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# **Executive Incentive Schemes in Initial Public Offerings: The Effects of Multiple Agency Conflicts and Corporate Governance**

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# **Executive Incentive Schemes in Initial Public Offerings: The Effects of Multiple Agency Conflicts and Corporate Governance**

## **ABSTRACT**

Combining a behavioral agency perspective with research on multiple agency conflicts, this paper examines factors affecting the implementation of equity based incentive schemes in initial public offerings (IPOs). Using a unique sample of UK IPO companies between years 1998 and 2002, it shows that conditional (performance-related) incentive schemes are negatively associated with share ownership and board power of the IPO's founding directors. However, the retained ownership of venture capital firms is positively associated with the probability of conditional incentive schemes. Board independence weakly effects on the "toughness" of executive compensation. The papers interesting findings suggests a number of avenues for a future analysis of governance development process in "threshold" firms.

*Key words:* IPO, governance, executive compensation, agency theory, founders.

# **Executive Incentive Schemes in Initial Public Offerings: The Effects of Multiple Agency Conflicts and Corporate Governance**

## **INTRODUCTION**

An increasing number of fast-growing firms face the decision to go public at different stages of their life-cycle, and the process of Initial Public Offering (IPO) has had increasing attention from academics (Jain & Kini, 1999; Ritter, 1987). Predominantly research on IPO companies has focused on areas such as issue performance (Brennan & Franks, 1997; Espenlaub & Tonks, 1998; Mikkelsen, Partch & Shah, 1997; Pham, Kalev & Steen, 2003), and its relationships with general corporate governance parameters such as board structure and characteristics (Beatty & Zajac, 1994; Certo, Covin, Daily & Dalton, 2001; Filatotchev & Bishop, 2002). Within these diverse research streams, a relatively little attention has been given to the role of executive compensation with regards to the IPO company. Although Beatty and Zajac (1994) argue the need for a more unified perspective on the control of executive compensation in the IPO company, there is

little understanding among academics and practitioners of factors affecting introduction of executive compensation schemes at the time of IPO and their structural characteristics, such as their relation to various performance targets established by the firm's board and shareholders.

Financial economists and organization theorists have developed a substantial body of literature on factors driving executive compensation and its organizational outcomes (see Conyon, Peck, Read & Sadler, 2000, for an extensive literature review). Most of the executive compensation studies have been rooted in labor economics and agency theory and have focused predominantly on mature publicly listed companies. Over recent years this has provided fuel for commentators to criticize the remuneration received by top executive directors. Many US studies have explored possible links between executive pay and the performance of the company, but these links have been found to be weak or non-existent (Berkema, Geroski & Schwalbach, 1997; Jensen & Murphy, 1990). Within the UK these links also have not been strong (Conyon & Leech, 1994; Gregg, Machin & Symanski, 1993; Main, Bruce & Buck, 1996). Some researchers argue that the incorporation of share based incentive schemes can promote unethical reporting behavior by CEOs (Carson, 2003). This is particularly important as it is estimated that in the late 90's nearly 80% of the rise in CEO pay came from share options grants (Perel, 2003). More recently, research on compensation issues in the mature listed company has been widened to encompass areas such as compensation and option incentives (Conyon & Sadler, 2001), the structure of compensation contracts (Conyon et al., 2000) and governance issues such as board control and remuneration committees (Conyon & Peck, 1998). However, the structure and characteristics of executive share-based compensation in the IPO company still remains unexplored, even though IPOs represent a unique laboratory to study equity based incentive pay schemes such as executive share options and long term incentive plans at a crucial time in the firm's development, which is often referred to as a "strategic threshold" (Filatotchev, Toms & Wright, 2006).

IPO context provides a number of opportunities for the development of more fine grained analysis of various theoretical aspects associated with equity-based incentive schemes, such as "risk-incentive trade-off" (Prendergast, 2002) or "framing" of risk preferences within behavioral agency framework (Wiseman & Gomez-Mejia, 1998). As Betty & Zajac (1994:315) argue, studying newer firms that are considering a wider variety of internal governance mechanisms may provide a particularly clear test of the agency-based contingency perspectives. For example, the question of choice between conditional ("hard") and unconditional ("soft") share option schemes ultimately concerns the effects of "hard" or "soft" targets on risk-taking behavior, but traditional agency-based corporate governance models are relatively silent on this issue (Wiseman & Gomez-Mejia, 1998:142). Beatty & Zajac (1994) emphasize that, since IPO firms may be particularly dependent on the existing top management team that usually includes the original founders, they may be more sensitive to managerial preferences for minimizing risk-bearing than would larger firms.

Furthermore, unlike large mature firms with diffused external shareholders, IPO firms come to the stock market with more concentrated ownership patterns, with managers, founders and early stage investors, such as venture capital firms (VCs) still retaining substantial equity stakes after the flotation (Filatotchev, 2006). A recent study by Arthurs, Hoskisson, Busenitz & Johnson (2008) argues that the IPO firms provide a multiple agency setting associated with "conflicts of interest among more than one agent group" (p. 277). Such settings create both a potential for "conflicting voices" among various principal groups (Hoskisson, Hitt, Johnson & Grossman, 2002), as well as agents' "conflicting choices" concerning which principals' interests

should have priority. For example, founders of the IPO firm, being large-block shareholders, may be considered as principals to non-founding executive directors. At the same time, these founders may also retain executive positions, which turns them into agents of external shareholders, such as VCs. Likewise, VCs may be principals to the executive directors as well as agents to those who provides funds. However, multiple agency research is silent with regard to how interests and risk preferences of multiple principals/agents in the IPO firm influence governance-related decisions such as the adoption of equity based incentive schemes.

This paper extends previous work in several ways. First, we make a contribution to corporate governance research by integrating multiple agency and behavioral agency theories and suggesting that combining them may help to develop further agency-based models of executive risk taking behavior and their attitudes towards different types of equity based incentives. Second, we develop further multiple agency framework by providing more fine grained analysis of the governance roles of executive and non-executive founders who very often are in charge of critical decision-making functions in entrepreneurial IPOs. The third contribution is that we show how different incentives and risk preferences of key shareholder constituencies in the IPO firm may impact on the choice between “soft” and “hard” equity-based incentive schemes. Our last contribution is to the behavioral agency view of the board’s governance functions. By integrating behavior and multiple agency perspectives, we argue that the specific board characteristics, such as board independence and founders’ control over the board, may determine the “salience” of multiple principals’ preferences, and, therefore, they should have a significant impact on the “toughness” of executive remuneration schemes.

### **CONCEPTUAL FRAMEWORK**

Beatty & Zajac (1994:315) argue that an IPO provides a unique opportunity to examine compensation arrangements and governance relationships that become formalized when an organization becomes an open corporation and its stock is openly traded for the first time. Although an IPO leads to a significant amount of capital raised with the issue of shares, it is often accompanied by the dilution of ownership from the existing shareholders to outside institutional and retail investors. Thus at the point of the IPO, founders and executives face both an exciting growth period and an uncertain time as they place shares beyond their control into the open market. Agency theorists argue that governance structures should be put in place to re-align the interests of insiders and outside shareholders (Jensen & Meckling, 1976; Pagano, Panetta & Zingales, 1998; Pagano & Röell, 1998), and linking executives’ remuneration to conditional share option schemes is often considered as powerful re-alignment mechanism. However, selecting equity-related incentive schemes may be problematic when there are different, perhaps conflicting voices in an IPO because of the multiple agent interests associated with different shareholder constituencies (Arthurs et al., 2008:282). Therefore, the IPO firm’s governance parameters may be an outcome of a complex pattern of principals’ interests and agents’ risk preferences associated with distribution of ownership and control within the newly listed firm (Filatotchev, 2006).

Building on the multiple agency perspective of the IPO firm’s governance aspects (e.g., Arthurs et al., 2008; e.g., Filatotchev et al., 2006) and behavioral agency research (e.g., Westphal & Zajac, 1995; Wiseman & Bromiley, 1996; Wiseman & Gomez-Mejia, 1998) this paper argues that in the IPO firm’s decisions to implement equity-based incentive schemes and the extent of their “toughness” are not exogenous factors. Rather, they are linked to the distribution of retained

ownership among multiple principals/agents, as well as their control over the IPO firm's board. We differentiate between the governance roles of four main groups of shareholders - non-founding executive directors, executive founders, non-executive founders, and venture capital firms – and consider their interests and risk preferences. Building on the behavioral agency research we argue that founding and non-founding executives should exhibit strong preferences for unconditional share option schemes, since their retained ownership leads to loss-aversion (as opposed to risk-aversion) within gain framed context (Tversky & Kahneman, 1986; Wiseman & Gomez-Mejia, 1998). However, the interests and risk preferences of non-executive founders and venture capitalists underpin a strong principal perspective on executive remuneration, and, building on “risk-incentive tradeoff” research (e.g., Prendergast, 2002) we argue that, in the uncertain environment of an IPO, these two groups of investors may support the development of conditional, performance-related incentive schemes (Zahra & Pearce, 1989). Finally, we argue that the specific board characteristics, such as board independence and founders' control over board, may determine the “salience” of multiple principals' preferences, and, therefore, they should have a significant impact on the “toughness” of executive remuneration schemes. The following sections develop these arguments further and suggest a number of testable hypotheses. We start our analysis with corporate governance aspects of share ownership of hired, non-founding directors. Then we consider dual agency roles of executive and non-executive founders and early stage investors. Our theoretical discussion concludes with analysis of the impact of board characteristics on the choice between conditional and unconditional share options in the IPO firm.

### **Multiple agents, ownership structure and equity based incentive schemes**

In their seminal article on corporate governance, Jensen & Meckling (1976) indicate that the flotation of a company's shares on the public market leads to the ‘principal-agent’ concern: how to reconcile the interests of incumbent managers and executive directors (as ‘agents’) with those of the company's ultimate owners – external shareholders (as ‘principals’). Corporate governance research suggests that appropriate mechanisms need to be put in place to motivate directors to align their own interests more closely with the shareholders, thus ensuring goal congruence. Share option based incentive schemes for executive directors have been discussed as the key way to help overcome agency problems (Beatty & Zajac, 1994; Fama, 1980; Fama & Jensen, 1983; Murphy, 1985), with greater amounts of the managers' compensation being tied directly to the performance of the company (Jensen & Murphy, 1990). At the point of the IPO this becomes particularly relevant, since a gradual process of “professionalization” of entrepreneurial ventures is usually accompanied by an increasing importance of hired, non-founding executives (Daily & Dalton, 1992; Willard, Krueger & Feeser, 1992). Indeed, some authors argue that one of the reasons for a private company to go public is a possibility to introduce share-based incentive schemes for non-founding key employees (Pagano & Röell, 1998).

Traditional agency argument that the implementation and use of compensation schemes can potentially mitigate the mis-alignment of managerial incentives and associated agency problems has been challenged by studies on the “incentive-risk trade-off” (Beatty & Zajac, 1994; Holmstrom, 1979; Prendergast, 2002). This research argues that linking a manager's remuneration too closely to firm performance could potentially lead to risk-avoiding behavior by the manager. Whilst it can be argued that equity and performance based compensation can have desirable motivational aspects, it may also cause the manager to have undesirable risk bearing

characteristics. Rappaport (1981; 1999) argues that managers, who act as the agents of the shareholders, are more risk averse than the owners of the company. Unlike owners of the company, who are able to diversify their ownership portfolio, managers have already invested their non-diversifiable human capital in the firm (Balkin & Gomez-Mejia, 1990; Gomez-Mejia & Balkin, 1992). As Scholes (1992:123) argues, “managers are more likely to attach significantly more value to a given level of cash than to the same expected level in stock or options because they can use this cash to buy a diversified portfolio of common stock, bonds, or whatever”.

In terms of compensation issues the most significant part of risk bearing for the executive is the acceptance of equity-based compensation within their compensation contract. Any form of equity-based pay will cause the executive to bear risk that could otherwise be more efficiently borne by the shareholders who are able to diversify their investments. As a consequence of this, executives are more likely to have preference for cash payment than to share options (Jensen & Murphy, 1990). This shift in managerial preferences may be particularly dramatic when incentive schemes are tied to “tough” measures linked to company performance such as earnings per share, total shareholder return and market share prices (Fama & Jensen, 1983). If company risk is high, then any proportion of remuneration that is equity based will be further loaded not only with non-diversifiable risk but also company risk. As such the executives will face a very different level of risk to the shareholder, and these risks can hinder the alignment of the two in the context of pay schemes that link pay to performance (Gray & Cannella, 1997; Wiseman & Gomez-Mejia, 1998).

Both agency arguments and the “risk-incentives trade-off” framework imply that risk preferences of managers may be contingent on the value of managers’ equity holdings. From the traditional agency perspective, the higher the managers’ equity position, the less severe the agency incentive problem is, making it less likely that firms will need to use stock options in their compensation contracts. Similarly, the risk – incentives research argues that high equity stakes in the firm mean that managers are relatively less diversified, and stock-based incentives would lead to their risk aversion. Both theories suggest that managerial ownership should be negatively related to the probability of “hard” performance contracts, *ceteris paribus* (Beatty & Zajac, 1994).

However, in the context of an IPO, this argument may be contested bearing in mind possible dilution of executive equity during the process of listing (Baker & Gompers, 2003; Certo, Daily, Cannella & Dalton, 2003), especially if dilution occurs when the original shareholders partially “exit” by selling some of their equity in the IPO. Since dilution through the sale of existing shares may increase the extent of diversification of the executives, multiple-agency framework (Arthurs et al., 2008) suggests that this increase in diversification combined with their retained equity in the focal company should bring non-founding executives in closer alignment with other principals and change their risk preferences. As a result, executives may want to obtain some upside gains associated with conditional share options, and, when controlled for share dilution, the effects of executive share ownership on conditional stock options should be neutral or positive.

More recent behavioral agency research (e.g., Wiseman & Bromiley, 1996; Wiseman & Gomez-Mejia, 1998) helps to untangle this complex web of incentive-risk bearing problems associated with executive ownership and stock options. By combining agency arguments with “prospect theory” research (Kahneman & Tversky, 1979; Tversky & Kahneman, 1986) these authors suggest that executives’ risk preferences and decisions may be driven by “problem

framing”, with their equity stakes being an important contingency affecting this framing. More specifically, an executive’s current wealth may provide only a point of reference for assessing the prospects as opposed to directly influencing the preference for risk (Wiseman & Gomez-Mejia, 1998:134). These arguments may have particular relevance in the context of IPO firms.

Even though there is a direct dilution of ownership at the time of the listing, founding and non-founding executive directors usually retain a significant proportion of ownership at IPO (Filatotchev, 2006). The lock-up restrictions on equity trading after the IPO may create transaction costs that prevent executives to adjust their equity holdings to an optimal level (Beatty & Zajac, 1994). Therefore, the magnitude of the retained equity positions after the IPO may influence their willingness to accept further risk bearing in their compensation contract. More specifically, using locked-up executive equity as a reference point for framing problems as gain or loss, behavioral models predict that executives should exhibit risk-averse preferences when considering the appropriateness of different types of incentive schemes within “gain” context. It seems likely that members of an executive team see the IPO as a milestone of success and have high expectations of the future (Arthurs et al., 2008; Certo et al., 2001; Certo et al., 2003). Wiseman & Gomez-Mejia (1998) argue that this situation may shift executives’ preferences from risk-avoidance to loss-avoidance, and they become more concerned with avoiding loss of perceived wealth than to attracting additional wealth. This results in more conservative risk-averse posture. These arguments imply that higher levels of retained executive equity after the IPO should frame their risk preferences away from “tough” conditional share option schemes towards less riskier unconditional schemes. Hence, we suggest:

*Hypothesis 1: The probability of conditional equity based incentive schemes being present in the remuneration contracts of executive directors in the IPO firm is negatively associated with the level of retained ownership by the non-founding executive directors.*

Previous studies of entrepreneurial IPOs recognize the continuing, albeit diminishing, centrality of the founding team in the life of the threshold firm (Amit, Glosten & Muller, 1990; Certo et al., 2001; Willard et al., 1992). Entrepreneurship research also indicates that the ability of the young firm’s founders to formulate and implement strategic initiatives which capitalize on environmental opportunities is vital to organizational growth and survival (Finkle, 1998; Jayraman, Khorana & Nelling, 2000; Steier & Greenwood, 2000). Founder characteristics, therefore, such as motivation and incentives, have a direct impact on the firm’s development and success in the long-run (Daily & Dalton, 1997).

However, as mentioned above, the IPO process is accompanied by significant shifts in the distribution of ownership and control between founding and new shareholders that create misalignment of incentives and a related set of agency costs (Jensen & Meckling, 1976; Mello & Parsons, 1998). As Pagano and Röell (1998:188) have pointed out, “in this situation the main conflict of interest is that between the controlling shareholder and the minority shareholders, rather than between hired managers and the generality of shareholders”. In addition, during the process of “professionalization” of the firm before it comes to an IPO some founders may step down from executive positions and move to non-executive roles (Willard et al., 1992), and this arguably aligns their interests with interests of external, minority shareholders.

Therefore, entrepreneurial IPO firms provide a setting where multiple agency problems are particularly salient (Arthurs et al., 2008). More specifically, the firm’s founders are, as a rule, majority shareholders and, as principals, they should monitor executive directors (Sapienza &

Gupta, 1994; Schulze, Lubatkin & Dino, 2003). At the same time, they continue to serve in top executive positions, including the CEO position. However, the process of “professionalization” makes the founder cohort less homogeneous since some founders may have moved to non-executive roles. Therefore, the multiple agency perspective should be augmented by considering potential differences in governance roles of executive and non-executive founders, and this research represents one of the first steps in this direction.

Behavioral agency arguments outlined above suggest that the framing of executive attitudes towards conditional share option schemes depends on the amount of their wealth associated with the IPO firm. It is the amount of perceived risk borne by the agents that affects their willingness to accept “hard” conditions attached to incentives. Founding executives, in addition to their financial wealth, also have a substantial amount of human capital invested in their firm. Moreover, their long tenure since the firm’s inception to its IPO creates strong psychological attachment to the firm, so its success and survival becomes a part of founder’s identity (Arthurs et al., 2008). Therefore, from the behavioral agency perspective, founders’ human capital investment and long tenure should be additional framing factors that re-enforce negative attitudes towards additional risk associated with conditional share options.

On the other hand, non-executive founders may see themselves more as principals than agents, especially when they retain a substantial equity stake in the firm after stepping down from their executive roles. In a complex environment of IPO, although they still may be able to monitor executives’ inputs, it is likely for them to have less idea about what the executives should spend their time on (Prendergast, 2002). Since non-executive founders are likely to have withdrawn from strategy-making process and other key executive decision, they have a reduced ability to understand and evaluate executive decision compared to executive founders. In this case, the framing of decisions of executive and non-executive founders should be different, and, in the absence of an effective mechanism of monitoring and evaluating complex positions when the optimal action is hard to pinpoint, non-executive founders are more likely to respond by offering the executives a pay-for-performance contract (Prendergast, 2002). This incentive will be stronger the higher is the non-executive founders’ wealth at stake.

These arguments extend multiple agency research by suggesting that executive and non-executive founders may have different risk attitudes and governance roles within the IPO firm, with executive founders aligning their preferences with other executives, whereas non-executive founders moving closer to the principal end of the spectrum. Hence, we suggest two linked hypotheses:

*Hypothesis 2a: The probability of conditional equity based incentive schemes being present in the remuneration contracts of executive directors in the IPO firm is negatively associated with the level of retained ownership by the executive founders.*

*Hypothesis 2b: The probability of conditional equity based incentive schemes being present in the remuneration contracts of executive directors in the IPO firm is positively associated with the level of retained ownership by the non- executive founders.*

Apart from insiders, entrepreneurial IPOs very often have external block holders such as venture capitalists. These investors provide equity finance at early stages of the venture’s life-cycle. As a

result of this long-term involvement with the venture, VCs have increased incentives to monitor both the decision plans and decision outcomes of managers (Brav & Gompers, 1997; Carpenter, Pollock & Leary, 2003). In particular, VCs impose contractual restraints on managerial discretion, including the use of staged investment, an enforceable nexus of security covenants, and the option to replace the entrepreneur as manager unless key investment objectives are met (see Megginson & Weiss, 1991, for a discussion). Therefore, from the agency perspective, venture capitalists are unique principals in the IPO firm with superior monitoring capacities that should compensate for a relatively weak incentive alignment associated with non-conditional executive share options.

However, the multiple agency framework suggests a different picture of the governance roles of VCs. Although VCs are principals to a focal IPO firm they are also agents to those who provide their investment funds (Arthurs et al., 2008). Despite the fact that VCs often use an IPO as an “exit” opportunity, a substantial part of their equity holding still remains with the IPO firm because of the lock-up arrangements that may last for over a year (Filatotchev, 2006). Therefore, the pressure to show returns from their investment with their clientele may last way after the IPO date, and this puts a serious burden on the monitoring capacity of VCs (Arthurs et al., 2008). As a result, there may be a strong argument that VC’s retained ownership after an IPO may lead to an increase in the probability of adopting performance related share options.

First, it is increasingly recognized in the management literature that IPO is an important strategic stage in the life-cycle of entrepreneurial firms which is often referred to as the “re-birth” or “re-start” of organizations (Finkle, 1998:6). At this critical junction, a firm has overcome the first challenges of its entrepreneurial phase and entered a growth stage. As Fama and French (2004:229) emphasize, an IPO “is the point of entry that gives firms expanded access to equity capital, allowing them to emerge and grow”. Prendergast (2002) argues that in this complex strategic environment, it is difficult to write an input-based contract since there is no clear understanding of what the agent should be doing; to provide such an incentive would involve frequent and complex re-contracting. She suggests that “the purpose of offering conditional pay schemes is not simply to induce effort, since an input based contracts could do this, but to induce executives to carry out the right kinds of efforts” (p. 1091). Second, since VC’s special rights associated with venture capital contract end at the time of an IPO, when the need for oversight is particularly great, VC investors may compensate for a relative loss of control by strengthening other governance mechanisms, such as increasing incentive alignment through conditional share options (Black & Gilson, 1998). Finally, although behavioral agency theorists did not explicitly study behavior of VCs, their arguments combined with the “multiple agency” perspective on venture capitalists suggest that, because of the finite time horizons associated with lock-up arrangements, VCs may shift their reference point towards encouraging executives’ risk exposure by introducing conditional share option schemes. These arguments are consistent with empirical evidence related to more mature listed firms. For example, David, Kochhar & Levitas (1998) found that the nature of ownership in U.S. firms was an important determinant of CEO compensation. In particular their research supported the case that institutional investors (with only an “investment relationship”) showed preferences towards lower overall levels of cash compensation with an increase in the proportion of compensation received from long-term incentives. Thus:

*Hypothesis 3: The probability of conditional equity based incentive schemes being present in the remuneration contracts of executive directors in the IPO firm is positively associated with presence of a retained ownership of venture capitalists after the IPO.*

## **Board characteristics and equity based incentive schemes**

In the previous section, we linked the type of executive share options schemes to the patterns of ownership and control in the IPO firm. Using the multiple-agency framework we argued that there may be a tension between the governance roles of executive and non-executive founders, executive directors and venture capitalists in terms of defining “toughness” of executive incentive schemes. Here we extend these arguments further by suggesting that compensation design may also depend on board parameters of the IPO firm, since this decision is ultimately a prerogative of the board and its committees. Therefore, board characteristics should have bearing on the “risk-incentive” trade-off associated with executive share options.

From the agency perspective, in order to change managerial risk orientation and align their interests with the interests of principals, firms not only need to set up incentive systems, but they should also make sure that the board is actively involved in the critical functions of active monitoring and evaluation of decisions made by the CEO and other top management team members (Fama & Jensen, 1983). The effectiveness of these monitoring and control functions has usually been related to the extent of board independence and has often been approximated by structural factors such as the proportion of outsiders on the board, CEO/Chairman roles held jointly or separately, etc. (Daily & Dalton, 1997; Zahra & Pearce, 1989). Beatty and Zajac (1994:317) suggest that a higher level of monitoring by boards would be required when executives resist accepting compensation risks tied to firm performance. They stress that traditional agency studies emphasize the primacy of incentive alignment in terms of dealing with agency problems with monitoring being related to the magnitude of incentive gap. This line of argument suggests that monitoring should be a substitute for lacking managerial incentives.

This view has been challenged by research on corporate governance as a system of interdependent elements by exploring how governance practices interact and potentially complement each other as related “bundles” of practices (Aguilera, Filatotchev, Gospel & Jackson, 2008; Rediker & Seth, 1995; Walsh & Steward, 1990). Governance practices here are not seen as being universally applicable. Rather than isolated “best practices”, corporate governance practices become effective only in particular combinations. Complementarities concern such interactions between practices, and how these interdependencies align governance to potentially diverse organizational environments. Therefore, monitoring may be complementary to incentive systems associated with executive stock options.

These arguments may be particularly relevant within the “multiple-agency” context, where principal-agent dualities lead to different risk-incentive trade-offs among shareholder constituencies of the IPO firm. Therefore, apart from controlling the executives’ actions and evaluating their performance, monitoring in this context should also involve setting and communicating performance standards to the executives. Behavior agency theorists argue that these standards should be strongly related to the principal’s preferences. As Wiseman & Gomez-Mejia (1998) suggest “unambiguous communication of these standards results in clear performance targets for the executive, which ... should influence agent’s aspirations or reference point for success” (p. 144). If boards are vigilant in their role of protecting interests of non-insider shareholders then the standards they set should be higher than the standards set by the agent. When this logic is applied within the “multiple-agency” context it becomes clear that the specific board characteristics, such as board independence and founders’ control over board, may determine the “salience” of principals’ preferences, and, therefore, they should have a significant

impact on the choice of incentive schemes.

In the context of IPOs, executive directors are very often the original founders of the IPO firm, and previous research suggests that the founder status of the CEO and/or Chairman may be an important dimension of executive power within the organization that leads to an “executive capture” of the board (Daily & Dalton, 1992; Ensley, Pearson & Amason, 2002). In previous sections we argued that decision framing and risk preferences of founding and non-founding executives are geared toward risk reduction associated with “soft” performance targets. As a result, in the presence of founders’ control over the board and “executive capture”, performance targets should be lower, reflecting the agent’s desire to establish accessible goals that reduce employment risk and ensure contingent pay (Wiseman & Gomez-Mejia, 1998). Hence,

*Hypothesis 4: The probability of conditional equity based incentive schemes being present in the remuneration contracts of executive directors in the IPO firm is negatively associated with presence of founder-CEO/Chairman.*

On the contrary, board independence may tip the balance away from the interest of insiders towards protecting preferences of external shareholders and non-executive founders. Board independence enhances the vigilance of monitoring (Daily, Johnson & Dalton, 1999; Golden & Zajac, 2001; Gulati & Westphal, 1999; Pfeffer, 1972; Shivdasani & Yermack, 1999; Westphal, 1999), especially at those points in the life-cycle of the firm that involve strategic transition (McNulty & Pettigrew, 1999). Socio-cognitive studies of corporate boards have extended agency research by suggesting that pro-active behavior by independent directors may be also driven by the strategic perspective and base of experience provided by their appointments to other organizations (Carpenter, 2002; Carpenter & Westphal 2001; Westphal, 1999; Westphal & Zajac, 1995). Therefore, we may expect that independent directors will appreciate the importance of conditional equity-based compensation schemes as it gradually becomes a “good governance” standard in more mature listed firms. Board independence, therefore, should relate to the difficulty of performance targets and, thus, to the executives’ reference point of success (Wiseman & Gomez-Mejia, 1998). Hence,

*Hypothesis 5: The probability of conditional equity based incentive schemes being present in the remuneration contracts of executive directors in the IPO firm is positively associated with the level of board independence.*

## **DATA AND METHODOLOGY**

### **The sample**

The data sample used in this analysis comprises of a unique data set of founder-led initial public offering companies in the UK. The data have both been sourced from the London Stock Exchange New Issues Listing and information from the Market Information and Analysis section that hold historical fact sheets for all issues from 1998 (including companies issuing additional shares, re-admissions and transfers between markets). The data sample has been collected from those companies floated on the London Stock Exchange (Main market and the Alternative Investment Market (AIM)) over a five year period from 1 January 1998 to 31 December 2002.

For the given period, the London Stock Exchange lists show us that 872 companies were

floated as initial public offerings. Any company with non UK incorporation was excluded as this might be leading to different governance structures. The IPO prospectuses for all remaining 766 UK companies were obtained from Thomson Research, which provides a comprehensive coverage of company filings for publicly quoted UK companies. Missing prospectuses were obtained either via company web sites, or by telephone/written request to the companies or their advisors whichever was deemed more appropriate. Any company deciding upon UK flotation must produce and file with the Stock Exchange a prospectus. Each prospectus was examined and particular emphasis given to the section detailing the history and founders of the company. Any companies that were unit or investment trust were excluded from the sample first (these have particular governance characteristics), then those deemed to involve a de-merger, merger or acquisition, corporate spin off, equity carve outs, reorganizations, or could be considered as solely acquisition vehicles were also excluded (Filatotchev & Bishop, 2002). This resulted in 311 companies who clearly demonstrated that they had been developed via the entrepreneurial process with entrepreneurial founders and those founders were serving as directors at the time of the company's flotation. Since our focus is on the decision to adopt conditional versus non-conditional share option schemes, we excluded a further 16 companies that did not have an executive share option scheme at the time of IPO. Our final sample includes 295 companies. Their listing prospectuses provide a wealth of information including details of the company's financial history, background details to the board of directors and their compensation contract, share ownership and details of any equity based incentive schemes, thus enabling the data variables to be collected from this document for each individual company.

## Measures

### *Dependent variable*

The dependent variable in this study is dichotomous and is measured as the presence of any conditional equity based remuneration scheme (i.e. with specific performance criteria to be achieved in order for grants to vest) at the point of IPO. This information has been primarily taken from the IPO prospectus that gives details of such schemes to future investors. In order to ensure accuracy, where details in the prospectus were vague, to prevent the possibility of missing data or a wrong assumption, annual report and accounts following the IPO were checked with reference to the scheme date in the IPO prospectus.

### *Independent variables*

Ownership of the company is stated in the prospectus in the section detailing 'Directors' and Others' Interests' within the 'Additional Information' in the prospectus. As a rule, the ownership in this section is broken down into both the number of shares held by each director on the board and the percentage of the total equity held by each individual member. Details both prior to and at the point of the IPO are given together in this one section. Additional information as to whether the shares are beneficial or non-beneficial and voting rights are also stipulated giving sufficient information for exact ownership details to be calculated. For this research, ownership details were carefully collated for each individual director and the position on the board was noted (4 categories, CEO, Chair, Executive director, non-executive director). A dichotomous variable was also created to state whether the board member was a founder of the company or not. By

combining this information, the retained ownership variables were created for executive and non-executive founder-directors and other, non-founder executives.

Later on in the same section of the document, block-holders (having greater than 3% share ownership) are also cited, thus enabling the identification of venture capitalist involvement. Attention was given to the section detailing any block investors in order to create a dummy variable indicating whether the company had retained ownership by venture capitalist after the IPO[1]. Names of the block-holders were identified and checked against the British Venture Capital Association list of membership (British Venture Capital Association, 2003).

The extent of founders' control over board was operationalized by collating information relating to the position of the founders on the board of directors. Founders were often in key roles, e.g. as the CEO or Chair and on occasions these were held dually. In order to measure this a dummy variable "CEO/Chair Founder duality" was created. This was assigned a value of one if the role of the CEO and Chair was combined and held by a founder of the firm, and zero otherwise. Building on previous research, a continuous variable measuring the ratio of independent (non-executive in the UK) directors to the total number of board members was used to operationalize the extent of board structural independence (see Filatotchev, 2006, for an extensive discussion).

## **Control Variables**

Several control variables were used. The sample of entrepreneurial IPO companies bridges a five year period that covers a bullish peak in the market mid way and then a slower bear market. As a result of this market fluctuation, a dummy variable was created to indicate flotation before the peak (April 2000).

To moderate for the method of issue and the market floated a further dummy variable was created for those companies that floated via the placing method. With a placing, shares are sold directly to selected institutional investors. Whilst this give the company more discretion to chose its investors, it does result in a narrower shareholder base, which may have an effect on involvement of block-holders (Pike & Neale, 2003). Similarly companies floating on the Alternative Investment Market (AIM) were also identified by a coded dummy variable.

Since the *ex ante* IPO's risk is unobservable and multi-dimensional factor, we use a number of proxies to operationalize it. In line with previous research on IPO companies, the first measurement for risk has been taken from the 'risk factors' discussed in the prospectus. These have simply been counted to provide a continuous measure for the risk of the firm, and a number of studies consider this as an adequate proxy for the risks surrounding the firm (Beatty & Zajac, 1994; Certo et al., 2001; Cyr, Johnson & Welbourne, 2000). A second measure for risk was created against the strength of the present executive team, with particular reference to the founder executives. A dichotomous variable was created to indicate whether the loss of founder/key personnel within the executive team was mentioned within the risk factors (1 = yes; 0 = no). If so this will be a particular risk to the further performance and direction of the company. The third risk proxy measure is derived from the profitability (or un-profitability) of the firm as disclosed to the future investors in the IPO prospectus. Unfortunately due to the age of the many of the firms a trend variable proved to be impractical. So, in line with previous research, a dichotomous measure was created (1= profitable, 0 = unprofitable) (Beatty & Zajac, 1994). The fourth measure for risk was created, again against the (un)profitability of the firm. This was an expansion of the dichotomous measure above in that the variable was made ordinal over the four year period prior to the IPO. No trading, or a loss disclosed in any one year prior to the IPO was

given the value of 1. Summing the values for each year gave a rank of 0 to 4. Hence over the four year period, companies with zero were determined as very low risk, as compared with companies with a four, i.e. four years of either no trading or losses, which were assessed as very high risk.

Since these proxies are not without weaknesses, we introduce an ex-post risk measurement of risk using stock price volatility. This was measured by taking the standard deviation of the first thirty days trading prices for the shares. Finally, we used a sectoral measurement of risk by creating a 'high technology' company dummy for firms from hi-tech industries such as information technology, computers and software etc.

The age of the firm has been used to control for the sophistication of the firm as its organizational structure and the development of governance systems may be linked to a life-cycle development effect. Previous research within mature companies shows that size might also be seen as a determinant of the executive compensation contract (Conyon et al., 2000; Gregg et al., 1993). In order to control for the size of the IPO company, two variables were considered: the market capital value of the firm at the point of the IPO and turnover in the year prior to the IPO. Using market capital value at the time of the IPO to control for size has specific problems. The value placed on the share price might be influenced by the adoption of governance factors, including the provision of equity based incentive schemes (Beatty & Zajac, 1994; Certo, 2003; Certo et al., 2003). Indeed market capitalization may be under-valued as information asymmetries between the various teams involved in the IPO process can lead to underpricing (when the initial offer price is less than the first day close of trade price) (Certo et al., 2001; Filatotchev & Bishop, 2002; Michaely & Shaw, 1994). Alternatively, governance signals (including retained ownership levels) may have a positive effect on the value of the firm (McBain & Krause, 1989; Mikkelsen et al., 1997). With these factors in mind, the measure of market capitalization as a control for the size of the organization might have considerable endogenous and exogenous influences. For this reason, sales turnover has been used to provide an adequate control for the size of the firm.

As indicated in the theory section, the dilution of ownership can also influence adoption of performance based incentives. To control for this, dilution of the founders and other non founder executive directors was measured as the percentage difference between the shares owned prior to and at the point of the IPO.

#### Analytical Technique

Ordinary least square (OLS) regression analysis makes the assumption that any linear model is continuous, homoskedastic and normally distributed. Thus with the dependent variable being the presence of conditional equity incentive schemes within the compensation contract of the executives, the use of OLS regression to model this data is inappropriate. When the dependent variable is of a dichotomous nature a more appropriate tool is multiple discriminant analysis or a logistic regression model (Hair, Anderson, Tatham & Black, 1998). In most applications of this nature the logit and probit models are quite similar, with the main difference being that the logistic distribution has slightly flatter tails (Gujarati, 2003). For comparison, both logit and probit models have been run on the variables. The results for both models were similar, with only marginal differences in the levels of significances. With such similar results, only those of the one (logit) model have been reported.

## EMPIRICAL RESULTS

Tables 1 and 2 provide the descriptive statistics and correlation matrix and for all variables used in the study. From the sample of 295 companies, 49.2% of the executive share option schemes had some form of performance criteria attached in order for shares only to vest to the executives if these conditions are met (or exceeded). Such a high number of companies operating schemes at the IPO show the importance attached to these, both internally and externally.

Insert Table 1 and 2 about here

Table 1 also shows the founder directors were by far the predominant group of insider shareholders, retaining above 30 percent of voting shares after the IPO on average. Founders in executive roles represented largest block owners holding on average 27.74 percent of total shares. Clearly, our data is consistent with the multiple-agency framework suggesting that founders could be considered as agents and principles, depending on the context. Other non founder executives' ownership was relatively low at 4.32 percent. 27 percent of IPOs in our sample had VC backing at their IPO.

In terms of board structure, independent directors held 42 percent of board seats on average. However the inclusion of non executive founders who continue to have ownership (mean 3 percent) might bring the levels of true independence into question. A founder was the firm's CEO/Chair in over 80 percent of cases, indicating that founders had retained strong leadership positions even at the IPO stage.

The results of the formal tests of our hypotheses are provided in Table 3. We introduced the main explanatory variables in a step-wise fashion, and this helps to verify whether the main regressors contributed to the explanatory power of the models used.

Insert Table 3 about here

As the models show, the riskier firms are less likely to have conditional share option schemes, in line with the "risk-incentives trade-off" framework. Large firms are more likely to introduce conditional schemes, which, again, may be a reflection of their relatively lower level of risk compared to smaller ventures.

As Model 1 shows, non-founding executive share ownership does not have any significant effects on the probability of conditional schemes. Although the non-founding executives do have ownership in the company, the level of this (mean 4.34%) may be not enough to provide a substitution effect with regards to incentive schemes. Thus our hypothesis 1 is not supported.

The results in Model 2 provide a negative impact of the executive founders' ownership variable on the probability of conditional schemes, thus giving marginal support in line with hypothesis 2a. However, contrary to hypothesis 2b, the retained ownership of non-executive founders also has significantly negative effect. When we introduced a combined founders' ownership in model 2, this variable had a strongly significant and negative effect. The level of retained ownership by the founders (mean ownership of 31%) shows that they still effectively control the firms, and their risk preferences are similar to non-founding executives. It seems that, regardless of the founders' role in the firm, their retained ownership prevents introduction of conditional share option schemes for executive directors, and we will return to this result in the discussion.

As model 3 shows, VC-backed IPOs are more likely to have incentive pay schemes having

specific performance targets attached. Therefore, hypothesis 3 is supported. The presence of venture capitalists positively enhances the governance of the firm, in line with our theoretical predictions.

The founders not only have considerable power within the organization via their levels of ownership; they also often retain powerful board positions. Model 4 shows support for our hypothesis 4, and the presence of conditional equity based incentive schemes in the remuneration contracts of executive directors is negatively associated with founders' board power/position, even though following the IPO the ownership dynamics change. Finally, model 5 shows there is a positive association between conditional incentive schemes and the levels of board independence. However this is significant at the ten percent level, thus providing marginal support for our hypothesis 5. This does however reinforce the multiple agency effects and potential tension that can happen within the board of such companies at the time of their IPO.

## DISCUSSION

Bringing together behavioral agency theory and multiple-agency perspective has enabled a more fine-grained study of the impact that ownership structure and board characteristics can have on the governance of the company and, in particular, the use of equity based incentive schemes to tie executives to performance and increasing shareholder return. Our analysis suggests that, in the context of IPO firms, the introduction of equity rewards tied directly to objective performance measures is an outcome of the complex pattern of risk preferences and monitoring capacities of different shareholder constituencies, including the original founders, hired executives and early stage investors. The balance between these "conflicting voices" (Hoskisson et al., 2002) in terms of adopting incentive schemes also depends on board configurations, with "agent-centered" boards leading to the introduction of "soft" share option schemes. This finding provide an extension to the multiple agency research (e.g., Arthurs et al., 2008) by suggesting that organizational outcomes of more than one agent group may also be linked to their influence over the focal firm's board.

The findings suggest that the founders of newly listed firms, regardless whether they are in executive or non-executive roles, are still very much in control and resist executive equity rewards being tied directly to objective performance measures. More specifically, non-executive founders, despite being large-block share holders, seem to collude with the executives when setting up incentive schemes. Although multiple agency perspective would suggest that non-executive founders' interests should be aligned with those of external shareholders, such as VCs, as we argued in a run-up to hypothesis 2b, our finding indicates that their governance role is different to external large-block holders. This finding is quite important since it suggests a promising avenue for future theory building within the context of agency research.

Multiple agency framework developed by Arthurs et al. (2008) does not account for possible differences in monitoring abilities and risk preferences of principals in an IPO, although from behavioral agency perspective there may be compelling reasons to argue that founders' framing or risk-related decisions may differ from external shareholders. First, despite possible dilution of their ownership, non-executive founders still have their human and financial capital associated with the focal firm, and, therefore, they are not risk neutral as diversified external shareholders. From the behavioral agency theory point of view, this should frame their risk preferences away from extensive risk-taking associated with business strategies driven by

conditional executive share options. Second, non-executive founders may still be closely involved with the firm which they have set up in the past and helped to develop. As a principal, they may have a good idea of what the executives should be doing after flotation, so that by observing efforts they can be sure that private and social benefits are aligned (Prendergast, 2002). Again, this diminishes the importance of output-based incentive contracts for the executives bearing in mind their potential costs for the firm. Our empirical finding suggests that an integration of research on risk-incentive trade-offs and behavioral agency perspective with multiple agency theory may enrich our understanding of complex governance issues in the “threshold”, IPO firms.

Our analysis also suggests that the founders are still able to exercise strong board leadership including the influence of incentive strategies. Tied with the power of the Founder-CEO/Chair, firms are maintaining a “founder-centric” structure, and founders have sufficient power to negotiate governance arrangements that are positively preserving their influence and rewarding their length of service rather than performance by the nature of incentive grants being unconditional. However, we did not find some evidence of the “good governance” roles of independent directors, although our results are only weakly significant. This brings into question the selection processes for these directors, as well as the extent of their independence from the founding directors in the context of IPOs.

However, it is not totally a founder “self governing” picture that emerges from our analysis. Entrepreneurial firms that come to an IPO often have significant equity stakes held by early stage investors, such as venture capitalists. Previous studies on the governance roles of VCs are rather ambiguous in terms of their impact on incentive and monitoring systems during and after the IPO. Most of researchers emphasize “exit-oriented” nature of VC investment, that may undermine their willingness and ability effectively participate in governance of new issues (Black & Gilson, 1998). Our findings clearly show that this may not be a universal case, especially when VCs continue to own shares after the IPO. Using behavioral and multiple agency frameworks we argued that venture capital firm is a special case of block-holders who appears to be actively involved in the governance development process. However, the emphasis of this involvement may shift from the direct monitoring to more active use of performance-related incentives after the IPO. Within this context, it is no surprise to see a positive association between VC involvement after the IPO and the presence of conditional equity based incentive schemes.

Previous research has recognized that governance mechanisms operate interdependently with the overall effectiveness depending on a simultaneous operation of several mechanisms in limiting managerial opportunism (Rediker & Seth, 1995; Walsh & Steward, 1990). Different governance mechanisms can complement each other (Aguilera, Filatotchev, Gospel & Jackson, 2007; Dalton, Daily, Certo & Roengpitya, 2003), and the cost-benefit trade-offs among a variety of governance mechanisms would determine their use (Rediker & Seth, 1995:88). We extend this research further and make two contributions. First, we suggest that a substitution hypothesis associated with incentives/monitoring functions of corporate governance suggested by traditional agency perspective provides a simplified picture that does not take into account behavioral aspects of different constituencies within the multiple agency framework. Our arguments and empirical findings are in line with complementarity hypothesis (e.g., Dalton et al., 2003) that seems to have relevance not only within the context of mature firms with diffused share ownership, but it plays a very important role in terms of mitigating conflicts between founders and shareholders in the IPO firm. Second, we analyze links between “toughness” of executive compensation and general governance factors in “threshold” firms, and this area was largely overlooked by agency research.

With clear changes to the pay strategies happening at the point of IPO, there is the

potential for further research in this area. The commanding position of the founders leads to unconditional incentive rewards. However, research shows that founders do depart companies (either willingly or unwillingly). Once this happens governance strategies again might be changed. There is also the point that the majority of the schemes implemented follow a three-year cycle from granting to vesting. One cannot ignore the possibility that grants are unconditional as their implementation has been no more than an “experimental” view of this type of incentive scheme. Further research based on a longitudinal study of post-IPO dynamics could provide insight into the changes and development of such schemes.

### **CONCLUSIONS**

The paper’s findings indicate that corporate governance is not an exogenous mechanism that solely provides checks and controls over the efficiency with which companies are run and whether managers make decisions in the interests of shareholders. More specifically, executive incentive schemes are closely related to the distribution of ownership and board power among founding and independent board members; insiders and external blockholders. The next step would be to link different governance configurations with organizational outcomes, and previous research provides evidence of possible effects of the IPO governance characteristics on the level of internationalization (e.g., Carpenter et al., 2003) and performance (Arthurs et al., 2008; Certo et al., 2001; Filatotchev & Bishop, 2002). Although it is beyond the ambitions of this paper to specify and test empirically complex linkages between ownership dynamics, incentive schemes and IPO performance, it helps to map out future broad areas and questions for empirical enquiry guided by a processual and behavioral analysis of executive compensation.

## REFERENCES

- Aguilera, R. V., Filatotchev, I., Gospel, H., & Jackson, G. 2007. An organizational approach to comparative corporate governance: costs, contingencies and complementarities. *Organizational Science*, 19: 475-492.
- Aguilera, R. V., Filatotchev, I., Gospel, H., & Jackson, G. 2008. An organizational approach to comparative corporate governance: costs, contingencies and complementarities. *Organizational Science*.
- Amit, R., Glosten, L., & Muller, E. 1990. Entrepreneurial ability, venture investments, and risk sharing. *Management Science*, 36(10): 1232-1245.
- Arthurs, J. D., Hoskisson, R. E., Busenitz, L. W., & Johnson, R. A. 2008. Managerial agents watching other agents: Multiple agency conflicts regarding underpricing in IPO firms. *Academy of Management Journal*, 51(2): 277-294.
- Baker, M., & Gompers, P. A. 2003. The determinants of board structure at the initial public offering. *Journal of Law and Economics*, 46(2): 569-598.
- Balkin, D. B., & Gomez-Mejia, L. R. 1990. Matching compensation and organizational strategies. *Strategic Management Journal*, 1(2): 153-169.
- Beatty, R. P., & Zajac, E. J. 1994. Managerial incentives, monitoring and risk bearing: a study of executive compensation, ownership, and board structure in initial public offerings. *Administrative Science Quarterly*, 39(2): 313-335.
- Berkema, H., Geroski, P., & Schwalbach, J. 1997. Managerial compensation, strategy and firm performance. *International Journal of Industrial Organization*, 15(4): 413-416.
- Black, B. S., & Gilson, R. J. 1998. Venture capital and the structure of capital markets: Banks versus stock markets. *Journal of Financial Economics*, 47: 243-277.
- Brav, A., & Gompers, P. A. 1997. Myth or reality? The long-run underperformance of initial public offerings: Evidence from venture and non venture capital-backed companies. *Journal of Finance*, 52(5): 1791-1821.
- Brennan, M. J., & Franks, J. 1997. Underpricing, ownership and control in initial public offerings of equity securities in the U.K. *Journal of Financial Economics*, 45(3): 391-413.
- British Venture Capital Association. 2003. Directory of members: Complete list of members [online] [www.bvca.co.uk](http://www.bvca.co.uk) [accessed 04/08/2003].
- Carpenter, M. A. 2002. The implications of strategy and social context for the relationship between top management team heterogeneity and firm performance. *Strategic Management Journal*, 23: 275-284.
- Carpenter, M. A., Pollock, T. G., & Leary, M. M. 2003. Testing a model of reasoned risk-taking: Governance, the experience of principals and agents, and global strategy in high-technology IPO firms. *Strategic Management Journal*, 24(9): 803-820.
- Carpenter, M. A., & Westphal, J. D. 2001. The strategic context of external network ties: Examining the impact of director appointments on board involvement in strategic decision-making. *Academy of Management Journal*, 44: 639-660.
- Carson, T. L. 2003. Interest and business ethics: Some lessons of the recent corporate scandals. *Journal of Business Ethics*, 43(4): 389-394.
- Certo, S. T. 2003. Influencing initial public offering investors with prestige: Signaling with board structures. *Academy of Management Review*, 28(3): 432-446.
- Certo, S. T., Covin, J. G., Daily, C. M., & Dalton, D. R. 2001. Wealth and the effects of founder management among IPO-stage new ventures. *Strategic Management Journal*, 22(6-7): 641-658.

- Certo, S. T., Daily, C. M., Cannella, A. A., & Dalton, D. R. 2003. Giving money to get money: How CEO stock options and CEO equity enhance IPO valuations. *The Academy of Management Journal*, 46(5): 643-664.
- Canyon, M., & Leech, D. 1994. Top pay, company performance, and corporate governance. *Oxford bulletin of Economics and Statistics*, 56(3): 229-247.
- Canyon, M. J., & Peck, S. I. 1998. Board control, remuneration committees and top management compensation. *The Academy of Management Journal*, 41: 146-157.
- Canyon, M. J., Peck, S. I., Read, L., & Sadler, G. V. 2000. The structure of executive compensation contracts: UK evidence. *Long Range Planning*, 33(4): 478-503.
- Canyon, M. J., & Sadler, G. V. 2001. CEO compensation, option incentives, and information disclosure. *Review of Financial Economics*, 10(3): 251-277.
- Cyr, L., Johnson, D., & Welbourne, T. 2000. Human resources in initial public offering firms: Do venture capitalists make a difference? *Entrepreneurship Theory and Practice*, 25(1): 77-91.
- Daily, C. M., & Dalton, D. R. 1992. Financial performance of founder-managed versus professionally managed small corporations. *Journal of Small Business Management*, 2: 25-34.
- Daily, C. M., & Dalton, D. R. 1997. CEO and board chair roles held jointly or separately: Much ado about nothing? *Academy of Management Executive*, 11(3): 11-20.
- Daily, C. M., Johnson, J. L., & Dalton, D. R. 1999. On the measurements of board composition: Poor consistency and a serious mismatch of theory and operationalization. *Decision Sciences*, 30: 83-106.
- Dalton, D. R., Daily, C. M., Certo, S. T., & Roengpitya, R. 2003. Meta-analysis of financial performance and equity: fusion or confusion? . *Academy of Management Journal*, 46(1): 13-26.
- David, P., Kochhar, R., & Levitas, E. 1998. The effect of institutional investors on the level and mix of CEO compensation. *The Academy of Management Journal*, 41(2): 200-208.
- Ensley, M. D., Pearson, A. W., & Amason, A. C. 2002. Understanding the Dynamics of New Venture Top Management Teams: Cohesion, Conflict, and New Venture Performance. *Journal of Business Venturing*, 17(4): 365-386.
- Espenlaub, S., & Tonks, I. 1998. Post IPO directors' sales and reissuing activity: an empirical test of IPO signalling models. *Journal of Business, Finance and Accounting*, 25(9-10): 1037-1079.
- Fama, E. F. 1980. Agency problems and the theory of the firm. *Journal of Political Economy*, 88(8): 288-307.
- Fama, E. F., & French, K. R. 2004. New lists: Fundamentals and survival rates. *Journal of Financial Economics*, 73(2): 229-269.
- Fama, E. F., & Jensen, M. C. 1983. Separation of ownership and control. *Journal of Law and Economics*, 26: 301-325.
- Filatotchev, I. 2006. Effects of executive characteristics and venture capital involvement on board composition and share ownership in IPO firms. *British Journal of Management*, 17(1): 75-92.
- Filatotchev, I., & Bishop, K. 2002. Board composition, share ownership and 'underpricing' of U.K. IPO firms. *Strategic Management Journal*, 23(10): 941-955.
- Filatotchev, I., Toms, S., & Wright, M. 2006. The firm's strategic dynamics and corporate

- governance life-cycle. *International Journal of Managerial Finance*, 2(4): 256-279.
- Finkle, T. 1998. The relationship between boards of directors and initial public offerings in the biotechnology industry. *Entrepreneurship, Theory and Practice*, 22(3): 5-30.
- Golden, B. R., & Zajac, E. J. 2001. When will boards influence strategy? inclination  $\times$  power = strategic change. *Strategic Management Journal*, 22(12): 1087-1111.
- Gomez-Mejia, L. R., & Balkin, D. B. 1992. *Compensation, organizational strategy, and firm performance*. Cincinnati, Ohio: South-Western Publishing Co.
- Gray, S. R., & Cannella, A. A. 1997. The role of risk in executive compensation. *Journal of Management*, 23(4): 517-540.
- Gregg, P., Machin, S., & Symanski, S. 1993. The disappearing relationship between directors pay and corporate performance. *British Journal of Industrial Relations*, 31(1): 1-9.
- Gujarati, D. N. 2003. *Basic Econometrics* (4th ed.). New York: McGraw-Hill.
- Gulati, R., & Westphal, J. 1999. Cooperative or Controlling? The Effects of CEO-Board Relations and the Content of Interlocks on the Formation of Joint Ventures. *Administrative Science Quarterly*, 44: 473-506.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. 1998. *Multivariate Data Analysis* (5th ed.). New Jersey: Prentice-Hall.
- Holmstrom, B. 1979. Moral hazard and observability. *Bell Journal of Economics*, 10(1): 74-91.
- Hoskisson, R. E., Hitt, M. A., Johnson, R. A., & Grossman, W. 2002. Conflicting voices: The effects of institutional ownership heterogeneity and internal governance on corporate innovation strategies. *Academy of Management Journal*, 45(4): 697-716.
- Jain, B. A., & Kini, O. 1999. The lifecycle of initial public offering firms. *Journal of Business, Finance and Accounting*, 26(9 & 10): 1281-1317.
- Jayraman, N., Khorana, A., & Nelling, E. 2000. CEO founder status and firm financial performance. *Strategic Management Journal*, 21(12): 1215-1224.
- Jensen, M., & Murphy, K. J. 1990. Performance pay and top management incentives. *Journal of Political Economy*, 98(2): 225-264.
- Jensen, M. C., & Meckling, W. H. 1976. Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4): 305-360.
- Kahneman, D., & Tversky, A. 1979. Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2): 263-292.
- Main, B. G. M., Bruce, A., & Buck, T. 1996. Total board remuneration and company performance. *The Economic Journal*, 106(439): 1627-1644.
- McBain, M. L., & Krause, D. S. 1989. Going public the impact of insider's holdings on the price of initial public offering. *Journal of Business Venturing*, 4(6): 419-428.
- McNulty, T., & Pettigrew, A. 1999. Strategists on the board. *Organization Studies*, 20(1): 47-74.
- Meggison, W., & Weiss, K. 1991. Venture capitalist certification in initial public offerings. *Journal of Finance*, 46(3): 879-903.
- Mello, A. S., & Parsons, J. E. 1998. Going public and the ownership structure of the firm. *Journal of Financial Economics*, 49(1): 79-109.
- Michaely, R., & Shaw, W. H. 1994. The pricing of initial public offerings: the test of adverse-selection and signaling theories. *Review of Financial Studies*, 7(2): 279-319.
- Mikkelsen, W. H., Partch, M. M., & Shah, K. 1997. Ownership and operating performance of companies that go public. *Journal of Financial Economics*, 44(3): 281-316.
- Murphy, K. 1985. Corporate performance and managerial remuneration: An empirical study. *Journal of Accounting and Economics*, 7(1-3): 11-42.

- Pagano, M., Panetta, F., & Zingales, L. 1998. Why do companies go public? An empirical analysis. *Journal of Finance*, 53(1): 27-64.
- Pagano, M., & Röell, A. 1998. The choice of stock ownership structure: Agency costs, monitoring, and the decision to go public. *Quarterly Journal of Economics*, 113(1): 187-225.
- Perel, M. 2003. An ethical perspective on CEO compensation. *Journal of Business Ethics*, 48(4): 381-391.
- Pfeffer, J. 1972. Size and composition of corporate boards of directors: The organization and its environment. *Administrative Science Quarterly*, 17(2): 218-228.
- Pham, P., Kalev, P., & Steen, A. 2003. Underpricing, stock allocation, ownership structure and post listing liquidity of newly listed firms. *Journal of Banking & Finance*, 27: 919-947.
- Pike, R., & Neale, B. 2003. *Corporate Finance and Investment – Decisions and Strategies*. Essex: Pearson Education Limited.
- Prendergast, C., C. P. . 2002. The tenuous trade-off between risk and incentives. *Journal of Political Economy*, 110(5): 1071-1102.
- Rappaport, A. 1981. Selecting strategies that create shareholder value. *Harvard Business Review*, 60(3): 139-149.
- Rappaport, A. 1999. New thinking on how to link executive pay with performance. *Harvard Business Review*, 77(2): 91-101.
- Rediker, K., & Seth, A. 1995. Boards of directors and substitution effects of alternative governance mechanisms. *Strategic Management Journal*, 16: 85-99.
- Ritter, J. R. 1987. The costs of going public. *Journal of Financial Economics*, 19(2): 269-281.
- Sapienza, H. J., & Gupta, A. K. 1994. Impact of agency risks and task uncertainty on venture capitalist-CEO interaction *Academy of Management Journal*, 37(6): 1618-1632.
- Scholes, M. 1992. Management incentive compensation and shareholder value. *Journal of Applied Corporate Finance*, 5(2): 110-130.
- Schulze, W., Lubatkin, M., & Dino, R. 2003. Exploring the agency consequences of ownership dispersion among the directors of private family firms. *Academy of Management Journal*, 46: 217-229.
- Shivdasani, A., & Yermack, D. 1999. CEO Involvement in the selection of new board members: An empirical analysis. *Journal of Finance*, 54(5): 1829 -1853.
- Steier, L., & Greenwood, R. 2000. Entrepreneurship and the evolution of angel financial networks. *Organization Studies*, 21(1): 163-192.
- Tversky, A., & Kahneman, D. 1986. Rational choice and the framing of decisions. *The Journal of Business*, 59(4): 251-278.
- Walsh, J. P., & Steward, J. K. 1990. On the efficiency of internal and external corporate control mechanisms. *Academy of Management Review*, 15(3): 421-458.
- Westphal, J. D. 1999. Collaboration in the boardroom: Behavioral and performance consequences of CEO board social ties. *Academy of Management Journal*, 42: 7-24.
- Westphal, J. D., & Zajac, E. J. 1995. Who shall govern? CEO board power, demographic similarity and new director selection. *Administrative Science Quarterly*, 40(1): 60-83.
- Willard, G. E., Krueger, D. A., & Feeser, H. R. 1992. In order to grow, must the founder go: A comparison of performance between founder and non-founder managed high-growth manufacturing firms. *Journal of Business Venturing*, 7(3): 181-194.

- Wiseman, R., & Bromiley, P. 1996. Towards a model of risk in declining organizations: An empirical examination of risk, performance and decline. *Organizational Science*, 7: 524-543.
- Wiseman, R., & Gomez-Mejia, L. R. 1998. A behavioral agency model of risk taking. *Academy of Management Review*, 23(1): 133-153.
- Zahra, S., & Pearce, J. 1989. Boards of directors and corporate financial performance: A review and integrative model. *Journal of Management*, 15(2): 291-272.

**TABLE 1.****Means, Median Values and Standard Deviations**

Variables	Mean	Median or % a	S.D.
Dependent Variable			
At IPO presence of any conditional share   option scheme		49.2	
Independent Variables			
Non founder executives' ownership (%)	4.32	1.17	7.19
Executive founders' ownership (%)	27.74	23.60	21.61
Non executive founders' ownership (%)	3.14	0.00	10.67
VC backed company		27.00	
CEO/Chair founder		86.78	
Board Independence	41.93	40.00	14.04
Control Variables			
Annual Turnover (£,000)	22128	2719	90703
Age of Company	6.48	5.00	6.44
No risk factors	11.96	10.00	7.43
Departure of key personnel		70.34	
(Un)Profitability risk		61.00	
Previous trading/(un)profitability		2.59	
Share price volatility	47.70	7.01	299.03
Float date pre dot com bubble		30.51	
Technology company		29.00	
Founders' dilution (%)	13.12	10.41	14.57
Executives' dilution (%)	2.40	0.36	6.53
Placing method		84.00	
Aim floatation		71.00	

a Percentages are reported for the 0/1 variables.

**TABLE 2**

**Correlation matrix for all variables**

|Variable

**TABLE 2 (continued)**

|Variable

**TABLE 3**  
**Logistic Regression Results**

Dependent Variable	Conditional scheme Logit Model 1	Conditional scheme Logit Model 2	Conditional scheme Logit Model 3	Conditional scheme Logit Model 4
Constant	-2.027	-1.506	-1.789	-.973
Non-founder executives' ownership	.002	.001	.008	.003
Executive founders' ownership		-.010 †	-.007 †	-.001 †
Non-executive founders' ownership		-.060 *	-.063 *	-.068 *
VC backing			.650 **	.670 **
CEO/Chair founder				-.995 **
Board independence				
Controls				
Log turnover yr-1 (£,000)	.456 *	.513 *	.504 *	.571 **
Age of company	.055 †	.052 †	.056 †	.043
Number of risk factors	-.024 †	-.021 †	-.020 †	-.026 †
Departure of key personnel	-.216 †	-.030 †	-.085 †	-.162 †
(Un)profitability	-.511	-.696	-.634	-.680
Previous trading/ (un)profitability	.427 *	.422 *	.407 *	.398 *
Share price volatility	.000	.000	.000	-.001
Float time dot.com bubble	.006	.065	.071	.059
Technology company	.132	.055	.001	.028
Founders' dilution	-.011	-.009	-.009	-.006
Executives' dilution	.044	.036	.037	.044
Placing method	.112	.266	.340	.405
AIM floatation	-.364	-.207	-.076	-.164
% correct predictions	63.9	64.5	64.9	67.3
Nagelkerke R2	.130	.174	.193	.215
Model ( 2 value	17.28	23.63 †	26.14 †	29.40 *

† p(0.10; \* p(0.05; \*\* p(0.01, \*\*\* p(0.001

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[1] We also used a continuous variable related to the retained ownership stake by VCs. This variable produced similar results, but the overall explanatory power of the regression model was lower, so we do not report these results here.