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**SHAREHOLDERS AND MANAGERS AS COOPERATIVE TEAMS
VS PRINCIPAL-AGENT HIERARCHIES**

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SHAREHOLDERS AND MANAGERS AS PRINCIPAL-AGENT HIERARCHIES AND COOPERATIVE TEAMS

Manuscript Type: Literature Review

Purpose: Shareholders and managers can work in a hierarchy in which principals attempt to control the actions of agents to achieve the wealth objective. Alternatively, shareholders and managers can work together as a cooperative team in which shareholders provide financial capital and managers provide human capital. We examine the different implications for value creation provided by the two approaches.

Methodology: By comparing the literature on the value implications of the incomplete contracting framework and control arrangements in principal-agent hierarchies, we identify deviations from optimal outcomes and suggest solutions.

Findings: Our review indicates that a cooperative framework has some advantages over the hierarchical model. The stability of human capital and the relationship between managers and shareholders can be enhanced when shareholders provide capital in increments which vest over time, and latitude for renegotiation of agreements is built into contracts.

Practical Implications: By surrendering control using stock options programmes, managers are free to invest in relationship-specific assets. Shareholders can control the provision of capital by withdrawing investment if insufficient returns are realised i.e. if stock options do not meet vesting requirements. The market can then be left to do its work.

Originality: This paper provides an original review of literature on cooperation and hierarchies in the shareholder-manager relationship and proposes solutions to identified deviations from optimal outcomes.

JEL: G30; G34; J33; L14; M52

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

Extracting value from the human capital of CEOs is complicated by problems in contracting between principals and agents. If ownership and control are separated, there are two possible approaches. The principals can attempt to achieve goal congruence between shareholders and managers by monitoring and designing optimal contracts. Equity markets allow shareholders to exit. Alternatively, shareholders and managers can act as cooperative teams in which each party provides capital - shareholders provide financial capital and managers provide human capital. The two combine to create value to the benefit of both parties. The purpose of this survey of the literature is to identify the most effective methods to extract value from the relationship between shareholders and managers, and release the value of CEOs' human capital to the benefit of both parties.

Two theories dominate the literature on this issue - the principal-agent model and the incomplete contracting framework. These models provide interpretations of the relationship between the shareholders and the managers of a listed company. Underlying the principal-agent relationship in listed companies are CEO compensation and equity markets. The former acts as a mechanism for incentives whilst the latter acts in a number of ways to constrain managerial behaviour. On the other hand, incomplete contracts are a key aspect of the shareholder-manager relationship. Imperfect information gives rise to incomplete contracts and moral hazard arises from incomplete contracts when setting managerial incentives and rewards. The overall outcome of the operation of the principal-agent model with incomplete contracts in modern corporations is the optimal contracting approach, which is generally applied in the form of incentive-based reward systems, supplemented by equity markets. However, as demonstrated by media outrage at regular instances of excessive compensation and governance scandals at great cost to shareholders, governments and society as a whole, such an approach is deeply flawed.

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3 The paper proceeds as follows. In the next section, we explain how the literature
4 search was conducted and which literature was used to develop our arguments. Having
5 identified the characteristics of the classical approaches, we then consider the private benefits
6 of control and the stability of human capital. After a discussion of the implications arising
7 from the review, we conclude by suggesting solutions which incorporate surrender of control
8 by shareholders to managers, i.e. surrendering the role of principal to agents, and
9 renegotiation of contracts to enhance stability of human capital.
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23 **LITERATURE REVIEW STRATEGY**

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26 The literature search strategy was to conduct a broad review of the academic literature
27 to establish relevant hypotheses and evidence. Initially, we categorize the literature into two
28 broad strands – CEO compensation and equity markets – and then subdivide into specific
29 hypotheses. Table 1 shows the main literature used regarding each relevant hypothesis.
30 Hypotheses are then cross-referenced with the types of contracts (complete or incomplete)
31 and the implications for shareholders and/or managers. The table allows the reader to assess
32 where the preponderance of the data lies. Specific papers on each hypothesis/implication box
33 are listed in the table with a short explanatory note. The table can be read either across the
34 table which highlights the literature on each specific hypothesis or evidence. Alternatively, it
35 can be read downwards in terms of implications for shareholders and/or managers for each
36 type of contract. The analysis of the evidence is presented in subsequent sections as discussed
37 above.
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THE CLASSICAL MODELS AND SHAREHOLDER-MANAGER RELATIONSHIPS

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). It questions whether the principal or agent should bear that risk and concludes that it 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. As 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 poor health of the insured customer. Diversified insurance companies can absorb risk and should therefore bear the risk of illness. 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. But 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 truly external effects on health. However, if we assume that lifestyle cannot be observed, the insurance

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3 company would like to encourage the customer to live a healthier lifestyle through a contract
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5 based on the outcome. One solution would be a type of contract that increases the costs for
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7 patients in the case of illness. Thus, they bear some risk, whether caused by their own actions
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9 or by external factors. Even though optimal risk sharing requires the insurance company to
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11 bear risk, asymmetric information between the customer and the insurance company shifts
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13 some risk towards the customer.
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18 Similarly, asymmetric information between managers and shareholders is considered
19
20 to be the reason why managers should bear some of the risk (Myers and Majluf, 1984, p.
21
22 196). In 1776, Adam Smith (1937) famously drew a parallel between the master-servant and
23
24 shareholder-manager relationship: “Like the stewards of a rich man, [the directors of public
25
26 companies] are apt to consider attention to small matters as not for their master’s honour, and
27
28 very easily give themselves a dispensation from having it”. Hart and Holmström (1986) argue
29
30 that when shareholders can observe managerial actions they can design a contract that
31
32 specifies managerial actions under every contingency. However, as shareholders cannot
33
34 observe actions, they have to base solutions on the outcome. One solution is that shareholders
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36 tie managerial pay to an increase in shareholder value. Pay-for-performance ensures that
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38 managers are bonded to shareholders and take actions that are in the interest of shareholders.
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45 Jensen and Meckling (1976) argue that monitoring is a substitute for managerial
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47 incentive pay but it is costly. As shares in public companies are typically widely held, Berle
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49 and Means (1932) conclude that atomistic shareholders have little incentive to observe
50
51 managerial actions (monitoring). The free-rider problem concludes that no shareholder will
52
53 monitor managers (Baumol, 1952). Asymmetric information also prevents monitoring by
54
55 financial intermediaries such as stock analysts, auditors, and other experts that estimate
56
57 project values. In the US, the *Sarbanes-Oxley Act* in 2002 required companies to increase the
58
59 amount of disclosed information, but also allowed them to opt out of publishing information
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3 entirely if they were cross-listed on an international exchange. Some firms stopped
4 publishing standardized information, but the shares continued to be traded (Litvak, 2007).
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8 Engel, Hayes and Wang (2007) report that those firms that 'went dark' after the passage of
9 the *Sarbanes-Oxley Act* exhibited a decline in stock prices of 10% on average. This is
10 consistent with the view that the increased information asymmetry between managers and
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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) find that for a \$1000 increase in company value, CEO wealth only increases by \$3.25. This was interpreted as "not very much" and 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 the effect of performance on pay, the effect of performance on management turnover has 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,

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3 and Vishny, 1990; Huson, Parrino, and Starks, 2001; Kaplan and Minton, 2012; Jenter and
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5 Kanaan, 2006). Tying managerial incentives through pay or turnover to their own returns
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7 seems either not to be a high priority for shareholders or not accomplished.
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11 Another implication of the principal-agent model is that shareholders and managers
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13 write feasible contracts for managers that tie managers' interests to shareholders and vice
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15 versa. However, shareholders have few contractual claims against managers. For example,
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17 shareholders have no contractual claim on dividends. Preferred dividends with contractual
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19 claims similar to interest payments are rare (Hart, 1986). Furthermore, many CEO
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21 employment contracts are incomprehensive (Schwab and Thomas, 2006; Gillan, Hartzell, and
22
23 Parrino, 2009). Only one half of CEOs in the Gillan, Hartzell, and Parrino study were found
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25 to have employment contracts in place. In a larger sample, two-thirds of all the CEOs were
26
27 found to have employment contracts (Schwab and Thomas, 2006). Furthermore, in both
28
29 samples, the contracts usually state the entitlements of CEOs, such as severance pay and
30
31 perks, rather than their duties. When sales are volatile and the future of a company is more
32
33 uncertain, CEOs have employment contracts that protect their rewards (Gillan, Hartzell, and
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35 Parrino, 2009). This is consistent with the view that employment contracts do have some
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37 degree of enforceability and tighten CEOs' claims against firms but not vice versa.
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47 *The Incomplete Contracting Framework*

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51 The theory behind the incomplete contracting framework acknowledges that neither
52
53 shareholders nor managers can write every agreement they would like to make. Contracts are
54
55 inherently incomplete. The reason for the imperfection is uncertainty about the future (Hart,
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57 1995a). Contracting parties cannot foresee every possible contingency. For example, an
58
59 employment contract of shareholders with a CEO cannot foresee every single growth
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3 opportunity and stipulate contingent actions. In incomplete contracting models, uncertainty
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5 plays a more central role than in the principal-agent model as the contingencies themselves
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7 are unknown.
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11 Observability of actions or outcomes is a minor concern in incomplete contracting
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13 models. The assumption of asymmetric information between managers and shareholders can
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15 be incorporated, but is usually relaxed (see e.g. Hart, 1995b) as both groups can observe
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17 actions and outcomes. As outcomes are uncertain, contingent clauses in contracts are unlikely
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19 to be triggered by future events. Stylized theoretical models such as that of Hart (1995a)
20
21 assume that there are no contracts in place between two economic agents. Actions, as well as
22
23 outcomes, are determined by other self-enforcing arrangements. The concept of implicit
24
25 contracts is applied to analysis of employment agreements between firms and workers,
26
27 particularly in studies of the economics of labor markets (see Azariadis, 1975; Bull, 1987;
28
29 MacLeod, 1989). Hart (2001) analyses debt and equity as financial contracts which substitute
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31 for impossible contracts. Implicit contracts give holders control rights over actions and cash
32
33 flow rights over outcomes (Bull, 1987; Klein, 1996). When there are written agreements, all
34
35 rights that are unallocated after contractual claims are known as residual rights (Easterbrook
36
37 and Fischel, 1983; Hart, 1995a). Easterbrook and Fischel (1983) consider shareholders as
38
39 residual claimants, arguing that all other stakeholders have enforceable contracts in place.
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41 Suppliers and customers have purchase agreements, employees and managers have
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43 employment agreements, and lenders have loan agreements with pre-determined interest.
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52 This leads to the question as to why and how residual rights over firms should be
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54 allocated. If all stakeholders other than shareholders have contracts in place, only the latter
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56 need to be protected. Hart (1995a) models a stylized situation with two residual claimants,
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58 outlined here with a slight simplification. There are two assets and two team members
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60 operating them. They work on a project that requires inputs called 'widgets' from both

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3 contracting parties at time t_1 . The final product will be sold in the market at time t_2 . A
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5 contracting party will only make an investment in this relationship when sufficient return is
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7 anticipated. However, uncertainty about the outcome is high. It is therefore impossible to
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9 agree on a particular profit-sharing rule. As regards the management-shareholder
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11 relationship, Alchian and Demsetz (1972) devise a model in which financial capital and
12
13 human capital are complementary investments and both holders are residual claimants who
14
15 generate quasi-rents in a final product. Human capital is operated by managers while
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17 financial capital is operated by shareholders. Only when both groups provide high inputs, are
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19 quasi-rents generated (i.e. rents above what each team member could achieve on their own,
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21 see Besanko, Dranove, Shanley, and Schaefer, 2009).
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28 A determinant of decision making about allocation of residual control rights is the
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30 specificity of the investments with respect to the project. In stylized incomplete contracting
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32 models, investments are entirely specific to a relationship and cannot be employed elsewhere
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34 (Hart, 1995a). If investments are entirely specific to the relationship, the managers should be
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36 more reluctant to invest in the joint product. They are at risk of being subject to what is
37
38 known as the “hold-up” problem (Besanko, Dranove, Shanley, and Schaefer, 2009). A
39
40 supplier of car parts might be willing to produce on better terms and conditions for a car
41
42 assembler if the car parts could be used elsewhere given a break down in the relationship.
43
44 The existence of an alternative use (the opportunity cost) means suppliers are exposed to less
45
46 risk as they can switch to the alternative use if the returns from the primary use fall
47
48 sufficiently. However, the car parts supplier might also withdraw the resource for other
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50 reasons. The alternative use gives rise to bargaining power. For example, the supplier could
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52 renegotiate existing contracts by threatening to withdraw car parts and make use of outside
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54 opportunities.
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3 Benmelech and Bergman (2011) find that the terms of funding of companies in the
4
5 airline industry are better when assets can be sold at a lower discount in a liquidation. Capital
6
7 provided by shareholders is generally considered to be specific (see, for example, Hart, 2001;
8
9 Garmaise, 2011) while it is more difficult to discern whether human capital provided by
10
11 managers is a relationship-specific investment. According to Parrino (1997) and Cremers and
12
13 Grinstein (2013), the transferability of managerial human capital is different for different
14
15 industries. They report that half of all successor CEOs in the airline industry are hired from
16
17 outside firms while virtually all CEOs in construction companies are hired from within firms.
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19 In recent CEO successions, more CEOs were hired from outside rather than inside the firm,
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21 indicating that human capital has become more general and transferable (Kaplan and Minton,
22
23 2012). The question remains as to whether CEO human capital is specific and CEOs can
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25 therefore be 'held up' by shareholders.
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35 *Market Discipline vs Outside Opportunities*

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38 In principal-agent models, markets are pivotal in disciplining managers (Manne 1965;
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40 Jensen and Meckling, 1976; Fama, 1980; Hart, 1983; Jensen and Ruback, 1983; Morck,
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42 Shleifer, and Vishny, 1988; Bebchuk and Fried, 2005; Fos, 2015). The market for corporate
43
44 control ensures that managers do not waste company resources. Takeovers and the seizure of
45
46 assets by banks fulfil a similar role (Manne, 1965). Active investors, acquirers or banks, will
47
48 exchange incumbent management when they use resources inefficiently (Hart, 1983; Bratton,
49
50 2006; Brav, Jiang, Partnoy, and Thomas, 2008; Bebchuk, 2013). Proxy contests, in which
51
52 large shareholders attempt to accumulate sufficient votes to influence nominations of board
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54 members, play a disciplinary role for company boards (Fos, 2015). And efficient financial
55
56 markets ensure that poor management performance is reflected in the stock price, as it
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3 becomes less costly to buy shares in the company and oust incumbent management (Manne,
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5
6 1965; Scharfstein, 1988).
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9 However, the evidence for a disciplinary role of stock markets is poor. Mitchell and
10
11 Mulherin (1996) report that takeovers (1) affect many companies at once rather than single
12
13 underperformers and (2) come in waves during market upturns. As takeovers are demand
14
15 driven, supply of poor performers is not the main driver. Inducing discipline on poorly
16
17 performing management cannot explain the vast majority of takeovers. Further evidence
18
19 against the disciplinary role of markets for corporate control is that the markets are not
20
21 cleared (companies which should theoretically be taken over are not acquired). In cleared
22
23 markets, shares in target companies would be sold as long as there is any positive value.
24
25 Takeover premiums for target shareholders are typically between 20% and 30% (depending
26
27 on whether an acquisition is a merger or a tender offer) (Ruback, 1983; Jarrell, Brickley, and
28
29 Netter, 1988) and have increased over the period between 1977 and 2005 (Raman,
30
31 Shivakumar and Tamayo, 2013). Premiums indicate inertia in changes of corporate control. If
32
33 takeovers are meant to discipline managers, evidence suggests that they are an inefficient
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35 tool.
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42 Similarly, competitive product markets are supposed to ensure that managers are
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44 employing company resources efficiently. In the case of inefficient use, the company will be
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46 competed out of business by rivals in the product market. External markets therefore take on
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48 a disciplinary role in constraining wasteful managerial behavior. However, Scharfstein
49
50 (1988) finds no evidence that product markets discipline managers. He argues that managers
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52 should be compensated through more incentives when competition is higher but finds the
53
54 opposite. This is consistent with the principal-agent model in that shareholders want to soften
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56 incentives for managers when the product market is highly competitive (Aggarwal and
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58 Samwick, 1999). This suggests that incentive pay and product markets are substitutes.
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3 In incomplete contracting models, markets are sidelined as outside opportunities. For
4
5 example, if CEOs with similar talent become available at lower cost, this will not lead to a
6
7 replacement of the incumbent CEO, but a renegotiation of their terms. The relationship
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9 between managers and shareholders is affected indirectly. Firm-specific investments such as
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11 capital and human capital are specific to a relationship. Incomplete contracting theories
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13 therefore put the relationship between shareholders and managers at the center. Markets, such
14
15 as the labor market, the product market and the market for corporate control, are regarded as
16
17 outside opportunities. In incomplete contracting models, if markets influence the relationship,
18
19 they can be deliberately hampered as managers or shareholders incur costs when exiting the
20
21 relationship. Costly barriers can be efficient. The efficiency can be measured by the degree to
22
23 which such barriers *ex ante* encourage relationship-specific investments.
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30 Company assets are typically sold off at a discount in a liquidation (Hart and Moore,
31
32 1995). This cost inhibits creditors, including debt holders, from enforcing liquidation of a
33
34 healthy company (Hart and Moore, 1994; Hart, 1995a). This in turn gives a credible
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36 commitment to managers that their complementary human capital investments will stay in
37
38 place longer to generate quasi-rents. Deliberately hampered markets for corporate control
39
40 also provide an explanation as to why markets for corporate control are not cleared. Both
41
42 managers and shareholders agree over additional switching costs. Managers typically
43
44 negotiate change-of-control clauses that pay out golden parachutes in the case of takeover-
45
46 initiated turnover (Lambert and Larcker, 1985; Lefanowicz, Robinson, and Smith, 2000;
47
48 Schwab and Thomas, 2006; Yermack, 2006a). Other types of board-initiated management
49
50 turnover that are not related to a change in shareholder structure are also followed by
51
52 severance pay (Schwab and Thomas, 2006; Yermack, 2006a). Labor markets are both
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54 opportunities and threats in the relationship between boards and CEOs. They are job options
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3 for CEOs and pools for successors for boards (Oyer, 2004; Oyer and Schaefer, 2005; Parrino,
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6 1997; Cremers and Grinstein, 2013).
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10 11 *Teams vs Hierarchies* 12

13
14 In principal-agent models, shareholders, as principals, employ agents (Jensen and
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16 Meckling, 1976; Holmström and i Costa, 1986). The principal designs a contract with an
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18 agent that aligns managers' interests with their own and assures that the agent accepts it
19
20 (Holmström, 1982). The relationship between shareholders and managers is therefore
21
22 hierarchical. Alchian and Demsetz (1972) develop a resource-based view, under which
23
24 capital and human capital are complementary investments which generate quasi-rents.
25
26 Schmidt (2003) and Hellmann (2006) argue that it is the inability to write perfect contracts
27
28 rather than information asymmetry that describes the relationship between two specific types
29
30 of financiers and managers, namely venture capitalists and entrepreneurs. Unlike public stock
31
32 holders, venture capitalists have less of a coordination problem, as their stakes are more
33
34 concentrated than those of shareholders of public companies. The relationship between
35
36 venture capitalists and entrepreneurs may be regarded as a double moral hazard (Schmidt,
37
38 2003; Hellmann, 2006). Relationships between public firms and CEOs may also be shaped by
39
40 double moral hazards (Blair and Stout,1999; Gillan, Hartzell, and Parrino, 2009). A firm
41
42 might want to renegotiate contracts with a CEO when the CEO has made firm-specific
43
44 investments. Therefore, the CEO might want to ensure compensation through a contract.
45
46 Once the contract is agreed upon, the CEO might act opportunistically by trying to trigger
47
48 damage compensation. Blair and Stout (1999) model the relationship in public companies
49
50 differently. Public companies are coordinated not through shareholders, but through boards.
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52 Boards are independent mediators for conflicts between managers and shareholders as they
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54 are virtually insulated from shareholders. This theory can explain why boards are a common
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3 feature of companies and why US companies usually have boards even though this is not
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5 required by law.
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10 **PRIVATE BENEFITS OF CONTROL AND STABILITY OF HUMAN CAPITAL**

11 *The Principal-Agent Framework*

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17 Unique problems can be identified from the assumptions and implications of each
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19 framework. For example, the quality of principals or agents is only directly relevant to the
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21 principal-agent perspective. The unobservability of the quality of products can lead to a
22
23 market for “lemons” in which only poor quality goods are traded (Akerlof, 1970). Similarly,
24
25 unobservability of managerial talent can lead to a market for poor quality management
26
27 (Morck, Shleifer, and Vishny, 1990). Alternatively, equity-based compensation attracts
28
29 managers with an optimistic opinion about the granting firm (Oyer, 2004).
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33
34 A number of authors consider differences between the qualities of different types of
35
36 investor. Lipton (1979) and Stein (1989) argue that some investors are more short-term than
37
38 others. Short-termism is proxied by the holding period of shares. One reason for short
39
40 holding periods is a low degree of resilience of shareholders’ assets to market downturns.
41
42 Stability of the asset held requires that the wealth of the investor is resilient to external
43
44 shocks. Lerner and Schoar (2004) and Lerner, Schoar and Wongsunwai (2007) argue that
45
46 some investors are less able to invest in private companies because they are more prone to
47
48 external shocks. They show that particular classes of investor such as endowments and
49
50 pension funds earn superior returns (which they trace back to the superior information of
51
52 such investors).
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57
58 The principal-agent model also predicts that actions are not observable once a
59
60 manager is hired and a shareholder has invested. This may result in problems of managers a)

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3 exercising less than optimal effort, b) pursuing projects that yield private benefit but no
4 shareholder benefit or c) stealing company funds. We discuss these in turn.
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9 It has been argued that non-owner managers are induced to make less than optimal
10 effort, as the return of every unit of effort invested has to be shared with investors (Jensen
11 and Meckling, 1976; Holmström, 1982; Jensen and Murphy, 1990). However, effort is
12 difficult to measure and empirical evidence for this assertion is scarce.
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18 Managers may derive a benefit from running a company, known as a “private benefit
19 of control” (Grossman and Hart, 1988). This alleged indulgence in private benefits is also
20 difficult to measure, because the benefits are not necessarily pecuniary. But the premium for
21 controlling blocks of shares, known as the “control premium”, indicates the value of private
22 benefits of control. Control premiums are 20% on average for block trades between 1978 and
23 1982 (Dyck and Zingales, 2004; Barclay and Holderness, 1989). Further evidence of private
24 benefits of control is that managers choose investments that make it hard to replace
25 themselves. For example, there is anecdotal evidence that managers negotiate loan contracts
26 with banks that become repayable upon the departure of the incumbent CEO (Shleifer and
27 Vishny, 1989).
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43 By having control, holders may divert funds into projects that yield benefits to them,
44 but not to shareholders. There is evidence that an abundance of company funds (‘free cash
45 flows’, see Jensen, 1986) often leads to inefficient investments (Jensen, 1986; Harford, 1999;
46 Titman, Wei, and Xie, 2004). The company invests in projects that do not generate a return
47 above a required return but increase company size, to the sole interest of the manager.
48 Companies with free cash flows tend to make value-destroying acquisitions (Morck, Shleifer
49 and Vishny, 1990; Lang, Stulz and Walking, 1991). Shareholders are therefore concerned
50 about an excessive amount of free cash flows at the discretion of managers. For example, in
51 2012, the investor Einhorn felt that insufficient cash was being returned to Apple
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3 shareholders and threatened to sue Apple, which had more than \$100bn in cash (Bebchuk,
4
5 2013).¹
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9 Further evidence of the private benefits of control is that when a company is sold,
10
11 buyers compensate a manager for relinquishing control over the company. This is one
12
13 explanation for the prevalence of change-in-control agreements. These agreements stipulate
14
15 rights for a manager when a company is taken over, such as severance pay. Note that the
16
17 protection of relationship-specific investments and private benefits of control are two
18
19 different explanations for managerial control. Bebchuk and Fried (2003) argue that managers
20
21 of the largest US companies entrench in companies, thus increasing the costs of shareholder
22
23 influence over their compensation and tenure through making control more costly. The
24
25 authors identify six common provisions that increase entrenchment and decrease shareholder
26
27 returns, which we discuss in more detail later.
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32
33 Finally, executives can expropriate shareholder funds. For example, it was also found
34
35 that in the early 2000s, some executive managers of the largest companies were ‘backdating’
36
37 exercise prices of stock options (Heron and Lie 2007; Narayanan, Schipani and Seyhun,
38
39 2007; Bizjak, Lemmon, and Whitby, 2009). Exercise prices are usually the stock price on the
40
41 granting date (Hall and Murphy, 2003). As the stock price rises, the intrinsic value of the
42
43 stock option rises. But at the beginning of the millennium, some executives were granted
44
45 stock options with exercise prices based on stock prices from earlier dates when stock prices
46
47 were lower (known as the ‘backdating scandal’).² Bertrand and Mullainathan (1999) note that
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49 managers increase their salaries after less intrusive state legislation.
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59 ¹ See also the Wall Street Journal on 02/07/2013, “Einhorn Sues Apple Over Preferred Stock Plan”,
60 <http://www.wsj.com/articles/SB10001424127887323452204578289811591849522>. Accessed 28/08/2015.

² See for example Peter Lattman’s article on Dealbook (10/11/2010),
http://dealbook.nytimes.com/2010/11/11/backdating-scandal-ends-with-a-whimper/?_r=0. Accessed
28/08/2015.

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

51 *The Incomplete Contracting Framework*

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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,

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2
3 demand for cars and hence car-bodies increased to an unexpected level. Demand and
4
5 therefore prices for metal increased for Fisher Body which had to be covered by General
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7 Motors as part of its contractual obligations in the relationship. Fisher Body resisted curbing
8
9 costs through, for example, relocating closer to General Motors (as that would have been a
10
11 specific investment and would have been subject to hold-up by General Motors). Therefore,
12
13 prices for General Motors rose to unexpected levels. To get costs under control, General
14
15 Motors eventually acquired Fisher Body. A similar solution to the hold-up problem might be
16
17 considered as a mechanism to resolve the manager-shareholder relationship. However, this
18
19 type of solution is not feasible in manager-shareholder relationships since human capital is
20
21 inalienable (to the individual) and therefore cannot be owned by shareholders (Hart and
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23 Moore, 1995; Blair and Stout, 1999).
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30 Hart (2001) argues that, in the absence of contracts that secure a share of the outcome,
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32 managers will underinvest their human capital in specific investments. This is similar to the
33
34 conclusion from the principal-agent framework in that managers will make less than optimal
35
36 effort. However, under the incomplete contracting view, the underlying rationale is different.
37
38 A manager who makes firm-specific investments wants some form of commitment that the
39
40 investment delivers a return of the outcome. A specific investment may be impossible or
41
42 costly to transfer to another relationship (Hart, 1995a) and different industries vary in the
43
44 degree to which managerial human capital can be transferred between companies (Parrino,
45
46 1997; Cremers and Grinstein, 2013).
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51 Protection of a return of managerial specific investments in managerial human capital
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53 is important as it encourages firm-specific investments (Hart and Moore, 1994; Hart and
54
55 Moutos, 1995; Blair and Stout, 1999). Only a manager who can perfectly transfer human
56
57 capital across companies and industries is not affected by contracting problems and will fully
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3 invest. As discussed above, in the case that managerial human capital is general rather than
4
5 relation-specific, there is no problem of a hold-up and therefore no contracting problem.³
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10 *Stability and Renegotiation*

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14 In a principal-agent framework, instability of firms is not an obvious problem because
15
16 perfect contracts can tie stakeholders' commitment to a firm. Companies are legal fictions
17
18 with a nexus of contracts with all stakeholders (Jensen and Meckling, 1976). Shareholders
19
20 then have to write an optimal contract that binds stakeholders, such as managers or suppliers,
21
22 to the company. According to Easterbrook and Fischel (1983), shareholders are the only
23
24 stakeholders who do not have contracts in place and it is therefore their claim that needs to be
25
26 maximized. However, Oyer's (2004) model within a principal-agent framework suggests that
27
28 principals are concerned that their contracts do not meet the agents' participation constraint.
29
30 Moreover, the participation constraint itself is dynamic. For employees, participation
31
32 (employment) depends on job offers by other companies. In a market upturn, job offers are
33
34 plentiful and employers are more concerned about meeting this constraint than in a market
35
36 downturn (Oyer, 2004).
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43 In an incomplete contracting framework, renegotiation problems can be inferred
44
45 because capital and human capital are complementary but cannot be contractually committed
46
47 to a relationship (Alchian and Demsetz, 1972; Hart, 2001). If one resource departs before
48
49 firm-specific investments are made, quasi-rents for firms are diminished (Rajan and Zinagles,
50
51 1998). Alternatively, if one resource is subsequently dismissed, rents are not shared.
52
53 Contracts governing profit-sharing can be renegotiated, such as by paying the manager less
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55 than originally agreed (Hart and Holmström, 1986; Gillan, Hartzell, and Parrino, 2009). If
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60 ³ Garmaise (2011) assumes that in an incomplete contracting framework, managerial human capital is general and Murphy and Zbojnik (2004) argue that general human capital has become more important for CEOs since the 1970s.

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3 one party anticipates that rents will not be shared, they will either leave or underinvest in
4
5 firm-specific investments. Studies generally consider stability with respect to the departure of
6
7 human capital (Oyer, 2004; Oyer and Schaefer, 2005; Rajgopal, Shevlin, and Zamora, 2006).
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9
10 Faleye (2007) argues that proponents of staggered boards will want boards to be insulated
11
12 from the market for corporate control in order to provide stability and continuity. Staggered
13
14 boards are boards in which directors are elected with timely overlapping employment
15
16 contracts. This increases the cost incurred by an acquirer as they are unable to dismiss all
17
18 directors at one time. Successful takeovers are rare via proxy contests to take over boards
19
20 (Bebchuk, Coates and Subramanian, 2002). Hence, stability is encouraged and managers are
21
22 able to invest in relationship-specific assets.
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28 CEOs can either leave voluntarily or be dismissed. If CEOs leave voluntarily before
29
30 they make firm-specific investments, quasi-rents are not generated. Thus, if CEOs anticipate
31
32 being fired after making firm-specific investments, they will not make such investments
33
34 (Gillan, Hartzell, and Parrino, 2009). Shareholders need assurance that they will receive a
35
36 sufficient return on capital. As discussed above, in an incomplete contracting framework,
37
38 shareholder capital is considered a firm-specific investment (Alchian and Demsetz, 1972;
39
40 Grossman and Hart, 1986; Hart and Moore, 1990; Blair and Stout, 1999). It is impossible or
41
42 costly to sell off assets from a company. Hart and Moore (1995), Hellmann (1998) and
43
44 Kaplan and Strömberg (2004) examine venture capital relationships in an incomplete
45
46 contracting model and come to a similar conclusion. The human capital of founders cannot be
47
48 tied to a company formally. In a situation with few outside opportunities, a founder derives
49
50 bargaining power through the ability to threaten to leave a firm. Departure of founders is a
51
52 problem for financiers (Hart and Moore, 1995). By threatening to depart, founders can
53
54 renegotiate agreements with financiers. Without their human capital, the value of the venture
55
56 is significantly diminished. Whether the voluntary departure of a good CEO is a hold-up of
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1
2
3 shareholders of public companies is debatable. Gillan, Hartzell, and Parrino (2009) argue
4
5 that, while managers are not diversified against dismissal, shareholders are diversified against
6
7 management losses and can find alternative managers. Therefore, the departure of a CEO in a
8
9 public company is not a hold-up. However, CEOs with the talent to run large companies are
10
11 scarce (Gabaix and Landier, 2008). Yermack (2006a) shows that voluntary departure of
12
13 CEOs has a significant negative effect on company values, while Clayton, Hartzell and
14
15 Rosenberg (2005) find that voluntary and forced turnover increases stock volatility following
16
17 turnover. Furthermore, Rajgopal, Shevlin, and Zamora (2006) find that shareholders try to
18
19 retain reputable CEOs.
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25 Another strand of research concerns the scenario in which shareholders dismiss
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27 managers (Berkovitch, Israel, and Spiegel, 2000; Almazan and Suarez, 2003; Rusticus, 2006;
28
29 Schwab and Thomas, 2006; Gillan, Hartzell, and Parrino, 2009). Dismissal can be through
30
31 incumbent shareholders and boards or in the process of a takeover (Hartzell, Ofek and
32
33 Yermack, 2004; Kaplan and Minton, 2012). Activist shareholders such as hedge funds seek
34
35 changes in the company's business strategy and mode of operation, proposing, for example,
36
37 divesting assets, changing investment or payout levels, altering the capital structure, or
38
39 replacing the CEO (Bratton, 2006; Brav, Jiang, Partnoy, and Thomas, 2008; Bebchuk, 2013).
40
41 There is uncertainty about the quality of the manager and the quality of outside managers that
42
43 become available (Berkovitch, Israel, and Spiegel, 2000; Almazan and Suarez, 2003). If
44
45 better managers are available, the board is inclined to replace the CEO. If CEOs expect to be
46
47 replaced, they will not make firm-specific investments. The reputational damage from
48
49 executive turnover is severe. CEOs from S&P 1500 companies often continue their careers in
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51 companies one tenth the size of their former employer (Gilson, 1989; Fee and Hadlock,
52
53 2004).
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3 Capital can leave on a forced or voluntary basis or can be of inferior quality. Short-
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6 termist shareholders are blamed for causing managers to make short-term investments at the
7
8 expense of long-term company value (Lipton, 1979; Stein, 1989; Anabtawi and Stout, 2008;
9
10 Strine, 2010). Venture capital funds want investors that are not vulnerable to external shocks
11
12 (Kaplan and Schoar, 2005). Hsu (2004) shows that ventures sell shares at a discount of 10% -
13
14 14% to reputable venture capital funds. Under this view, investor quality is determined by
15
16 how much an external shock affects their liquidity and their ability to hold on to shares.
17
18 Uncertainty about possible shocks and resilience against shocks rather than intentions of
19
20 shareholders influence the value of investors. Stock market regulation and the law prevent
21
22 shareholders from being expropriated when companies go private. However, even in the UK
23
24 with shareholder-friendly regulation, the transaction can be sanctioned by courts against a
25
26 veto of up to 25% of shareholders (Payne, 2011).
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33 There is evidence that shareholder identity matters when a company goes public.
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35 According to Brennan and Franks (1997), Stoughton, Wong and Zechner (1997) and Ritter
36
37 and Welsh (2002), firms actively choose shareholders in an initial public offering. They
38
39 achieve leeway in picking preferred investors by offering them discounts ('underpricing'). As
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41 a side-effect and due to stock market regulation, all investors will get that discount. While
42
43 Brennan and Franks (1997) argue that firms opt for dispersed shareholders, Stoughton and
44
45 Zechner (1997) suggest that firms prefer blockholdings by institutions. Barclay and
46
47 Holderness (1989) report that for public companies, 95% of blockholdings in their sample
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49 remained as blockholdings for the subsequent 5 years. These findings suggest that firms are
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51 concerned about selecting and retaining particular shareholders and equity capital structures.
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DISCUSSION

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). Pay should therefore be related to performance (Jensen and Murphy, 1990) so that managers have an incentive to increase company value. Stock is a natural candidate for pay-for-performance, as stock-based compensation covaries with a company's stock price (Jensen and Meckling, 1976). 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.⁴

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.⁵

Residual Control Rights – Residual Cash Flow Rights

⁴ Holderness (2003) finds that for firms in the S&P 500 index, board ownership is 21% on average (median: 14%).

⁵ Anderson and Reeb (2003) show that family-run firms with high inside ownership outperform widely-held companies indicating that the agency cost effect is stronger than the entrenchment effect.

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3 Cash flow rights can only be enforced when a claimant has control rights (Hart,
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5 2001). For example, shareholders receive a return on their shares because they have votes in
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7 their company which provide them with control over the company's assets. Residual cash
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9 flow rights such as the right to receive a dividend (in the case where profits are distributed)
10
11 are derived through residual control rights. Votes in a company provide the holder with
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13 bargaining power, as the owners can withdraw their assets (at a discount). Under this view,
14
15 owners of companies are residual claimants who receive what is left after all other
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17 stakeholders (including managers) receive cash flows that are not contractual commitments to
18
19 other stakeholders. Other stakeholders have effective contracts in place (Easterbrook and
20
21 Fishel, 1983, 1991; Hart, 1995a). Control could then be shifted away from shareholders (to
22
23 protect managers) through equity pay for managers. The question then becomes how to
24
25 allocate control over a company between shareholders, managers and other stakeholders.
26
27 Grossman and Hart (1988) argue that one-share-one-vote is the optimal allocation for most
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29 companies, as it protects the return of each capital share of investment with one vote.
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37 Rather than having a contractual claim over a share in the profit, equity gives the
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39 shareholder votes over assets and rights over cash flows from assets. Hart (2001) calls this
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41 residual control rights and residual cash flow rights. Residual control rights are rights of an
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43 owner over an asset that is not written down in a contract. Residual cash flow rights are rights
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45 over the proceeds from an asset that are not contractually agreed (such as fixed interest
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47 payments). Ownership provides the holder with important rights when contracts are
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49 incomplete. An owner with 10% of the shares cannot be squeezed out from a public
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51 company. Squeeze-out rights provide majority shareholders with the right to force minority
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53 shareholders below that threshold to sell their shares. It is a mechanism that was intended to
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55 prevent minority shareholders from holding-out to negotiate a prohibitive price with the
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57 acquirer (Grossman and Hart, 1980). With only a 10% holding, a shareholder could be
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3 regarded as an insider of the company with all resulting insider duties such as declaration of
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5 changes in interest. In many cases, a 25% stake would effectively, depending on the articles
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7 of the association, allow the minority shareholder to veto a takeover of a company (Grossman
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9 and Hart, 1980; Garvey and Hanka, 1999). As different shareholders might collude, votes are
10
11 an effective tool to acquire control over an asset, even if it is just veto rights. Indeed, as
12
13 discussed above, Morck, Shleifer and Vishny (1988) identify a U-shaped relationship
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15 between ownership and company value. However, even with an incomplete contracting
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17 perspective, the argument that control over assets determines cash flow rights is challenged.
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19 Blair and Stout (1999) argue that shareholders do not have control over the most important
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21 asset, namely the human capital of employees. Marx, Strumsky, and Fleming (2007) state
22
23 that the most important asset "walks out the door every evening". It is therefore not
24
25 established that votes over assets other than human capital (residual or not) influence the
26
27 outcome of the management-shareholder relationship. It is debatable whether residual control
28
29 and cash flow rights over non-human capital assets are pivotal for securing a reward. We
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31 previously documented that a different characteristic of equity influences the outcome of the
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33 relationship between managers and shareholders - that equity compensation converts into
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35 severance pay in the case of dismissal.
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47 *Renegotiation of Claims*

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50 Some authors argue that it is optimal to write contracts with no *ex post* negotiation
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52 while others believe that space for renegotiation might be optimal. Room for renegotiation is
53
54 optimal in the case of bankruptcy. Companies under bankruptcy file for 'protection' from
55
56 lenders who would like to seize the assets (Hart, 1995a). In a principal-agent model, tough
57
58 liquidation terms are considered to be a means of inducing managers to use funds efficiently
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60 (Manne, 1965). Conversely, it is observed that a bankruptcy under reorganization allows a

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3 distressed company to renegotiate restrictive contracts with stakeholders to allow
4
5 restructuring (Hart, 1995a). Roberts and Sufi (2009) report that 90% of privately agreed loans
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7 to public companies are renegotiated prior to maturity. The amount, maturity, and pricing of
8
9 the contracts are renegotiated, and rarely as a result of distress. Shleifer and Summers (1988)
10
11 argue that the value from takeovers is mainly derived from renegotiating long-term contracts
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13 with stakeholders. Renegotiation, even though potentially imposing lower discipline on
14
15 borrowers, allows for restructuring of companies.
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20 As discussed above, shareholders and managers leave agreements deliberately
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22 unspecified when uncertainty is low (Gillan, Hartzell, and Parrino, 2009). This observation is
23
24 inconsistent with the view that uncertainty prevents the parties from writing contracts, as
25
26 proposed by Klein (1996). Equity compensation is one form of severance pay that reduces
27
28 contracting ambiguity (Rau and Xu, 2013; Zhao, 2013). Yermack (2006a) finds that
29
30 severance payments in the case of CEO departure deviate from payments stipulated in
31
32 severance agreements. Agreements in writing do not appear to be binding but rather guiding.
33
34 Hush money, for example, prevents a CEO from leaking company secrets after departure
35
36 (Schwab and Thomas, 2006; Yermack, 2006a; Erkens, 2011) and continues to be paid years
37
38 after severance. Californian courts void contracts that prevent CEOs from working for
39
40 competitors after departure, yet 58% of S&P1500 companies headquartered in California
41
42 contract over such 'non-competition'. Courts appear to play a minor role here, as enforcers of
43
44 such contracts. Schwab and Thomas (2006) argue that companies would rather stick to
45
46 payouts over the coming years in order to prevent redundant CEOs from leaking company
47
48 secrets. Their results confirm that the amount of severance pay as a multiple of salaries is
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50 correlated with the length in years of the non-competition agreement. Renegotiation of
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52 contracts with CEOs can therefore be beneficial to shareholders for the prevention of leaks of
53
54 company secrets when contracts are not functional.
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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 (2014) 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 are 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 that 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

1
2
3 raise funds. The reason is that financiers expect that founders will renegotiate initial
4
5 agreements because founders can always threaten to leave a venture. This gives founders
6
7 bargaining power *ex post*, e.g. to renegotiate compensation contracts. Founders might want to
8
9 pledge their human capital to investors but this is not possible. Their human capital is
10
11 'inalienable'. However, founders have another way of committing not to leave. Hart and
12
13 Moore (1995) argue that founders can promise to pay a fixed proportion (interest) of the
14
15 capital invested that is independent of the success of the company. A fixed proportion is
16
17 verifiable in court and therefore enforceable. Hence, only if founders fail to pay the fixed
18
19 proportion do investors acquire control over the company. This is the rationale for investing
20
21 through bank loans. For financiers who invest equity, Hellmann (1998) identifies a solution
22
23 to this problem: founders accept deferred investments. Equity investments vest over time and
24
25 only after the expiry of the vesting period does the founder own the equity stakes. If the
26
27 founder leaves the venture, the unvested stake in the venture is forfeited. This reduces the
28
29 founder's bargaining power during the vesting period.⁶
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37 Studies have found that shareholders offer severance pay to executives in order to
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39 make commitments not to fire managers or renegotiate their compensation (Berkovitch,
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41 Israel, and Spiegel, 2000; Almazan and Suarez, 2003; Rusticus, 2006; Schwab and Thomas,
42
43 2006; Gillan, Hartzell, and Parrino, 2009). Wagner and Wenk (2013) find evidence from
44
45 Swiss companies between 2006 and 2010 that shareholders surrender control over managers.
46
47 They show that shareholders in Switzerland at that time period were opposed to binding votes
48
49 over compensation. Under Swiss legislation, the right to propose and confirm (and veto)
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51 executive compensation at that time was with boards.
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⁶ Oyer (2004) and Rajgopal, Shevlin, and Zamora (2006) amongst others note that public companies pay CEOs vesting compensation.

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3 Blair and Stout (1999) argue that public company law is a means of weakening
4 shareholder power in their own interest. By investing in a public company, shareholders
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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 further that in public companies, votes are not the primary decision instrument. 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 board discretion. 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). Severance payouts allow managers to invest in relationship-specific investments as they will be rewarded 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

We reviewed the literature on the relationship between managers and shareholders from the perspective of principal-agent hierarchies and cooperative teams. In particular, we considered the two main models (the principal-agent model and the incomplete contracting framework) of the relationship between shareholders and managers. After discussing the way in which the extant models operate in modern corporations, we explored deviations from optimal outcomes and identified the importance of the stability of human capital. Finally, we identified some advantages of the cooperative approach which arise from the hold-up problem. When the potential for hold-up exists, parties to contracts are not willing to commit their resources to value-enhancing activities for fear that quasi-rents will be expropriated by counterparties. The outcome is reduced value of all parties.

The main implication of the preceding discussion is that managers should be encouraged to invest in relationship-specific assets which create value for managers and shareholders. By making a credible commitment not to hold-up CEOs, valuable human capital can be released to productive ends. The provision of capital can then be controlled by the use of vesting stock options in executive compensation packages and markets can and should be left to do their work. If returns are insufficient then shareholders can curtail investment by means of vesting characteristics of stock options with no implications for hold-up. If returns meet expectations then CEOs need not fear hold-up since capital is released automatically.

Our second observation is that value may also be extracted in the relationship between managers and shareholders by embracing the contractual latitude of incomplete contracts and allowing room to renegotiation of contracts when circumstances dictate. Bankruptcy and post-takeover negotiations, and non-compete agreements provide examples of how such

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3 latitude is of value to shareholders and managers. However, such value is not limited to these
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5 situations.
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8 Surrender of control using investment by instalments in the form of vested stock
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10 option grants and contractual latitude, which allows for renegotiation possibilities, can
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12 enhance the stability of human and financial capital in the interests of both managers and
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14 shareholders. Further research on how these solutions affect decision making will enhance
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16 our understanding of the combined operation of human capital of managers and financial
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18 capital of shareholders.
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Table 1. Literature Review.

Broad Literature Strand	Hypothesis/Evidence	Contracts/Implications for			
		Complete contracts/ Shareholders and Managers	Incomplete contracts/ Shareholders	Incomplete contracts/ Managers	Incomplete contracts/ Shareholders and Managers
I. CEO Compensation	Pay for Performance	Stock compensation as pay-for-performance since shareholders cannot observe CEOs (Adam Smith, 1776/1937; Berle and Means, 1932; Arrow, 1963; Jensen and Meckling, 1976; Holmstrom, 1979; 1982; Lazear and Rosen, 1981; Myers and Majluf, 1984; Holmstrom and Costa, 1986; Jensen and Murphy, 1990; Hall and Liebman, 1998)	Stock compensation as pay-for-performance since shareholders are residual claimants (Easterbrook and Fischel, 1983; Bull, 1987; Hart, 1995a, 2001; Klein, 1996)		
	Free Cash Flows		CEO control and free cash flows lead to poor investments (Jensen, 1986; Morck, Shleifer, and Vishny, 1990; Lang, Stulz, and Walkling, 1991; Harford, 1999; Titman, Wei, and Xie, 2004; Bebchuk, 2013)		
	Severance Pay		Severance pay for self-serving CEOs? (Lambert and Larcker, 1985; Lefanowicz, Robinson, and Smith, 2000; Yermack, 2006a)	Severance pay as protection against hold-up when outcomes are unpredictable (Gilson, 1989; Berkovitch, Israel, and Spiegel, 2000; Fee and Hadlock, 2004; Hartzell, Ofek, and Yermack, 2004; Almazan and Suarez, 2003; Bratton, 2006; Rusicus, 2006; Schwab and Thomas, 2006; Brav, Jiang, Partnoy, and Thomas, 2008; Gillan, Hartzell, and Parrino, 2009; Acharya, Baghai, and Subramanian, 2014; Kaplan and Minton, 2012; Bebchuk, 2013; Rau and Xu, 2013; Wagner and Wenk, 2013; Zhao, 2013)	
	Stock as Severance Pay	Stock-based compensation for attracting and retaining CEOs when outcomes are predictable (Himmelberg and Hubbard, 2000; Chidambaram and Prabhala, 2003; Oyer, 2004; Oyer and Schaefer, 2005; Rajgopal, Shevlin, and Zamora, 2006; Cremers and Grinstein, 2013)	Stock-based compensation windfalls for CEOs (Bebchuk and Fried, 2003; 2004; Kaplan and Minton, 2012)	Stock-based compensation as severance compensation when outcomes are unpredictable (Schwab and Thomas, 2006; Gillan, Hartzell, and Parrino, 2009)	
	CEO Departure		Departure of CEOs as hold-up of shareholders? (Hart and Moore, 1995; Hellmann, 1998; Kaplan and Stromberg, 2004; Clayton, Hartzell, and Rosenberg, 2005; Yermack, 2006a; Marx, Strumsky, and Fleming, 2007; Gabaix and Landier, 2008; Gillan, Hartzell, and Parrino, 2009)		

Table 1. continued

Broad Literature Strand	Hypothesis	Contracts/Implications for			
		Complete contracts/Shareholders and Managers	Incomplete contracts/Shareholders	Incomplete contracts/Managers	Incomplete contracts/Shareholders and Managers
II. Equity Market	Efficiency of Takeovers		Markets for corporate control to discipline CEOs? (Manne, 1965; Jensen and Meckling, 1976; Fama, 1980; Hart, 1983; Jensen and Ruback, 1983; Grossman and Hart, 1986; Morck, Shleifer, and Vishny, 1988; Scharfstein, 1988; Hart and Moore, 1990; Bebchuk, Coates, and Subramanian, 2002; Bebchuk and Fried, 2005; Bratton, 2006; Brav, Jiang, Partnoy, and Thomas, 2008; Bebchuk, 2013; Fos, 2015)	Market for corporate control not cleared due to takeover premiums & controlling block premiums (Ruback, 1983; Jarrell, Brickley, and Netter, 1988; Grossman and Hart, 1988; Barclay and Holderness, 1989; Dyck and Zingales, 2004; Raman, Shivakumar, and Tamayo, 2013)	
	Non-disciplinary Takeovers			Takeovers are not mainly for disciplining management since takeovers come in waves and are demand-driven (Mitchell and Mullherin, 1996)	
	Matching of investors to firms	Matching of investors as sign that firms screen investors under certainty through discounts and qualification (Brennan and Franks, 1997; Stoughton, Wong, and Zechner, 2001; Ritter and Welsh, 2002; Lerner and Schoar, 2004; Lerner, Schoar, and Wongsunwai, 2007)		Matching of investors to CEOs under uncertainty through discounts and qualification (Lipton, 1979; Stein, 1989; Hsu, 2004; Kaplan and Schoar, 2005; Anabtawi and Stout, 2008; Strine, 2010; Payne, 2011)	
	Board Independence		CEO/chairman duality and other evidence that boards side with CEOs to hold up shareholders (Bebchuk and Fried, 2003)		Independent and insulated boards as evidence that contracts between CEOs and Shareholders are incomplete (Alchian and Demsetz, 1972; Blair and Stout, 1999; Faleye, 2007; Besanko, Dranove, Shanley, and Schaefer, 2009)
	Control Rights		Right allocation of control through shares (Holderness, 2003; Anderson and Reeb, 2003; Grossman and Hart, 1980; 1988; Morck, Shleifer, and Vishny, 1988; Garvey and Hanka, 1999; Hart, 2001)		Right allocation of control through boards (Alchian and Demsetz, 1972; Blair and Stout, 1999; Faleye, 2007; Besanko, Dranove, Shanley, and Schaefer, 2009)