PRINCIPALS, AGENTS AND INCOMPLETE CONTRACTS: ARE SURRENDER OF
CONTROL AND RENEGOTIATION THE SOLUTION?

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Research Question/Issue: The extent to which managerial and shareholder rewards are
determined by incompleteness of contracts has been extensively studied (Hart, 1995a). In
this paper, we survey literature on the relationship between managers and shareholders
and provide a perspective on control of companies. Particularly, we review the two main
strands of research, the principal-agent model and the incomplete contracting framework,
each of which emphasizes different assumptions.

Research Findings/Insights: Companies can be regarded as nexuses with contractual
relationships between management and shareholders (Jensen and Meckling, 1976).
Incomplete contracts affect the stability of the relationship between managers and
shareholders (Oyer, 2004; Gillan, Hartzell, and Parrino, 2009). Discretion for
renegotiation of such contracts can be desirable, if stability is improved (Schwab and
Thomas, 2006; Roberts and Sufi, 2009). Discretion for renegotiation of contracts between
management and shareholders is increased in public companies when shareholders
surrender control over management to boards (Blair and Stout, 1999; Peters and Wagner, 2014).

**Theoretical/Academic Implications:** Our analysis indicates that corporate stability, renegotiation of agreements and control rights over assets are not systematically captured by principal-agent models. We suggest that renegotiation and the surrender of control offer viable avenues for future research.

**Practitioner/Policy Implications:** We discuss potential solutions relating to the potential for renegotiation of contracts and the surrender of control as a credible commitment to managers which frees them to invest in relationship-specific investments on behalf of shareholders.

*JEL:* G30; G34; J33; L14; M52

Keywords: Corporate Governance; M&A; Agency Theory; Contracting Theory; Executive Compensation; Share Options Policy

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INTRODUCTION

The principal agent model and the incomplete contracting framework provide two interpretations of the relationship between the shareholders and the managers of a listed company. The two models are in part complementary. Incomplete contracts are a key aspect of the principal agent model with respect to the relationship between managers and shareholders. Imperfect information and asymmetric information give rise to incomplete contracts. The separation of ownership and control in modern corporations in conjunction with incomplete contracts gives rise to moral hazard with respect to managerial incentive and reward systems. The overall outcome of a combined framework is the optimal contracting approach usually enacted in the form of incentives based rewards.

However, as is demonstrated by media outrage at regular incidences of compensation which is considered to be excessive and governance scandals at great cost to shareholders, governments and society as a whole, such an approach is deeply flawed. Considerable, academic attention has focused on the operation of the two models, usually in isolation. The purpose of this review is to identify the main outcomes from incomplete contracts in the manager-shareholder relationship and to review proposed solutions to the deficiencies of the existing system. Taking a perspective which emphasizes the value of team production and stability of human capital, we conclude by suggesting solutions which incorporate surrender of control by shareholders to managers, i.e. surrendering the role of principal to agents, and renegotiation on contracts to enhance stability of human capital. Further research on how these solutions affect decision-making may offer valuable contributions to the development of the understanding of the combined framework.
WHAT SHAPES THE RELATIONSHIP BETWEEN MANAGERS AND SHAREHOLDERS?

The Principal-Agent Framework

The principal-agent model assumes that the outcome of a typical project is risky (Holmström, 1979, 1982; Lazear and Rosen, 1981). A principal wants to hire an agent in order to pursue the project. The model asks the question as to who should bear the risk of the outcome. It concludes that risk should be borne by the party who is better diversified. Assuming that shareholders of public companies are the principal and managers are the agent, diversified shareholders are better protected against risk, as they generally have a small proportion of their wealth in one particular company. Managers, on the other hand, derive their wealth from their labor. Considering that shareholders can absorb more risk, the model makes the prediction that shareholders should bear the risk while managers should receive a fixed part of the return, i.e. fixed compensation.

In the health insurance industry, there is evidence of another factor affecting optimal risk-sharing in a principal-agent relationship (Arrow, 1963). In this case, agents are insurance companies and principals are customers i.e. patients. The risky outcome is the well-being of the insured customer. Diversified insurance companies can absorb risk and it is they who should bear the risk of illness of a customer. The customer pays a fixed fee to the insurance company and gets full indemnity in case of poor health. Arrow (1963) argues that this is optimal if the illness of the customer is solely caused by external circumstances. If fully insured customers exacerbate the risk of illness, say, through an unhealthy lifestyle (from which they derive utility), they would get treatment for self-inflicted risk at the cost of the insurance company. This problem is known as moral hazard. The insurance company would have to pay out the higher indemnity and compensate the customer for self-inflicted harm. In an optimal world, the insurance company would like to have information about the lifestyle
of their customers. A contract could then rule out indemnity for unhealthy lifestyles and only cover for truly external effects on health. However, if we assume that lifestyle cannot be observed, the insurance company would like to induce the customer to live a healthier lifestyle through a contract based on the outcome. One solution would be a type of contract that increases the costs for the patient in the case of illness. The patient would share in the risk of the outcome. Therefore, they bear some risk, whether caused by their own actions or by external factors. As can be seen, even though optimal risk sharing requires the insurance company to bear risk, asymmetric information between the customer and the insurance company shifts some risk towards the customer.

Similarly, asymmetric information between managers and shareholders is considered to be the reason why managers should bear some of the risk of outcomes (Myers and Majluf, 1984, p. 196). In 1776, Adam Smith (1937) famously drew a parallel between the master-servant and shareholder-manager relationship: “Like the stewards of a rich man, [the directors of public companies] are apt to consider attention to small matters as not for their master’s honour, and very easily give themselves a dispensation from having it”. Hart and Holmström (1986) argue that when shareholders can observe managerial actions they can design a contract that specifies managerial actions under every contingency. However, as shareholders cannot observe actions, they have to base solutions on the outcome. One solution is that shareholders tie managerial pay to an increase in shareholder value. Pay-for-performance ensures that managers are bonded to shareholders and take actions that are in the interest of shareholders.

Jensen and Meckling (1976) argue that monitoring is a substitute for managerial incentive pay but it is costly. Considering that shares in public companies are typically widely held, Berle and Means (1932) conclude that atomistic shareholders have little incentive to observe managerial actions (monitoring). The free-rider problem concludes that
no shareholder will monitor managers (Baumol, 1952). Asymmetric information also prevents monitoring of financial intermediaries such as stock analysts, auditors, and other experts that estimate project values. In the US, the Sarbanes-Oxley Act in 2002 required companies to increase the amount of disclosed information, but also allowed them to opt out of publishing information entirely if they were cross-listed on an international exchange. Some firms stopped publishing standardized information, but the shares continued to be traded (Litvak, 2007). Engel, Hayes and Wang (2007) report that those firms that ‘went dark’ after the passage of the Sarbanes-Oxley Act exhibited a decline in stock prices of 10% on average. This is consistent with the view that the increased information asymmetry between managers and shareholders negatively affects firm value.

One implication of the principal-agent model is that shareholders make use of pay for performance incentives to make managers bear the outcomes resulting from their actions. Jensen and Murphy (1990) famously find that for a $1000 increase in company value, CEO wealth only increases by $3.25. A finding which was interpreted as “not very much” and which was subsequently used to justify the grant of company stock and stock options to executives over the following decades. However, Hall and Liebman (1998) argue that this was not a rejection of the principal-agent model, as a $3.25 increase in managerial wealth could be a meaningful share in the profits when compared to the remaining wealth of a manager. Recent studies have found that CEO compensation in public companies is more closely tied to industry and market developments than company performance (see for example Bebchuk and Fried, 2004; Rajgopal, Shevlin, and Zamora, 2006; Kaplan and Minton, 2012; Cremers and Grinstein, 2013). Thus, according to these authors, CEOs are compensated for luck rather than performance (or ability, or responsibility). The loose tie between pay and abnormal performance is inconsistent with the view that asymmetric information affects optimal risk-sharing between managers and shareholders. Apart from
effects of performance on pay, effects on management turnover have also been researched. Murphy (1999) suggests a modest correlation between forced turnover and firm performance. Other studies find that CEO turnover is not related to deviations from general industry-wide conditions (see for example Morck, Shleifer, and Vishny, 1990; Huson, Parrino, and Starks, 2001; Kaplan and Minton, 2012; Jenter and Kanaan, 2006). Tying managerial incentives through pay or turnover to their own returns seems either not to be a high priority for shareholders or not accomplished.

Another implication of the principal-agent model is that shareholders and managers write feasible contracts for managers that tie managers’ interests to shareholders and vice versa. However, shareholders have few contractual claims against managers. For example, shareholders have no contractual claim on dividends. Preferred dividends with contractual claims similar to interest payments are rare (Hart, 1986). Furthermore, many CEO employment contracts are incomprehensive (Schwab and Thomas, 2006 and Gillan, Hartzell, and Parrino, 2009). Only one half of CEOs in an S&P500 sample in the Gillan, Hartzell, and Parrino (2009) study were found to have employment contracts in place. In a larger sample of S&P1500 companies (Schwab and Thomas, 2006), two-thirds of all the CEOs were found to have employment contracts in place. Furthermore, in both samples, the contracts that are in place usually state the entitlements of CEOs, such as severance pay and perks, rather than their duties. When sales are volatile and the future of a company is more uncertain, CEOs have employment contracts in place to protect their rewards (Gillan, Hartzell, and Parrino, 2009). This is consistent with the view that employment contracts do have some degree of enforceability and tighten CEOs’ claims against firms but not vice versa.

The Incomplete Contracting Framework
The theory behind the incomplete contracting framework acknowledges that neither shareholders nor managers can write every agreement they would like to make. Contracts are inherently incomplete. The reason for the imperfection is uncertainty about the future (Hart, 1995a). Contracting parties cannot foresee every possible contingency. For example, an employment contract of shareholders with a CEO cannot foresee every single growth opportunity and stipulate contingent actions. In incomplete contracting models, uncertainty plays a more central role than in the principal-agent model as the contingencies themselves are unknown.

Observability of actions or outcomes is a minor concern in incomplete contracting models. The assumption of asymmetric information between managers and shareholders can be incorporated, but is usually relaxed (see e.g. Hart, 1995b) as both groups can observe actions and outcomes. As outcomes are highly uncertain, contingent clauses in contracts are unlikely to be triggered by future events. Stylized theoretical models such as that of Hart (1995a) assume that there are no contracts in place between two economic agents. Actions, as well as outcomes, are determined by other self-enforcing arrangements. Such arrangements are at the focus of much attention. The concept of implicit contracts is used to analyze employment agreements between firms and workers, particularly in studies of the economics of labor markets (see Azariadis, 1975; Bull, 1987; MacLeod, 1989). Hart (2001) analyses debt and equity as financial contracts which substitute for impossible contracts. Implicit contracts give holders control rights over actions and cash flow rights over outcomes (Bull, 1987; Klein, 1996). When there are written agreements, all rights that are unallocated after contractual claims are enforced are known as residual rights (Easterbrook and Fischel, 1983; Hart, 1995a). Easterbrook and Fischel (1983) consider shareholders as residual claimants, arguing that all other stakeholders have enforceable contracts in place. Suppliers and
customers have purchase agreements, employees and managers have employment agreements, and lenders have loan agreements with a pre-determined interest.

This leads to the question as to why and how residual rights over firms should be allocated. If all stakeholders other than shareholders have contracts in place, only the latter need to be protected. Hart (1995a) models a stylized situation with two residual claimants, outlined here with a slight simplification. There are two assets $a_1$ and $a_2$ and two team members operating them, $M_1$ and $M_2$. They work on a project that requires inputs called ‘widgets’ from both contracting parties at time $t_1$. The final product will be sold in the market at time $t_2$. A contracting party will only make an investment in this relationship when sufficient return is anticipated. However, uncertainty about the outcome is high. It is therefore impossible to agree on a particular profit-sharing rule. Before we analyze the solution, the situation is applied to the management-shareholder relationship. Alchian and Demsetz (1972) devise a model in which financial capital and human capital are complementary investments and both holders are residual claimants who generate quasi-rents in a final product. Human capital is operated by managers while financial capital is operated by shareholders. Only when both groups provide high inputs, are quasi-rents generated (i.e. rents above what each team member could achieve on their own, see Besanko, Dranove, Shanley, and Schaefer, 2009).

A determinant for making decisions about allocation of residual control rights is the specificity of the investments with respect to the project. In stylized incomplete contracting models, investments are entirely specific to a relationship and cannot be employed elsewhere (Hart, 1995a). If investments are entirely specific to the relationship, the managers should be more reluctant to invest in the joint product. They are at risk of being subject to what is known as the “hold-up” problem (Besanko, Dranove, Shanley, and Schaefer, 2009). A supplier of car parts might be willing to produce on better terms and conditions for a car
assembler if the car parts can be used elsewhere in the case that the relationship breaks down. The existence of an alternative use (the opportunity cost) means the supplier is exposed to reduced risk as they can switch to the alternative use if the returns fall sufficiently from the primary use. However, the car parts supplier might also withdraw the resource for other reasons. The alternative use gives rise to bargaining power. For example, the supplier may wish to renegotiate existing contracts. This might be achieved by threatening to withdraw car parts. The supplier would then make use of outside opportunities. Benmelech and Bergman (2011) find that the terms of funding of companies in the airline industry are better when assets can be sold at a lower discount in case of liquidation. Capital provided by shareholders is generally considered to be specific (see for example Hart, 2001; Garmaise, 2011) while it is more difficult to discern whether human capital provided by managers is a relationship-specific investment. According to Parrino (1997) and Cremers and Grinstein (2013), different industries exhibit differences in the transferability of managerial human capital within industries. They report for the airline industry that half of all successor CEOs are hired from outside firms while virtually all CEOs in construction companies are hired from within firms. Kaplan and Minton (2012) report that in recent CEO successions, more CEOs were hired from outside the firm than from inside, indicating that human capital has become more general and transferable. The question remains as to whether CEO human capital is specific and CEOs can therefore be ‘held up’ by shareholders.

**Market Discipline vs Outside Opportunities**

In principal-agent models, markets are pivotal in disciplining managers (Manne 1965; Jensen and Meckling, 1976; Fama, 1980; Hart, 1983; Jensen and Ruback, 1983; Morck, Shleifer, and Vishny, 1988; Bebchuk and Fried, 2005; Fos, 2007). The market for corporate control ensures that managers do not waste company resources. Manne (1965) argues that
takeovers and the seizure of assets by banks fulfil a similar role. Both activities ensure that managers use resources efficiently. Active investors, acquirers or banks, will exchange incumbent management when they use resources inefficiently (Hart, 1983; Bratton and Geo, 2006; Brav, Jiang, Partnoy, and Thomas, 2008; Bebchuk, 2013). Fos (2007) finds that proxy contests, in which large shareholders attempt to accumulate sufficient votes to influence nominations of board members, play a disciplinary role for company boards. And efficient financial markets ensure that poor management performance is reflected in the stock price, as it becomes less costly to buy shares in the company and oust incumbent management (Manne, 1965; Scharfstein, 1988).

However, the evidence for a disciplinary role of stock markets is poor. Mitchell and Mulherin (1996) report that takeovers (1) affect many companies at once rather than single underperformers and (2) come in waves during market upturns. As takeovers are demand driven, supply of poor performers is not the main driver for takeovers. Inducing discipline on poorly performing management cannot explain the vast majority of takeovers. Further evidence against the disciplinary role of markets for corporate control is that the markets are not cleared (companies which should theoretically be taken over are not acquired). In cleared markets, shares in target companies would be sold as long as there is any positive value. Ruback (1983) and Jarrell, Brickley, and Netter (1988) show that takeover premiums for target shareholders are typically between 20% and 30% (depending on whether an acquisition is a merger or a tender offer) and have increased over the period between 1977 and 2005 (Raman, Shivakumar and Tamayo, 2013). Premiums indicate inertia in changes of corporate control. If takeovers were meant to discipline managers, evidence would suggest that they are an inefficient tool.

Similarly, competitive product markets are supposed to ensure that managers are employing company resources efficiently. In the case of inefficient use, the company will be
competed out of business by rivals in the product market. External markets therefore take on a disciplinary role in constraining wasteful managerial behavior. However, Scharfstein (1988) does not find evidence that product markets discipline managers. He argues that managers should be compensated through more incentives when competition is higher but finds the opposite to be the case. Aggarwal and Samwick (1999) suggest that this is consistent with the principal-agent model, if one considers the context that shareholders want to soften incentives for managers when the product market is highly competitive. In this view, incentive pay and product markets are substitutes.

In incomplete contracting models, markets are side-lined as outside opportunities. For example, if CEOs with similar talent become available at a cheaper cost, this will not lead to a replacement of the incumbent CEO, but a renegotiation of their terms. The relationship between managers and shareholders is affected indirectly. Firm-specific investments such as capital and human capital are specific to a relationship. Incomplete contracting theories therefore put the relationship between shareholders and managers at the center. Markets, such as the labor market, the product market and the market for corporate control, are sidelined. Such markets are regarded as outside opportunities, stressing that they affect the relationship, but are not central to it. In incomplete contracting models, if markets influence the relationship, they can be deliberately hampered, in that managers or shareholders incur costs when exiting the relationship. Costly barriers can be efficient. The efficiency can be measured by the degree to which such barriers encourage relationship-specific investments, *ex ante*.

Company assets are typically sold off in liquidation at a discount (Hart and Moore, 1995). This cost serves as a commitment by debt holders, for example, not to force a liquidation of a healthy company (Hart and Moore, 1994; Hart, 1995a). The cost of liquidation ties the hands of creditors from enforcing liquidation. This in turn gives a credible
commitment to managers that their complementary human capital investments will stay in place longer to generate quasi-rents. Deliberately hampered markets for corporate control also provide an explanation as to why markets for corporate control are not cleared. Both managers and shareholders agree over additional switching costs. Managers typically negotiate change-of-control clauses that pay out golden parachutes in the case of a takeover-initiated turnover (Lambert and Larcker, 1985; Lefanowicz, Robinson, and Smith, 2000; Schwab and Thomas, 2006; Yermack, 2006a). Other types of board-initiated management turnover that is not related to a change in shareholder structure are also followed by severance pay (Schwab and Thomas, 2006; Yermack, 2006a). Labor markets are both opportunities and threats in the relationship between boards and CEOs. They are job options for CEOs and pools for the CEOs’ successors for boards (Oyer, 2004; Oyer and Schaefer, 2005; Parrino, 1997; Cremers and Grinstein, 2013).

**Teams vs Hierarchies**

In principal-agent models, shareholders, as principals, employ an agent (Jensen and Meckling, 1976; Holmström and i Costa, 1986). The principal designs a contract with an agent that aligns managers’ interests with their own and assures that the agent accepts it (Holmström, 1986). The relationship between shareholders and managers is therefore hierarchical. Alchian and Demsetz (1972) develop a resource-based view, under which capital and human capital are complementary investments which generate quasi-rents. Schmidt (2003) and Hellmann (2006) argue that it is the inability to write perfect contracts rather than information asymmetry that describes the relationship between two specific types of financiers and managers, namely venture capitalists and entrepreneurs. Unlike public stock holders, venture capitalists have less of a coordination problem, as their stakes are more concentrated than those of shareholders of public companies. Schmidt (2003) and Hellmann
(2006) regard the relationship between venture capitalists and entrepreneurs as a double moral hazard. Blair and Stout (1999) and Gillan, Hartzell, and Parrino (2009) also argue that relationships between public firms and CEOs are shaped by double moral hazards. A firm might want to renegotiate contracts with a CEO once a CEO has made firm-specific investments. Therefore, the CEO might want to ensure compensation through a contract. Once a contract is agreed upon, the CEO might act opportunistically by trying to trigger damage compensation. Blair and Stout (1999) model the relationship in public companies differently. Public companies are coordinated not through shareholders, but through boards. Boards are independent mediators for conflicts between managers and shareholders as they are virtually insulated from shareholders. This theory can explain why boards are a common feature of companies. Indeed, even US companies, where law does not require them, usually have boards.

WHAT ARE THE DEVIATIONS FROM THE OPTIMAL OUTCOME?

The Principal-Agent Framework

The different frameworks reveal common problems in the relationship. And some unique problems can be identified from the assumptions and implications of each framework. Akerlof (1970) argues that the unobservability of the quality of products can lead to a market for “lemons” in which only poor quality goods are traded. Similarly, unobservability of managerial talent can lead to a market for poor quality management (Morck, Shleifer, and Vishny, 1990). Alternatively, Oyer (2004) argues that equity-based compensation attracts managers with an optimistic opinion about the granting firm.

Lipton (1979) and Stein (1989) consider differences between the qualities of different types of investors. They argue that some investors are more short-termist than others. Short-
termism is proxied by the holding period of shares. One reason for short holding periods is a low degree of resilience of shareholders’ assets to market downturns. Stability of the asset held requires that the wealth of the investor is resilient to external shocks. Lerner and Schoar (2004) and Lerner, Schoar and Wongsunwai (2007) argue that some investors are less qualified to invest in private companies because they are more prone to external shocks. They show that particular classes of investment such as endowments and pension funds earn superior returns (which they trace back to the superior information of such investors).

The principal-agent model also predicts that actions are not observable once a manager is hired and a shareholder has invested. To summarize the resulting problems in more depth, the principal-agent literature distinguishes between the problems of managers a) exercising less than optimal effort, b) pursuing projects that yield private benefit but no shareholder benefit and c) stealing company funds. Jensen and Meckling (1976), Holmström (1986) and Jensen and Murphy (1990) argue that non-owner managers are induced to make less than optimal effort, as the return of every unit of effort invested has to be shared with investors. However, effort is difficult to measure and empirical evidence for this assertion is scarce.

Grossman and Hart (1988) argue that managers derive a benefit from running a company and call this a private benefit of control. Alleged indulgence in private benefits is also difficult to measure, because the benefits are not necessarily pecuniary. Dyck and Zingales (2001) and Barclay and Holderness (1989) argue that the premium for controlling blocks of shareholdings indicate the value of private benefits of control, as the premiums are not shared with minority investors. Having a larger value than dispersed stock, blocks must have an additional value attached which is known as the control premium. Control premiums are 20% on average for block trades between 1978 and 1982. Shleifer and Vishny (1989) find further evidence of private benefits of control. They argue that managers make investments
that make it hard to replace them. They find anecdotal evidence that, for instance, managers negotiate loan contracts with banks that become payable upon the departure of the incumbent CEO.

By having control, holders may divert funds into projects that yield benefits to them, but not to shareholders. Jensen (1986), Harford (1999), and Titman, Wei, and Xie (2004) find evidence that abundance of company funds (‘free cash flows’, see Jensen, 1986) often leads to inefficient investments. The company invests in projects that do not generate a return above a required return but increase company size, to the sole interest of the manager. Morck, Shleifer, and Vishny (1990) and Lang, Stulz and Walking (1991) find that companies with free cash flows make value-destroying acquisitions. Shareholders are therefore concerned about an excessive amount of free cash flows at the discretion of managers. In 2012, the investor Einhorn felt that insufficient cash was being returned to Apple shareholders and was therefore threatening to sue Apple, which had more than $100bn in cash (Bebchuk, 2013).¹

Further evidence of private benefits of control is that when a company is sold, buyers have to compensate a manager for relinquishing control over the company. This is one explanation for the prevalence of change-in-control agreements. Schwab and Thomas (2006) point out that the agreements stipulate rights for a manager in the case where a company is taken over, such as severance pay for departing managers. Note that the protection of relationship-specific investments and private benefits of control are two different explanations for managerial control. Bebchuk and Fried (2003) argue that managers of the largest US companies entrench in companies, thus increasing the costs of shareholder influence over their compensation and tenure through making exercising control more costly. The authors identify six common provisions that increase entrenchment and decrease shareholder returns, which will be discussed in more detail in section 3.

Finally, executives can expropriate shareholder funds. Managers increase their own salaries after less intrusive state legislation (Bertrand and Mullainathan, 1999). It was found that in the early 2000s, some executive managers of the largest companies were ‘backdating’ exercise prices of stock options to lower exercise prices, based on share prices from previous periods (Heron and Lie 2007; Narayanan and Schipani, 2007; Bizjak, Lemmon, and Whitby, 2009). A stock option gives a manager the right, but not the obligation, to buy company stock at a particular exercise price. Hall and Murphy (2003) point out that exercise prices are usually the stock price upon granting date. As the stock price rises, the intrinsic value of the stock option rises. At the beginning of the millennium, some executives were granted stock options with exercise prices based on stock prices from earlier dates than the grant date when stock prices were lower (known as the ‘backdating scandal’).²

Bebchuk and Fried (2003) also criticize unjustified “windfalls” from stock options during market upturns. Himmelberg and Hubbard (2000) and Oyer (2004) argue that, as stock prices rise with bull markets, stock option compensation leads to payouts that are not related to managerial outperformance. Furthermore, Chidambaran and Prabhal (2003) show that in bear markets when stock options lose their value, exercise prices are frequently lowered (‘repriced’) and stock option values therefore restored. Bebchuk and Fried (2004) generalize the observations related to excessive payouts and call equity compensation “stealth compensation”. Stock option compensation in that view is not transparent to the public and therefore a means for managers to extract company funds without causing outrage from shareholders. Yermack (2006b) shows that managers also frequently receive non-financial perks such as golf club memberships, company jets or expensive office space. He shows that companies vary in their disclosure of such perks. Some perks are written down in

employment contracts upon hiring a CEO (Schwab and Thomas, 2006). Also severance agreements that are negotiated upon hiring are considered as a means of extracting funds from shareholders. Inderst and Mueller (2005, 2010) argue that it is dismissed executives in particular who receive severance pay. They argue that CEOs are thus financially encouraged to publish bad news or depart from a company after poor performance. However, Hartzell, Ofek and Yermack (2004) argue that severance pay is necessary to compensate a dismissed CEO in the course of an acquisition, for the loss of the private benefit of control.

**The Incomplete Contracting Framework**

Williamson (1979) reports a stylized example of the renegotiation of contracts in a supplier-customer relationship between Fisher Body and General Motors. The two companies had an exclusive contract in place that required General Motors to pay a certain percentage margin on top of the costs incurred for car bodies supplied by Fisher Body. However, demand for cars and hence car-bodies increased to an unexpected level. Demand and therefore prices for metal increased for Fisher Body which had to be covered by General Motors as part of its contractual obligations in the relationship. Fisher Body resisted curbing costs through, for example, relocating closer to General Motors (as that would have been a specific investment and would have been subject to hold-up by General Motors). Therefore, prices for General Motors rose to unexpected levels. To get costs under control, General Motors eventually acquired Fisher Body. A similar solution to the hold-up problem might be considered as a mechanism to resolve the manager-shareholder relationship. However, this type of solution is not feasible in manager-shareholder relationships since human capital is inalienable (to the individual) and therefore cannot be owned by shareholders (Hart and Moore, 1995; Blair and Stout, 1999).
Hart (2001) argues that, in the absence of contracts that secure a share of the outcome, managers will underinvest in specific investments in their human capital. This is similar to the conclusion from the principal-agent framework in that managers will make less than optimal effort. However, under the incomplete contracting view, the underlying rationale is different. A manager who makes firm-specific investments wants some form of commitment that the investment delivers a return of the outcome. A specific investment may be impossible or costly to transfer to another relationship (Hart, 1995a). Parrino (1997) and Cremers and Grinstein (2013) argue that different industries vary in the degree to which managerial human capital can be transferred between companies.

Hart and Moore (1994), Hart and Moutos (1995) and Blair and Stout (1999) argue that protection of a return of managerial specific investments in managerial human capital are important as they encourage firm-specific investments, \textit{ex ante}. Only a manager who can perfectly transfer human capital across companies and industries is not affected by contracting problems and will fully invest. As discussed above, in the case that managerial human capital is general rather than relation-specific, there is no problem of a hold-up and therefore no contracting problem. Garmaise (2011) assumes that in an incomplete contracting framework, managerial human capital is general and Murphy and Zabojnik (2004) argue that general human capital has become more important for CEOs since the 1970s.

\textbf{Renegotiation and Stability}

In a principal-agent framework, instability of firms is not an obvious problem because perfect contracts can tie stakeholders’ commitment to a firm. Jensen and Meckling (1976) posit that companies are legal fictions with a nexus of contracts with all stakeholders. Shareholders then have to write an optimal contract that binds stakeholders, such as managers or suppliers, to the company. According to Easterbrook and Fischel (1983), shareholders are
the only stakeholders who do not have contracts in place. It is therefore their claim that needs to be maximized. However, Oyer’s (2004) model within a principal-agent framework suggests that principals are concerned that their contracts do not meet the agents’ participation constraint. Moreover, the participation constraint itself is dynamic. For employees, participation (employment) depends on job offers by other companies. In a market upturn, job offers are plentiful and employers are more concerned about meeting this constraint than in a market downturn (Oyer, 2004).

In an incomplete contracting framework, renegotiation problems can be inferred because capital and human capital are complementary but cannot be contractually committed to a relationship (Alchian and Demsetz, 1972; Hart, 2001). If one resource departs before firm-specific investments are made, quasi-rents for firms are diminished (Rajan and Zingales, 1998). Alternatively, if one resource is subsequently dismissed, rents are not shared. Contracts governing profit-sharing can be renegotiated, such as by paying the manager less than originally agreed (Hart and Holmström, 1986; Gillan, Hartzell, and Parrino, 2009). If one party anticipates that rents will not be shared, they will either leave or underinvest in firm-specific investments *ex ante*. Most literature examines stability with respect to the departure of human capital (Oyer, 2004; Oyer and Schaefer, 2005; Rajgopal, Shevlin, and Zamora, 2006). Faleye (2007) argues that proponents of staggered boards will want boards to be insulated from the market for corporate control in order to provide stability and continuity. Staggered boards are boards in which directors are elected with timely overlapping employment contracts. This increases the cost incurred by an acquirer as they are unable to dismiss all directors at one time. Successful takeovers are rare via proxy contests to take over boards (Bebchuk, Coates and Subramanian, 2002). Hence, stability is encouraged and managers are able to invest in relationship-specific assets.
CEOs can either leave voluntarily or be dismissed. If CEOs leave voluntarily before they make firm-specific investments, quasi-rents are not generated. Thus, if CEOs anticipate being fired after making firm-specific investments, they will not make such investments (Gillan, Hartzell, and Parrino, 2009). Shareholders need assurance that they will receive a sufficient return on capital. As discussed above, in an incomplete contracting framework, shareholder capital is considered a firm-specific investment (Alchian and Demsetz, 1972; Grossman and Hart, 1986; Hart and Moore, 1990; Blair and Stout, 1999). It is impossible or costly to sell off assets from a company. Hart and Moore (1995), Hellmann (1998) and Kaplan and Strömberg (2004) examine venture capital relationships in an incomplete contracting model and come to a similar conclusion. The human capital of founders cannot be tied to a company formally. In a situation with few outside opportunities, a founder derives bargaining power through the ability to threaten to leave a firm. Hart and Moore (1995) argue that departure of founders is a problem for financiers. By threatening to depart, founders can renegotiate agreements with financiers. Without their human capital, the value of the venture is significantly diminished. Whether the voluntary departure of a good CEO is a hold-up of shareholders of public companies is debatable. Gillan, Hartzell, and Parrino (2009) argue that, while managers are not diversified against dismissal, shareholders are diversified against management losses and can find alternative managers. Therefore, a departure of a CEO in a public company is not a hold-up. However, Gabaix and Landier (2008) show that CEOs with the talent to run large companies are scarce. Yermack (2006a) shows that voluntary departure of CEOs has a significant negative effect on company values, while Clayton, Hartzell and Rosenberg (2005) find that voluntary and forced turnover increases stock volatility following turnover. Furthermore, Rajgopal, Shevlin, and Zamora (2006) find that shareholders try to retain reputable CEOs.
Another strand of research concerns the scenario whereby shareholders dismiss managers (Berkovitch, Israel, and Spiegel, 2000; Almazan and Suarez, 2003; Rusticus, 2006; Schwab and Thomas, 2006; Gillan, Hartzell, and Parrino, 2009). Dismissal can be through incumbent shareholders and boards or in the process of a takeover (Hartzell, Ofek and Yermack, 2004; Kaplan and Minton, 2012). Activist shareholders such as hedge funds seek changes in the company’s business strategy and mode of operation, proposing, for example, divesting assets, changing investment or payout levels, altering the capital structure, or replacing the CEO (Bratton and Geo, 2006; Brav, Jiang, Partnoy, and Thomas, 2008; Bebchuk, 2013). Berkovitch, Israel, and Spiegel (2000) and Almazan and Suarez (2003) argue that there is uncertainty about the quality of the manager and the quality of outside managers that become available. If better managers become available, the board is inclined to replace the CEO. If CEOs expect to be replaced, they will not make firm-specific investments in ex ante. Gilson (1989) and Fee and Hadlock (2004) report that the reputational damage in the executive job market from executive turnover is severe. CEOs from S&P 1500 companies often continue their careers in companies one tenth the size of their former employer.

Capital can leave on a forced or voluntary basis or can be of inferior quality. Short-termist shareholders are blamed for causing managers to make short-term investments at the expense of long-term company value (Lipton, 1979; Stein, 1988; Anabtawi and Stout, 2008; Strine, 2010). Venture capital funds want investors that are not vulnerable to external shocks (Kaplan and Schoar, 2004). Hsu (2004) shows that ventures sell shares at a discount of 10% - 14% to reputable venture capital funds. Under this view, investor quality is determined by how much an external shock affects their liquidity and their ability to hold on to shares. Uncertainty about possible shocks and resilience against shocks rather than intentions of shareholders influence the value of investors. ‘Going private’ means that shares in a company stop being traded on a regulated stock exchange. Stock market regulation and the law prevent
shareholders from being expropriated when companies go private. However, even in the UK with shareholder-friendly regulation, the transaction can be sanctioned by courts against a veto of up to 25% of shareholders (Payne, 2011).

Evidence that shareholder identity matters can also be found in the case of a company going public. According to Brennan and Franks (1997), Stoughton and Zechnier (1997) and Ritter and Welsh (2002), firms actively choose shareholders in an initial public offering. They achieve a leeway in picking preferred investors by offering them discounts (‘underpricing’). As a side-effect and due to stock market regulation, all investors will get that discount. While Brennan and Franks (1997) report that firms opt for dispersed shareholders, Stoughton and Zechnier (1997) report that firms prefer blockholdings by institutions. Barclay and Holderness (1989) report that for public companies, 95% of blockholdings in their sample remained as blockholdings for the subsequent 5 years. Those findings suggest that firms are concerned about selecting and retaining particular shareholders and equity capital structures.

**WHAT ARE THE SOLUTIONS?**

**Aligning Incentives**

In a principal-agent framework, it is optimal to align incentives of managers with shareholders’ interests. This is true under the assumption that monitoring is ineffective. As discussed above, dispersed shareholders are typical in public companies and have little incentive to monitor managers (Grossman and Hart, 1980). Jensen and Murphy (1990) argue that pay should therefore be related to performance. If compensation is related to performance, managers have an incentive to increase company value. Jensen and Meckling (1976) argue that stock is a natural candidate for pay-for-performance, as stock-based
compensation exhibits covariance with a company’s stock price. A share in the profits increases the costs of shirking and the costs of low effort and stealing, as managers share in the resulting losses and gain through increases in firm value.

Holderness (2003) finds that for firms in the S&P500 index, board ownership is 21% on average (median: 14%) for insiders. Anderson and Reeb (2003) show that family-run firms with high inside ownership outperform widely-held companies. Morck, Shleifer, and Vishny (1988) identify a U-shaped relationship between company value as measured by Tobin’s Q and board holdings. Tobin’s Q increases for board equity holdings up to 5% and then decreases as board holdings increase up to 25% before increasing again as managerial ownership approaches 50%. They conclude that board equity decreases some agency costs and increases others. With board holdings of 5%, a further reduction of agency costs through incentive alignment is less important than the increase of costs through shielding the company from the market for corporate control (managerial ‘entrenchment’). Hence, incentive pay is beneficial to shareholders as long as it reduces agency costs more than it allows managers to entrench.

**Residual Control Rights – Residual Cash Flow Rights**

Hart (2001) argues that cash flow rights can only be enforced when a claimant has control rights. For example, shareholders receive a return on their share, because they have votes in a company which provide them with control over a company's assets. Residual cash flow rights such as the right of a dividend (in the case where profits are distributed) are derived through residual control rights in a company. Votes in a company provide the holder with bargaining power, as the owners can withdraw their assets (at a discount). Under this view, owners of companies are residual claimants who receive what is left after all other
stakeholders (including managers) receive cash flows that are not contractual commitments to other stakeholders. Other stakeholders have effective contracts in place (Easterbrook and Fishel, 1983, 1991; Hart, 1995a). Control could then be shifted away from shareholders (to protect managers) through equity pay for managers. The question then becomes how to allocate control over a company between shareholders, managers and other stakeholders. Grossman and Hart (1988) argue that one-share-one-vote is the optimal allocation for most companies, as it protects the return of each capital share of investment with one vote.

Rather than having a contractual claim over a share in the profit, equity gives the shareholder votes over assets and rights over cash flows from assets. Hart (2001) calls this residual control rights and residual cash flow rights. Residual control rights are rights of an owner over an asset that is not written down in a contract. Residual cash flow rights are rights over the proceeds from an asset that are not contractually agreed (such as fixed interest payments). Ownership provides the holder with important rights when contracts are incomplete. With a 10% ownership, an owner cannot be squeezed out from a public company. Squeeze-out rights provide majority shareholders with the right to force minority shareholders below that threshold to sell their shares. It is a mechanism that was intended to prevent minority shareholders from holding-out to negotiate a prohibitive price with the acquirer (Grossman and Hart, 1980). With as little as 10% ownership, a shareholder could be regarded as an insider of the company with all resulting insider duties such as declaration of changes in interest. In many cases a 25% stake would effectively, depending on the articles of the association, allow the minority shareholder to veto a takeover of a company (Grossman and Hart, 1980; Garvey and Hanka, 1999). Considering that different shareholders might collude, votes are an effective tool to acquire control over an asset, even if it is just veto rights. Indeed, as discussed, Morck, Shleifer and Vishny (1988) identify a U-shaped relationship between ownership and company value. Tobin’s Q increases up to a 5%
ownership of a company board, decreases to ownership of 25% and then increases up to an ownership of 50%.

However, even with an incomplete contracting perspective, the argument that control over assets determines cash flow rights is challenged. Blair and Stout (1999) argue that shareholders do not have control over the most important asset, which is the human capital of employees. Marx, Strumsky, and Fleming (2007) argue that the most important asset "walks out the door every evening". It is therefore not established that votes over assets other than human capital (residual or not) influence the outcome of the management-shareholder relationship. It is debatable whether residual control and cash flow rights over non-human capital assets are pivotal for securing a reward. We previously documented that a different characteristic of equity influences the outcome of the relationship between managers and shareholders. It is proposed that equity compensation converts into severance pay in the case of dismissal.

**Renegotiation of Claims**

Some authors argue that it is optimal to write contracts with no *ex post* negotiation while others believe that space for renegotiation might be optimal. Room for renegotiation is optimal in the case of bankruptcy. Companies under bankruptcy file for ‘protection’ from lenders who would like to seize the assets (Hart, 1995a). In a principal-agent model, tough liquidation terms are considered to be a means of inducing managers to use funds efficiently (Manne, 1965). Conversely, it is observed that a bankruptcy under reorganization allows a distressed company to renegotiate restrictive contracts with stakeholders to allow restructuring (Hart, 1995a). Roberts and Sufi (2009) report that 90% of privately agreed loans to public companies are renegotiated prior to maturity. The amount, maturity, and pricing of
the contracts are renegotiated, and rarely as a result of distress. Shleifer and Summers (1988) argue that the value from takeovers is mainly derived from renegotiating long-term contracts with stakeholders. Renegotiation, even though potentially imposing lower discipline on borrowers, allows for restructuring of companies.

As discussed above, shareholders and managers leave agreements deliberately unspecific when uncertainty is low (Gillan, Hartzell, and Parrino, 2009). This observation is inconsistent with the view that uncertainty prevents the parties from writing contracts, as proposed by Klein (1996). Yermack (2006a) finds that severance payments in the case of CEO departure deviate from payments stipulated in severance agreements. Agreements in writing do not appear to be binding but rather guiding. Schwab and Thomas (2006), Yermack (2006a), and Erkens (2011) find that hush money prevents a CEO from leaking company secrets after departure. Hush money continues to be paid years after severance. Californian courts void contracts that prevent CEOs from working for competitors after departure, yet 58% of S&P1500 companies headquartered in California contract over such ‘non-competition’. Courts appear to play a minor role here, as enforcers of such contracts. Schwab and Thomas (2006) argue that companies would rather stick to payouts over the coming years in order to prevent redundant CEOs from leaking company secrets. Their results confirm that the amount of severance pay as a multiple of salaries is correlated with the length in years of the non-competition agreement. Renegotiation of contracts with CEOs can therefore be beneficial to shareholders for the prevention of leaks of company secrets when contracts are not functional.

**Acquiring vs Surrendering Control**

It is debatable whether stronger or weaker control solves the double moral hazard problem between managers and shareholders. Bebchuk and Fried (2005) argue that markets
are ineffective and investors therefore need stronger control over managers. Morck, Shleifer and Vishny (1988) argue that board equity holdings might undermine disciplining effects through takeovers because boards might entrench. This would explain why company performance diminishes when the board holdings are higher than 5%.

For less senior employees, Acharya, Baghai and Subramanian (2012) show that the change of law towards greater employee protection against wrongful dismissal leads to more innovation, as measured by number of patents and patent quality. Conversely, Inderst and Mueller (2005) argue that severance pay induces poorly performing managers to remove from their entrenched position. Inderst and Mueller (2010) argue that severance pay induces managers honestly to report bad news. Severance pay protects them from adverse effects. Additionally, from the managers' point of view, the executive labor market and market for corporate control is more efficient than CEOs would like. In contrast to the principal-agent framework, entrenchment would then not be the result of the private benefits of control but protection of relationship-specific investments.

All the above arguments are based on the assumption that management has de facto control while votes are of secondary importance. Hence, it is shareholders who have to increase their de facto control over managers. However, venture capital and public company literature also provides evidence in which shareholders and managers deliberately surrender control in order to make a commitment not to hold up their counterpart (Hart and Moore, 1995; Hellmann, 1998; Oyer, 2004; Rajgopal, Shevlin, and Zamora, 2006). Hart and Moore (1995) argue that within an incomplete contracting framework founders find it difficult to raise funds. The reason is that financiers expect that founders will renegotiate initial agreements because founders can always threaten to leave a venture. This gives founders bargaining power ex post, e.g. to renegotiate compensation contracts. Founders might want to pledge their human capital to investors but this is not possible. Their human capital is
‘inalienable’. However, founders have another way of committing not to leave. Hart and Moore (1995) argue that founders can promise to pay a fixed proportion (interest) of the capital invested that is independent of the success of the company. A fixed proportion is verifiable in court and therefore enforceable. Hence, only if founders fail to pay the fixed proportion do investors acquire control over the company. This is the rationale for investing through bank loans. For financiers who invest equity, Hellmann (1998) identifies a solution to this problem: founders accept deferred investments. Equity investments vest over time and only after the expiry of the vesting period does the founder own the equity stakes. If the founder leaves the venture, the unvested stake in the venture is forfeited. This reduces the founder’s bargaining power during the vesting period. Rajgopal, Shevlin, and Zamora (2006) find that public companies pay CEOs vesting compensation, as argued by Oyer (2004).

Studies have found that shareholders offer severance pay to executives in order to make commitments not to fire managers or renegotiate their compensation (Berkovitch, Israel, and Spiegel, 2000; Almazan and Suarez, 2003; Rusticus, 2006; Schwab and Thomas, 2006; and Gillan, Hartzell, and Parrino, 2009). Wagner and Wenk (2013) find evidence from Swiss companies between 2006 and 2010 that shareholders surrender control over managers. They show that shareholders in Switzerland at that time period were opposed to binding votes over compensation. Under Swiss legislation, the right to propose and confirm (and veto) executive compensation at that time period was with boards.

Blair and Stout (1999) argue that public company law is a means of weakening shareholder power in their own interest. By investing in a public company, shareholders commit not to exercise excessive control over managers. They, along with executive managers, surrender control to boards. It is boards who exercise ultimate control over managers and shareholders. Boards determine executive pay and dividends. By having no stakes in the company, they are impartial and can act as referees. They call boards “mediating
hierarchs”. Blair and Stout (1999) argue that in public companies, votes are not the primary decision instrument. They argue that boards are empowered with discretion in order to serve all stakeholders, not just shareholders. Votes are merely a tool to get a recommendation on long-term issues. Furthermore, parties that are interested in particular decisions, such as managers over their own compensation, are prohibited from voting. Voting outcomes over the employment of board members are not binding to boards, but also merely a recommendation. Boards are ‘insulated’ from shareholders (Bebchuk, 2013). If shareholders want to dismiss a board member, they have to find a replacement and qualified board members are prohibitively costly to find for unsophisticated shareholders. This view can explain the prevalence of boards and the degree of discretion of boards. A major criticism of the view is that the majority of CEOs in the US are also chairmen. The implication of this would be that holding both titles of team member and referee is efficient.

A consistent finding is that boards surrender more control over managers by granting equity-based compensation. One implication of the use of equity-based compensation is that it converts into severance pay in the case of dismissal (Rusticus, 2006). Under public pressure, such compensation converts into severance payouts. Severance payouts allow managers to invest in relationship-specific investments as they will receive reward for their investment. Evidence providing some support for this view is provided by Peters and Wagner (2014) who find that CEO compensation in a sample of S&P1500 companies between 1993 and 2009 is higher when risk of forced turnover is higher.

CONCLUSION

The principal-agent framework and the incomplete contracting framework make different assumptions about the relationship between managers and shareholders. The principal-agent model stresses asymmetric information while the incomplete contracting
framework emphasizes the inability to come to complete agreements (Jensen and Meckling, 1976; Hart, 1995a). Asymmetric information is a problem for shareholders as opportunistic managers increase their own wealth rather than shareholder wealth (Jensen and Meckling, 1976). Incomplete contracts are a problem because neither managers nor shareholders can credibly commit to reward the counterpart for any effort (Hart, 1995a). As a result, asymmetric information and incomplete contracts are two alternative explanations for underinvestment of CEOs in effort (Jensen and Meckling, 1976; Hart, 1995a). Other implications and solutions are different. Asymmetric information requires shareholders to induce managers to exert effort (Jensen and Murphy, 1990). Incomplete contracts require that managerial control is increased or shareholder control is decreased (Hart, 1995a; Blair and Stout, 1999). Renegotiation has been shown in a number of circumstances to improve the relationship between managers and shareholders which in turn improves firm value (Manne, 1965; Gillan, Hartzell, and Parrino, 2009). Surrendering control over managers as a means of making a credible commitment not to dismiss a manager and allow freedom to investment in relationship-specific investments is one solution to incomplete contracts for shareholders. We believe that both surrendering control, as credible commitment to management, and renegotiation of contracts offer viable avenues for future research into optimal outcomes within the relationship between managers and shareholders within the incomplete contracting framework.

REFERENCES


