

**CORPORATE GOVERNANCE AND INDEPENDENT
DIRECTORS: BEHIND PRIVATE EQUITY INVESTMENT PERFORMANCE**

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ABSTRACT

The aim of this research is to verify whether corporate governance, and in particular independent directors, contribute to Private Equity and Venture Capital (PEVC) investment performance in the Italian market. The data set used for this empirical analysis is unique in that it covers the entire range of Italian PEVC deals between 1998 and 2005. Our empirical findings suggest that there is higher performance when independent directors are employed. Analyzing two different panels of venture-backed companies (with non independent and with independent directors), considering the venture-backed companies with independent directors, we find that the director's profile seems to have a significant impact on the performance. To present, many studies have asserted that corporate governance of venture-backed companies is one of the tools that can be used to improve PEVC investment performance. Evidence from the market highlights a considerable use of independent directors within corporate governance. Most research on this topic is limited to U.S. data, and very few studies analyze the Italian market. Most PEVC investors use corporate governance and in particular an independent director as a tool for enhancing performance. This study offers insights to private banking and investment banking industries interested in enhancing PEVC investment performance, analyzing the relations between PEVC performance and some corporate governance aspects (i.e. independent directors and director's profile).

Keywords: independent directors, private equity, corporate governance

INTRODUCTION

Private equity and venture capital (PEVC) is an important way to sustain economic development and companies' growth. The interest in PEVC is driven by both the private banking and investment banking industries. To present, numerous studies have investigated a variety of different PEVC aspects (e.g. Gompers and Lerner, 2004) and the relation with venture-backed companies (e.g. Hellmann and Puri, 2002). However, up to now, the key issue has been PEVC performance. Since data on performance and its drivers are quite unclear, mostly in Europe (Gompers and Lerner, 2001), conducting an empirical study on this topic would be innovative but very difficult. One possible driver that enhances PEVC performance is corporate governance. Therefore, building on some of the seminal studies in the literature (Kaplan and Reishus, 1990; Pearce and Zahara, 1992; Lipton and Lorsch, 1992), we can argue that corporate governance of venture-backed companies is a way to improve performance. Evidence from the market highlights a considerable use of independent directors within corporate governance.

This study focuses on the Italian market, which represents the 21% of the European market in volume. Compared to other markets in the world, the Italian market is not often studied. The aim of this research is to analyze whether corporate governance contributes more to performance than other factors (e.g., industry growth and financial structure). Moreover, the aim is to identify what role independent directors play and to test if they affect PEVC investment performance. The results of this work may be relevant for both PEVC investors and regulators.

To establish a clear picture of the PEVC market, it is useful to classify players and investments by stage cluster and legal entity. Stage clusters generally include seed, start up, early stage, expansion, replacement & turnaround, and distressed (or vulture). Legal

classifications include close-end funds, venture capital trust, limited partnership, investment firm, banks, and public-private vehicles.

The International PEVC market is typically divided into three blocks (as percentage of total volume): the United States and United Kingdom (40%), Europe (35%), and emerging countries (25%), (EVCA, 2006). In the U.S. and U.K., PEVC is not regulated since an equity investment is not considered a financial service. By contrast in Europe, PEVC is regulated, even though some countries tolerate the existence of “unsupervised vehicles.” Both in “regulated” and in “unregulated” countries, information on PEVC is often incomplete and opaque.

Relevant information covers some critical issues across United States, United Kingdom and Europe¹. For this paper, the analysis of data on investment by players and performance through gross pooled IRR is particularly interesting.

Table 1 shows investments by players at the end of 2005 for different markets. It’s very important to highlight that in the United States, United Kingdom and Germany, limited partnership is the most used vehicle (58%, 45% and 45% in volume, respectively), whereas in Italy, France and Spain, regulations prohibit limited partnership for PEVC investors, thus the most used vehicle is the close-end fund.

<Table 1: Investment by players at the end of 2005 (in volume)>

Table 2 compares gross pooled IRR for different markets and years. We can see from this table that the Italian PEVC performance is lower than the United States and United Kingdom. The data show that Spain, France and Germany have a performance more or less similar to Italy. Analyzing Italian PEVC performance over the years, we find that from 2000 to 2005, the gross pooled IRR has decreased from 47.1% to 29.9%. 2003 recorded the lowest result with 17.8%.

<Table 2: Gross pooled IRR for different years and countries>

The paper is organized as follows. In the next section we highlight the most influential studies of private equity and venture capital performance. The section after reviews the most important literature on independent directors and their relation with performance. The final three sections describe our sample, present the empirical analysis and offer conclusions, respectively.

PERFORMANCE OF PEVC INVESTMENTS

Even if PEVC investment performance is a topic of the utmost importance for all the players involved, it is quite hard to find studies that analyze it in detail (e.g., IRR per single investment). The reasons for this usually include the following: details about each single investment are not added in the monthly info flow given to the Supervisor Authorities, accounting rules do not ask for a disclosure of every single investment IRR, information about IRR is quite private and PEVC investors do not have an incentive to promote disclosure and lastly, PEVC associations have only gross pooled IRR data.

Most papers typically approach the performance issue through proxies and/or cumulated measures (Cochrane, 2005) such as gross pooled IRR for a certain year in a country, final IRR for the vehicles that are finishing their activities (relevant only for vehicles of countries with an old tradition in PEVC), daily pricing for listed PEVC (available only for venture capital trust in the U.K. and some closed-end funds in Europe). However the best measure may be the post IPO performance of venture-backed companies.

Only the papers that study the U.S. market use datasets with single investment IRR (Gompers, 1995; Gompers et al., 2005; Kaplan and Schoar, 2005). Further, only a very limited number of papers employ non-U.S. datasets (Manigart et al., 2002; Phalippou and Zollo, 2005; Alemany and Martì, 2007). As a consequence, European markets have largely

remained unexplored; it must be tested whether determinants of performance found in U.S. studies can be extended to Europe, despite rules, supervision and PEVC ownership that are quite different.

A complete theory does not exist regarding PEVC investment performance; rather, there is a puzzle that shows different perspectives (both macro and micro) and supports the impact of different determinants. In terms of the process for managing an investment, the PEVC investor is involved in three phases to create value: decision to invest, managing and monitoring, and exiting.

The decision to invest is an *ex ante* decision on how to allocate the portfolio, and the exit strategy has an ambiguous relation with performance. Frequently in the literature the issue comes up of whether exiting affects performance or whether performance affects exiting.

The second phase, managing and monitoring, is the most thoroughly investigated area. Managing and monitoring involves the so-called “day after” that is the period ensuing the decision to invest. The investor and the venture-backed company have to plan jointly how to live together. To plan means to establish both medium and long term courses of action, as well as daily procedures. The goal of the investor and of the venture-backed company (or of the entrepreneur) is the same - the creation of value. Yet even though they both strive to create value, the perspectives of the investor and the company can be completely different. This crucial divergence of views can involve the permanence of the investor, strategies for increasing the company’s value, choice of alliances, and decisions to embark on new opportunities that create a situation different from the one that existed pre-investment. The managing and monitoring activities involve the investor in the venture. These activities have to ensure the creation of value and while keeping in check the state of the financed venture. This relationship implies the presence of two completely different areas of interest for the managerial phase: actions that create and measure value, and rules for living together.

<Figure 1: The managing and monitoring activities>

Actions that create and to measure value

Typically, actions that create and measure value are used to justify the presence of the investor within the managerial process of a venture-backed company. The nature of this presence depends on the stage of the investment (from seed to replacement and vulture), the style of the investor and the nature of the investment agreement (hands-on versus hands-off approach).

However, regardless of the stage and the style of investment, the activities that are key to managing and monitoring are the same: board services (i.e., corporate governance), performance evaluation and review, management recruiting, external advising and help in arranging additional financing. In both theory and practice, the activities that are most crucial and best represent the tools for enhancing the IRR are corporate governance, industrial growth, and financial structure.

Rules for living together

The presence of the investor within the governance and management of the venture-backed company requires rules for reducing conflicts and mitigating the agency problem between the investor and the management. Both the investor and the venture-backed company are characterized by very specific risks that need to be mitigated during the investment.

On the investor side, these risks include making the wrong industrial decisions, a lack of commitment on the part of the management, different timing in value creation, entry of new shareholders, and exiting surprises. The contractual schemes typically employed to offset these risks include lock up, permitted transfer, staging technique, stock option plan, callable

and put-able security, tag alone rights, drag alone rights, right of first refusal, and exit ratchet.²

CORPORATE GOVERNANCE AND INDEPENDENT DIRECTORS

Corporate governance is one of the three tools for managing and monitoring a venture-backed company. A PEVC investor must verify the set of actions to sustain value growth and to select the right mix of corporate governance, industrial growth and financial structure. Independent directors are part of corporate governance. The 2006 BVCA Annual survey highlights that in Europe the pooled PEVC investor strongly believes that corporate governance and independent directors are powerful and fair tools for creating value within venture-backed companies. Data gathered by PEVC investors' associations of different countries and the EVCA periodic surveys give the same results. Among the three tools previously enounced, the hierarchy in terms of importance seems to be corporate governance, then industrial growth, then financial structure. The benefits of using independent directors are numerous, and include competence transfer, deep knowledge on specific issues, improving corporate governance rules, strengthen network, advise the entrepreneur (BVCA, 2006; Van der Berghe and Levreu, 2002; Lerner et al., 2005).

Listed companies have used independent directors to great benefit. Theory, practitioners and regulators all consider independent directors to be a fair corporate governance instrument for enhancing performance (Kaplan and Reishus, 1990; Pearce and Zahara, 1992; Lipton and Lorsch, 1992; Luan and Tang, 2007³).

Many papers study the impact of the presence and the role of independent directors on stock performance (e.g. Rosenstein et al., 1990; Gompers et al., 2003; Cotter et al., 1997). The definition of "independent" is designated in many countries according to an internal code of

activity within the stock exchange, and is governed both by civil and common laws. The pillars that qualify a director as “independent” are:

- No control of the issuer and no influence over it.
- No holding of equity and no significant business with, relationship with, or compensation from the issuer or from companies controlled by the issuer.
- No previous membership in the board of the company.
- No family relation with shareholders/directors of the issuer.

However, it is the board of directors that establishes whether a particular director is independent, considering not only principles defined by rules. After the release of the OECD Principles Guide in 2004, the European recommendation and the ICGN principles in 2005, definitions of “independence” have begun to be amended to standardize the term among European and non-European corporate governance codes. Table 3 shows that some differences still persist between countries, however.

<Table 3: Definition of independent director in different countries>

Even if the aim is to standardize the definition of an “independent director,” it is important to remember that cultural diversity, varying regulations and economic environments may not allow findings to be generalized to all countries (Kang et al., 2007).

The debate over the use of independent directors as a tool for corporate governance of PEVC has only taken shape recently, and thus the topic has only been marginally analyzed. At present, only a few of working papers investigate the phenomena (e.g. Gottschalg et al., 2004; Hellmann et al., 2004; Hooghiemstra and Van Manen, 2004), and this is due to strong evidence coming from the market. The common issue is the evidence of an imperfect definition of “independent director” for PEVC, especially in the EU.

Despite these initial studies, many questions remain open, waiting for empirical evidence. The relationship between independent directors and performance is constantly investigated,

as is the difference in value creation between venture-backed companies with independent directors, and those without. Many studies are going to analyze the characteristics of independent directors and their impact on performance.

SAMPLE

For the Italian market, there exists no complete data set covering all PEVC deals, only partial data sets (AIFI, PEM, Thomson Financial Management). The data set used for this empirical analysis is constructed based on interviews over 18 months with all asset management companies (AMC),⁴ and results were matched with the three data sets mentioned above. Information about the directors was drawn both from interviews and from public data from Bank of Italy and Consob, when available.

The data set is unique in that it covers the entire range of Italian PEVC deals between 1998 and 2005. The data set is comprised of information from:

- 58 asset management companies (AMC) supervised by the Bank of Italy, that is, all financial institutions operating in the private equity and venture capital market between 1998 and 2005.
- 87 closed-end funds (CEF), that is, all closed funds available in Italy at the time of the survey and operating between 1998 and 2005.

In order to measure the “entry” and “exit” cash value, we consider all deals initiated between 1998 and 2005 (8 years) and ended with each strategy of exit (including write-off). There are 987 deals in total.

The data gathered cover a broad spectrum of topics including: the characteristics of every deal, the characteristics of the asset management companies and of the closed end funds, the

characteristics of venture-backed companies and of their corporate governance, the independent and non independent directors' profiles and other information.

The characteristics of every deal involves gross and yearly IRR, holding period, year of investment and of exiting, exit way strategy (trade sale and sale to other investor, initial public offering (IPO), write off), cluster of investment (seed, start up and early stage, expansion, replacement, buy out), size of investment (million euros), and percentage of shares.

The characteristics of the AMC analyzed include starting year, number of managed close-end funds, and information about shareholders (percentage owned by banks and financial institutions, private investors, industrial companies, and public administration). The characteristics of the CEF analyzed include starting year, size (million euros), and number of investments.

The characteristics of venture-backed companies and of their corporate governance include their industry (nine total industries, following EVCA and BVCA criteria), sales and changes in sales, D/E ratio and changes in D/E ratio, EBIT, EBITDA and their respective changes, ROE, ROA and their respective changes, and the number of directors.

Elements of the independent and non independent directors' profiles we took into account include number of board memberships appointed by the AMC during the investment (CNMCd), number of board memberships appointed by the AMC before the investment (CNMCb), number of board memberships of venture-backed companies belonging to the CEF (CEF), contemporaneousness of expiry between AMC and venture-backed companies' board of directors (TM), and voluntary end of the mandate in the venture-backed company before the term (VE).

Finally, “other information” refers to the gross and yearly internal rate of return on the Italian Stock Exchange (total return index) and risk free rate both measured in the same period of every PEVC investment.

The data set is characterized by specific features of the Italian market that differ from those of the U.S. and U.K. markets. In particular, there is a lack of evidence of the staging technique; no data on co-investment (both domestic and international), which started to be used after 2004 and is very popular today, and the ownership of AMC is typically made up of either banks or private investors and industrial companies. Until 2004-2005, it was very rare to find joint ventures between banks and private investors. In the vast majority of cases (948), the AMC appoints only one director to the board of the venture-backed company. Last, there is no evidence of a simultaneous presence of both an independent and a non independent director.

Descriptive statistics

The descriptive statistics give a clear picture of the Italian PEVC Market. Information on yearly IRR is classified according to the cluster of investment, the exit way strategy, the year of investment and of exit, and the industry. The same information is generated for two panels: venture-backed companies with an independent director (436) and venture-backed companies with a non independent director (551). These two panels are statistically different in terms of IRR.

<Table 4: Descriptive statistics for strategies for exit>

<Table 5: Descriptive statistics for yearly IRR cluster of investment>

<Table 6: Descriptive statistics for yearly IRR cluster of investment year>

<Table 7: Descriptive statistics for yearly IRR cluster of exit year>

<Table 8: Descriptive statistics for independent and non independent directors>

Analyzing the data presented above yields some interesting findings about the Italian PEVC market. At first, investors show a medium-long time period strategy (average holding period of 34 months). Thus the strategy adopted seems to be “buy and hold” rather than “buy and sell.” In terms of industry analysis, the data does not provide evidence that there is a preferred sector in which to invest.

On average PEVC acquires a stake of 23% in the company with an average investment of 6.8 million euros. In terms of the cluster of investment, we observe that seed, start up and early stage clusters account for only the 13% of the market, even though the average investment is not small (3.5 million euros). Finally, the investing and exiting year seem to have influenced the number of deals rather than the IRR.

EMPIRICAL ANALYSIS

The methodology adopted is an OLS regression that is run to determine what drives the IRR of the investments. The OLS regression is run for each of the panels (non independent and independent directors), taking into account all the variables related to the independent and non-independent directors' profiles. Results are quite similar in both analyses also using a Tobit regression where data are censored below a value of -100%.

In the first OLS regression, the dependent variable is the yearly IRR and the independent variables include the *holding period*, *percentage of shares*, *AMC shareholders* (dummy variable for bank or not), *size of CEF*, *sales* and *change in sales*, *D/E* and *change in D/E*, *non independent or independent director* (dummy), and *gross yearly stock exchange return*. There is also a control for the *year of investment* and *exit*, *size of investment* and *industry*, and *cluster of investment*. Table 3 summarizes the results.

<Table 9: Effect of different variables on yearly IRR >

Note that *Holding period* is significant at the 1% level, while *AMC shareholders* is significant at the 10% level. *Size of the CEF*, *Change in sales* and *Change in D/E* are significant at the 5% level. The dummy variable for *Independent director* is significant at the 1% level.

Results do not change with EBIT, EBITDA, ROA or their respective changes, or with substitution of sales and their respective changes. *Starting year of AMC* and *the number of managed CEF* are not significant (the AMC story is too short to highlight a reputation effect). Considering the ownership of the AMC not as dummy (banks, yes or not) but in terms of shares, results do not change. The same results are obtained considering the ownership of the AMC in terms of percentage of directors. Control variables do not have an impact on yearly IRR.

Results show that the IRR is affected by the variables that represent the typical drivers used by the PEVC manager: *change in sales*, *D/E* and *holding period*.

There is evidence of a negative effect for *AMC shareholders*, and *CEF size* (i.e., market power and/or reputation) has a positive effect on IRR. There is no evidence of correlation between IRR and *percentage of shares* and *stock exchange return*.

Results show that *stage cluster* and *industry* do not have an impact on *IRR*, while the ability to increase sales, to grow through D/E, to shorten the holding period and to have many business connections positively affect the IRR. This effect is stronger if the PEVC investor is not a bank. The market trend (*gross yearly stock exchange return*) does not affect the IRR. Corporate governance does matter - independent directors positively affect performance.

In the second and third OLS regressions the dependent variable is again the yearly IRR and the independent variables include those in the previous regression, as well as the five variables related to the directors' profiles. As before, control variables include the *year of investment* and *exit*, *size of investment* and *sector*, *cluster of investment*, *sales* and *D/E ratio*.

The aim of the second regression is to verify whether characteristics of the directors affect in a different way the IRR of investment on venture-backed in firms with non independent and those with independent directors. In the second and third regressions, the robustness of the results has been checked using other variables instead of sales (i.e., EBIT, EBITDA, etc.).

< Table 10: Effects of different variables on yearly IRR for independent and non independent panels.>

The results show that in the two panels the IRR is affected by the same variables as in the first regression, as well as the variables relating to the directors' profiles. The independent panel is more affected by variables related to directors' profile. Taking a deeper look at the results, it's important to emphasize that in the independent panel the number of memberships before (*CNMB*) and during the investment (*CNMD*) is negatively correlated with IRR as well as a voluntary end of the mandate (*VE*). For the non independent panel, only the *number of memberships* in venture-backed companies is relevant and positively correlated with IRR. The other variables are not significant. In both cases there is no evidence of the "busy directors effect" (Fich and Shivdasani, 2006) for PEVC investment.

These results can be interpreted in the following ways. First, we can hypothesize that the higher the number of memberships (both before and during the investment) of independent directors, the lower the "pureness" of their independence. Second, if the number of memberships is negatively correlated with IRR, the independent directors may likely have goals that differ from performance (Perry and Peyer, 2005); banking ownership can sustain and explain this effect. Third, the negative correlation between the voluntary end of the mandate and the IRR can be seen as a signal about the company that the independent directors give remitting their mandate. Continuing this interpretation, the fourth point relates to why the number of memberships (both before and during the investment) of non independent directors has no impact on the IRR. This may simply mean that this group of

directors generally has many memberships. This can also justify why voluntary end is not significant. Vice versa, the positive correlation between the number of memberships for a director in venture-backed companies means there is a track record effect related to the director.

CONCLUSIONS

This paper analyzes various drivers of the IRR of investment in venture-backed companies. The drivers are typically classified into corporate governance, industrial growth and financial structure variables. Most PEVC investors use an independent director as a tool for enhancing performance, although the definition of “independent” is inconsistent for PEVC investment. Empirical analysis suggests there is a higher performance when independent directors are employed. The IRR is driven also by industrial growth, financial structure, and holding period. However, in the independent sample, the director’s profile seems to have a significant impact on the IRR. Busy independent directors are probably not as independent as it would seem, and they are used to pursue goals unrelated to the IRR. However, they offer a signal by remitting their mandate. Even after the analysis performed in this study, the impact that independent directors have on performance remain ambiguous. The question remains: “Independents: stars or monsters?” (Kierkegaard, 1843)

This study offer insights to private banking and investment banking industries interested in enhancing PEVC investment performance. Furthermore, empirical findings allow us to increase the Italian corporate governance literature. Most research on this topic is limited to U.S. data, and very few studies analyze the Italian market.

Future research should involve analysis of the new legal framework for PEVC independent directors (linked to the number of memberships), criteria of appointment, PEVC investors' goals and the network effect.

NOTES

1. Data is a compilation of official statistics from Supervisory Authority, Private Official Associations of PEVC investors (AIFI, EVCA and BVCA), international data bases (Thompson Financial Services, IFC PEVC monitor).
2. For more details on these contractual schemes see Lerner et al., 2005.
3. The authors emphasize the need to discover the direction of causality between board composition and performance.
4. The TUF provides that closed-end funds must be managed by asset management companies. However the closed-end funds run in the same way of the limited partnerships.

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Table 1: Investment by players at the end of 2005 (in volume)

	US	UK	G	F	I	S
Closed-end funds	15% (f of f)	20%(trust) 10%(fund)	25%	58%	68%	70%
Limited partnership	58%	45%	45%	0	0	0
Investment firms	0	10%	18%	20%	25%	27%
Banks	8%	6%	7%	8%	5%	0
Pub-private vehicles	19%	9%	5%	15%	2%	3%
Total	100%	100%	100%	100%	100%	100%

Source: EVCA, 2006

Table 2: Gross pooled IRR for different years and countries.

Year	US	UK	G	F	I	S
2005	55.0%	42.7%	36.7%	22.1%	29.9%	35.1%
2004	49.2%	35.9%	35.1%	37.1%	24.7%	23.1%
2003	28.2%	22.4%	20.4%	41.6%	17.8%	16.1%
2002	19.2%	23.2%	22.1%	22.1%	34.9%	32.8%
2001	45.2%	45.2%	18.2%	23.2%	34.2%	46.1%
2000	125.2%	78.4%	43.1%	69.1%	47.1%	55.3%

Source: EVCA, 2006

Figure 1: The managing and monitoring activities

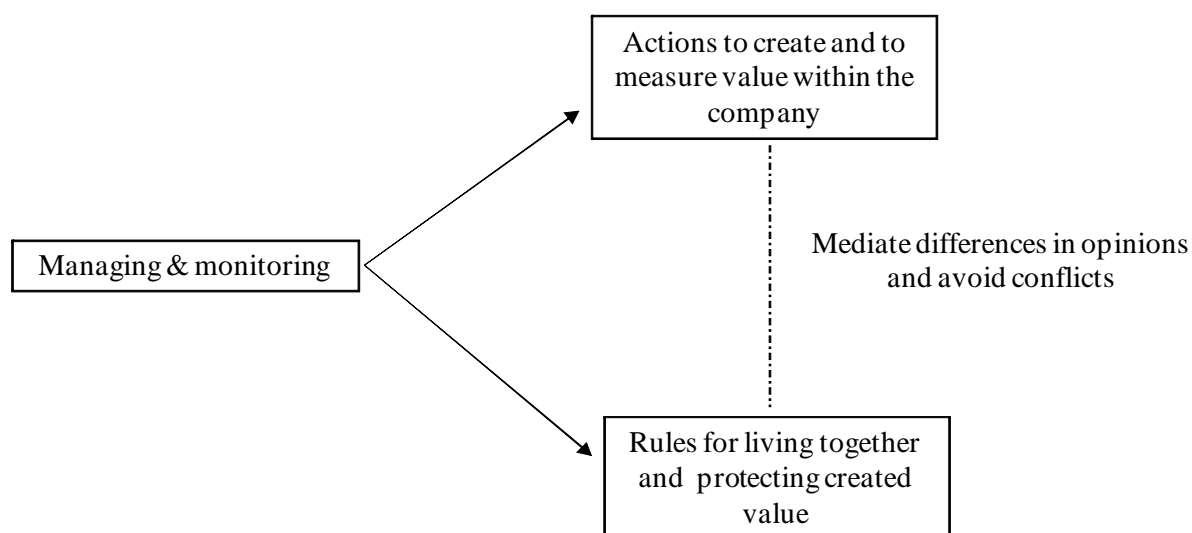


Table 3: Definition of independent director in different countries

A person could not be considered independent if he/she	UK	FR	D	I	S	US
is an employee of the c. or group	5 years	5 years	5 years	3 years	3 years (5 executive)	3 years
has or has had business relations with the c.	3 years	Yes	1 year	1 year	Yes	Not directly
receives or has received compensation from the c.	Yes	-	-	Yes	Yes	Yes (with limits)
has close family ties with the c. shareholders	Yes	-	Yes	Yes	Yes	Yes (with limits)
holds cross-directorship	Yes	Yes	Yes	Yes	Yes	Yes
has served in the c. boards before	Yes	CEO last 12 years	-	Yes (9 years in last 12)	Yes (last 12 years)	-
represents or has represented a substantial part of co. shareholders	Yes	-	Yes	Yes	Yes	Yes

Table 4: Descriptive statistics for strategies for exit

	yearly IRR		trade sale	IPO	write off	total	
mean	11.67%		start up	50	18	67	135
median	11.78%		expansion	249	19	34	302
std dev	22.83%		buy out	301	33	0	334
min	-100.00%		replacement	208	2	6	216
max	98.00%		total	808	72	107	
# obs	987						

	#obs	%	#obs	%	
trade sale	808	81.86%	start up	135	13.68%
IPO	72	7.29%	expansion	302	30.60%
write off	107	10.84%	buy out	334	33.84%
			replacement	216	21.88%
total	987	100.00%	total	987	100.00%

Table 5: Descriptive statistics for yearly IRR cluster of investment

	yearly IRR							hp (months)	size	% shares	
	#obs	%	mean	median	std dev	max	min				
start up	135	13,68%	5,59%	9,70%	25,72%	45,00%	100,00%	-	42,78	3,45	24,16%
expansion	302	30,60%	13,22%	11,80%	20,12%	61,00%	100,00%	-	33,49	4,76	22,64%
buy out	334	33,84%	14,06%	14,02%	20,84%	98,00%	-25,50%	-	30,36	11,74	23,19%
replacement	216	21,88%	9,82%	12,41%	37,41%	88,00%	100,00%	-	33	7,22	16,54%
total	987	100,00%	11,67%	11,78%	22,83%	98,00%	100,00%	-	34,16	6,76	22,69%

Table 6: Descriptive statistics for yearly IRR cluster of investment year

investment year	#obs	yearly IRR				
		mean	median	std dev	max	min
1998	169	10.05%	11.12%	24.80%	85.55%	-20.50%
1999	213	11.11%	10.97%	25.92%	81.40%	-100.00%
2000	248	9.76%	8.50%	26.71%	92.50%	-100.00%
2001	125	11.04%	12.05%	22.89%	90.05%	-50.00%
2002	98	11.74%	11.55%	19.45%	87.75%	-100.00%
2003	89	12.01%	12.42%	20.54%	95.50%	-100.00%
2004	42	12.20%	12.65%	22.34%	98.00%	-10.00%
2005	3	73.67%	65.00%	19.50%	96.00%	60.50%
	987	11.67%	11.78%	22.83%	98.00%	-100.00%

Table 7: Descriptive statistics for yearly IRR cluster of exit year

exit year	#obs	yearly IRR				
		mean	median	std dev	max	min
1998	2	32.75%	32.75%	17.32%	45.00%	20.50%
1999	40	8.75%	9.12%	19.50%	90.00%	-100.00%
2000	235	11.39%	12.01%	20.05%	98.00%	-20.00%
2001	186	11.12%	11.69%	19.85%	92.00%	-100.00%
2002	41	10.54%	9.70%	28.35%	95.00%	-100.00%
2003	103	11.20%	10.95%	20.07%	90.05%	-100.00%
2004	215	11.79%	11.90%	22.79%	92.00%	-100.00%
2005	165	11.85%	11.20%	22.64%	98.00%	-100.00%
	987	11.67%	11.78%	22.83%	98.00%	-100.00%

Table 8: Descriptive statistics for independent and non independent directors

	yearly IRR		CNMd		CNMb		CEF	
	Indep	Non indep	Ind	NI	Ind	NI	Ind	NI
	mean	13.29%	10.38%	5,78	6,05	5,79	6,21	3,07
median	13.43%	10.49%	6	7	6	7	3	4
std dev	22.98%	22.21%	3,31	3,91	3,79	3,81	2,04	2,73
min	-100%	-100%	0	1	0	1	1	1
max	98%	95%	11	13	14	13	9	12
# obs	436	551	436	551	436	551	436	551

	Ind		Non ind	
	yes	no	yes	no
TM	216	220	233	318
VE	79	357	63	488

Table 9: Effect of different variables on yearly IRR.

	Coefficient	p-value
Constant	1.387**	0.035
Holding period	-0.009***	0.001
Percentage of shares	0.002	0.234
AMC shareholders (dummy)	-0.053*	0.067
Size of CEF	0.007**	0.025
Sales (year of investment)	0.088	0.322
Change in sales	0.089**	0.032
D/E (year of investment)	0.002	0.456
Change in D/E	0.067**	0.027
Independent or not (dummy)	0.032***	0.003
Gross yearly stock exchange return	0.033	0.318
Adjusted R-square	28%	
#Obs	987	

* denotes significance at the 10% level

** denotes significance at 5% level

*** denotes significance at 1% level

Table 10: Effect of different variables on yearly IRR for independent and non independent panels.

	Independent panel	Non independent panel
Constant	1.487 (0.043)**	1.588 (0.067)*
Holding period	-0.011 (0.022)***	-0.007 (0.065)*
Percentage of shares	0.005 (0.344)	0.002 (0.322)
AMC shareholders (dummy)	-0.033 (0.032)**	-0.058 (0.021)**
Size of CEF	0.009 (0.065)*	0.014 (0.005)***
Change in sales	0.092 (0.031)**	0.083 (0.041)**
Change in D/E	0.069 (0.003)***	0.061 (0.007)***
Number of directors	-0.002 (0.566)	-0.009 (0.711)
Gross yearly stock exchange return	0.044 (0.433)	0.022 (0.822)
CNMd	-0.017 (0.071)*	0.012 (0.517)
CNMb	-0.012 (0.006)***	0.026 (0.413)
CEF	0.007 (0.671)	0.023 (0.071)*
TM	0.066 (0.527)	0.045 (0.518)
VE (dummy)	-0.075 (0.003)***	-0.085 (0.616)
Adjusted R-square	29%	26%
#obs	436	551

* denotes significance at the 10% level

** denotes significance at 5% level

*** denotes significance at 1% level