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Working Paper

Creating strategic advantage through entrepreneurial governance in new ventures

Jena Economic Research Papers, No. 2007,086

Provided in Cooperation with:
Max Planck Institute of Economics

Suggested Citation: Audretsch, David B.; Lehmann, Erik E.; Plummer, Lawrence A. (2007) : Creating strategic advantage through entrepreneurial governance in new ventures, Jena Economic Research Papers, No. 2007,086, Friedrich Schiller University Jena and Max Planck Institute of Economics, Jena

This Version is available at:
https://hdl.handle.net/10419/25671

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JENA ECONOMIC RESEARCH PAPERS

2007 – 086

Creating Strategic Advantage through Entrepreneurial Governance in New Ventures

by

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www.jenecon.de

ISSN 1864-7057

The JENA ECONOMIC RESEARCH PAPERS is a joint publication of the Friedrich-Schiller-University and the Max Planck Institute of Economics, Jena, Germany. For editorial correspondence please contact m.pasche@wiwi.uni-jena.de.

Impressum:

Friedrich-Schiller-University Jena
Carl-Zeiß-Str. 3
D-07743 Jena
www.uni-jena.de

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Creating Strategic Advantage through Entrepreneurial Governance in New Ventures

November 2007

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Abstract

An important literature has made a fundamental link between corporate governance and corporate strategy. According to agency theory, assigning managers stock options aligns their interests with the interests of the owners of the firm. This paper suggests that this may not apply in the context of new ventures. Instead, an alternative perspective offered in this paper suggests that if contracts are incomplete, then managerial stock ownership not only provides a mechanism to align managerial incentives with the owners' goals, as agency theory predicts, it also grants top managers residual control rights to be used in subsequent negotiations with the owners. The ability to exercise residual control rights improves the ex post bargaining position of the CEO as an asset owner, thereby increasing her incentive to make relationship-specific investments that are specific to the new venture. Thus, in the context of new venture strategy assigning asset ownership to those who have the most important relationship-specific resources or who have indispensable human capital is a crucial source of subsequent competitive advantage. This theory of entrepreneurial governance is tested using patent ownership as a proxy for both relationship-specific investments and indispensable human capital of the CEO of the new venture. The empirical results support the main hypothesis posited by the entrepreneurial governance model.

JEL-classification: M13, L 20, R30

Keywords: managerial equity ownership, new ventures; property rights, governance, knowledge, innovation

Acknowledgement: An earlier version of this paper was presented at the Conference on Strategic Entrepreneurship, Schloss Ringberg, Germany, June 2007. We thank the participants for their helpful comments and suggestions. Any errors or omissions remain our responsibility.

1. Introduction

A firm's performance depends crucially on choosing and implementing an effective strategy that generates a competitive advantage to create and appropriate greater economic value than rival firms. However, to fully realize this potential, a firm must be organized to exploit its resources and capabilities, which critically depends on the firm's governance and organization structure (Uhlaner, Wright, and Huse, 2007). In this paper we follow recent research that emphasizes the important link between a firm's governance structure and its impact on creating strategic advantages through exploiting a firm's resources and capabilities.

The theory of the firm has paid extensive attention to the moral hazard conflict between managers and shareholders as a driver of performance and competitive advantage. The most common approach in analyzing this conflict is principal-agent theory (Jensen and Meckling, 1976). This literature has identified two common agency problems that influence a firm's strategy: (1) Investment in managerial perks and pet projects and (2) managerial risk aversion (Jensen and Meckling, 1976; and Dalton et al., 2003). Investments in pet projects do not necessarily add economic value to the firm because they typically involve an inefficient combination of firm resources, but they do, however, directly benefit those managers. Managerial risk aversion leads to investments that eliminate firm-specific risk but are associated with lower expected returns for the shareholders.

Agency theory provides much of the guiding framework for corporate governance studies generally and ownership structure studies more specifically (Dalton et al. 2003). Much of this research is based on applications of agency theory to analyze the determinants of managerial equity ownership (Himmelberg et al., 1999; Agarwal

and Samwick, 1999, and Bitler et al., 2006), where managerial ownership is explained by measures of risk, such as variations in the market value of firms and firm size (Agarwal and Samwick, 1999), by the leeway of managers to reallocate intangible assets (Himmelberg et al., 1999) and by some proxies of risk-aversion, such as personal wealth of managers (Bitler et al., 2006). However, most empirical studies do not discriminate between large, established firms and new ventures (Brunninge, Nordqvist, and Wiklund 2007; and Zahra, Neubaum, and Naldi, 2007).

While the theoretical lens provided by agency theory has generated key insights regarding the alignment of interests between corporate management and owners, there are compelling reasons to suspect that agency theory has quite different implications for entrepreneurial new ventures. A recent literature has emerged suggesting that new ventures, in particular those based largely on knowledge and technological resources rather than physical capital, do not simply mirror their larger and longer-established counterparts (Audretsch, Keilbach and Lehmann, 2006). Rather, the competitive strategy of knowledge-based new ventures is largely focused on knowledge capital and new ideas, which typically are linked to the knowledge resources and capabilities of the founder and managers of the new venture. Thus, in addition to the traditional management functions, managers in knowledge-based new ventures provide crucial knowledge resources as well.

The purpose of this paper is to suggest an alternative view to agency theory that links the governance of entrepreneurial new ventures to competitive strategy. This view revolves around the dual role requiring both managerial as well as knowledge inputs from entrepreneurs in knowledge-based new ventures. In the second section of this paper, a theory of entrepreneurial governance in new ventures is introduced and then contrasted with corporate governance according to traditional agency theory. This leads

to the development of two main hypotheses linking entrepreneurial governance structures to strategic advantage. After introducing a database consisting of new ventures in Germany that have made an initial public offering (IPO) in the third section, these propositions are empirically tested in the fourth section by linking the equity share held by the CEO in German new ventures to measures of both managerial intellectual property and the intellectual property of the new venture. In the final section of the paper a summary and conclusions are provided. In particular, the empirical evidence suggests that strategic decisions involving the governance of entrepreneurial new ventures do not mirror the conventional wisdom already established for large incumbent corporations. Rather, providing equity ownership to managers of knowledge-based new ventures is not completely explained by agency theory and is at least to some extent consistent with the theory of entrepreneurial governance.

2. Linking Entrepreneurial Governance to Strategic Advantage

Agency theory typically focuses on large and diversified firms as described by Chandler (1990). Their primary competitive advantage is in terms of scale and scope. These economies of scale and scope make the firm too large to have ownership rest only in the hands of management so that outside investors are needed to finance assets and to bear the risk associated with such large ownership stakes (Rajan and Zingales, 2000). Competitive advantages arise through large size and extensive brand image from mass advertising to pose formidable barriers to competition from new entrants. The only critical resource is to raise money from the capital market to finance size and brand image. Outside owners delegate the control to salaried managers, which then leads to the logical outcome of the separation of ownership and control and the potential for disinterested managers to appropriate corporate resources for their own benefit, at the expense of the shareholders.

However, the competitive advantage of young and knowledge-based new ventures is less the result of scale and scope and more from building complementarities between resources and capabilities. We follow recent research that has emphasized the importance of intangible assets and human capital in entrepreneurial new ventures as their main source of competitive advantages (Rajan and Zingales, 2000; Audretsch et al., 2006). In these new ventures, equity ownership may not only serve as a mechanism to ensure managerial effort as predicted by agency-theory or to internalize the costs of misbehavior (Jensen and Meckling, 1976), but also provide incentives to invest in firm specific investments. Equity ownership of the firm's physical assets provides parties with bargaining power in negotiations after they have made investments in their relationships. Thus, the study of governance in an entrepreneurial context has to go beyond the Jensen and Meckling (1976) framework.

In the absence of comprehensive contracts, property rights of assets largely determine which ex post bargaining will prevail and thus give power and incentives to devote effort to value-increasing activities. Especially in knowledge-based firms, the agent who has no control over any essential physical asset risks going unpaid for any work which could not be explicitly specified in a contract. Thus, consistent with Grossman and Hart (1986), Hart (1986), and Hart and Moore (1990), ownership of the physical assets offers residual control rights in case negations subsequent to relationship-specific investments are made.

In their seminal papers, Grossman and Hart (1986) and Hart and Moore (1990) develop a framework for examining how changes in the distribution of asset ownership affects the incentives of the individuals who work with those tangible and physical assets. They highlight the central role of nonhuman assets because they can be bought and sold on the one hand and owned on the other hand. Brynjolfsson (1994) extended

the Grossman-Hart-Moore framework by including productive knowledge and information as an intangible assets that affects agents' marginal product when they have access to it.

The main result of the theoretical framework is that the allocation of ownership rights of the physical assets has an important effect on the bargaining position of the parties after they have made relationship specific investments. In the absence of comprehensive contracts, property rights over the physical assets largely determine which ex post bargaining positions will prevail. If the assets owned by the parties are complementary in the production process, the ownership of assets essential to production, tangible or not, and the receipt of the corresponding residual income stream should go hand-in-hand (Brynjolfsson, 1994).

In particular, we focus our attention on the relationship between the ownership of intangible assets, i.e., patents, and physical assets, on the one hand, and the ownership of claims on residual income streams on the other. In doing so, we assume that two assets – patents and physical assets – are necessary for the production process. We further assume that neither patents nor the physical assets alone could generate any economic value for the new venture. Thus, both assets have strong complementarities in the production process. If patents and physical assets, such as apparatuses and machines, are two choice variables, then we assume that "doing (more of) one of them increases the returns to doing (more of) the other" (Roberts, 2004, p.34). While physical assets are generally well protected and ownership is relatively easy to define, patents often provide little protection for their inventors because the legal and financial requirements for upholding their validity, their use in the production process or for providing their infringement are high (Teece, 2005).

As proposed by Brynjolfsson (1994), we assume that no comprehensive contract can be written for how the patent should be used in the production process and how the generated quasi-rents should be divided among the inventor of the patent and the owner of the physical assets. According to this view, the dilemma of providing incentives to the inventor when comprehensive contracts are infeasible can be mitigated if the inventor of the patent is assured a significant share of the output she produces by providing her with ex post bargaining power through ownership of the physical assets. Then, a strategic advantage is shaped by the ownership structure of the firm.

3. Research Model and Hypotheses

The preceding discussion is summarized by the matrix in Figure 1, which represents the research model for this study. If the entrepreneurial governance model for strategic advantages holds, we expect that the ownership of physical assets and ownership of intangible assets are strong complementarities.

Figure 1: Patent Ownership, Equity Ownership and Hold-Up

	Patents Owned by the CEO	**Patents Owned by the Firm**
Equity Ownership of the CEO is High	Residual control rights with the CEO as the inventor Strategic advantage (I)	Hold-up problem though the CEO Strategic disadvantage (II)
Equity Ownership of the CEO is Low (zero)	Hold-up problem through shareholder(s) Strategic disadvantage (III)	Residual control rights with the shareholders Strategic Advantage (IV)

The patents used in the production process could be owned by an individual person or by the firm as a legal entity.[1] In the first case, the CEO personally owns at least one patent. If she owns no equity shares of the firm and if her cooperation is

[1] For underinvestment and other incentive problems in firms when employees are the inventors but not the patent holders see Harhoff and Loisl (2004).

necessary to the production process, she risks going uncompensated for work which is not specifically stipulated in an explicit contract. However, if she owns at least some of the essential physical assets, she will be in a position to reap at least some of the benefits accruing from the relationship-specific investments that were not explicitly specified in the contract. For example, she can "veto" any allocation of the residual rewards which she considers to be unfavorable. Equity ownership of the physical assets therefore leads to ex post bargaining power and thus mitigates the hold-up problem.

One concern is that the CEO with patent ownership may threaten to withdraw the patents from the production process. This is only credible if the CEO has outside opportunities. One outside opportunity is the ability to raise money to invest in new production technologies. This however leads to the same problem if she needs other sources of equity financing. In the other case, she can sell her patents or allow other firms to use the patents. Then she needs a comprehensive contract that specifies all the relevant circumstances. If such a contract is feasible, the question arises why she needs some ownership of the physical asset to protect and ensure her relationship specific investments. Thus, following the Grossman, Hart and Moore framework, complementary assets should be owned by one agent, in this case the CEO as the inventor of the patent. As Audretsch, Keilbach and Lehmann (2006) show, the competitive advantage for a knowledge-based new venture is typically bestowed from the human capital and knowledge capabilities of the founder and manager. If the critical resource is the human capital of the entrepreneur and her venture-specific investments, then ownership rights yield her residual rights of control and thus power in any negotiations over the use of the asset. This leads to the first hypothesis,

Hypotheses 1: The share of equity held by the CEO is positively influenced by the number of patents she owns.

An alternative case exists when the patents are owned by the firm as a legal entity. In terms of the resource based view of the firm (Barney, 1986 and 2007), as long as human capital resources are tied to the physical capital resources of the firm they remain relatively immobile. If the CEO owns a large proportion of equity shares of the firm she also has power over the use and misuse of the patents that are owned by the firm. This facilitates her ability to hold-up other shareholders by selling the patents to other firms. This, however, might lead to the underinvestment of employees to devote their human capital to firm-specific investments or the underinvestment of shareholders (see Brynjolffson, 1994, p. 1651). This suggests the second hypothesis,

Hypotheses 2: The share of equity held by the CEO is negatively influenced by the number of patents owned by the firm.

A large literature has shown (Fiegener et al. 2000; Randoy and Goel, 2003; Huse, 2000, Daily et al. 2003; Audretsch and Lehmann, 2005) that the percentage of equity shares held by a CEO is shaped both by firm size and firm age. Firm size may influence equity ownership of managers in several ways. First, as argued by Agarwal and Samwick (1999), firm size is a proxy for firm risk. They found a significant negative relationship between firm size and the amount of equity held by managers independently of the measure of size (as proxied by revenues, employees or market value). They interpret their findings as being in line with the predictions from agency

theory that the amount of variable compensation, as equity shares, is negatively shaped by firm risk.

Secondly, the larger the firm, the larger the amount of assets sold at IPO. All equal, a certain percentage of equity hold by the CEO will lead to higher amount of money which is invested in the same project, her firm. A risk averse CEO will then cash out more of her shares to diversify her personnel income risk.

Finally, we consider firm age. Research examining the survival of new ventures has shown that firm age is a proxy for firm risk. One interpretation of the negative relationship between new venture age and the likelihood of survival is that the entrepreneur and managers of the new venture are uncertain about their capabilities, the underlying production technology or market conditions. As the new venture matures and gains experience, the degree of entrepreneurial uncertainty reduces (Jovanovic, 1982; Audretsch, Keilbach and Lehmann, 2006). Secondly, there is a pure evolutionary argument: the older a firm, the longer it has survived on the market and thus the lower is the associated risk (Audretsch and Lehmann, 2005).

3. Data, Methodology and Descriptive Statistics

Establishing effective corporate governance is arguably most important at the time of an initial public offering (IPO), because the IPO represents the first time that most firms raise equity from dispersed investors and thus, the distribution of equity should be shaped by the need for oversight. Thus, we link managerial equity ownership and patents using a unique dataset consisting of all of the knowledge-based and high technology German IPO firms that were publicly listed between 1997 and 2002. We excluded all firms located outside Germany as well as holding companies resulting in an underlying data set consisting of 285 publicly listed German firms with information collected from IPO prospectuses, combined with publicly available information from

on-line data sources including the *Deutsche Boerse AG (*www.deutsche-boerse.com). This database includes firms from highly innovative industries, such as biotechnology, medical devices, life sciences, e-commerce and other high-technology industries.

In our estimates, we control for specific industry effects by including dummy variables for the following industries: Software, E-Services, E-Commerce, Computer & Hardware, Telecommunication, Biotechnology, Medicine & Life Science, Media & Entertainment, and High-Technology. Furthermore, the age and size of the firm are considered as special characteristics. Age is measured as years founded before IPO and the number of employees captures firm size. All data are taken at the time of IPO.

As Table 1 shows, on average, each CEO owns one patent. However, the number of patents is highly skewed in the dataset. In 237 new ventures, the CEO owns no patent, while the number of patents varies between one and 49 in the other 46 new ventures. The same holds for the number of patents owned by a new venture. Here, 207 new ventures have no registered patents, while the number of patents in the other 66 new ventures ranges between one and 96. The firms also differ in their age and size. While the median firm is about 8 years old and has 98 employees, the average age is about 10 years and employs on avarage about 216 employees.

The correlation matrix in Table 2 shows that the independent variables have a very low correlation. The highest correlation is between the two patent measures – the number of patents owned by the CEO and those owned by the firm.

Different estimation techniques are applied to alternatively analyze the determinants of equity ownership of the CEO and the existence of CEO stock option plans. The determinants of equity ownership can be tested using simple OLS-regressions or Tobit regressions. Since the endogenous variable is truncated at low and

high values (minimum zero percent equity ownership and a maximum at 75%), the Tobit model is preferable to the OLS-approach (all results are presented in Table 3).

Let $y_i^* = \beta' x_i + u_i$ with y_i^* as the latent variable, which represents the desired or potential equity holding by the CEO. Further, x_i is a vector of exogenous variables, including the number of patents of the CEO and those of the new venture, and u_i are disturbances with $E(u_i) = 0$. The observed variable y_i is given by

$$y_i = \begin{cases} \underline{c}_i & if\ y_i^* \le \underline{c}_i \\ y_i^* & if\ \underline{c}_i < y_i^* < \overline{c}_i \\ \overline{c}_i & if\ \overline{c}_i \le y_i^* \end{cases}$$

where $\underline{c}_i, \overline{c}_i$ are fixed numbers representing the censoring points of equity ownership by a venture capitalist prior to IPO (zero and 75). This suggests that the specification for estimating the model should be:

y (CEO Ownership) = f (*CEO patents, new venture patents, control dummies,)* + *u*

A concern in estimating the above regression model is the high degree to which the endogenous variables are skewed. As examples from the labor market literature (Fitzenberger et al. 2002; and Buchinsky, 1998) show, the method of quantile regression estimation is appropriate in the case of such highly skewed endogenous variables. This semi-parametric technique provides a general class of models in which the conditional quantiles have a linear form. In its simplest form, the least absolute deviation estimator fits medians to a linear function of covariates. The method of quantile regression is potentially attractive for the same reason that the median or other quantiles are a better measure of location than the mean. Other useful features are the

robustness against outliers and that the likelihood estimators are in general more efficient than least square estimators.[2]

Let (y_i, x_i), $i=1,...,n$, be a sample of new ventures, where x_i is a *Kx1* vector of regressors. Assume that $Quant_\theta(y_i, x_i)$ devotes the conditional quantile of y_i, conditional on the regressor vector x_i. The distribution of the error term $u_{\theta i}$ satisfies the quantile restriction $Quant_\theta(u_{\theta i}, x_i) = 0$. Thus, $y_i = Quant_\theta(y_i, x_i) + \mu_{\theta i}$, is estimated or, $Quant_\theta(y_i, x_i) = x_i' \beta_\theta$.

4. Empirical Results and Discussion

The estimation results are provided in Table 3. The first row shows the results from the OLS estimation. As the positive and statistically significant coefficient of the number of patents held by the manager suggests, the greater the number of patents held by a manager, the greater is the share of equity ownership by the manager. By contrast, the number of patents owned by the firm have no statistically significant impact on the share of equity held by managers. Thus, we find support for Hypothesis 1 only.

As the positive and statistically significant coefficient of firm age suggests, the share of equity ownership by managers tends to increase as the new ventures becomes more mature. By contrast, as the negative and statistically significant coefficient of firm size indicates, managers tend to receive less equity ownership as the firm becomes larger. The second row shows the results from estimating the regression model using the Tobit regression method. In fact, the results are strikingly similar to those obtained from OLS estimation. Both regression estimation methods confirm the first hypothesis that the percentage of equity held by a CEO is positively influenced by the number of patents she owns.

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[2] See *Buchinsky* (1998) for a survey of the method and some applications in the labor market.

The next rows report the results from the quantile regressions. For all quantiles between the 0.2-quantile and the 0.8-quantile, the percentage of equity held by the CEO increases with the number of patents owned by the CEO. These results are consistent with the first hypothesis that CEO equity ownership should be more prevalent as the CEO holds more patents. No such statistical support is found for the second hypothesis that the percentage of equity stakes held by the CEO increases with the number of patents owned by the firm. Although the estimated regression coefficients have the predicted negative sign, they are not statistically significant.

According to the model of entrepreneurial governance posited in this paper, if the intellectual property of the entrepreneur or CEO, protected in the form of patented inventions, is essential for production because of complementarities with her expertise, then she is effectively indispensable to the new venture.[3] Thus, the above empirical results may explain why an entrepreneur with access to assets essential to the success of the new venture is more likely to own the new venture than are other stakeholders, from either inside or outside of the new venture. However, if the entrepreneur's knowledge and assets are not completely essential to the productivity of the physical assets and subsequent competitive advantage of the new venture, then assigning the entrepreneur or CEO property rights would actually reduce the incentives of the other agents (sole agent in the two agent model) involved with the new venture. Thus, the empirical results provide compelling evidence for the first hypothesis posited in the third section of this paper.

Although not explicitly tested, the results presented in Table 3 are in sharp contrast the standard predictions and empirical evidence from testing corporate

[3] This was emphasized by Hart and Moore (1990).

governance within the framework of classic agency theory (Himmelberg et al., 1999, or Bitler et al., 2005). If the economic value of patents is associated with high risk, the equity ownership held by the CEO as a patent holder should decrease with the number of her patents. Then, for a risk averse CEO, it should be optimal to cash out at IPO and thus spread her risk. This disparity between the predictions and results commonly verifying corporate governance in the class agency theory and those found in this paper for the model of entrepreneurial governance suggest that the governance of entrepreneurial new ventures may be markedly different and even contrary to what by now constitutes conventional wisdom concerning the governance of established, incumbent large corporations.

Thus, when knowledge held by the entrepreneur or CEO that is specific to the new venture is also tacit, having a CEO who is also a patent holder becomes indispensable to the new venture, since such knowledge is intrinsically linked to the productivity of the physical capital resources or assets and therefore the competitive advantage and the subsequent performance of the new venture.[4]

5. Conclusion

An important literature has made a fundamental link between corporate governance and corporate strategy. According to agency theory, assigning managers stock options provides contracts that are compatible with the incentives of the owners of the firm. This paper has found that neither the theory nor the empirical evidence transfers very well to new ventures. This is because the function of managers in entrepreneurial new ventures is fundamentally different from for their counterparts in large established, incumbent corporations. While both types of managers have to

[4] In the sense that Hart and Moore(1990) pointed out.

provide managerial and organizational services, managers in entrepreneurial new ventures have an additional function that is essential to the competitive advantage and performance of the new venture – providing knowledge and expertise that in many cases is intrinsically linked to the capital resources of the new venture (Audretsch, Keilbach and Lehmann, 2006).

Thus, in this paper an alternative theory is offered to explain the link between new venture governance and entrepreneurial strategy. According to this theory, the boundaries of the new venture define the allocation of residual control rights. If contracts are incomplete, then managerial stock ownership provides not just a mechanism to render managerial incentives compatible with the owners' goals, as agency theory predicts, but more importantly, also as an instrument enabling residual control rights in subsequent negotiations. The ability to exercise residual control rights improves the ex post bargaining position of the CEO as an asset owner, thereby increasing her incentive to make relationship-specific investments that are specific to the new venture. Thus, new venture strategy suggests that assigning asset ownership to those who have the most important relationship-specific investments or who have indispensable human capital is a crucial strategy bestowing subsequent competitive advantage.

This theory of entrepreneurial governance is tested using patent ownership as a proxy for both relationship-specific investments and indispensable human capital of the CEO of the new venture. The empirical results strongly confirm the main hypotheses posited by the entrepreneurial governance model. In particular, patent ownership of the CEO significantly increases the percentage of equity held.

The findings of this paper show that strategic decisions involving the governance of entrepreneurial new ventures do not mirror the conventional wisdom

already established for large incumbent corporations. Rather, the decision to provide equity ownership to managers of new ventures, especially in small and high-tech new ventures, is not completely explained by and cannot be totally guided by agency theory, as is the case by Bitler et al. (2005), among others.

An important qualification regarding the results presented in this paper is that empirical studies on corporate governance may suffer from reverse causality and heterogeneity (see Börsch-Supan and Köke 2002; and Himmelberg et al. 1999). The problem of reverse causality may exist to the degree that patents are influenced by CEO ownership of the physical assets. However, as Holmström (1999) shows by analyzing the costs and benefits of litigation, such reverse causality is more likely to apply to established large corporations than for small and new ventures.

Further research should incorporate the role of other stakeholders with investments specific to the new venture, such as venture capitalists (see Demougin and Fabel, 2004). Ownership of the physical assets of the new venture may have little value for such stakeholders without the expertise and knowledge of the CEO as the patent holder. Otherwise, venture capitalists may have sufficient expertise enabling them to learn and transform their technically specialized human capital and capabilities to the new venture. This, however, leads to the well known double-moral hazard problem associated with new ventures. Then, the ownership rights of both patents and the physical assets may be part of the problem, but also a mechanism to mitigate it.

Table 1: Descriptive Statistics

	Mean	Std. Dev.	Min	Max	Median
CEO equity after IPO	19.53	19.43	0	79.9	16.02
Patents owned by the CEO	1.15	5.23	0	49	0
Patents owned by the firm	3.46	11.18	0	96	0
Firm Age (Years)	10.40	11.105	1	107	8
Firm Size (#Employees)	216.29	325.43	2	1,700	98

Table 2: Correlation Matrix

	CEO Patents	Firm Patents	Firm Age	Firm Size
CEO Equity Ownership	0.15	0.04	-0.02	0.03
Firm Size	0.11	0.07	0.001	-
Firm Age	0.03	0.04	-	-
Firm Patents	0.59	-	-	-

Table 3: Regrression Results Estimating CEO Equity Ownership

	CEO Patents	Firm Patents	LN(Size)	LN(Age)	Industry-Dummies	IPO-Dummies	Constant	R2 Pseudo
OLS	0.788	-0.048	-2.542	2.442	Insig.	Insig	23.641	0.099
	(3.74)***	(0.32)	(2.54)**	(3.01)***			(4.19)***	
Tobit	0.946	-0.069	-3.538	3.075	Insig.	Insig.	23.876	0.027
	(2.87)***	(0.39)	(2.74)***	(2.81)***			(3.47)***	
0.2 Quantile	0.594	-0.0162	-0.444	0.261	Hardware(+)	Insig.	2.601	0.031
	(7.09)***	(0.42)	(1.38)	(1.02)			(1.51)	
0.3 Quantile	0.587	-0.005	-1.731	1.197	Insig.	Insig.	9.961	0.051
	(2.94)***	(0.05)	(2.08)**	(1.73)*			(2.17)**	
0.4 Quantile	0.681	-0.0667	-2.817	1.374	Insig.	Insig.	19.371	0.073
	(1.65)*	(0.29)	(1.53)	(0.92)			(1.92)*	
0.5 Quantile	0.858	-0.201	-3.579	1.798	Software(+)	Insig.	26.556	0.083
	(2.83)**	(0.99)	(2.14)**	(1.33)			(2.92)**	
0.6 Quantile	0.732	-0.096	-3.604	3.549	Software(+)	Insig.	26.513	0.087
	(2.88)**	(0.55)	(2.67)**	(2.99)**			(3.58)***	
0.7 Quantile	1.816	-0.109	-4.917	3.087	Software(+)	Insig.	39.103	0.092
	(6.01)***	(0.47)	(3.10)***	(2.26)**			(4.43)***	
0.8 Quantile	1.266	0.006	-4.032	4.133	Insig.	Insig.	37.541	0.099
	(2.96)**	(0.02)	(1.56)	(1.74)*			(2.59)	
0.9 Quantile	0.667	0.061	-1.161	3.401	Media (+)	IPO97(+)	36.894	0.095
	(1.89)*	(0.23)	(0.59)	(1.49)			(2.20)	

[a] Estimated regression coefficients
[b] Absolute t-statistic values in parentheses
[*] Statistically significant at the 10 percent level
[**] Statistically significant at the 5 percent level
[***] Statistically significant at the 1 percent level.

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