms is to protect shareholders by maximizing the alignment between managers' and shareholders' interests (Shleifer & Vishny, 1997). With regard to executive compensation, the agency-based prescription is pay-for-

performance contracts. A compensation contract is a legal arrangement specifying the criteria used to award compensation, the form of the compensation, and the conditions for linking compensation to the established criteria over a finite period of time (Gomez-Mejia & Wiseman, 1997). According to Walsh and Seward (1990), such contracts are the primary means by which boards can influence executive behavior. They seek to align the interests of managers and shareholders by creating a "win-win" scenario where compensation is tied to shareholder wealth. Examples include bonuses tied to the attainment of profitability targets and the awarding of stock options.

The notion of performance-based pay is based on Holmstrom's (1979) "hidden action" model. Under this model, because the board cannot fully observe the tasks performed by managers, it should link compensation to observable outcome variables that are correlated with those tasks. Although this theoretical proposition is widely accepted and promoted, empirical research has failed to identify a significant link between executive pay and firm performance. In their seminal study of this issue, Jensen and Murphy (1990) find that CEO compensation increases by only $3.25 per $1,000 increase in shareholder wealth, which they interpret as being too small to provide significant incentives. They hypothesize that political forces may act to reduce the sensitivity of pay to performance from what is predicted by agency theory. This same question was raised years later by Shleifer and Vishny (1997, p. 774) in their survey of corporate governance: "Given the large impact of executives' actions on values of firms, why aren't very high powered incentive contracts used more often in the United States and elsewhere in the world?"

Equity-Based Pay

According to Hall and Liebman (1998, p. 656), "The most direct solution to the agency problem is to align the incentives of executives with the interests of shareholders by granting stock and stock options the CEO." Such equity-based pay serves not only to minimize managerial shirking and shortsightedness, but also to promote managerial risk taking (Haugen & Senbet, 1981). As previously discussed, due to their high levels of firm-specific human capital, CEOs have a tendency to be more risk-averse than diversified shareholders. Agency theorists argue that equity-based pay helps overcome this risk-aversion by allowing CEOs to participate in unlimited upside gains, while providing a floor for losses. Indeed, empirical research supports this proposition. Studies have found that managers with stock options are less likely to hedge financial risk with derivatives (Rajgopal & Shevlin, 2002) and more likely to engage in acquisitions (Sanders, 2001), especially risky acquisitions (Wright, Kroll, Lado, & Van Ness, 2002).

Sanders and Hambrick (2007) contribute to this line of research by "unpacking" the concept of managerial risk taking, distinguishing among three of its major elements: size of the outlay, variance of potential outcomes, and likelihood of extreme loss. Based on an examination of three different types of investment spending (R&D, capital investment, and acquisition), they find that CEOs with stock options make larger investment outlays that result in extreme company performance, with more big losses than big gains. In other words, stock options appear to motivate managers to "swing for the fences, hoping to hit home runs but knowing that they also have an increased likelihood of striking out" (Sanders & Hambrick, 2007, p. 1061). These results suggest that high levels of stock option pay may induce executives to surpass a prudent degree of

risk-taking. However, Sanders and Hambrick (2007) note that certain features of stock option programs, such as vesting periods and frequency of grants, may alter the observed relationships. Moreover, they suggest the use of restricted stock, rather than stock options, as a means for encouraging reasonable risk taking. While both forms of equity compensation are related to performance extremeness, the effect is not as negatively lopsided for restricted stock.

Offering a counter-balance to the growing consensus that more equity-based pay is better, Zajac and Westphal (1994) highlight the potential costs of such practices. They proffer that, although contingent compensation has desirable motivational properties, it can also cause a manager to bear risk that could be more efficiently borne by diversified shareholders. When the agent is risk-averse and the principal is risk-neutral, it is more difficult and costly for the agent to bear the risk of firm performance. If this is true, equity-based compensation is more costly for risky firms, and risky firms should use lower levels of such compensation. Consistent with this expectation, Zajac and Westphal (1994) find an inverse relationship between firm risk and the use of equity-based compensation in a sample of large U.S. firms. Moreover, they find that CEOs' willingness to accept risky compensation (or, stated differently, the cost to the firm of using such compensation) depends on various firm-specific and CEO-specific factors. One such firm-specific factor is financial distress. For distressed firms, which have a short-term decision horizon, immediate survival is of greater concern than the long-term costs of incentive compensation.

Severance Pay

The common view in the corporate governance literature is that boards should be as independent as possible and that any form of CEO entrenchment is harmful to shareholders. Almazan and Suarez (2003) challenge this view, based on their identification of a potential conflict between inducing a CEO to improve the effectiveness of his management and allowing shareholders to benefit from every valuable managerial replacement. They propose that the solution to the CEO's incentive problem is in the allocation of power with the BOD as well as on traditional devices such as severance pay and incentive compensation. The key insight of their analysis is that, in certain circumstances, shareholders may benefit by adding severance pay to governance structures that rely on a strong board and, in other circumstances, by shifting to a weak board that allows for greater CEO influence. In both cases, severance pay plays a crucial role, and the gain to shareholders is due to savings on incentive compensation. Importantly, Almazan and Suarez's model (2003) suggests that severance pay and weak boards are substitutes for costly performance-based managerial compensation.

Golden Parachutes

Definition

Golden parachutes are "severance agreements adopted by boards of directors that provide various cash and non-cash benefits to senior executives if certain events occur following a change in control of the company" (Brusa, Lee, & Shook, 2009). Examples of such events include firings, demotions, or resignations of executives. Importantly, a golden parachute can be established by the BOD without shareholder approval. Although

the term "golden parachute" implies a distinct form of contract, such contracts can vary substantially along several dimensions (Fiss, Kennedy, & Davis, 2012). For example, some cover only the CEO or a handful of top executives, while others include dozens of managers. Golden parachutes also differ in regard to the benefits they provide upon a change in control. Some include only a lump-sum payment (often three years' salary, due to tax regulations[1]), while others extend to stock grants, options, health insurance, pension plans, consultancy arrangements, and even use of the corporate jet. Fiss et al. (2012) describe the diffusion of golden parachutes over time. These contracts emerged in the 1970s among a handful of firms and then spread rapidly with the 1980s hostile takeover wave. By the late 1980s, the majority of the largest public corporations in the U.S. had golden parachute contracts for their most senior executives.

Two Views of Golden Parachutes

As previously noted, the agency problem is particularly evident in the context of corporate takeovers, where managers may not share in any benefits that accrue to the target firm's shareholders. Specifically, managers of takeover targets face an explicit loss of compensation due to the probability of eventual termination (Small, Smith, & Yildirim, 2007). Because CEOs take many years to ascend to the top of the corporate ladder, "the notion of losing control and status after years of toil presents a considerable threat to earning prospects, career options, and even self-esteem" (Fiss et al., 2012, p. 1078). Given this potential conflict, compensation contracts that offer protection to managers

[1] Pursuant to Section 280G of the Internal Revenue Code, golden parachute payments that exceed three times the individual's average taxable compensation over the five preceding calendar years result in: 1) loss of tax deductions for any excess amount; and 2) a 20% excise tax liability to the individual on such amount.

upon changes in control can serve to align the interests of managers and shareholders. Such reasoning is the basis of the incentive alignment hypothesis, which suggests that golden parachutes enhance shareholder value by: a) allowing the firm to attract and retain managerial talent; and b) decreasing managerial resistance to beneficial takeover bids and/or creating incentives for managers to negotiate the most favorable deal (Jensen, 1988; Harris, 1990; Knoeber, 1986).

This hypothesis is consistent with several bonding models, wherein contingent severance pay is promised in advance to managers to provide insurance for their human capital value (Yermack, 2006). According to Knoeber (1986), if we assume that managerial performance can be accurately evaluated only in the long run, some form of deferred compensation is required for optimal contracting. However, deferred compensation requires credible commitment from shareholders due to the possibility of a hostile takeover. In this situation, a golden parachute can be viewed as a contractual response that bonds shareholders to deferred compensation contracts, thereby enhancing managerial efforts. Specifically, golden parachutes may encourage managers to take risk (Almazan & Suarez, 2003) and discourage them from entrenching themselves in office or shirking when dismissal appears possible (Berkovitch, Israel, & Spiegel, 2000).

In contrast, the entrenchment hypothesis, introduced by Manne (1965) and further developed by Shleifer and Vishny (1989), conjectures that golden parachutes have the adverse effect of increasing slack on the part of managers as a result of being less subject to discipline by the market for corporate control. This insulation may impair shareholder wealth if: a) the manager administers the firm less efficiently due to the reduction in potential loss from a change in control; or b) the golden parachute increases the cost of a

takeover, thus lowering the takeover premium that a bidder is willing to pay (Hall & Anderson, 1997). Moreover, since golden parachutes can be granted by boards without shareholder approval, their adoption may signal that managers hold a high level of influence over the board (Brusa et al., 2009). Indeed, empirical evidence supports this proposition. Several studies (e.g., Cochran, Wood, & Jones, 1985; Singh & Harianto, 1989; Wade, O'Reilly, & Chandratat, 1990) conclude that the CEO's influence over the board is a significant factor in predicting the adoption of a golden parachute contract.

Welfare Effects of Golden Parachutes

Empirical research regarding the welfare effects of golden parachute contracts can be segregated into two broad categories: examinations of stock price reactions to announcements of golden parachute adoption and examinations of shareholder gains in takeover situations. Studies of the former type have produced mixed results. Lambert and Larcker (1985), who examined a sample of firms that adopted golden parachutes between 1975 and 1983, report a positive market reaction to the announcement. They interpret this finding as evidence supporting the incentive alignment hypothesis. However, as noted by Jensen (1988), there is no way to know whether these findings reflect investors' belief in the efficacy of golden parachutes or their reaction to a signal that adopting firms may become future takeover targets. In contrast, later studies (e.g., Bebchuk, Cohen, & Wang, 2014; Brusa et al., 2009; Hall & Anderson, 1997; Mogavero & Toyne, 1995) observed a negative stock price reaction for firms adopting golden parachutes, as predicted by the entrenchment hypothesis. Finally, some studies (e.g.,

Born, Trahan, & Faria, 1993; Davidson, Pilger, & Szakmary, 1998) found no market reaction at the time of adoption.

Studies that investigate takeover gains weigh more heavily on the side of the entrenchment hypothesis. Lefanowicz, Robinson, and Smith (2000) show that golden parachutes mitigate (lessen) the positive relationship between managerial incentives and target acquisition gains. Specifically, they found that managers tend to negotiate higher acquisition prices to mitigate their personal financial losses, but the presence of a GP reduces this tendency. Subramaniam (2001) found that existence of a golden parachute shifts the distribution of synergy gains from the target to the bidder. Similarly, Hartzell et al. (2004) found that target shareholders receive lower acquisition premiums in transactions that involve extraordinary personal treatment of the target CEO, including golden parachute contracts. In contrast, Machlin, Choe, and Miles (1993) observe a *positive* relationship between golden parachutes and target acquisition premiums, while some (e.g., Bange & Mazzeo, 2004; Cotter & Zenner, 1994; Sokolyk, 2011) observe no relationship.

In addition to takeover gains, researchers have examined the impact of golden parachutes on the probability of acquisition. This empirical evidence is inconclusive: although several studies (e.g., Agrawal & Knoeber, 1998; Bates, Becher, & Lemmon, 2008; Cotter & Zenner, 1994; Machlin et al., 1993; Sokolyk, 2011) find a positive relationship, several others (e.g., Bange & Mazzeo, 2004; Born et al., 1993; Hall & Anderson, 1997) find no relationship. Two recent studies that examine both acquisition likelihood and premiums include Bebchuk et al. (2014) and Fich, Tran, and Walkling

(2013). Such recent evidence is important, given the transformation of corporate governance in the past two decades due to enhanced public scrutiny.

Fich et al. (2013), who examined 857 acquisitions from 1997 to 2007, found that the expected acquisition premium (the product of acquisition likelihood and the premium conditional on acquisition) is a positive function of the presence of a golden parachute contract. They offer further insight by testing the "importance" of a GP contract to the target's CEO (the value of the GP payout relative to the value of lost compensation due to the acquisition), concluding that more important GPs are associated with higher completion probabilities but lower conditional acquisition premiums. This evidence is consistent with the incentive alignment hypothesis because the expected (unconditional) premium to target shareholders remains the same despite an increase in parachute importance.

Bebchuk et al. (2014) tested a longer time series of acquisitions, including 1,418 initial bids and 1,081 completed acquisitions from 1990 to 2007. Like Fich et al. (2013), they observe a positive relationship between golden parachutes and expected acquisition premiums. Although GPs are associated with lower premiums in the event of an acquisition, their association with a higher acquisition likelihood dominates. To investigate whether the positive relationship with expected premiums is driven by managerial incentives or signaling, Bebchuk et al. (2014) separately examine older and newer golden parachutes. They reason that, if the relationship is due solely to signaling, it should be observed only for newer (recently adopted) GPs. However, a positive relationship is observed for both older and newer GPs, indicating the existence of an incentive effect.

Managerial Influence on Firm Outcomes

Classic Views

Under a competitive market for managerial talent, such as that described by the size of stakes model, individual CEOs should not have much impact on firm decisions or performance. Indeed, the neoclassical view of the firm characterizes managers as homogenous and selfless inputs in the production process—in other words, perfect substitutes. In contrast, agency theory acknowledges that managers have power in their firms, which they can use to alter firm outcomes for personal gain. Even so, agency models do not generally imply that corporate performance will vary with individual managers, as they do not address idiosyncratic differences among managers (Bertrand & Schoar, 2003). In sum, most of the literature has relied on firm-, industry-, or market-level characteristics to explain corporate behavior and performance.

Empirical Evidence

Despite this lack of theoretical support, practitioners and the press have long recognized the impact of CEOs and other top executives on corporate policy, as well as corporate identity (i.e., "tone at the top"). In recent years (especially in the wake of corporate scandals and the financial crisis), individual managerial characteristics have started to garner more research attention. Bertrand and Schoar (2003) were among the early contributors to this emerging stream of literature. Using a manager-firm matched panel data set, they tracked individual top managers across different firms over time. This approach allowed estimation of how much observed variation in firm policies can be attributed to manager fixed effects. Bertrand and Schoar (2003) found significant

heterogeneity across managers in investment, financing, and other organizational strategy variables, indicating the existence of differences in "style" across managers. Moreover, they found that some of the managerial differences were systematically related to differences in corporate performance and that managers with higher performance were more highly compensated.

A recent study by Graham, Harvey, and Puri (2013) offers confirming evidence that personal traits of CEOs (such as risk aversion, time horizon, and optimism) are related to financial policies of corporations. Adams, Almeida, and Ferreira (2005) observe greater performance variability for firms whose CEOs have more decision-making power (e.g., the CEO is the founder, the CEO is the only insider on the board, or the CEO holds multiple job titles). In addition to supporting the proposition that individual characteristics impact firm performance, this study also suggests that the interaction between individual characteristics and organizational characteristics has important consequences for firm performance.

Ang, Lauterbach, and Vu (2003) examine the hypothesis that the managerial labor market and the capital market are integrated and jointly efficient with respect to CEO appointments. They define efficiency in the managerial labor market as consisting of two components: a) rational pay – better-quality CEOs who can contribute more to the firm's wealth demand and receive a pay premium; and b) rational expectations – better-quality CEOs, who receive a pay premium *ex ante*, will deliver better future performance. Capital market efficiency, which assumes that investors acquire labor market information and react rationally to CEO appointments, implies that: c) positive stock price reactions should be observed in response to appointments of better-quality CEOs; and d) these

stock price reactions should be a predictor of change in the firm's future performance. Consistent with the notion of jointly efficient and integrated labor and capital markets, Ang et al. (2003) find that appointments of better-quality CEOs are accompanied by positive stock price reactions and followed by improvements in firm performance. The practical implication is that paying a high-quality CEO a premium is rational because high-quality CEOs increase firm value and improve firm performance.

Chang, Dasgupta, and Hilary (2010) employ a similar approach to examine whether CEO pay and performance reflect CEO ability. However, unlike Ang et al. (2003), who study CEO appointments, Chang et al. (2010) study CEO departures. Another difference is use of the CEO's prior performance as an indicator of quality, in addition to prior pay. Chang et al.'s (2010) first finding is a negative relationship between the stock market's reaction to news of the CEO's departure and both the firm's prior performance and the CEO's prior pay. Next, the departing CEO's subsequent labor market success is observed to be greater if the firm's prior performance is better, the CEO's prior pay is higher, and the stock market's reaction is more negative. Finally, better prior performance, higher prior pay, and a more negative stock market reaction are associated with worse post-departure firm performance. Collectively, these results are consistent with Ang et al.'s (2003) findings and support the proposition that CEO pay is rationally driven by the CEO's contribution to firm value.

Further evidence is provided by Kaplan, Klebanov, and Sorenson (2012), who examine more than 30 characteristics of CEO candidates for companies involved in private equity transactions and relate these characteristics to subsequent firm performance. These characteristics are grouped into two broad skill sets: one that reflects general

ability and another that contrasts between interpersonal skills and execution skills. Kaplan et al. (2012) find that subsequent performance is positively related to both general ability and execution skills. Finally, Leverty and Grace (2012) investigate the influence of managers on firms in distress, focusing on the property-liability insurance industry. Unlike previous research, this study defines managerial ability in terms of the efficient deployment of firm resources. Leverty and Grace (2012) find that managerial ability is negatively related to the amount of time the firm spends in financial distress, the likelihood of the firm's failure, and the cost of the failure. These results suggest that, contrary to popular perception, managers of failed firms are not intrinsically bad and managerial skill can create value even in financial distress.

CEO Compensation in a Sociological Context

Criticisms of the Market for CEO Talent

Many have criticized the concept of a competitive market for executive talent, particularly the notion of efficiency that it implies. Gordon and Dew-Becker (2008) challenge the comparison of corporate executives to entertainment superstars. For the latter, compensation is clearly market-driven: aggregate consumer preferences determine how many concert tickets (or CDs, movies, etc.) are sold and at what price. In contrast, the marginal productivity of executives is not so easily discernible from the organizations they run. "Rather than being a direct factor of production, an executive directs and organizes other factors" (Elson & Ferrere, 2013, p. 502). This ambiguity implies that executive compensation is driven, at least to some degree, by non-economic

considerations related to board dynamics, as suggested by the managerial entrenchment literature.

According to Elson and Ferrere (2013), a true market for executive talent cannot exist because such talent is limited in transferability. Although some managerial skills are general in nature, others are necessarily firm-specific. Thus, a manager's productivity in his or her specific firm is greater than it would be at another firm, in which case *ex post* negotiations over the sharing of such rents occurs in an indeterminate setting that is subject to non-economic factors (Mortensen & Pissarides, 1999). According to Elson and Ferrere (2013, p. 505), "Conventional economic analysis is a blunt tool for understanding such a phenomenon where the law of one price is violated." Although the concepts of supply and demand may set a floor and ceiling for executive compensation, there is a wide range for corporate discretion (Elson & Ferrere, 2013).

Peer Benchmarking

Other researchers have sought to explain executive compensation in a sociological or institutional context. Proponents of this view see substantial ambiguity as essential to the nature of any evaluation of executive "value" and to any related negotiations regarding compensation. As a result, rather than being based on fundamental economic values, executive compensation is determined through normative practices in a landscape of local networks (Elson & Ferrere, 2013). A common practice utilized by boards to resolve this ambiguity is targeting executive compensation to peer companies, known as peer benchmarking. In this practice, boards survey the prevalent compensation practices of companies in similar industries and of similar size and complexity (i.e., the peer group)

and use this information as a reference point. For example, boards may set CEO compensation at some specific percentile (e.g., 50th, 75th, or 90th percentile) of the peer group. In essence, this process attempts to create a competitive market for executives that does not otherwise exist (Elson & Ferrere, 2013). Some researchers (e.g., Bizjak, Lemmon, & Naveen, 2008; Cremers & Grinstein, 2014) find peer benchmarking consistent with competitive compensation, while others (e.g., Faulkender & Yang, 2010) argue it is used only as means to justify some pre-determined level of compensation.

Retention Considerations

Although the corporate and academic discourse surrounding CEO pay levels has in recent years focused on applications of agency theory (e.g., incentive alignment, pay for performance), this was not always the case. Prior to the 1980s, corporations commonly cited retention concerns as a primary justification for executive pay decisions (Zajac & Westphal, 1995). Ironically, over the same period, organizations have become more exposed to external labor markets due to higher CEO turnover and a shift from internal to external recruitment (Murphy & Zabojnik, 2007). Voluntary CEO turnover is highly problematic for corporations, due to the substantial replacement costs that must be incurred. Companies that are currently in the external market for a CEO face these costs directly, while for others such costs represent a threat that motivates boards to proactively adjust their compensation packages to stay competitive (Fulmer, 2009). Thus, in today's active market for CEOs, retention should be a concern for boards, even if they are reluctant to publicly disclose this concern. Fulmer (2009) provides empirical evidence that retention is an influential factor in CEO compensation. Specifically, he finds that

CEO compensation is strongly related to competitors' pay levels and that CEOs who are especially likely to be "raided" receive higher pay and/or less-risky pay.

Reputational Capital

Human capital theory (e.g., Becker, 1962; Mincer, 1974) posits that differential wages among employees result in part from their differential levels of human capital. Although traditional human capital variables such as education and experience represent *past* actions and accomplishments, they have value in the labor market because they are perceived as indicators of likely *future* performance (Fulmer, 2009). Spence (1973, p. 357) states, "The employer cannot directly observe the marginal product prior to hiring. What he does observe is a plethora of personal data in the form of observable characteristics and attributes of the individual, and it is these that ultimately must determine his assessment." Aside from providing indications of future performance, perceptions of an employee's human capital can enhance his or her marketability for more symbolic reasons. As suggested by the herding literature, risk considerations may cause managers to act in conformity with the general consensus established by other managers. This effect could also be present in a board's selection of a CEO, given the magnitude of the decision. As noted by Lublin (2005, p. B1), "A sitting or former chief can…be a safe choice…Directors realize they won't be criticized for bringing a top-notch CEO in."

Understanding the importance of reputation to their marketability, managers are using a form of *social capital* to legitimize and stabilize their *human capital* claims (Wajcman & Martin, 2001). Specifically, they have developed informal networks for

establishing beliefs about each others' abilities. According to Martin (2005, p. 752), such informal beliefs constitute a manager's *reputational capital*, which he defines as "socially constructed estimations of the capacities of managers." Conceptually, reputation can be thought of as the representation of one's human capital that actually operates in labor markets and workplaces, playing a key role hiring decisions, expectations of job performance, and evaluations of job performance (Martin, 2005).

Given the importance of reputational capital, building and preserving this asset should be a primary concern for managers. Although identifying a "good" manager may seem like a relatively straightforward function of firm performance, the dynamic nature of contemporary organizations undermines this proposition. Managers do have some ability to shape others' impressions of them, but attempting to stabilize one's reputation is fundamentally difficult (Martin, 2005). This is because managers often have little control over events that destroy firm value, such as a takeover or the failure of a business unit. Given this instability, managers attempt to convert their reputational capital into *financial* capital. According to Martin (2005), the social capital networks in which reputations are formed also serve the labor market exclusion functions that are used by managers to restrict competition and raise compensation. Thus, the success of a managerial project that enhances reputational capital serves as the basis for increasing managerial income.

In addition to their reputations among fellow professionals, managers must also be mindful of public perception, which is driven primarily by the media. In his influential book, Khurana (2002) proffers that the rise of the business press "has introduced new rules according to which an individual's ability to charm journalists and

command their attention becomes a relevant factor in order to be considered a worthy candidate for the CEO position" (Bertrand, 2009, p. 125). For individual shareholders, who have insufficient resources to develop an understanding of a corporation's business activity, the reputation of the CEO may be an indication of investment quality. Rightly or wrongly, "with information and technology overload assaulting all audiences, a CEO's reputation can serve as a mental shortcut…and differentiate a company from others in the corporate landscape" (Gaines-Ross, 2000, p. 367).

Career Concerns

Nohel and Todd (2005) characterize human capital value as the present value of all future compensation gains or losses that are attributed to the manager's performance. The implication is that managers who perform well (i.e., make good decisions that increase shareholder value) can be rewarded with current compensation as well as an increase in their human capital value (Elsaid, Davidson, & Benson, 2009). The literature refers to managers' incentive to protect their human capital value (or reputation) as *career concerns*. According to Gibbons and Murphy (1992), in the presence of career concerns, the optimal compensation contract optimizes total incentives, both implicit incentives from career concerns and explicit incentives from the compensation contract. Due to their implicit incentive effect, career concerns should be considered along with contractual provisions (e.g., stock options and pay for performance) as means for mitigating agency problems.

Wealth Effects of CEO Reputation

A number of theoretical papers (e.g., Hirshleifer, 1993; Scharfstein & Stein, 1990) propose that managers' career considerations, particularly those related to reputation, influence their decisions regarding corporate capital investments. The basic proposition is that a manager may make investment decisions that harm shareholders if these decisions will enhance the manager's reputation. Given this possibility, high CEO reputation can be either beneficial or costly to shareholders. Under the efficient contracting hypothesis, developed by Fama (1980), there is a positive relationship between CEO reputation and wealth effects of corporate capital investments. The central theme underlying this hypothesis is that CEOs build their reputations over the course of their careers through repeated dealings in the capital markets (Jian & Lee, 2011). Thus, CEOs with better reputations have more at stake in terms of credibility and future compensation if they invest in value-reducing projects. In contrast, the rent extraction hypothesis predicts a negative relationship between CEO reputation and the wealth effects of corporate capital investments. This is because managers have incentives to make investment decisions that boost their personal reputations but destroy shareholder value. For example, managers may overinvest in projects that can be resolved in the short-term and escalate investment in value-reducing projects to avoid conceding failure.

Jian and Lee (2011) shed light on these competing hypotheses with an empirical study of the association between CEO reputation and corporate capital investments. Based on the stock market's reaction to announcements of capital investments, they find that such investments create more value for firms with reputable CEOs than for those with less-reputable CEOs. In other words, they show that in firms with high agency costs

of free cash flow, market responses to capital investments are conditioned by CEO reputation. These results suggest that the efficient contracting hypothesis dominates the rent extraction hypothesis. More importantly, the results identify CEO reputation as a factor that can mitigate the agency problem. Another important implication is that a managerial human capital dimension—CEO reputation—plays a role in shaping firm outcomes.

The Contingent Nature of Corporate Governance

Given the endogenous nature of corporate governance, it is not surprising that empirical studies have failed to identify a significant link between governance, particularly governance indices, and shareholder value (Bhagat et al., 2008). Specifically, because governance choices are endogenous decisions made by managers and shareholders, the choices that are value-maximizing for one firm could be very different from the choices that are value-maximizing for another firm (Larcker, Ormazabal, & Taylor, 2011). According to Dowell et al. (2011) these different choices are driven by different evaluations of the relative costs and benefits of corporate governance mechanisms, which are contingent on the firm's circumstances. This is an important proposition, because it implies that universal regulatory prescriptions for corporate governance (as exemplified by SOX and the related stock exchange rules) are not appropriate and that governance structure should instead be tailored to the firm's environment as well as its current financial situation and life-cycle stage (Dowell et al., 2011) .

Two recent empirical studies examine the value of corporate governance under specific conditions. Dowell et al. (2011) investigate the degree to which governance mechanisms impact a firm's survival when it is in financial distress. They argue that, in periods of turbulence, when a firm's environment is shifting faster than governance mechanisms can be adapted, the opportunity exists for inefficient governance to affect performance in a significant way. Thus, while governance may have only a marginal effect on survival during routine periods of a firm's existence, it may have a significant effect when there is high risk of failure. Examining a sample of firms for which survival is in question (internet firms in the period following the technology boom and bust of the late 1990s), they find that specific governance mechanisms (board independence, board size, and CEO power) are associated with the likelihood of firm survival, but only for those firms in the sample that are in the greatest financial distress. This study contributes to the literature by providing evidence of the impact of governance during an important state of nature for firms: severe financial distress.

Chi and Lee (2010) hypothesize that, if governance structures mitigate agency conflicts, then the value of corporate governance should vary with the potential severity of agency conflicts. Based on Jensen's (1986) proposition that agency costs are especially severe when the firm generates substantial free cash flow, Chi and Lee (2010) model the relationship between governance and firm value as a function of potential agency conflicts. They highlight the phrase "especially severe" because it suggests that the value of governance may increase in a nonlinear fashion as the perception of conflict increases. However, typical empirical studies regress firm value on a governance variable unconditionally, a methodology that is weakened by the assumption that the

governance effect is the same for all firms across all time (in a pooled sample). Consistent with expectations, Chi and Li (2010) find evidence of significant governance benefits among firms subject to greater agency conflicts, as proxied by higher free cash flow.

Bankruptcy

Background

In the United States, bankruptcy is a federal court proceeding that can be initiated voluntarily by a financially distressed debtor or involuntarily by the debtor's creditors. For distressed businesses, the Federal Bankruptcy Code (Title 11 of the United States Code) allows two alternative forms of bankruptcy filing. For businesses with limited prospects of future successful operation, there is the Chapter 7 filing. With a Chapter 7 filing, the bankruptcy court appoints a trustee to oversee the closure of the business and the sale of its assets, the proceeds of which are used to pay creditors. An alternative for the business that desires to continue operations is the Chapter 11 filing. The purpose of Chapter 11 filing is to give the debtor a temporary opportunity to reorganize its business and form a debt repayment plan, with the ultimate goal of emergence as an ongoing entity (Campbell, 1997).

Chapter 11 Bankruptcy

Campbell (1997) provides a concise description of the Chapter 11 bankruptcy process. The debtor's management usually continues to operate the business while a reorganization plan is developed. This plan is drafted by the debtor, ratified by creditor

committees, and then voted upon by the creditors after they have been divided into classes of similar claims. If all classes of creditors vote to accept the reorganization plan, it is submitted to the bankruptcy court for official approval. However, if the debtor cannot obtain creditor approval within an established time period, the court will order the Chapter 11 reorganization proceeding to be converted to a Chapter 7 liquidation proceeding.

Costs and Benefits of Bankruptcy

The costs of bankruptcy filing can be described as direct or indirect. Direct costs are the out-of-pocket costs associated with the actual bankruptcy proceeding, including filing fees, professional fees, and various administrative costs. Direct costs are incurred in all bankruptcy proceedings, although they are generally higher for Chapter 11 filings than for Chapter 7 filings (Campbell, 1997). Indirect bankruptcy costs include any losses that are attributable to adverse impacts on the investment decisions and operations of the firm (Gilson, 2012). Examples include opportunity costs such as lost sales/profits, inability to obtain credit, and lost investment opportunities. These costs can occur not only during bankruptcy, but also before and after (Campbell, 1997). Moreover, they are not limited to firms that actually file for bankruptcy but can affect firms with a high probability of bankruptcy. Many studies have examined the direct costs of bankruptcy, finding that such costs average 6.5% of the firm's pre-filing asset value (Hotchkiss, John, Mooradian, & Thorburn, 2008). Indirect costs are thought to be higher, although estimating these costs is a challenge since observed performance outcomes around the bankruptcy may be the cause, rather than the consequence, of the filing (Gilson, 2012).

Another cost of bankruptcy it its price impact on the firm's stock. Bankruptcy is an extremely negative event for shareholders within only a few days, as shown by studies that document an average loss of about 30% of stock value around filing time (Altman, 1971; Clark & Weinstein, 1983; Lang & Stulz, 1992). The large magnitude of negative stock returns is interpreted as evidence that filing reveals significant new adverse information about firm value (Li, 2013). According to Datta and Iskandar-Datta (1995), "Bankruptcy filing conveys information about the cash flow prospects of the firm, leading to a reassessment of the true value of its assets." While recognizing that the new information about firm value is one of the factors explaining negative stock returns around filing, Li (2013) argues that, theoretically, there is also wealth transfer from shareholders to creditors as a result of filing. Importantly, in Chapter 11 bankruptcy, *all* the firm's debt needs to be paid off, and shareholders will only receive payouts if the firm value turns out to be higher than the total value of this debt. Prior to filing, the firm only needs to honor debt that is *immediately due*. Thus, Li (2013) argues that Chapter 11 filing accelerates payments to creditors, which constitutes a wealth transfer from shareholders to creditors. In Li's (2013) proposed model, this wealth transfer alone can cause shareholder loss even if filing does not provide any new adverse information about the firm.

As noted by Li (2013), the wealth transfer effect of filing explains the existence of involuntary Chapter 11 filing—those cases filed by creditors. A more puzzling question, however, is why we observe voluntary Chapter 11 filings by managers whose interests are supposed to be aligned with shareholders. Despite the negative price impact, Li (2013) highlights several benefits of Chapter 11 bankruptcy filing. Perhaps the most

apparent benefit is its automatic stay feature: once a firm files for bankruptcy, the court prohibits all creditors from pursuing collection efforts against the firm pending an approval of a reorganization plan by the court. This allows valuable time for restructuring, which can facilitate the firm's ultimate survival as an operating entity. Chapter 11 also benefits financially distressed firms by helping them raise cash (Gilson, 2012). This is attributable to provisions that relieve the firm from making interest or principal payments on its debt, offer access to new forms of financing (such as debtor-in-possession financing), allow the rejection of contracts that threaten its viability, making it easier to sell assets, and reducing the firm's tax burden. Depending on the relative magnitude of the costs and benefits, bankruptcy may either enhance or diminish long-term shareholder value. In Li's (2013) model, which allows for both voluntary and involuntary filings, only managers know the true value of the firm and make the decision about whether to file bankruptcy in the interest of shareholders.

Bankruptcy as a Strategic Choice

When a firm's financial position deteriorates and it defaults on its debt, or is at significant risk of defaulting on its debt, its options are straightforward: a) raise cash through asset sales, operating improvements, and new financing; or b) negotiate with creditors to reduce or postpone debt payments (Gilson, 2012). Both of these options for dealing with financial distress can be pursued either in bankruptcy court or through an agreement outside of court. In either case, debt restructuring creates value by "temporarily enabling overleveraged companies to continue to operate their businesses, thereby preserving value that would otherwise be lost if they were shut down or

liquidated" (Gilson, 2012, p. 25). According to Gilson (2012), the choice between restructuring debt inside or outside court depends on two things: 1) the relative costs and benefits to the company of each option; and 2) the level of consent needed from creditors to implement a restructuring plan. The economically optimal choice is the one that maximizes the value of the firm's assets and thus provides the greatest possible recovery to all of the firm's claimholders. Balancing of the cost-benefit tradeoff should reflect the firm's specific circumstances, such as its capital structure, the composition of its shareholders, the existence of labor contracts, and the magnitude of intangible assets (Gilson, 2012).

Efficiency of Chapter 11 Bankruptcy

The U.S. Bankruptcy Code favors the rehabilitation of financially distressed companies that are deemed to be worth saving—those that are worth more as going concerns than liquidated in piecemeal form (Gilson, 2012). Although this may be a worthy goal, the efficiency of the Chapter 11 bankruptcy process has been long debated by legal and financial scholars. From an ideal standpoint, Chapter 11 filing provides a recontracting mechanism among claimholders of the bankrupt firm that mitigates transaction costs and bargaining problems related to potentially value-enhancing restructuring initiatives (Aivazian & Zhou, 2012). "The implication is that Chapter 11 attenuates impediments to rational organizational and strategic changes so that collectively rational outcomes emerge for bankrupt firms" (Aivazian & Zhou, 2012, p. 229). In contrast, critics argue that it is an overly debtor-friendly process that gives

incumbent managers too much control and fails to liquidate economically inefficient firms (Aivazian & Zhou, 2012).

Researchers have attempted to shed light on this debate by assessing the firm's operating performance before, during, and after bankruptcy. Numerous empirical studies dating back to the 1980s (e.g., Altman, 1984; Hambrick & D'Aveni, 1988) document a downward spiral of extended decline in performance prior to bankruptcy filing. Results for reorganized firms have been mixed, with early studies showing continuation of poor performance and later studies observing more successful reorganization outcomes. Relating post-reorganization operating performance to firm and industry characteristics, Denis and Rodgers (2007) find that firms that significantly restructure their assets and liabilities during Chapter 11 are more likely to achieve positive industry-adjusted operating performance in the three years following emergence. Kalay, Singhal, and Tashjian (2007) examine changes in firm operating performance during bankruptcy and find that firms experience significant improvement in this metric. Zhang (2010) shows that the competitors of firms that emerge from Chapter 11 bankruptcy experience negative long-term equity returns and deteriorating financial performance. Finally, compared to a group of control firms, Aivazian and Zhou (2012) observe a much greater improvement in the operating cash flows of reorganized firms after emerging from bankruptcy.

As summarized above, the recent literature suggests that Chapter 11 reorganization has a tendency to enhance the operating performance of firms that face temporary profitability problems, thus challenging the notion that Chapter 11 is an inefficient debtor-friendly mechanism (Aivazian & Zhou, 2012). Still, Gilson (2012, p.

35) notes that, until fairly recently, out-of-court restructuring was thought to dominate the formal Chapter 11 bankruptcy process because it was faster and cheaper—"just as a plaintiff and defendant litigating over a property dispute would always first seek to settle out of court to avoid a costly trial." However, he suggests this "calculus has shifted" due to legal innovations and institutional changes that have made Chapter 11 a relatively more efficient process, as well as a growing appreciation for the numerous benefits that Chapter 11 can provide. Gilson (2012) also suggests this enhanced efficiency played a key role in the recovery of the U.S. economy following the recent financial crisis. He notes that, in a relatively short period of time, much of the corporate debt that defaulted during the crisis has since been managed down; mass liquidations have been avoided; and corporate profits, balance sheets, and stock values have rebounded.

Golden Parachutes in Bankruptcy

The U.S. Bankruptcy Code separates claims into two basic categories—those arising before the bankruptcy petition is filed and those arising after. This distinction is important because it implies very different procedural treatment and potential for collection (Bartell, 2008). Pre-petition claims that are not granted priority treatment under Section 507 (such as employee wages/retirement contributions, delinquent taxes, and customer deposits) are placed in the pool of general unsecured creditors. Such creditors are entitled to a proportionate share of liquidated assets or at least that amount through a reorganization plan, a payment that often represents only a small fraction of the balance due. In contrast, post-petition obligations that qualify as administrative expenses receive priority treatment, which may result in full payment.

Complicating matters, there can be pre-petition contracts that give rise to obligations for payment after the bankruptcy filing. These "straddle" obligations do not fall clearly into one of the two basic categories (Bartell, 2008). Included in the realm of straddle obligations are employment contracts and any severance/golden parachute agreements contained therein. Generally, employment contracts are considered "executory contracts" under Section 365 of the Code, which can be either assumed or rejected at the debtor's discretion subject to court approval (Gretchko & Bogdanowicz, 2014). Although the term "executory contract" is not defined in the Code, it is traditionally described as a contract that requires further performance by both parties (Lichtenstein, 2006). Importantly, characterization as an executory contract results in pre-petition classification of any claims arising from breach of the contract. Under Section 365, even if the debtor's obligations required performance after the bankruptcy filing, any breach caused by a failure of the debtor to perform under the contract is treated as occurring *before* the filing. In this way, rejection effectively transforms all the debtor's straddle obligations under the contract into pre-petition obligations giving rise to pre-petition claims (Bartell, 2008).

The only post-petition obligations under rejected executory contracts that are not transformed into pre-petition claims are those created by post-petition performance by the non-debtor party to the contract (e.g., the employee) (Bartell, 2008). For example, if an employee performs under the contract after the bankruptcy filing, the debtor is obligated to pay (as an administrative expense) an amount representing reasonable value for the services performed. This amount may not be the same as the contractual amount payable, and any amount owed in excess of the amount actually paid becomes part of the pre-

petition claims created by the rejection (Bartell, 2008). Thus, a party to a rejected executory contract can have a bifurcated claim including an administrative portion for post-petition services and an unsecured portion for the rejection damages (Lichtenstein, 2006).

As described above, characterization of claims under executory contracts is determined by the provisions of the Code. However, not all straddle obligations constitute executory contracts, and disputes may arise that require some obligations under executory contracts to be specifically characterized as pre-petition or post-petition (Gretchko & Todhunter, 2012). A commonly disputed issue is characterization of severance and golden parachute payments as part of employment contracts. With regard to these specific provisions of the employment contract, the employee has fully performed his or her obligations before the filing, but the debtor's obligation did not arise until after the filing (e.g., due to termination of employment or change in control) (Bartell, 2008). There is no clear authority regarding treatment of severance and golden parachute payments in Chapter 11 bankruptcy. As with many other bankruptcy issues, the outcome depends on the jurisdiction in which the petition is filed. Nonetheless, as a whole, the courts have demonstrated a reluctance to allow post-petition payments to former employees on account of severance or golden parachute agreements (Bartell, 2008; Lichtenstein, 2006).

Recent legislation has enhanced the uncertainty surrounding executive compensation in bankruptcy. The Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 (BAPCPA) introduced several changes to Chapter 11, including the treatment of executive compensation plans. Before, courts utilized the "business

judgment" rule on a case-specific basis to evaluate such plans. With BAPCPA, Congress sought to eliminate judicial discretion in this regard by adding Sec. 503(c) to the Code, which limits transfers to and obligations incurred for the benefit of insiders of a debtor that are intended to induce them to remain with the company through bankruptcy. According to the literature (e.g., Rogoff, Sussman, & Cohen, 2006), the effectiveness of the new standards remains unresolved. For plans created post-petition, debtors have often been successful in skirting the new standards by re-characterizing retention and severance payments as "incentive" payments. Moreover, is not clear whether the standards apply at all to pre-petition executive contracts.

Prepackaged Bankruptcy

One of the most significant innovations to emerge in the debt restructuring industry over the years has been the use of "prepackaged" bankruptcy, which combines the most attractive features of Chapter 11 and out-of-court restructuring (Gilson, 2012). In a prepackaged bankruptcy, the firm negotiates a restructuring plan with its creditors prior to filing for bankruptcy. Thus, the firm is able to enter bankruptcy with a reorganization plan and disclosure statement already in place. The advantage of this approach over a traditional Chapter 11 (or "free fall") bankruptcy is that it reduces the amount of the time the firms spends in bankruptcy court, thereby lowering direct and indirect costs (Gilson, 2012).

Acquisition in Bankruptcy

Although there is no federal law that prohibits trading of securities in bankruptcy, most companies in this situation are unable to meet the listing standards to continuing trading on an organized exchange. Trading could still continue over-the-counter, but such activity is unlikely due its extreme financial risk. Although a company can emerge from Chapter 11 bankruptcy, in most instances, its plan of reorganization will cancel the existing equity shares, with the creditors and bondholders becoming the new owners. It is also uncommon for stock acquisitions to occur in bankruptcy, as potential buyers have a more attractive means of acquiring the bankrupt company's assets: through an asset sale under Section 363 of Chapter 11 of the Bankruptcy Code, known as a "363 sale." In our study, the term "acquisition" represents this type of transaction.

The 363 sale, which allows a debtor to sells its assets outside the ordinary course of business, has become a popular tool for distressed companies seeking to sell *substantially all* their assets. Although initially intended as a means for the debtor to obtain cash to fund a reorganization, it is now being used to sell entire companies and dispose of the bankruptcy without a plan (Raykin, 2012). This type of sale is attractive because it is more efficient than a sale under a bankruptcy reorganization plan and offers buyers many benefits that cannot be realized in a sale outside bankruptcy. The primary benefit to the seller is speed, i.e., reduced time in bankruptcy. Most 363 sales take a few months, but they can be accomplished in a matter of days. For example, one of the most high-profile examples of a 363 sale in recent years was Lehman Brothers in 2008, whose assets (valued at approximately $639 billion) were sold to Barclays within five days of filing. This benefit is particularly important when the assets are rapidly depreciating in

value or the debtor cannot obtain financing to continue interim operations. The primary benefit to the buyer is that Sec. 363 provides a degree of finality to the sale that is unavailable outside bankruptcy. Specifically, it allows the assets to be sold "free and clear" of existing liens and interests and protects sales made in "good faith" from being reversed on appeal. Because of these protections, buyers may be willing to pay more for the assets.

Another benefit of 363 sales is their ability to capture going-concern value. This is important, as one of the primary justifications of Chapter 11 bankruptcy is the preservation of going-concern value. Even if there is insufficient going-concern value to warrant reorganization of a bankrupt firm, a 363 sale preserves whatever going-concern value may exist by placing the firm's assets in new hands (Baird & Rasmussen, 2003). This benefits not only the debtor by enhancing the bankruptcy recovery, but also society as a whole by preserving productive capacity. According to Baird and Rasmussen (2003, p. 691), the opportunity of 363 sales "undercuts the liquidation/reorganization dichotomy that marks much discussion about bankruptcy law." This dichotomy is the misconception that a firm has only two options in bankruptcy: reorganize consensually in order to preserve going-concern value or sell its assets piece-by-piece for only a fraction of their value. Given these benefits to both sellers and buyers, a 363 sale can provide a means for a distressed company to fulfill its fiduciary duty to its shareholders by maximizing value and minimizing transaction costs.

Comparing Bankruptcy Outcomes

Bankruptcy outcomes are commonly separated into three categories: liquidated, acquired, and reorganized (Kalay et al., 2007). As discussed above, an efficient bankruptcy outcome is one that maximizes the value of the firm's assets and minimizes costs (both direct and indirect). Depending on the specific circumstances of the bankrupt firm, this could be achieved either through reorganization or acquisition. Despite this ambiguity, liquidation, where the firm's assets are sold on a piecemeal basis at a substantial discount, is clearly the least favorable bankruptcy outcome. The fact that many firms choose to file Chapter 11 bankruptcy (reorganization) rather than Chapter 7 (liquidation) supports this proposition. Research shows that Chapter 7 filings result in only "token" recoveries to unsecured creditors (Lubben, 2007). Although recoveries in Chapter 11 vary widely, simply being in Chapter 11 indicates that creditors' probability of some recovery is higher than zero (Lubben, 2012). Of course, a Chapter 11 filing involves higher professional fees and other expenses, which represent the cost of moving to that higher recovery.

In the perfect world envisioned by early researchers who proposed capital structure irrelevance, firms in financial distress (with insufficient assets to satisfy claims) could simply renegotiate their obligations and move on (Lubben, 2012). In reality, debtor firms face a world with incomplete contracts, incomplete information, and uncertain asset values. In this environment, financial distress is not costless, and corporate reorganization structures are important tools to avoid economically disruptive liquidation of assets (Baird & Bernstein, 2006; Pulvino, 1998; Shleifer & Vishny, 1992). Critics of the Chapter 11 process argue that managers can make sub-optimal decisions in

bankruptcy, such as promoting reorganization over liquidation, to preserve their employment. According to Bradley and Rosenzweig (1992, p. 1067-1077), a Chapter 11 petition is "a way to keep control of the firm free from the intrusive monitoring of creditors, thereby permitting management to extract wealth from the firm's various security holders."

While it is true that reorganization allows managers to exercise some power and leverage they would not otherwise have, it also introduces new constraints on managerial authority (Korobkin, 1993). Most major transactions require the approval of the bankruptcy court, and Chapter 11 provides for the appointment of committees to represent the interests of creditors and shareholders. The most common type of committee is the creditors' committee, which acts as a "statutory watchdog" that monitors the conduct of the debtor's management. Specifically, Section 1103 of the U.S. Bankruptcy Code gives such committees the authority to "investigate the acts, conduct, assets, liabilities, and financial condition of the debtor"; "participate in the formulation of a plan"; and "request the appointment of a trustee or examiner." Through the exercise of these powers, the creditors' committee has significant influence in the Chapter 11 bankruptcy process. As a fiduciary for creditors holding unsecured claims, the committee's charge is to increase returns to creditors. This objective can be accomplished through negotiating a favorable plan of reorganization or encouraging the debtor to sell its assets on a piecemeal or going-concern basis. According to Harner and Marincic (2011), support of the creditors' committee is necessary for the debtor's successful reorganization, because the various creditors (who vote on the plan) and the

bankruptcy court (which ultimately approves or rejects the plan) rely to varying degrees on the committee's recommendations.

Although reorganization is thought to preserve value, this value is unknown. According to Bebchuk (1988, p. 778), "It is generally impossible to place an objective and indisputable figure on the value that the reorganized company will have." Because the reorganization value is unknown, it is difficult to decide how ownership in the new entity should be divided among the existing claimants. This challenge is what Bebchuk (1988) refers to as the "division problem." Bankruptcy law has dealt with this problem by leaving the decision to a process of bargaining among the claimants, within a set of established constraints (Bebchuk, 1988). Under existing rules, a plan of reorganization will obtain judicial confirmation if all classes of claimants approve it. These rules dictate how participants can be grouped into classes, how their votes can be solicited, and what level of majority constitutes class approval. The rules also limit the concessions that a class of claimants can make. Specifically, the class cannot, without unanimous agreement among the members, vote to receive less than the class would get in a liquidation.

Policy reflects the belief that liquidation is the least favorable bankruptcy outcome. As summarized above, the underlying rationale of Chapter 11 bankruptcy is that reorganization may allow the firm's stakeholders to capture a greater value than could be obtained in liquidation. This notion was highlighted by the House Judiciary Committee that proposed Chapter 11 in 1977: "The premise of business reorganization is that assets that are used for production in the industry for which they are designed are

more valuable than those same assets sold for scrap."[2] The U.S. bankruptcy system, unlike other systems around the world, places the bankruptcy outcome largely in the hands of the interested parties, who have superior information about the firm's finances and future viability (Warren & Westbrook, 2009). It is presumed that the parties themselves are best positioned to determine the outcome that collectively preserves the most value. Moreover, the procedural confines of Chapter 11 work to limit the ability of any individual party to thwart value-maximizing outcomes. Thus, a firm's decision not to liquidate in bankruptcy suggests that liquidation was an unfavorable alternative.

Scholars are also in agreement that liquidation destroys value. According to Shleifer and Vishny (1992), an important cost of bankruptcy is the cost of being forced to sell assets to less efficient producers. When capital market imperfections exist, forced liquidations do not result in allocations of assets to highest-value users. This results not only in a socially inefficient allocation of resources, but also in a lower amount of cash available to pay creditors and shareholders. Liquidation discounts are especially severe for industry-specific assets, due to a reduced population of buyers (limited to other companies in the same industry) and the effects of any industry-wide pressures that contributed to the seller's insolvency (Brown, 1997; Stromberg, 2000). Pulvino (1999) identifies two reasons why bankrupt firms receive lower prices in asset sales than non-bankrupt distressed firms. First, bankruptcy status attracts low-ball offers from opportunistic buyers. Second, the structure of the bankruptcy law encourages managers to accept low bids. Managers seeking to protect their jobs have an incentive to raise capital at any price, to temporarily fund ongoing operations.

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[2] H. Rep. No. 595, 95th Cong. 1st Sess. 220 (1977).

In contrast to the consensus regarding the inefficiency of liquidation, the literature does not clearly identify either of the other two bankruptcy outcomes—reorganization or acquisition—as the best alternative. As previously noted, it has become increasingly common in recent years for firms to enter bankruptcy for the purpose of pursuing an acquisition, sometimes with a specific buyer in mind. According to Baird and Rasmussen (2002, p. 751), this trend evidences the fact that "corporate reorganizations have all but disappeared." Their article, titled *The End of Bankruptcy*, states:

> In the nineteenth century, no single group of investors could amass the capital needed to buy large firms, and the market for small ones was underdeveloped. Today, both small and large firms can be sold as going concerns, inside of bankruptcy and out. The ability to sell entire firms and divisions eliminates the need for a collective forum in which the different players must come to an agreement about what should happen to the asset. That decision can be left to the new owners (Baird & Rasmussen, 2002, p. 756).

To be effective, bankruptcy must solve two problems of the bankrupt firm: excessive debt and illiquidity. LoPucki and Doherty (2007) explain how these objectives can be accomplished via a bankruptcy sale or reorganization. They contend the principal difference between the two methods is that, in a reorganization, a judge rather than the market determines the debtor's valuation. As reflected in Baird and Rasmussen's (2002) statement noted above, economic scholars favor sales over reorganizations because they consider market valuations more accurate. What advocates of going-concern sales fail to recognize, according to LoPucki and Doherty (2007), is the fact that any buyer able to the supply the liquidity necessary to purchase and rehabilitate large public companies would demand a substantial return on investment. The advantage of reorganization is that it preserves value by eliminating the need to pay this return on investment.

Hotchkiss and Mooradian (1998) proffer that, when a firm is unable to generate any acquisition interest pre-bankruptcy, the Chapter 11 process actually discourages acquisitions. Due to agency conflicts, managers may seek to extend the bankruptcy process rather than pursue an acquisition. Firms with complex debt structures are not attractive acquisition targets in bankruptcy, given the greater probability of friction from creditors' objections. Finally, the choice of acquisition versus reorganization is impacted by the "lemons" problem. Bankrupt firms with better future prospects are likely to pursue reorganization as independent companies rather than attempt a sale in a market where good firms, pooled with bad firms, may sell at a low price. Even when a bankrupt firm does seek an acquisition, this information asymmetry suggests that less-informed buyers will be deterred from bidding. Consistent with this proposition, Hotchkiss and Mooradian (1998) find that bankrupt targets are most often acquired by firms in the same industry.

LoPucki and Doherty (2007) identify several additional reasons why going-concern sales may occur at depressed values. First is a conflict of interest that impacts the financial professionals (often investment bankers) that arrange the sales, who are paid "success fees" based on the sale price. Like real estate agents and contingency-fee lawyers, they have little incentive to maximize the price: the incremental fee earned from a higher price is not worth the extra effort necessary to obtain that price. As with IPOs, the investment banker may even have an incentive to *minimize* the sale price if the bank has a relationship with the buyer. "Underpricing creates value that the investment banker can deliver to a grateful buyer" (LoPucki & Doherty, 2007, p. 35). If this occurs, why don't creditors or the court intervene? The answer, proffered by LoPucki and Doherty

(2007), is two-fold. The creditors may not even be aware of the underpricing, given their informational disadvantage and the expense that would be required to obtain an independent valuation. Assuming they are aware and do object to the sale, such an objection is highly unlikely to prevail in bankruptcy court. Although the law requires debtors to prove they have "good business reasons" to sell firm assets without plan formalities and disclosure, LoPucki and Doherty (2007) suggest that competition among bankruptcy courts for "big cases" has created passivity in the courts' evaluation of sale proposals. To support their propositions, LoPucki and Doherty (2007) also present empirical results. In a study of large public companies that filed Chapter 11 bankruptcy in the period 2000 to 2004, they found that recoveries from reorganizations were more than double recoveries from sales.

CHAPTER III

Hypotheses Development

Context of Financial Distress

As highlighted in the governance literature, the effectiveness of corporate governance mechanisms is dependent on the firm's circumstances. Because the value of corporate governance should vary with the potential severity of agency conflicts, the impact of governance mechanisms should be more pronounced during periods of greater conflict (Chi & Li, 2010). An example of such a period that has been identified in previous research is severe financial distress, when the firm's survival is in question (Dowell et al., 2011). In this situation, the firm becomes a takeover target, and the CEO faces a high probability of job loss (Khanna & Poulson, 1995). Distress often does lead to the dismissal of the CEO, which places the distressed firm in the difficult position of needing to recruit a new CEO (Gilson, 1989). In recent decades, as general skills have become more important than firm-specific skills, an active and competitive external labor market for CEOs has developed (Murphy & Zabojnik, 2004, 2007). Although external recruitment enhances the firm's access to managerial talent, it also introduces the challenge of assessing skills and abilities of candidates who have no performance history with the firm (Martin, 2005).

An insight gained from our CEO interviews is the specialized nature of management in distress. Several of the individuals we interviewed considered themselves to be "turnaround managers" and were characterized as such in the press. According to one interviewee, distressed companies do not necessarily seek "good

CEOs, since such managers "don't have experience with disasters." Moreover, it is not necessary that the manager have experience in the particular industry. As this CEO put it, "I'm not there to tell them how to make toasters." Rather, the firm is looking for someone who is able to quickly "size up the problem" and take decisive action. This description of the qualifications of a turnaround manager suggests two counteracting effects on the pool of potential candidates – smaller due to the specialized skills/experience required and larger due to the absence of industry-specific qualifications.

Value of the CEO

Even without a strong theoretical basis, it is widely believed that CEOs have substantial influence on corporate policy and identity. This notion is supported by numerous empirical studies that identify heterogeneity across CEOs in various individual characteristics and link such variation to corporate performance (Ang et al., 2003; Bertrand & Schoar, 2003; Graham et al., 2013, Kaplan et al., 2012). The practical implication of such studies is that paying a premium to a high-quality CEO is rational because such CEOs increase firm value. This proposition reflects the optimal contracting view of managerial compensation, which holds that premium wages are simply a response to the demand for and value of managerial talent (Elson & Ferrere, 2013). Managerial talent is especially critical for firms in financial distress, when resources are limited and decisive action is required (Leverty & Grace, 2012).

Reputational Capital

Because managerial ability cannot be directly observed, boards must rely on measures such as education and experience. Reputational capital, which captures such human capital factors, plays a key role in hiring decisions, expectations of job performance, and evaluations of job performance (Jian & Lee, 2011; Martin, 2005). Although a manager's reputation is determined by *past* actions and accomplishments, it has value in the labor market as an indication of likely *future* performance (Fulmer, 2009). Aside from this information content, perceptions of a manager's reputation can enhance his or her marketability for more symbolic reasons. In selecting a CEO, boards may exhibit a form of herding behavior, gravitating toward consensus perceptions of the "safe choice" (Lublin, 2005). Such tendencies are likely to be exacerbated in financial distress, when agency conflicts and corporate governance come under enhanced scrutiny.

The distressed firm requires a capable CEO to facilitate its survival, but a capable CEO will perceive this offer for employment as a very high-risk proposition. If the firm cannot be saved, the new CEO will likely bear the blame, regardless of any actual culpability (Khanna & Poulson, 1995). A manager who is fired or forced to resign faces not only a loss of current income, but also damage to his or her reputation that can diminish prospects for future income (Jensen, 1988). Thus, human (or reputational) capital value can be characterized as the present value of all future compensation gains or losses attributed to the manager's performance (Nohel & Todd, 2005). According to our CEO interviewees, turnaround managers face even more risk due to the enhanced expectations created by the specialized nature of their expertise. Since a distressed firm hires a new CEO for a specific task (i.e., to steer the firm through treacherous terrain),

failure at this task is particularly harmful to the CEO's reputation. As stated by one interviewee, "It is potentially very damaging to attach yourself to a failing firm." This same CEO disclosed that his experience at the subject firm did in fact negatively impact his professional reputation, "even more so than I expected." Given the inherent instability of reputations, managers seek to convert *reputational* capital to *financial* capital via compensation contracts (Martin, 2005).

Contracting for Incentives

Executive compensation has long been recognized as a tool for influencing managerial incentives, thus serving a role in corporate governance (Shleifer & Vishny, 1997; Walsh & Seward, 1990). A proposition of the optimal contracting view of executive compensation is that boards are able to design compensation schemes that provide managers with efficient incentives to take actions that maximize shareholder value. The goal of such pay-for-performance mechanisms (e.g., equity-based pay) is to align the interests of managers and shareholders by tying executive compensation to shareholder wealth. However, research shows that managers are not incentivized exclusively by compensation. As previously noted, they also have an incentive to protect their human capital value (or reputation). In the presence of such career concerns, the optimal compensation contract optimizes total incentives, both *implicit* incentives from career concerns and *explicit* incentives from the compensation contract (Gibbons & Murphy, 1992).

Golden Parachutes

Although contracting is usually discussed in relation to routine annual compensation, understanding top management incentives requires considering other forms of compensation, including contingent pay related to one-time events such as mergers, acquisitions, and bankruptcies (Yermack, 2006). An example of a contingent compensation contract is a golden parachute, which offers protection to managers upon a change in control. Given the enhanced agency conflicts that exist in corporate takeover contexts, this protection can serve to align the interests of managers and shareholders. Such reasoning is the basis of the incentive alignment hypothesis, which suggests that golden parachutes enhance shareholder value by allowing the firm to attract/retain managerial talent and decreasing resistance to beneficial takeover bids (Jensen, 1988; Harris, 1990; Knoeber, 1986). In contrast, the entrenchment hypothesis argues that golden parachutes have the adverse effect of increasing slack on the part of managers by insulating them from discipline in the market for corporate control (Manne 1965; Shleifer & Vishny, 1989).

Compensation Contracting in Financial Distress

Equity-based pay (e.g., stock and stock options) serves not only to minimize managerial shirking and shortsightedness, but also to promote managerial risk-taking (Haugen & Senbet, 1981). Due to their high level of firm-specific human capital, CEOs have a tendency to be more risk-averse than diversified shareholders. Agency theory suggests that equity-based pay helps overcome this risk aversion by allowing CEOs to participate in unlimited upside gains, while providing a floor for losses. To accept the

risk attached to employment at a distressed firm, a reputable CEO (i.e., with high reputational capital) will prefer a compensation contract that offers commensurate upside potential in the form of substantial equity-based pay. Although risky firms generally offer less equity-based compensation due to its higher long-term costs, a firm in severe distress will do so because: a) it has limited cash resources; and b) short-term survival trumps any long-term cost considerations (Zajac & Westphal, 1994). Moreover, the new CEO's interest in equity compensation implies an expectation that the firm can be saved (i.e., the upside potential can be realized) and that he or she can influence the outcome.

One of our interviewees highlighted an important factor in contract negotiations for the CEO position at a distressed firm: the expected tenure of the position. He explained that such positions are sometimes short-term in nature (i.e., an interim CEO), with the immediate goal of stabilizing operations. In this situation, the CEO is interested primarily in fixed (cash) compensation, because there is limited opportunity for stock price appreciation. According to this interviewee, "Growth can't occur until the bleeding is stopped, and these are two different missions." He advised that "big gains" are not realized until a transformational strategy is implemented – "something that investors can believe in." In contrast to an interim CEO position, if the firm and manager see the potential for a more permanent situation, equity compensation would be critical.

Facing the high risk of job loss (through failure of the firm, firing, or acquisition), the new CEO will also require protection in the form of a golden parachute contract. Such protection would be valuable in the event that a change in control or dismissal occurs after a turnaround is achieved. Insight as to how or why this might occur was gained from our CEO interviews. The interviewees explained that CEO positions at

distressed firms are often short-term (less than two years) for two primary reasons. As previously noted, management in distress requires a different set of skills than management in general. Thus, the CEO who leads a firm from the brink of bankruptcy may not be the best person to lead the firm in the long-term. Sometimes this is known from the beginning (in the case of an interim CEO appointment). Other times, the board does not make this determination until later, after the CEO has already committed to what he or she perceived as a long-term appointment. Distressed firms seeking a transformation are looking for someone with a new perspective. As explained by one interviewee, "They don't want the same kind of people." The downside of this approach is the possibility that the new person is not the right fit – "The board tries something new and decides they don't like it."

Another source of uncertainty is the board dynamics of distressed firms. According to our interviewees, distressed firms are vulnerable to power plays and manipulation among board members. This leads to a precarious balance of power that can shift against the CEO at any moment, often due to something as simple as personality conflicts. Given this uncertainty, CEO candidates will require a golden parachute, regardless of the expected tenure of the position. One interviewee advised that he required a GP "to protect me in the event the board and shareholders decided to sell the company and the new ownership wanted to go a different direction without me at the helm." Moreover, he stated, "It takes a serious amount of time to find other employment at this level, so the severance was intended to sustain my income during this break in employment."

Our interviewees described the pool of candidates who would even consider the CEO position at a distressed firm as quite small, giving the candidate a better bargaining position in contract negotiations. Thus, the compensation requirements of the candidate are typically met. One of the interviewees highlighted the limited options available to the board in this situation: "If they aren't willing to pay what I'm asking for, they can hire a consulting firm for ten million dollars." Due to the apparent high-risk nature of the employment proposition, it is understood by both the board and the candidate that commensurate rewards must be offered. In the words of one interviewee, "If I think the risk is too high, I'll walk away."

Research Hypotheses

As explained above, a reputable CEO will require a golden parachute to accept employment at a distressed firm. The distressed firm is willing to offer this benefit because: a) it identifies the candidate as reputable, i.e., having the intent and capability to lead the firm out of distress; and b) it is necessary to recruit the reputable candidate. This clearly creates value for shareholders if the reputable CEO's efforts to achieve a turnaround are successful. But what if the CEO is unable to avoid bankruptcy? Based on our CEO interviews, this could occur for a number of reasons, such as overconfidence of the CEO, misinformation about the true financial condition of the firm, or unanticipated market developments. *An important unanswered question is whether a reputable CEO creates value for shareholders in bankruptcy*. If not, the value of the golden parachute is diminished because it has a high cost if the firm survives and no benefit if the firm fails—essentially a lose-lose proposition. Given this tradeoff, shareholders would prefer to "roll

the dice" with a lower-quality CEO. They would be no worse off in the failure scenario and better off in the survival scenario.

Because executive compensation contracts are usually nullified in bankruptcy, there remains no explicit incentive for the CEO to preserve shareholder wealth. In other words, the compensation contract no longer has any power as a corporate governance mechanism. However, a reputable CEO still has an implicit incentive driven by career concerns, i.e., the desire to preserve his or her reputational capital. If this implicit incentive drives the manager to continue wealth-preserving efforts in the absence of explicit incentives, *a reputable CEO does create value for shareholders in bankruptcy, and the golden parachute does have value as a tool for distressed firms to recruit reputable CEOs.* Thus, in our study, the golden parachute doesn't *explicitly* incentivize the CEO toward a particular bankruptcy outcome; instead, it identifies and attracts reputable CEOs who have an *implicit* incentive to preserve shareholder wealth.

Examining this research question requires ranking the favorability of the three Chapter 11 bankruptcy outcomes: acquisition, reorganization, and liquidation. Public policy clearly reflects the belief that liquidation is the least favorable outcome. The underlying rationale of Chapter 11 bankruptcy (as an alternative to Chapter 7) is that reorganization preserves more value than liquidation. Moreover, the fact that many firms voluntarily choose to pursue reorganization, with its higher costs, supports this proposition (Warren & Westbrook, 2009). Although individual stakeholders may have incentives to thwart value-maximizing outcomes, the procedural confines of Chapter 11 work to limit such efforts (Harner & Marincic, 2011; Korobkin, 1993). Scholars, who recognize the forced sale of assets to inefficient producers as an important cost of

bankruptcy, also agree that liquidation destroys value (Pulvino, 1998; Shleifer & Vishny, 1992). Finally, empirical research shows that liquidation implies zero recovery for unsecured creditors and shareholders (Lubben, 2007, 2012). Comparing reorganization and acquisition is more difficult, since the relative costs and benefits of each outcome depend on the unique circumstances of the firm. Both reorganization and liquidation preserve value in the form of going-concern value, but the question of which outcome captures more going-concern value remains unsettled (Baird & Rasmussen, 2002; LoPucki & Doherty, 2007).

Accepting liquidation as the least favorable bankruptcy outcome, we pose the following primary hypothesis:

> *H1: CEOs hired during times of financial distress who negotiate a golden parachute contract are more likely to guide the firm toward the avoidance of liquidation in bankruptcy.*

This first hypothesis tests whether reputable CEOs create value for shareholders in bankruptcy. It contains a two-fold expectation: 1) that a reputable CEO will require a golden parachute; and 2) that a reputable CEO will pursue value preservation even when the golden parachute becomes worthless. However, this hypothesis does not address a second key element of our argument: the importance of the distress context in creating the information content of the reputable CEO's demand for a golden parachute. Our reasoning suggests that, outside the context of financial distress, the CEO's negotiation of a golden parachute offers little information about his or her capability. Thus, we propose a second hypothesis to test CEO risk considerations as the *driver of the information content* of the golden parachute:

H2: CEOs hired during other times who negotiate a golden parachute are no more likely to lead the firm toward the avoidance of liquidation in bankruptcy.

Another element of our argument is the *nature of the information content* offered by the golden parachute. We reason that a CEO who accepts employment at a distressed firm absent a golden parachute demonstrates a lack of capability and/or intention to achieve a turnaround, leading to our third hypothesis:

H3: CEOs hired during times of financial distress who do not negotiate a golden parachute are no more likely to lead the firm toward the avoidance of liquidation in bankruptcy.

CHAPTER IV

Methodology and Results

Research Approach

We examine golden parachutes as a tool for financially distressed firms to recruit reputable CEOs, who have the capability and implicit incentive to lead the firm to a favorable bankruptcy outcome. Unlike previous research, which has attempted to link general governance structure with broad measures of firm performance, our approach focuses on a *single firm mechanism* (presence of a golden parachute) that has clear implications for s*pecific firm outcomes* (avoidance of liquidation) in a *specific context* (distress/bankruptcy).

Assumptions

Expectation of Bankruptcy Filing

An important assumption of our study is that the CEO does not perceive a bankruptcy filing as imminent. Although the CEO recognizes the distressed firm as a takeover target, which creates the value of the golden parachute, the firm's eventual bankruptcy filing is not known. As previously discussed, the payment of a GP in bankruptcy is highly uncertain. If bankruptcy were expected, the GP would have limited risk-mitigation value and thus limited effectiveness in recruiting. Anecdotal evidence obtained from our CEO interviews supports this assumption, as all the interviewees expressed the belief that bankruptcy could be avoided with new leadership and the implementation of certain strategic initiatives. One interviewee described bankruptcy as

"all bad" (i.e., never a good scenario) and stated that, even for highly distressed companies, he always goes in with a goal and plan to avoid bankruptcy. According to another interviewee, for an executive to take such a position, "he has to believe the problem is fixable."

Other Assumptions

Our methodological approach requires several other assumptions, all of which are supported by the literature and our CEO interviews:

- A firm that eventually files for Chapter 11 bankruptcy is known to be in financial distress prior to its filing.
- Closer proximity to the firm's bankruptcy filing indicates greater severity of financial distress.
- The decisions and actions of a firm's CEO can influence its bankruptcy outcome.
- Liquidation is the least favorable bankruptcy outcome for a firm's shareholders.
- A reputable CEO has implicit incentives to maximize shareholder value, even without explicit compensation-based incentives.

Sample and Data

Sample Description

We examine a sample of large U.S. firms that both entered and exited Chapter 11 bankruptcy during the period July 2002 to June 2013.

Sample Formation

The starting point for our sample is the UCLA-LoPucki Bankruptcy Research Database (BRD). This database includes all bankruptcy cases filed under Chapter 11, either by or against a company, that: a) had assets of $100 million or more (in 1980 dollars) as of the date of filing; and b) was required to file annual reports (Form 10-K) with the SEC. BRD represents the collection of data from a variety of sources, including bankruptcy court files available through the Public Access to Court Electronic Records (PACER) service and various SEC filings.

Time Period

The time period for the sample is restricted to the post-SOX period, beginning in July of 2002, based on research indicating that CEOs became significantly more risk-averse following SOX (Wang, Davidson, & Wang, 2010).

Other Sample Restrictions

Following previous research, our sample excludes firms in the financial, insurance, real estate, and public utilities industries, because these firms have unique bankruptcy protocols. Also excluded are firms whose bankruptcy filings are related to tort litigation (Dahiya, John, Puri, & Ramirez, 2003) and firms for which the necessary data were not available. The final sample is comprised of 275 firms.

Data Sources

The Bankruptcy Research Database provides basic information about the bankruptcy cases (e.g., date of filing, duration, prepackaged, etc.), select financial and industry data, and the outcomes of the Chapter 11 process. For financial data not contained in BRD, we utilize Compustat. All financial data for the sample firms are for the last fiscal year before the year of bankruptcy filing. Other firm- and CEO-specific data, including executive compensation data, are obtained from the firm's most recent proxy statement or Form 10-K filed with the SEC before the bankruptcy filing.

Descriptive Statistics

In our sample of 275 firms, 47 (17.1%) were acquired in bankruptcy, 196 (71.3%) were reorganized, and 32 (11.6%) were liquidated. This distribution (majority reorganized) is consistent with previous empirical studies of bankruptcy outcomes. Table 1, which reports the time distribution of the bankruptcy filings, shows several patterns. Most notable is the cyclical nature of the filings, evidenced by a small spike in 2003 and a larger spike in 2009. Both of these spikes follow declines in the U.S. economy, the latter representing the Great Recession. Another observation is the increasing prevalence of prepackaged filings over time, comprising more than half of annual filings in recent years. A decreasing trend is apparent in the duration of the bankruptcy filings, with an average of 12.2 months for the entire sample. There is not a clear time trend in the liquidation rate, which ranges from a low of 0% in years 2004 and 2006 to a high of 25% in year 2012. As previously noted, the average liquidation rate for the entire sample is 11.6%.

Table 1
Sample by Year and Bankruptcy Outcome

Year	Acqu.	Reorg.	Liqu.	Total	% Liqu.	% of Sample	# Prep.	% Prep.	Duration (Mos.)
2002	4	15	3	22	13.6%	8.0%	7	31.8%	11.8
2003	12	28	5	45	11.1%	16.4%	11	24.4%	19.7
2004	3	22	0	25	0.0%	9.1%	12	48.0%	10.5
2005	2	15	3	20	15.0%	7.3%	4	20.0%	16.1
2006	1	10	0	11	0.0%	4.0%	5	45.5%	12.0
2007	2	5	1	8	12.5%	2.9%	4	50.0%	5.5
2008	6	11	5	22	22.7%	8.0%	3	13.6%	16.4
2009	11	47	8	66	12.1%	24.0%	29	43.9%	13.8
2010	3	13	1	17	5.9%	6.2%	9	52.9%	6.9
2011	2	13	2	17	11.8%	6.2%	9	52.9%	8.8
2012	1	8	3	12	25.0%	4.4%	6	50.0%	6.2
2013	0	9	1	10	10.0%	3.6%	8	80.0%	2.4

Table 2 shows the distribution of our sample by industry, using industry categories employed in previous research (Barniv, Agarwal, & Leach, 2002). These include agriculture, mining, and construction (SIC 01-19); manufacturing (SIC 20-39); wholesale and retail goods (SIC 50-59); and miscellaneous. Manufacturing is the best-represented industry in our sample, comprising 47% of the observations. The liquidation rate for this industry category is 11.6%, consistent with the liquidation rate for the entire sample. The liquidation rates for the other specified industry categories are higher, while the liquidation rate for the miscellaneous category is lower. Finally, Table 3 illustrates the prevalence of GP contracts in our sample. Of our 275 sample firms, 165 (60%) had GPs for the CEO at the time of bankruptcy filing. There is no apparent difference in this percentage across the three bankruptcy outcomes.

Table 2
Sample by Industry and Bankruptcy Outcome

Industry	Acqu.	Reorg.	Liqu.	Total	% Liqu.	% of Sample
Agric/Mining/Const	2	13	3	18	16.7%	6.5%
Manufacturing	27	87	15	129	11.6%	46.9%
Wholesale/Retail	6	20	6	32	18.8%	11.6%
Miscellaneous	12	76	8	96	8.3%	34.9%

Table 3
Sample by GP and Bankruptcy Outcome

Outcome	#	% Total	GP	% Outcome
Acquired	47	17.1%	27	57.4%
Reorganized	196	71.3%	119	60.7%
Liquidated	32	11.6%	19	59.4%
Total	275	100.0%	165	

Variables

Dependent Variable

Our dependent variable is the outcome of the Chapter 11 bankruptcy process, specifically the binary outcome pair *liquidated v. not liquidated (reorganized or acquired)*. Like Kalay et al. (2007), we categorize a firm as *reorganized* if it emerged from bankruptcy as an operating entity, as *acquired* if all (or substantially all) of the firm's assets were purchased by one buyer, and as *liquidated* if the firm's assets were sold to multiple buyers or the Chapter 11 filing was converted to Chapter 7.

Independent Variables

We consider three independent variables of interest. First is a binary factor representing the existence of a golden parachute contract for the CEO at the date of filing. Following Lefanowicz et al. (2000), a firm is coded as having a GP if its latest SEC filing

preceding the bankruptcy filing indicates the existence of such an agreement, defined as any agreement providing for supplementary payments contingent upon a change in control of the firm. The second independent variable is a binary factor indicating a new CEO. A new CEO is defined as one hired within one year preceding the firm's bankruptcy filing, when the firm was in severe financial distress. Finally, we consider the interaction of these two terms, a binary factor indicating a new CEO with a GP.

Univariate Probabilities

Our three hypotheses predict differences in the probability of liquidation in bankruptcy, depending on whether the CEO was new (recently hired) and whether he or she had a GP contract. Specifically, we expect:

- A lower probability for new CEOs with GPs vs. new CEOs without GPs (H1);
- No lower probability for incumbent (not new) CEOs with GPs vs. incumbent CEOs without GPs (H2); and
- No lower probability for new CEOs without GPs vs. incumbent CEOs without GPs (H3).

Table 4 illustrates the univariate probabilities (proportions) calculated from our sample, which are consistent with the expectations noted above.

Table 4
Univariate Probabilities of Liquidation

	Tot	NL	L	P(L)		Tot	NL	L	P(L)
New w/ GP	49	44	5	10.2%	New w/o GP	54	44	10	18.5%
Incumb. w/ GP	116	102	14	12.1%	Incumb. w/o GP	56	53	3	5.4%
New w/o GP	54	44	10	18.5%	Incumb. w/o GP	56	53	3	5.4%

Other Univariate Comparisons

Our hypotheses focus on the interaction of two factors, *new CEOs with GP contracts*, specifically the impact of this interaction on bankruptcy outcomes. Proper testing of this relationship requires controlling for other factors that may explain the relationship. In an effort to identify such controls, we test for differences in various factors between two sub-groups of our sample population: 1) firms of new CEOs with GPs; and 2) firms of new CEOs without GPs. Our total sample contains 103 firms with newly hired CEOs, 49 with GPs and 54 without. We test both firm-specific and CEO-specific factors, as illustrated in Tables 5 and 6. Although we find no significant (at 5%) differences, several of these factors are utilized as controls based on findings from previous studies.

One firm characteristic that we were unable to test, due to data limitations, is the probability of bankruptcy as measured by Altman's Z-score and Ohlson's O-score. We could not apply the Z-score, since one of its inputs is the market value of the firm's equity. Many of our sample firms are not publicly traded and thus have no available measure of market equity. Another constraint, which impacts the applicability of both scores, is the limited availability of quarterly data for the private firms (which are required to file only annual reports with the SEC). Without such periodic data, we cannot measure the bankruptcy scores at a given point in time (e.g., one year) prior to bankruptcy. This is not a substantial limitation for our study, given our focus on new hires (i.e., hired within one year of the bankruptcy filing). At this point in time, we expect the firm's financial distress to be apparent. This apparent distress drives the high-risk nature of the employment proposition, which is critical to our hypotheses

development. Moreover, our interviews indicate that the CEO's expectations of avoiding bankruptcy were based not on the firm's existing financial condition but rather on the firm's potential with implementation of a turnaround plan.

Table 5
Differences between Firms of New CEOs, with and without GPs
T-Tests for Comparisons of Means – Scale Variables

Factor	#Obs. Tot.	#Obs. GP Yes	#Obs. GP No	Mean GP Yes	Mean GP No	p-value
Sales	103	49	54	2,769.54	5,059.34	0.448
Log Sales	103	49	54	6.77	6.93	0.589
Total Assets	103	49	54	2,531.10	4,445.44	0.361
Log Total Assets	103	49	54	7.00	6.87	0.586
Current Assets	103	49	54	759.93	1,304.09	0.509
Log Current Assets	103	49	54	5.87	5.67	0.445
Total Liabilities	103	49	54	2,452.49	5,375.80	0.406
Log Total Liabilities	103	49	54	2.99	2.96	0.808
Current Assets / Tot. Assets	103	49	54	0.39	0.37	0.670
Current Assets / Current Liab.	103	49	54	1.72	1.19	0.083
Tot. Liab. / Tot. Assets	103	49	54	1.1	1.15	0.778
Net Income / Sales	103	49	54	-2.36	-0.22	0.209
EBIT / Sales	103	49	54	-1.51	-0.01	0.281
EBITDA / Sales	103	49	54	-1.22	-0.01	0.273
Income Before Extr. Items / Sales	103	49	54	-2.18	-0.22	0.243
Log # Employees	101	49	52	8.28	8.07	0.862
CEO Age	103	49	54	51.12	53.80	0.105
Block Ownership	103	49	54	0.55	0.64	0.077
CEO Ownership	103	49	54	0.02	0.04	0.370

Table 6
Differences between Firms of New CEOs, with and without GPs
Chi-Square Tests – Categorical Variables

Factor	#Obs. Tot.	#Obs. GP Yes	#Obs. GP No	Chi-Square	p-value
CEO Replaced in Bankruptcy	103	49	54	0.59	0.444
CEO Hired from Outside	103	49	54	0.50	0.481
CEO Age 60+	103	49	54	0.40	0.525
CEO Age 64+	103	49	54	3.34	0.068
Public v. Private Firm	103	49	54	0.55	0.459
Public v. OTC v. Private Firm	103	49	54	0.97	0.614
CEO or President at Prev. Firm	103	49	54	0.94	0.334
Chief Officer at Prev. Firm	103	49	54	3.31	0.069

CEO w/ MBA Degree	83	43	40	0.96	0.327
CEO w/ Law Degree	83	43	40	0.21	0.651
CEO w/ Graduate Degree (Any)	83	43	40	0.97	0.325
CEO w/ Ivy League Degree	83	43	40	1.75	0.186
Educational Field	83	43	40	1.57	0.456

CEO Interviews

As previously noted, we interviewed eight CEOs of our sample firms over a period of two weeks in September of 2014. Six of the interviews were conducted by phone, and two CEOs responded via email. Our questions addressed issues such as their decision to accept employment at the firm, the contract negotiation process, the condition of the firm at the time of hire, and the personal consequences of the bankruptcy. Key characteristics of the interviewees are provided in Table 7. Because most requested confidentiality, names are not disclosed. All of the interviewees were new hires and were thus able to offer information directly relevant to our hypotheses. Five of the eight were new hires with GP contracts, which are expected to have non-liquidation outcomes based on our hypotheses. Four of the five meet this expectation, with either reorganization or acquisition outcomes. For the one exception, the CEO explains his firm's liquidation as a result of the board's imprudent rejection of his proposed turnaround plan.[3] In sum, these eight observations are largely consistent with our hypotheses. More importantly, the information gained from the interviews confirmed the underlying reasoning for the hypotheses and offered insights that enhanced our understanding of the results.

[3] Additional details regarding this firm and CEO are discussed in the final section of the paper.

Table 7
Characteristics of Interviewees

Interviewee	New Hire	GP Contract	Bankruptcy Outcome
1	Yes	No	Liquidated
2	Yes	Yes	Acquired
3	Yes	Yes	Liquidated
4	Yes	No	Liquidated
5	Yes	No	Liquidated
6	Yes	Yes	Reorganized
7	Yes	Yes	Reorganized
8	Yes	Yes	Acquired

Logistic Regression Model

While the univariate comparisons are suggestive, it is also necessary to conduct a multivariate test. Given the dichotomous nature of the dependent variable, our hypotheses can be assessed with a logistic regression model of the following form:

$$PROB = b_0 + b_1GP + b_2New + b_3(GP * NEW) + b_kX_k + E$$

- *PROB* – dependent variable equal to one if the firm is liquidated
- *GP* – dummy variable equal to one if the CEO has a GP contract
- *New* – dummy variable equal to one if the CEO was hired within one year of the bankruptcy filing
- *GP * New* – dummy variable equal to one if the CEO has a GP and was hired within one year of the bankruptcy filing
- *X* – a vector of control variables

Based on our hypotheses, we expect no significant relationship for *GP* or *NEW* and a significant negative relationship for the interaction *GP * New*.

Controls

A number of control variables are included in the regression model, based on significant factors identified in previous research. We include three firm-specific financial factors (measured as of the year-end preceding the bankruptcy filing) that may

impact the firm's probability of liquidation: size, leverage, and current ratio. A negative sign is expected for firm size (SIZ), since larger firms have more resources to facilitate survival in bankruptcy. A negative sign is also expected for leverage (LVG). Although leverage drives a firm to bankruptcy more quickly, this implies less time for the firm to continue unprofitable operations and thus better prospects for a favorable bankruptcy outcome (Denis & Rodgers, 2007). The expected relationship for the current ratio (CURR) is positive, since current assets have a higher liquidation value (making liquidation a more attractive proposition) and can be more easily diverted during the bankruptcy process for non-productive purposes (Dahiya et al., 2003). In addition to these financial factors, we also control for two firm-specific governance factors: block ownership (BLK) and CEO ownership (CEO Own). Again, these are measured as of the year-end preceding the bankruptcy filing. We expect a negative sign for both ownership controls, since greater ownership implies a greater incentive for the owners to exercise their influence to avoid liquidation in bankruptcy.

The next group of controls addresses CEO-specific factors that may influence bankruptcy outcomes. CEO age (AGE) is included, with a negative expected sign. Since age proxies for experience, it suggests a greater ability to manage a firm in crisis. Two dummy variables measure whether the CEO was hired from outside the firm (OUT) and whether the CEO was replaced during the bankruptcy process (REPL). The expected sign for OUT is negative, since an outside hire is not entrenched in the problems that led to the crisis and is more likely to contribute a new perspective. In contrast, we expect a positive relationship for REPL, because replacement of a CEO during bankruptcy is often concurrent with the realization that liquidation cannot be avoided. In this case, the

replacement CEO is tasked with facilitating an orderly liquidation of the firm's assets. The final two controls address characteristics of the bankruptcy filing that are known to be related to the outcome: whether the filing is prepackaged or pre-negotiated (PREP) and the duration of the bankruptcy process. Since a prepackaged filing indicates the existence of a specific plan to avoid liquidation, the expected sign for this control is negative. The expected sign for duration is also negative, since reorganization and acquisition are more complex than liquidation and thus require more time to complete. All explanatory factors, including these controls, are identified in Table 8, which provides definitions, sources, and expected signs. The regression model also controls for year and industry fixed effects, with industry measured using the four categories previously identified.

Table 8
Explanatory Factors

Name	Abbrev.	Description	Exp. Sign	Source
Golden parachute	GP	An indicator variable that equals one if the CEO has a GP contract and zero otherwise	N/A	SEC filings
CEO new hire	NEW	An indicator variable that equals one if the CEO was hired within one year of bankruptcy filing and zero otherwise	N/A	BRD
Firm size	SIZ	Natural log of books assets (in 2008 dollars), as of the year-end preceding bankruptcy filing	_	BRD
Leverage	LVG	Total Liabilities / Total Assets (in 2008 dollars), as of the year-end preceding bankruptcy filing	_	BRD
Current assets %	CURR	Current Assets / Total Assets (in 2008 dollars), as of the year-end preceding bankruptcy filing	+	Compustat
Block ownership	BLK	Percentage of shares owned by shareholders with at least a 5% interest, as of the year-end preceding bankruptcy filing	_	SEC filings
CEO ownership	CEO Own	CEO shares + options / shares outstanding, measured as of the year-end preceding bankruptcy filing	_	SEC filings

CEO age	AGE	CEO's age at the date of bankruptcy filing	_	SEC filings
CEO outside hire	OUT	An indicator variable that equals one if the CEO was hired from outside the firm and zero otherwise	_	SEC filings
Replacement of CEO during bankruptcy	REPL	An indicator variable that equals one if the CEO was replaced during the bankruptcy process and zero otherwise	+	BRD
Prepackaged bankruptcy	PREP	An indicator variable that equals one if the bankruptcy is prepackaged/pre-negotiated and zero otherwise	_	BRD
Duration of bankruptcy	DUR	Number of months in bankruptcy, from the date of filing to the date of plan confirmation	_	BRD

Descriptive Statistics

Table 9 provides the descriptive statistics for all variables, and pairwise correlations of the explanatory variables are provided in Table 10. As illustrated in Table 10, most of the correlations are low, and none are above 0.50. The highest correlation is -0.49, which is between PREP and DUR. This negative relationship is expected, since prepackaged bankruptcies are known to have quicker resolutions.

Table 9
Descriptive Statistics

Variable	Mean	Median	St. Dev.	Min.	Max.
SIZ	6.818	6.529	1.101	5.073	11.423
LVG	1.113	0.974	0.675	0.130	6.152
CURR	0.352	0.335	0.198	0.016	0.924
BLK	0.604	0.620	0.272	0.000	1.000
CEO Own	0.065	0.010	0.168	0.000	1.000
AGE	54.10	54.00	8.43	34.00	88.00
OUT	0.487	N/A	0.501	0.000	1.000
REPL	0.309	N/A	0.463	0.000	1.000
PREP	0.389	N/A	0.488	0.000	1.000
DUR	12.158	9.770	12.160	0.000	116.53
NEW	0.375	N/A	0.485	0.000	1.000
GP	0.600	N/A	0.491	0.000	1.000

Table 10
Pairwise Correlations

	SIZ	LVG	CURR	BLK	CEO Own	AGE	OUT	REPL	PREP	DUR	NEW	GP
SIZ	1.00											
LVG	-0.08	1.00										
CURR	-0.21	-0.04	1.00									
BLK	-0.15	0.14	-0.10	1.00								
CEO Own	-0.09	0.06	-0.12	0.22	1.00							
AGE	0.03	-0.08	0.02	0.05	0.20	1.00						
OUT	-0.00	0.04	-0.10	0.02	0.07	0.07	1.00					
REPL	0.03	-0.20	0.19	-0.07	0.00	0.02	-0.07	1.00				
PREP	-0.09	0.22	-0.17	0.07	-0.04	0.02	0.07	-0.36	1.00			
DUR	0.21	-0.00	0.06	-0.07	0.08	0.07	0.01	0.39	-0.49	1.00		
NEW	0.08	0.01	0.12	-0.01	-0.14	-0.14	0.04	0.04	-0.09	0.06	1.00	
GP	0.03	0.03	-0.03	-0.10	-0.22	-0.06	-0.02	-0.05	0.01	-0.07	-0.20	1.00

Logistic Regression Results

Results of the logistic regressions are provided in Table 11. Model I includes the control variables along with our variables of interest, *GP* and *NEW*. Consistent with our hypotheses, neither variable is significant in Model I. This indicates that neither the presence of a GP for the CEO, nor the proximity of the CEO's hiring to the bankruptcy filing, independently impacts the firm's probability of liquidation in bankruptcy. In Model II, we add the interaction term *GP * New*, which allows testing of our primary hypothesis: that GPs are related to a reduced probability of liquidation *only for newly hired CEOs*. The interaction term in Model II is negative and highly significant (less than 1%), which supports Hypothesis 1. As with Model I, neither *GP* nor *NEW* is significant in Mode1 II. Consistent with Hypothesis 2, a GP contract does not reduce the probability of liquidation in bankruptcy unless the CEO is newly hired, i.e., hired during the crisis period leading up to the bankruptcy. Finally, consistent with Hypothesis 3, a newly hired CEO does not reduce the probability of liquidation in bankruptcy unless the CEO has a GP contract.

To test the economic significance of our findings, we compare the probabilities of four groups: incumbent CEOs with GPs, incumbent CEOs without GPs, new CEOs with GPs, and new CEOs without GPs. In calculating these probabilities from our logistic regressions, we assume a firm: a) in the goods industry; b) with the average level of CEO ownership, block ownership, firm size, leverage, liquidity, CEO age, and bankruptcy duration; c) without a prepackaged filing; and d) filed in year 2013. For such firms with new CEOs that have GPs, the probability of liquidation in bankruptcy is less than 5%. This probability increases to almost 25% for firms with new CEOs that do not have GPs. Thus, for firms with newly hired CEOs, the presence of a GP decreases the probability of liquidation by 80%. For incumbent CEOs with GPs, the probability of liquidation is 13%, more than twice the probability for new CEOs with GPs. This comparison shows that GPs have information content (indication of capability) only for newly hired CEOs (i.e., hired during financial distress). In fact, the presence of a GP for an incumbent CEO actually *increases* the probability of liquidation, from 2% to 13%.

Table 11
Logistic Regressions
Liquidated v. Not Liquidated

	Model I			Model II			Model III			Model IV		
GP Def.	Any			Any			Salary			Vesting		
	B	p-value		B	p-value		B	p-value		B	p-value	
Intercept	-0.2492	0.9288		-0.7729	0.7989		-1.0569	0.7419		-0.2806	0.9247	
SIZ	-0.2281	0.3681		-0.2798	0.2833		-0.2246	0.4033		-0.2155	0.3904	
LVG	-0.9703	0.1970		-1.3417	0.0961	*	-1.7264	0.0515	*	-1.2964	0.1029	
CURR	3.3649	0.0107	**	3.1068	0.0311	**	3.1670	0.0377	**	3.3124	0.0186	**
BLK	-2.4485	0.0244	**	-3.3116	0.0048	***	-3.5000	0.0038	***	-2.9505	0.0097	***
CEO Own	1.4511	0.4223		3.2663	0.1168		4.0131	0.0624	*	2.1867	0.2535	
AGE	0.0218	0.4719		0.0253	0.4193		0.0285	0.3670		0.0210	0.4938	
OUT	0.2001	0.6715		0.4287	0.3974		0.5309	0.3115		0.4284	0.3951	
REPL	0.5176	0.3122		0.7995	0.1475		0.9763	0.0896	*	0.5679	0.2860	

PREP	-1.6738	0.0229	**	-1.9063	0.0141	**	-2.0814	0.0097	***	-1.8771	0.0143	**
DUR	-0.0298	0.2719		-0.0183	0.5271		-0.0285	0.3733		-0.0196	0.4754	
AG/MIN/ CON	0.0327	0.9711		-0.3617	0.7033		-0.6152	0.5275		-0.2324	0.8045	
MANUF	-0.3924	0.4960		-0.2189	0.7204		-0.3057	0.6254		-0.3287	0.5777	
GOODS	-0.4716	0.5406		-0.2580	0.7476		-0.2521	0.7585		-0.3721	0.6318	
NEW	0.5957	0.2436		2.8296	0.0033	***	3.2980	0.0011	***	1.7505	0.0138	**
GP	0.1711	0.7301		2.0443	0.0185	**	2.5726	0.0052	***	1.2427	0.0654	*
GP*New				-3.8912	0.0026	***	-5.0123	0.0005	***	-2.8734	0.0123	**
Chi-Squ.	57.253	0.0000	***	68.225	0.0000	***	73.577	0.0000	***	64.323	0.0000	***
Pseudo-R^2	0.188			0.220			0.235			0.209		
# Obs.	275			275			275			275		

*Significant at 10%; ** significant at 5%; *** significant at 1%

In addition to a general definition of a golden parachute (encompassing any type of benefit payable upon a change in control), we also test alternative definitions that reflect specific types of benefits. This approach follows the suggestion of Bebchuk et al. (2014) that future research should focus on specific types of golden parachutes. We consider the two most common components of GP contracts: cash payment based on a multiple of salary (Salary) and immediate vesting of restricted stock and stock options (Vesting). Almost 91% of the GPs in our sample have a salary provision, and 65.5% have a vesting provision. About 62% of the GPs have both a salary provision and a vesting provision, indicating that the two provisions commonly occur together. We estimate the parameters of our model using two alternative definitions of GP: one representing inclusion of a salary provision (Model III) and another representing inclusions of a vesting provision (Model IV). Regressions with these alternative GP definitions produce results similar to our primary model using the general GP definition. Neither *GP* nor *NEW* is significant, and *GP * New* is highly significant with a negative coefficient of substantial magnitude.

Significant control variables include PREP, CURR, and BLK, each of which has the expected sign. The coefficient for PREP is negative, meaning that firms with a prepackaged or pre-negotiated bankruptcy are less likely to be liquidated. This finding suggests that advance planning (before the bankruptcy filing) is often successful in helping a firm avoid liquidation. The coefficient for CURR is positive, meaning that firms with a higher current ratio are more likely to be liquidated. This validates the expectation that higher liquidity makes the liquidation outcome more attractive for certain stakeholders, incentivizing such stakeholders to support this outcome. Finally, the coefficient for BLK is negative, meaning that firms with a higher percentage of block ownership are less likely to be liquidated. As expected, block owners have a greater incentive to avoid liquidation and exercise their influence to resist this outcome. Although the coefficient for each of these significant controls is high in magnitude, the coefficient for the interaction term *GP * New* is even higher. This suggests that, of the all the factors tested, this factor has the strongest influence on the firm's probability of liquidation in bankruptcy. Another important observation is the greater pseudo-R^2 for the models that include the interaction term *GP * New*. This shows that adding the interaction term substantially increases the explanatory power of the model.

Robustness Checks

We focus on the binary outcome *liquidated v. not liquidated* because the latter outcome is clearly more favorable for shareholders. To confirm our results, we also tested two other outcome pairs with the same contrast in favorability: *liquidated v. acquired* (Table 12) and *liquidated v. reorganized* (Table 13). For both of these outcome

pairs, findings for the explanatory terms of interest are the same as for our primary model, i.e., only the interaction term *GP * New* is (negatively) related to the less favorable bankruptcy outcome. The two focused models have higher explanatory power than the primary model, as indicated by their higher pseudo-R^2s (0.413 for L v. A and 0.327 for L v. R, compared to 0.220 for L v. NL). This reflects greater explanatory power of the control factors in the focused models, since the interaction term is highly significant with a high magnitude in all three models.

Table 12
Logistic Regressions
Liquidated v. Acquired

	Model I			Model II			Model III			Model IV		
GP Def.	Any			Any			Salary			Vesting		
	B	p-value		B	p-value		B	p-value		B	p-value	
Intercept	5.4281	0.9745		5.1413	0.9759		3.7565	0.9824		3.9265	0.9816	
SIZ	0.6289	0.2098		0.4318	0.4226		0.6562	0.2763		0.7235	0.1560	
LVG	-0.2755	0.6990		-0.6982	0.4250		-0.8541	0.3960		-0.5935	0.4603	
CURR	2.4141	0.2447		1.8552	0.4232		1.4797	0.5499		2.5181	0.2404	
BLK	-3.3798	0.0308	**	-4.3792	0.0112	**	-4.7053	0.0088	***	-3.7294	0.0240	**
CEO Own	3.4130	0.1793		4.8140	0.1223		5.9985	0.0589	*	3.6848	0.1797	
AGE	0.0211	0.6427		0.0306	0.5409		0.0278	0.5908		0.0074	0.8756	
OUT	0.2461	0.7476		0.4242	0.6144		0.5557	0.5157		0.2661	0.7380	
REPL	-1.3721	0.0991	*	-1.2298	0.2128		-0.8424	0.4100		-1.4724	0.1246	
PREP	1.1422	0.4444		2.1940	0.1895		2.0671	0.2373		1.4783	0.3435	
DUR	-0.0755	0.1058		-0.0750	0.1751		-0.0856	0.1196		-0.0570	0.2452	
AG/MIN/ CON	-0.2060	0.9035		-0.8293	0.6740		-1.0959	0.6002		-0.3826	0.8282	
MANUF	0.0011	0.9991		0.3456	0.7467		0.2875	0.8046		0.2626	0.7925	
GOODS	0.5609	0.6278		0.9170	0.4744		0.9451	0.4856		0.6262	0.6122	
NEW	0.8448	0.2367		3.4070	0.0111	**	4.1962	0.0046	***	2.2555	0.0228	**
GP	-0.0435	0.9491		1.9135	0.0884	*	2.8585	0.0211	**	1.6149	0.0945	*
GP*New				-4.6575	0.0116	**	-6.1897	0.0026	***	-3.5288	0.0353	**
Chi-Squ.	34.090	0.133		42.077	0.016	**	46.914	0.010	***	39.112	0.062	*
Pseudo-R^2	0.350			0.413			0.448			0.390		
# Obs.	79			79			79			79		

*Significant at 10%; ** significant at 5%; *** significant at 1%

Table 13
Logistic Regressions
Liquidated v. Reorganized

	Model I			Model II			Model III			Model IV		
GP Def.	Any			Any			Salary			Vesting		
	B	p-value		B	p-value		B	p-value		B	p-value	
Intercept	2.1219	0.5211		1.8934	0.6133		2.0445	0.6103		2.1754	0.5579	
SIZ	-0.5837	0.0653	*	-0.6210	0.0565	*	-0.5824	0.0780	*	-0.5266	0.0920	*
LVG	3.0636	0.0148	**	-3.1904	0.0141	**	-3.4991	0.0093	***	-3.3313	0.0093	***
CURR	5.4611	0.0021	***	4.7238	0.0128	**	4.9836	0.0131	**	5.5119	0.0046	***
BLK	-1.3376	0.2584		-2.6125	0.0520	*	-2.7563	0.0415	**	-1.8825	0.1189	
CEO Own	-0.4363	0.8711		2.1356	0.4880		2.3721	0.4557		0.4385	0.8773	
AGE	0.0295	0.4009		0.0295	0.4104		0.0259	0.4749		0.0239	0.4995	
OUT	0.2735	0.6404		0.4483	0.4741		0.5977	0.3597		0.6128	0.3295	
REPL	1.4258	0.0158	**	1.6797	0.0112	**	1.7729	0.0099	***	1.3740	0.0247	**
PREP	-1.7582	0.0339	**	-2.2167	0.0135	**	-2.3209	0.0107	**	-2.1742	0.0142	**
DUR	0.0055	0.9027		0.0024	0.9567		0.0013	0.9778		0.0060	0.8929	
AG/MIN/ CON	0.2297	0.8211		-0.4419	0.6857		-0.5630	0.6139		0.0205	0.9845	
MANUF	-0.4823	0.4725		-0.3569	0.6088		-0.4042	0.5706		-0.4028	0.5584	
GOODS	-1.6957	0.0944	*	-1.5252	0.1422		-1.5741	0.1388		-1.4726	0.1598	
NEW	0.8242	0.2046		3.1864	0.0090	***	3.5171	0.0053	***	1.8499	0.0295	**
GP	0.3100	0.6282		2.4452	0.0321	**	2.6752	0.0228	**	1.1848	0.1548	
GP*New				-4.0157	0.0131	**	-5.1345	0.0039	***	-3.0583	0.0323	**
Chi-Squ.	83.137	0.0000	***	90.338	0.0000	***	93.746	0.0000	***	88.109	0.0000	***
Pseudo-R^2	0.306			0.327			0.337			0.321		
# Obs.	228			228			228			228		

*Significant at 10%; ** significant at 5%; *** significant at 1%

The three models have differences in the significance of controls, as illustrated in Table 14. All of the coefficient signs are consistent with our expectations, which were based on implications for probability of liquidation. BLK is significant with a negative coefficient for all three outcome pairs. PREP is not significant for Liquidated v. Acquired, which is expected since prepackaged bankruptcies typically involve plans for reorganization, not acquisition. CURR also lacks significance for Liquidated v. Acquired, which decreases the significance of this factor in the primary (combined) model. For the

Liquidated v. Reorganized outcome pair, two factors are identified as significant that are not significant in the primary (combined) model: REPL and LVG. REPL has a positive coefficient, which is consistent with our initial expectations. This suggests that replacement of the CEO during bankruptcy increases the probability of liquidation compared to reorganization, but not compared to acquisition. Finally, LVG has a negative coefficient for Liquidated v. Reorganized. Thus, leverage decreases the likelihood of liquidation compared to reorganization but not compared to acquisition. The negative sign of the relationship is consistent with our initial expectations and suggests that pre-bankruptcy leverage implies a greater ability to manage debt service, which helps to avoid liquidation but does not increase the firm's attractiveness for acquisition.

Table 14
Significant Control Factors (5%)

Factor	L v. NL	L v. A	L v. R
LVG			--
CURR	+		+
BLK	--	--	--
REPL			+
PREP	--		--

We identified several observations in our sample where the CEO was hired shortly (only a couple weeks) before the bankruptcy filing. For these cases, one of our key assumptions—that the bankruptcy was not expected by the CEO—is highly questionable. Using a breakpoint of 30 days preceding filing, we identified 15 such observations. These could be characterized as "immediate" rather than "new" CEO hires. None of the 15 immediate hires had GPs, which is consistent with the underlying reasoning of our hypotheses. When bankruptcy is imminent, the CEO recruiting context

changes. Most importantly, the risk faced by the new CEO is reduced. Because bankruptcy is already a foregone conclusion, it does not negatively impact the CEO's reputation. Moreover, such an appointment is known to be short-term in nature, diminishing the CEO's need for and expectation of a GP contract. Since none of the 15 immediate CEOs had GPs, their characterization in the regressions as *New* does not affect our main factor of interest: the interaction term *GP * New*. Thus, this issue has no impact on our primary conclusions.

Another robustness check is the inclusion of two time dummies (in addition to year fixed effects) to the logistic regressions to control for events that could affect our hypothesized relationships: the recent global financial crisis and the enactment of the Bankruptcy Abuse Prevention and Consumer Protection Act (BAPCPA). Since the number of bankruptcies increased in the aftermath of the crisis (as previously noted for our sample), it is possible that outcomes (e.g., the liquidation rate) changed as well. Following Fahlenbrach and Stulz (2011), we define the post-crisis period as beginning in July 2007. Similarly, BAPCPA, which revised several provisions of Chapter 11, may have impacted the probabilities of different bankruptcy outcomes. Because BAPCPA was enacted on April 20, 2005, we define the post-BAPCPA period as beginning in May 2005. Although these time effects are not apparent on an annual basis (see Table 1), it is helpful to address the issue in a multivariate setting. Upon such testing, we found neither time factor to be significant in any of our models.

In evaluating our methodology, one may reasonably ask why we did not also consider distressed firms that did not file for bankruptcy—for example, by testing whether the presence of a GP impacts a non-bankrupt firm's probability of filing for

bankruptcy. The reason for this is two-fold. First, a key assumption of our study is that liquidation is the least favorable bankruptcy outcome. Such an assumption cannot be made for the event of bankruptcy filing, since neither outcome (filing vs. not filing) is clearly more favorable for shareholders. As previously discussed, Chapter 11 bankruptcy offers various benefits that can facilitate the firm's ultimate survival through reorganization. Thus, for non-bankrupt distressed firms, there is no clear outcome that we can expect a capable CEO to pursue. Our second reason for studying bankrupt firms is that bankruptcy provides a unique context wherein CEOs have no explicit incentives related to compensation contracting. The absence of such explicit incentives allows us to evaluate the impact of implicit incentives on CEO behavior, which is the focus of our research questions. Until the firm files for bankruptcy, the CEO still has explicit incentives from his or her compensation contract, along with any other implicit incentives that may exist. In this context, we could not identify reputable CEOs, because all CEOs (whether reputable or not) would have incentives to take value-preserving actions. In sum, our chosen methodology allows us to make to two key determinations: which CEOs are reputable and which firm outcomes they should pursue to preserve shareholder wealt

CHAPTER V

Summary and Conclusions

For a sample of large U.S. firms that completed Chapter 11 bankruptcy during the period July 2002 to June 2013, we find that existence of a golden parachute contract for the CEO at the time of filing impacts the outcome of the bankruptcy process. Specifically, a firm that has a *new CEO with a GP* is more likely to avoid liquidation in bankruptcy. This relationship is observed only for the interaction of the factors, not for the factors individually. The presence of a GP contract is not significant unless the CEO is newly hired, and a newly hired CEO is not significant unless the CEO has a GP contract. In addition to its statistical significance, the interaction *GP * New* has substantial economic significance. Of all the significant factors identified in our logistic regression model, this interaction term has the highest magnitude. Other significant factors include the firm's current ratio (a common financial indicator) and block ownership (a common governance indicator), which are widely recognized in the literature as predictors of bankruptcy outcomes. Importantly, we identify a previously *untested factor* that has an even *stronger influence*.

A remarkable aspect of our findings is the nature of this predictor variable. Unlike characteristics that describe firms and CEOs *in general*, which have been tested in previous studies (and were included in our model as controls), our variable of interest is *context-driven*. Rather than considering what factors *might* impact outcomes for financially distressed firms, we consider a factor that boards actually *expect* to have a

strong impact—the CEO. Recognizing that distressed firms often replace their CEOs, we examine the process by which a new CEO is recruited. This includes both the desired qualifications of candidates (quality indicated by reputation) and elements of the compensation contract that are necessary to recruit qualified candidates (golden parachutes). In developing our hypotheses, we considered not only the *what* of the context (financial distress), but also the *how*—how it impacts both the firm and the CEO. In financial distress, risk is the primary dynamic that raises the stakes for all parties involved. The firm faces the risk of failure, and the CEO faces both the short-term risk of job loss and the long-term risk of loss of reputational capital. Our results suggest that when both parties properly evaluate this risk, the result is an efficient compensation contract that contributes to shareholder wealth preservation.

Another notable attribute of our predictor variable is its identity— the presence of a golden parachute contract for the firm's CEO. Although GPs are negatively characterized in both the academic literature and the press as indicators of managerial entrenchment, our results suggest a potentially *positive* effect on firm value. Moreover, our results highlight the *multifaceted role* of GPs as a firm mechanism. In this way, our study expands upon the existing literature, which has focused primarily on the governance role of GPs. Like other forms of executive compensation, GPs can serve a governance role by aligning the interests of managers and shareholders (e.g., in a corporate takeover context). Regardless of their efficacy in this function (which has not been supported by research), we show that GPs are a useful tool for distressed firms to screen and recruit reputable CEOs. This value is not dependent on the firm's survival, as reputable CEOs have implicit incentives to continue promoting shareholder interests even

in bankruptcy, when explicit incentives from the compensation contract (including the GP) are nullified.

Because all the firms in our sample ultimately filed for bankruptcy, the newly hired CEO's efforts to save the firm were clearly unsuccessful. If the CEO was indeed capable, this suggests that either: a) The CEO did not accurately assess the situation before accepting the position; or b) The CEO's efforts were thwarted by factors outside his or her control. Through our CEO interviews, we obtained anecdotal evidence supporting both of these explanations. With regard to intervening factors, perhaps the most common are market factors such as economic and/or industry conditions. One example of this scenario is the CEO of a construction firm who was hired on October 1, 2007, shortly before the stock market began a 16-month nosedive. According to the CEO, although the firm was already in trouble, "This sealed our fate." Even after the bankruptcy filing, market events continued to undermine the CEO's efforts to facilitate reorganization. Several months into the bankruptcy, a verbal reorganization plan was established with the firm's creditors and shareholders that involved a primary lender taking debt in the reorganized firm. However, the bankruptcy of Lehman Brothers caused the lender to change its mind and demand immediate cash payment. The CEO states, "I literally got a call from the bank the day after Lehman's bankruptcy was announced." Another CEO interviewee described a situation where an intervening factor, in this case a major supplier, derailed his turnaround plan:

> "The plan I developed with the help of my management team and a financial consultant would have avoided bankruptcy had it not been for the stubborn attitude not to participate in the plan demonstrated by our major supplier. The plan was viable up to the final days before we filed our petition in court. Once the supplier failed to come to the table, several of the remaining components fell apart."

A CEO candidate's decision to accept (or reject) employment at a distressed firm is driven largely by an evaluation of the potential risks and rewards of the proposition. Although substantial risk is inherent, the CEO must determine whether the risk exceeds some threshold. One interviewee explained that he requires a 30-day evaluation period during which he can "bail out" if he decides to the risk is too great. During this time, he looks for "red flags" such as illegal activity and environmental issues. Despite their best efforts, the risk assessments of CEOs can be undermined by incomplete or inaccurate information. For example, one firm in our sample had not produced financials for some time, which obscured the dire reality of its condition. Although the CEO perceived "a pretty good chance of avoiding bankruptcy," it "turned out to be riskier than I thought." In more than one case, our CEO interviewees described situations where the board did not accurately represent the facts. In the words of one interviewee, "The board painted a rosier picture." Another CEO expressed strong skepticism of the board's representations in the recruiting process. Given the likelihood of obfuscation, he views board members' "attitudes" as a more accurate indicator than their words. For example, when a board is "defensive" and doesn't recognize a problem, "This usually means there are major problems."

A final example illustrates how board dynamics can interfere with both the CEO's risk-assessment efforts before accepting the position and his or her strategic plans after assuming leadership. In this case, the firm was clearly in distress, but the board was unsure of the best course of action. According to the CEO, some board members were hoping the firm could survive, while others wanted to liquidate as soon as possible. This CEO was charged with the immediate tasks (six-week timeline) of: a) determining which

components of the business had value and which did not; and b) identifying any assets that could be sold. During this time, the CEO determined that only one component of the business was profitable. His proposed solution was to sell other non-performing segments and continue as a smaller company. According to the CEO, this ultimately did not happen due to the divided state of the board. Without strong commitment to the firm's survival, board members were easily swayed by an activist bondholder who favored liquidation. The CEO states that, after accepting the position, he soon learned the firm's future was "pre-ordained." He believes that hiring a new CEO was just "going through the motions." More specifically, "The board members were trying to distance themselves from the decision" and "needed somebody in that role at the eleventh hour."

These real-world examples highlight the various unique factors that can impact a firm's ability to avoid bankruptcy, as well as the outcome of bankruptcy. Consistent with previous research (e.g., Barniv et al. 2002), this suggests that predicting bankruptcy outcomes is more difficult than discriminating between healthy and distressed firms. Because all bankrupt firms are distressed, accounting variables commonly used for predicting bankruptcy filing are not as useful for predicting bankruptcy outcomes. It appears that non-financial factors, especially sociological factors that capture behavioral dynamics, may have more explanatory value. Our study examines one such factor—executive leadership. Although capable leadership is necessary to achieve favorable outcomes, our results show it is not sufficient. Even so, the board of a distressed firm has a duty to take actions that maximize the firm's prospects for survival. Our study suggests that one such action is to utilize golden parachutes as tool for screening and recruiting a reputable CEO.

Although the focused nature of our study limits its widespread applicability, at least directly with regard to golden parachutes, we do not see this as a limitation of its worth. We make no claim that golden parachutes *generally* enhance shareholder wealth, but we do find they can in *certain circumstances*. This ambiguity is found in much of the empirical literature on corporate governance mechanisms, including executive compensation structures. As previously discussed, studies have failed to identify a link between either the level or nature of executive compensation and firm performance. Perhaps these results have more meaning than is immediately apparent, in the sense that *no relationship is observed because no such relationship should exist*. This does not imply that theory (e.g., agency theory) is wrong, but rather that it must be applied in context. The literature has begun to recognize the contingent nature of corporate governance—that no governance structure is suitable for all firms at all times. Our results support this proposition and offer some additional insights. We suggest that, more broadly, all corporate policy should be contingent. Similarly, general characterizations of firm mechanisms as "good" or "bad" are misplaced. Although research should continue to address widespread problems, we must not let urgency lead to oversimplification of complex issues. The goal of such research should not be universal prescriptions, but rather solutions and tools that can be tailored to the needs and circumstances of specific firms.

REFERENCES CITED

ESSAY 2

Adams, R. B., Almeida, H., & Ferreira, D. (2005). Powerful CEOs and their impact on corporate performance. Review of Financial Studies, 18(4), 1404-1432.

Agrawal, A., & Knoeber, C. (1998). Managerial compensation and the threat of takeover. *Journal of Financial Economics, 47,* 219-239.

Ahimud, Y., & Lev, B. (1981). Managerial incentives and corporate investment and financing decisions. *Journal of Finance, 42,* 234-254.

Aivazian, V. A., & Zhou, S. (2012). Is Chapter 11 efficient? *Financial Management, 41*(1), 229-253.

Almazan, A., & Suarez, J. (2003). Entrenchment and severance pay in optimal governance structures. *Journal of Finance, 58,* 519-547.

Altman, E. I. (1971). *Corporate bankruptcy in America.* Lexington, MA: Heath Lexington Books.

Altman, E. I. (1984). A further empirical investigation of the bankruptcy cost question. *Journal of Finance, 39,* 1067-1089.

Anderson, R. C., & Bizjak, J. M. (2003). An empirical examination of the role of the CEO and the compensation committee in structuring executive pay. *Journal of Banking & Finance, 27,* 1323-1348.

Ang, J., Lauterbach, B., & Vu, J. (2003). Efficient labor and capital markets: Evidence from CEO appointments. *Financial Management, 32*(2), 27-52.

Ayotte, K. M., & Morrison, E. R. (2009). Creditor control and conflict in Chapter 11. *Journal of Legal Analysis, 1*(2), 511-551.

Baird, D. G., & Bernstein, D. S. (2006). Absolute priority, valuation uncertainty, and the reorganization bargain. *Yale Law Journal, 115*(8), 1930-1970.

Baird, D. G., & Rasmussen, R. K. (2002). The end of bankruptcy. *Stanford Law Review, 55*(3), 751-789.

Baird, D. G., & Rasmussen, R. K. (2003). Bankruptcy at twilight. *Stanford Law Review, 56*(3), 673-699.

Bange, M., & Mazzeo, M. (2004). Board composition, board effectiveness, and the observed form of takeover bids. *Review of Financial Studies, 17*(4), 1185-1215.

Barniv, R., Agarwal, A., & Leach, R. (2002). Predicting bankruptcy resolution. *Journal of Business Finance & Accounting, 29,* 497-520.

Bartell, L. B. (2008). Straddle obligations under prepetition contracts: Prepetition claims, postpetition claims or administrative expenses? *Emory Bankruptcy Developments Journal, 25*(1), 39-64.

Bates, T., Becher, D., & Lemmon, M. (2008). Board classification and managerial entrenchment: Evidence from the market for corporate control. *Journal of Financial Economics, 87*(3), 656-677.

Bebchuk, L. A. (1988). A new approach to corporate reorganizations. *Harvard Law Review, 101*, 775-804.

Bebchuk, L. A., Cohen, A., & Wang, C. (2014). Golden parachutes and the wealth of shareholders. *Journal of Corporate Finance, 25*, 140-154.

Bebchuk, L. A., & Fried, J. (2003). Executive compensation as an agency problem. *Journal of Economic Perspectives, 17*, 71-92.

Bebchuk, L.A., Fried, J., & Walker, D. (2002). Managerial power and rent extraction in the design of executive compensation. *University of Chicago Law Review, 69,* 751-846.

Bebchuk, L. A., & Weisbach, M. (2010). The state of corporate governance research. *Review of Financial Studies, 23*, 939-961.

Becker, G. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy, 70*, 9-49.

Berle, A., & Means, G. (1932). *The modern corporation and private property.* New York: Harcourt Brace Jovanovich.

Berkovitch, E., Israel, R., & Spiegel, Y. (2000). Managerial compensation and capital structure. *Journal of Economics and Management Strategy, 9*, 549-584.

Bertrand, M. (2009). CEOs. *Annual Review of Economics,* 1, 121-149.

Bertrand, M., & Mullainathan, S. (2001). Are CEOs rewarded for luck? The ones without principles are. *Quarterly Journal of Economics, 116*(3), 901-932.

Bertrand, M., & Schoar, A. (2003). Managing with style: The effect of managers on firm policies. *Quarterly Journal of Economics, 118*, 1169-1208.

Bhagat, S., Bolton, B., & Romano, R. (2008). The promise and perils of corporate governance indices. *Columbia Law Review, 108*(8), 1803-1882.

Bizjak, J., Lemmon, M., & Naveen, L. (2008). Does the use of peer groups contribute to higher pay and less efficient compensation? *Journal of Financial Economics, 90*, 152-168.

Born, J., Faria, H., & Trahan, E. (1999). Structuring more-effective executive severance contracts. *Managerial Finance, 25*(10), 13-21.

Born, J., Trahan, E., & Faria, H. (1993). Golden parachutes: incentive aligners, management entrenchers, or takeover bid signals? *Journal of Financial Research, 16*, 299-308.

Bradley, M., & Rosenzweig, M. (1992). The untenable case for Chapter 11. *Yale Law Journal, 101*, 1043-1095.

Brown, D. (1997). Liquidity and liquidation: Evidence from real estate investment trusts. *Journal of Finance, 55*, 469-485.

Brown, M. (2006). Corporate integrity and public interest: A relational approach to business ethics and leadership. *Journal of Business Ethics, 66*(1), 11-18.

Brown, P., & Hesketh, A. (2004). *The mismanagement of talent*. Oxford: Oxford University Press.

Brusa, J., Lee, W. L., & Shook, C. (2009). Golden parachutes, managerial incentives and shareholders' wealth. *Managerial Finance, 35*(4), 346-356.

Buchholtz, A. K., & Ribbens, B. (1994). Role of chief executive officers in takeover resistance: Effects of CEO incentives and individual characteristics. *Academy of Management Journal, 37*(3), 554-579.

Campbell, S. V. (1997). An investigation of the direct costs of bankruptcy reorganization for closely held firms. *Journal of Small Business Management, 35*(3), 21-29.

Carr, L., & Valinezhad, M. (2004). The role of ethics in executive compensation: Toward a contractarian interpretation of the neoclassical theory of managerial remuneration. *Journal of Business Ethics, 13*(2), 81-93.

Chang, Y. Y., Dasgupta, S., & Hilary, G. (2010). CEO ability, pay, and firm performance. *Management Science, 56*(10), 1633-1652.

Chi, J., & Li, D. S. (2010). The conditional nature of the value of corporate governance. *Journal of Banking and Finance, 34*, 350-361.

Clark, T. A., & Weinstein, M. I. (1983). The behavior of the common stock of bankrupt firms. *Journal of Finance, 38*, 489-504.

Cochran, P. L., Wood, R. A., & Jones, T. B. (1985). The composition of boards of directors and incidence of golden parachutes. *Academy of Management Journal, 28,* 664-671.

Coffee, J. C. (1988). Shareholders versus managers: The strain in the corporate web. In J. C. Coffee, L. Lowenstein, & S. Rose-Ackerman (Eds.), *Knights, raiders, and targets: The impact of hostile takeovers.* New York: Oxford University Press.

Coles, J., & Li, Z. (2010). Managerial attributes, incentives, and performance. Arizona State University, Working Paper.

Cotter, J., & Zenner, M. (1994). How managerial wealth affects the tender offer process. *Journal of Financial Economics, 35*(1), 63-97.

Cremers, K. J., & Grinstein, Y. (2014). Does the market for CEO talent explain controversial CEO pay practices? *Review of Finance, 18*, 921-960.

Custodio, C., Ferreira, M. A., & Matos, P. (2013). Generalists v. specialists: Lifetime work experience and chief executive officer pay. *Journal of Financial Economics, 108*, 471-492.

Dahiya, S., John, K., Puri, M., & Ramirez, G. (2003). Debtor-in-possession financing and bankruptcy resolution: Empirical evidence. *Journal of Financial Economics, 69*, 259-280.

Daily, C. M., Dalton, D. R., & Cannella, A. A. (2003). Corporate governance: Decades of dialogue and data. *Academy of Management Review, 28*(3), 371-382.

Datta, S., & Iskandar-Datta, M. E. (1995). Reorganization and financial distress: An empirical examination. *Journal of Financial Research, 18,* 15-32.

Davidson, W., Pilger, T., & Szakmary, A. (1998). Golden parachutes, board and committee composition, and shareholder wealth. *Financial Review, 33*, 17-32.

DeAngelo, H., & DeAngelo, L. (1989). Corporate financial policy and corporate control: A study of defensive adjustments and ownership structure. *Journal of Financial Economics, 21*, 29-59.

Denis, D. K., & Rodgers, K. J. (2007). Chapter 11: Duration, outcome, and post-reorganization performance. *Journal of Financial and Quantitative Analysis, 42*, 101-118.

Dowell, G., Shackell, M., & Stewart, N. (2011). Boards, CEOs, and surviving a financial crisis: Evidence from the internet shakeout. *Strategic Management Journal, 32*, 1025-1045.

Edmans, A., & Gabaix, X. (2009). Is CEO pay really efficient? A survey of new optimal contracting theories. *European Financial Management, 15*(3), 486-496.

Elsaid, E., Davidson, W. N., & Benson, B. W. (2009). CEO compensation structure following succession: Evidence of optimal incentives with career concerns. *Quarterly Review of Economics & Finance, 49,* 1389-1409.

Elson, C. M., & Ferrere, C. K. (2013). Executive superstars, peer groups, and overcompensation: Cause, effect, and solution. *Journal of Corporation Law, 38*(3), 488-531.

Evans, J. D., & Hefner, F. (2009). Business ethics and the decision to adopt golden parachute contracts: Empirical evidence of concern for all stakeholders. *Journal of Business Ethics, 86,* 65-79.

Fahlenbrach, R., & Stulz, R. (2011). Bank CEO incentives and the credit crisis. *Journal of Financial Economics, 99,* 11-26.

Falato, A., Li, D., & Milbourn, T. T. (2011). To each according to his ability? The returns to CEO talent. Washington University at St. Louis, Working Paper.

Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy, 88,* 288-307.

Faulkender, M., & Yang, J. (2010). Inside the black box: The role and composition of compensation peer groups. *Journal of Financial Economics, 96,* 257-270.

Fee, C., & Hadlock, C. (2003). Raids, rewards, and reputations in the market for managerial talent. *Review of Financial Studies, 16,* 1315-1357.

Fich, E., Tran, A., & Walkling, R. (2013). On the importance of golden parachutes. *Journal of Financial & Quantitative Analysis, 48*(6), 1717-1753.

Fiss, P. C., Kennedy, M. T., & Davis, G. F. (2012). How golden parachutes unfolded: Diffusion and variation of a controversial practice. *Organization Science, 23*(4), 1077-1099.

Frydman, C. (2007). Rising in the ranks: The evolution of the market for corporate executives, 1936-2003. MIT, Working Paper.

Frydman, C., & Saks, R. (2007). Executive compensation: A new view from a long-term perspective, 1936-2005. *Review of Financial Studies, 23,* 2009-2138.

Fulmer, I. S. (2009). The elephant in the room: Labor market influences on CEO compensation. *Personnel Psychology, 62*(4), 659-695.

Gabaix, X., & Landier, A. (2008). Why has CEO pay increased so much? *Quarterly Journal of Economics, 123*(1), 49-100.

Gabaix, X., Landier, A., & Sauvagnat, J. (2013). CEO pay and firm size: An update after the crisis. *The Economic Journal, 124*, F40-F59.

Gaines-Ross, L. (2000). CEO reputation: A key factor in shareholder value. *Corporate Reputation Review, 3*(4), 366-370.

Gibbons, R., & Murphy, K. (1992). Optimal incentive contracts in the presence of career concerns: Theory and evidence. *Journal of Political Economy, 100*(3), 468-505.

Gilson, S. C. (1989). Management turnover and financial distress. *Journal of Financial Economics*, 25(2), 241-262.

Gilson, S. C. (2012). Coming through crisis: How Chapter 11 and the debt restructuring industry are helping to revive the U.S. economy. *Journal of Applied Corporate Finance, 24*(4), 23-35.

Gomez-Mejia, L. R., & Wiseman, R. M. (1997). Reframing executive compensation: an assessment and outlook. *Journal of Management, 23*, 291-374.

Gordon, R., & Dew-Becker, I. (2008). Controversies about the rise in American inequality: A survey. NBER, Working Paper No. 13982.

Graham, J. R., Harvey, C. R., & Puri, M. (2013). Managerial attitudes and corporate actions. *Journal of Financial Economics, 109*(1), 103-121.

Graham, J., Li, S., & Qui, J. (2012). Managerial attributes and executive compensation. *Review of Financial Studies, 25*, 144-186.

Gretchko, L. S., & Bogdanowicz, M. A. (2014). How to represent the client that wants its contract rejected. *American Bankruptcy Institute Journal, 33*(8), 24-25.

Gretchko, L. S., & Todhunter, L. J. (2012). When a contract is rejected, does its noncompetition clause survive? *American Bankruptcy Institute Journal, 31*(8), 24-25.

Hall, P., & Anderson, D. (1997). The effect of golden parachutes on shareholder wealth and takeover probabilities. *Journal of Business Finance and Accounting, 24*(3), 445-463.

Hall, B. J., & Liebman, J. B. (1998). Are CEOs really paid like bureaucrats? *Quarterly Journal of Economics, 113*(3), 653-691.

Hambrick, D. C., D'Aveni, R. A. (1988). Large corporate failures as downward spirals. *Administrative Science Quarterly, 33,* 1-23.

Harner, M. M., & Marincic, J. (2011). Committee capture? An empirical analysis of the role of creditors' committees in business reorganizations. *Vanderbilt Law Review, 64*(3), 747-797.

Harris, E. G. (1990). Antitakeover measures, golden parachutes, and target firm shareholder value. *RAND Journal of Economics, 69,* 51-83.

Hartzell, J. C., Ofek, E., & Yermack, D. (2004). What's in it for me? CEOs whose firms are acquired. *Review of Financial Studies, 17*(1), 37-61.

Haugen, R. A., & Senbet, L. W. (1981). Resolving the agency problems of external capital through options. *Journal of Finance, 36,* 629-647.

Himmelberg, C. P., & Hubbard, R. G. (2000). Incentive pay and the market for CEOs: An analysis of pay-for-performance sensitivity. Presented at Tuck-JFE Contemporary Corporate Governance Conference.

Hirshleifer, D. (1993). Managerial reputation and corporate investment decisions. *Financial Management, 22*(2), 145- 160.

Holmstrom, B. (1979). Moral hazard and observability. *Bell Journal of Economics, 13,* 234-340.

Hotchkiss, E., & Mooradian, R. (1998). Acquisitions as a means of restructuring firms in Chapter 11. *Journal of Financial Intermediation, 7,* 240-262.

Hotchkiss, E., John, K., Mooradian, R., & Thorburn, K. (2008). Bankruptcy and the resolution of financial distress. In E. Eckbo (Ed.), *Handbook of corporate finance: Empirical corporate finance,* Vol. 2. The Netherlands: Elsevier.

Hubbard, R. G. (2005). Pay without performance: A market equilibrium critique. *Journal of Corporate Law, 30,* 717-720.

Jacoby, S. M. (1999). Are career jobs headed for extinction? *California Management Review,* 42(1), 123-145.

Jackall, R. (1988). *Moral mazes: The world of corporate managers*. New York: Oxford University Press.

Jarrell, G., Brickley, J., & Netter, J. (1988). The market for corporate control: The empirical evidence since 1980. *Journal of Economic Perspectives, 2,* 639-658.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review, 76*, 323-329.

Jensen, M. C. (1988). The takeover controversy: Analysis and evidence. In J. C. Coffee, L. Lowenstein, & S. Rose-Ackerman (Eds.), *Knights, raiders, and targets: The impact of the hostile takeover* (pp. 315-354). New York: Oxford University Press.

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.

Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top management incentives. *Journal of Political Economy, 98*(2), 225-264.

Jensen, M. C., Murphy, K. J., & Wruck. (2004). Remuneration: Where we've been, how we got to here, what are the problems, and how to fix them. Harvard Business School, Working Paper.

Jensen, M., & Ruback, R. (1983). The market for corporate control: The scientific evidence. *Journal of Financial Economics, 11*, 5-50.

Jian, M., & Lee, K. W. (2011). Does CEO reputation matter for capital investments? *Journal of Corporate Finance, 17*, 929-946.

Kalay, A., Singhal, R., & Tashjian, E. (2007). Is Chapter 11 costly? *Journal of Financial Economics, 84*, 772-796.

Kaplan, S. N., Klebanov, M. M., & Sorenson, M. (2012). Which CEO characteristics and abilities matter? *Journal of Finance, 67*(3), 973-1007.

Kaplan, S. N., & Minton, B. A. (2012). How has CEO turnover changed? *International Review of Finance, 12*(1), 57-87.

Kaplan, S., & Reishus, D. (1990). Outside directorships and corporate performance. *Journal of Financial Economics, 27*, 389-410.

Khanna, N., & Poulsen, A. B. (1995). Managers of financial distressed firms: Villains or scapegoats? *Journal of Finance, 50*(3), 919-939.

Khurana, R. (2002). The curse of the superstar CEO. *Harvard Business Review, 80*(9), 60-66.

Kidder, D. L., & Buchholtz, A. K. (2002). Can excess bring success? CEO compensation and the psychological contract. *Human Resource Management Review, 12*, 599-617.

Knoeber, C. (1986). Golden parachutes, shark repellents, and hostile takeovers. *American Economic Review, 76,* 155-167.

Korobkin, D. R. (1993). The unwarranted case against corporate reorganization: A reply to Bradley and Rosenzweig. *Iowa Law Review, 78,* 669-720.

Lambert, R., & Larcker, D. (1985). Golden parachutes, executive decision making, and shareholder wealth. *Journal of Accounting and Economics, 7,* 179-204.

Lang, L. H., & Stulz, R. M. (1992). Contagion and competitive intra-industry effects of bankruptcy announcements. *Journal of Financial Economics, 32,* 45-60.

Larcker, D. F., Ormazabal, G., & Taylor, D. J. (2011). The market reaction to corporate governance regulation. *Journal of Financial Economics, 101,* 431-448.

Lefanowicz, C. E., Robinson, J. R., & Smith, R. (2000). Golden parachutes and managerial incentives in corporate acquisitions: Evidence from the 1980s and 1990s. *Journal of Corporate Finance, 6,* 215-239.

Leverty, J. T., Grace, M. F. (2012). Dupes or incompetents? An examination of management's impact on firm distress. *Journal of Risk & Insurance, 79*(3), 751-783.

Levy, F. S., & Temin, P. (2007). Inequality and institutions in 20th Century America. MIT, Working Paper.

Li, Y. (2013). A nonlinear wealth transfer from shareholders to creditors around Chapter 11 filing. *Journal of Financial Economics, 107,* 183-198.

Lichtenstein, M. J. (2006, Fall). Bankruptcy courts' treatment of severance agreements providing for continued payments to former employees. *Business Law Brief,* 28-30.

LoPucki, L. M., & Doherty, J. W. (2007). Bankruptcy fire sales. *Michigan Law Review, 106,* 1-59.

Lublin, J. S. (2005, Sept. 19). The serial CEO: Experienced chief executives are in demand as companies look outside for leadership. *Wall Street Journal,* B1.

Lubben, S. J. (2007). Business liquidation. *American Bankruptcy Law Journal, 81*(1), 65-85.

Lubben, S. J. (2012). What we know about Chapter 11 cost is wrong. *Fordham Journal of Corporate & Financial Law, 17*(1), 141-187.

Machlin, J., Choe, C., & Miles, J. (1993). The effects of golden parachutes on takeover activity. *Journal of Law & Economics, 36*, 861-876.

Manne, H. (1965). Mergers and the market for corporate control. *Journal of Political Economy, 75,* 110-120.

Martin, B. (2005). Managers after the era of organizational restructuring: Towards a second managerial revolution? *Work, Employment, and Society, 19*(4), 747-760.

Martin, B., & Wajcman, J. (2004). Markets, contingency, and preferences: Contemporary managers' narrative identities. *Sociological Review, 52*(2), 240-264.

Maskara, P. K., Maskara, A., & Aggarwal, R. (2013). Corporate governance: Known, unknown, and the wrongly known. *Journal of Business and Economics, 4*(2).

Matsumara, E., & Shin, J. (2005). Corporate governance reform and CEO compensation: Intended and unintended consequences. *Journal of Business Ethics, 62*, 101-113.

Meyer, M. W. (2001). What happened to middle management? In I. Berg & A. Kalleberg (Eds.), *Sourcebook of labor markets: Evolving structure and practices*, (pp. 449-466). New York: Kluwer Academic.

Milkovich, G. T., & Newman, J. M. (2005). *Compensation*. Boston: McGraw Hill.

Mincer, J. (1974). *Schooling, experience, and earnings*. New York: Columbia University.

Mishel, L., & Sabadish, N. (2012). CEO pay and the top 1%: How executive compensation and financial-sector pay have fueled income inequality. Economic Policy Institute, Issue Brief No. 331.

Mogavero, D., & Toyne, M. (1995). The impact of golden parachutes on stock returns: A re-examination of the evidence. *Quarterly Journal of Business and Economics, 34*, 30-38.

Mortensen, D. T., & Pissarides, C. A. (1999). New developments in models of search in the labor market. In O. Ashenfelter & D. Card (Eds.), *Handbook of labor economics*, Vol. 3 (pp. 2567-2627). Amsterdam: Elsevier Science.

Murphy, K., & Zabojnik, J. (2004). CEO pay and appointments: A market-based explanation for recent trends. *American Economic Review, 94*, 192-196.

Murphy, K., & Zabojnik, J. (2007). Managerial capital and the market for CEOs. Queen's University Department of Economics, Working Paper No. 1110.

Nichols, D., & Subramaniam, C. (2001). Executive compensation: Excessive or equitable? *Journal of Business Ethics, 29,* 339-351.

Nohel, T., & Todd, S. (2005). Compensation for managers with career concerns. *Journal of Corporate Finance, 11*, 229-251.

Pulvino, T. C. (1998). Do asset fire sales exist? An empirical investigation of commercial aircraft transactions. *Journal of Finance, 53*(3), 939-978.

Pulvino, T. C. (1999). Effects of bankruptcy court protection asset sales. *Journal of Financial Economics, 52*, 151-186.

Rajgopal, S., & Shevlin, T. (2002). Empirical evidence on the relation between stock option compensation and risk taking. *Journal of Accounting & Economics, 33*, 145-171.

Raykin, A. (2012). Section 363 sales: Mooting due process? *Emory Bankruptcy Developments Journal*, 29, 91-144.

Rodgers, W., & Gago, S. (2003). A model capturing ethics and executive compensation. *Journal of Business Ethics, 48*, 189-202.

Rogoff, A., Sussman, R., & Cohen, J. (2006). Struggling with executive compensation incentives in Chapter 11 under the new code. *2006 Norton Annual Survey of Bankruptcy Law*, 385-412.

Rosen, S. (1981). The economics of superstars. *American Economic Review, 71*(5), 845-858.

Sanders, W. G. (2001). Behavioral responses of CEOs to stock ownership and stock option pay. *Academy of Management Journal, 44*, 477-492.

Sanders, W. G., & Hambrick, D. C. (2007). Swinging for the fences: The effects of CEO stock options on company risk taking and performance. *Academy of Management Journal, 50*(5), 1055-1078.

Scharfstein, D. S., & Stein, J. C. (1990). Herd behavior and investment. *American Economic Review, 80*(3), 465-479.

Shleifer, A., & Vishny, R. W. (1989). Management entrenchment: The case of manager-specific investments. *Journal of Financial Economics, 25*(1), 123-140.

Shleifer, A., & Vishny, R. W. (1992). Liquidation values and debt capacity: A market equilibrium approach. *Journal of Finance, 47*, 1343-1365.

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Finance, 52*, 737-783.

Singh, H., & Harianto, F. (1989). Management-board relationships, takeover risk, and the adoption of golden parachutes. *Academy of Management Journal, 32*, 7-24.

Small, K., Smith, J., & Yildirim, S. (2007). Ownership structure and golden parachutes: Evidence of credible commitment or incentive alignment? *Journal of Economics and Finance, 31*, 368-382.

Smith, C., & Mayers, D. (1982). On the corporate demand for insurance. *Journal of Business, 55*, 281-296.

Smith, C., & Stulz, R. (1985). The determinants of firms' hedging policies. *Journal of Financial and Quantitative Analysis, 20*, 391-405.

Sokolyk, T. (2011). The effects of antitakeover provisions on acquisition targets. *Journal of Corporate Finance, 17*, 612-627.

Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics, 87*, 355-374.

Stromberg, P. (2000). Conflicts of interest and market illiquidity in bankruptcy auctions: Theory and tests. *Journal of Finance, 55*(6), 2641-2692.

Subramaniam, C. (2001). Are golden parachutes an optimal contracting response or evidence of managerial entrenchment? Evidence from successful takeovers. *Journal of Business Finance and Accounting, 28*, 1-33.

Tervio, M. (2008). The difference that CEOs make: An assignment model approach. *American Economic Review, 98*, 642-668.

Wade, J. C., O'Reilly, C., & Chandratat, I. (1990). Golden parachutes: CEOs and the exercise of social influence. *Administrative Science Quarterly, 35*, 587-603.

Wajcman, J., & Martin, B. (2001). My company or my career: Managerial achievement and loyalty. *British Journal of Sociology, 52*(4), 559-578.

Walsh, J. P. (1988). Top management turnover following mergers and acquisitions. *Strategic Management Journal, 9*(2), 173-183.

Walsh, J. P., & Seward, J. K. (1990). On the efficiency of internal and external corporate control mechanisms. *Academy of Management Review, 15*, 421-458.

Wang, H., Davidson, W., & Wang, X. (2010). The Sarbanes-Oxley Act and CEO tenure, turnover, and risk aversion. *Quarterly Review of Economics & Finance*, 50(3), 367-376.

Warren, E., & Westbrook, J. L. (2009). The success of Chapter 11: A challenge to the critics. *Michigan Law Review, 107*, 603-641.

Wright, P., Kroll, M., Lado, A., & Van Ness, B. (2002). The structure of ownership and corporate acquisition strategies. *Strategic Management Journal, 23*, 41-55.

Yermack, D. (1997). Good timing: CEO stock option awards and company news announcements. *Journal of Finance, 52*(2), 449-476.

Yermack, D. (2006). Golden handshakes: Separation pay for retired and dismissed CEOs. *Journal of Accounting and Economics, 41*, 237-256.

Zajac, E. J., & Westphal, J. D. (1994). The costs and benefits of managerial incentives and monitoring in large U.S. corporations: When is more not better? *Strategic Management Journal, 15,* 121-142.

Zajac, E. J., & Westphal, J. D. (1995). Substance and symbolism in CEOs' long-term incentive plans. *Administrative Science Quarterly, 39,* 367-390.

Zhang, G. (2010). Emerging from Chapter 11 bankruptcy: Is it good news or bad news for industry competitors? *Financial Management, 39*, 1719-1742.

Wei, S. J. (2000). Local corruption and global capital flows. *Brookings Papers on Economic Activity, 2,* 303-354.

Wei, S. J. (2001). Domestic crony capitalism and international fickle capital: Is there a connection? *International Finance, 4*(1), 15-45.