

**CORPORATE GOVERNANCE AND INDEPENDENT
DIRECTORS: MUCH ADO ABOUT NOTHING?
THE EVIDENCE BEHIND PRIVATE EQUITY INVESTMENT PERFORMANCE**

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Abstract

Recourse to independent directors by private equity investors per se is not tied to performance increases. We draw this conclusion from analyzing a unique data set representative of the Italian context: all deals realized by Italian closed-end funds from 1999 to 2003. Our study shows that independent directors impact the rate of return only on deals which require very specific skills, i.e. turnaround and buyout investments. Besides, busy independent directors do not seem to affect negatively the internal rate of return. Finally, independent directors tend to resign when performance is unsatisfactory and consent to shave losses when performances are negative.

JEL code: G34, G24, G11

Keywords: performance puzzle, independent director, corporate governance, closed-end fund, private equity

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I. Introduction

Performance of firms is not simply related to markets trends and competitive positioning but also to corporate governance. As composition of a board of directors and internal rules of governance directly affect performance, public authorities and regulators in many countries have introduced specific laws to encourage adopting an effective framework of governance rules that can help firms perform better. Independent members on boards of directors, that is, members not appointed by the owners, are believed to be particularly valuable. Internal codes, stock exchange regulations and public authorities also focus on the question of independent members with a view to strongly promoting their presence in many firms. Use of independent directors is extremely common in several countries, especially in cases where a firm's performance has a great impact on public opinion and/or the number of stakeholders is very large (i.e., in listed companies, private equity-owned firms, large State-owned corporations, etc.)¹. But while in many countries the profile of independent board members is clearly defined by law and regulations², the increasing use (or abuse) of these professionals has prompted an investigation as to whether their presence affects the performance of firms in different ways.

¹ 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, 2007).

² For an overview from around the world about the definition of "independent directors" see: Baysinger and Butler (1985); Clifford and Evans (1997); Young (2000); Becht (2002); Chatterjee *et al.* (2003); Nowak and McCabe (2003); Peng (2004); Long *et al.* (2005); Santella (2005).

After the comparative study by European Commission (2002) highlighted a lack of homogeneity among countries, three important documents caught the attention of the entire market: the 2004 OECD principles of corporate governance, then in 2005, the EC Recommendation on the role of non-executive or supervisory directors of listed companies, and the ICGN statement on global corporate governance principles. The objective of these provisions concerning independent and non-executive directors was to offer the market a more precise definition and a more or less comprehensive list of parameters to provide a profile for individuals occupying the roles concerned.

At a market level, the OECD and EU documents are of fundamental importance inasmuch as they provide a uniform interpretation and a much more precise definition of the concept of independence. Furthermore, it

Given the widespread recourse to independent directors as a tool to promote fair corporate governance rules within the boards of private equity-backed firms, it is crucial to understand whether independent directors are a solution to improve and/or to maximize the internal rate of return for PE investments.

The paper is organized as follows. Section II reviews the relevant literature on monitoring private equity deals, first focusing on the role and size of boards in the choice of corporate governance as the solution to manage PE investments and, following this, the role of independent directors on boards. Section III describes the Italian institutional context for private equity industry, in order to explain the structure of private equity investments in our country. Section IV introduces our research questions. Sections V and VI give details about our sample, explain the methodology and show results. Section VII reports the main findings and some considerations.

II. Review of literature

The topic of our paper finds several links to three main research streams of the extensive literature about corporate governance in private equity industry .

The first research stream reviews the issue of monitoring and control of private equity deals by PE investors. On the one hand, it highlights the features of the relationship binding this type of financial intermediary to firms financed or eligible for financing (see for example: Gorman and Sahlman, 1989; Sahlman, 1990; Blackwell and Winters, 1997; Benveniste *et al.*, 1998; Schmidt, 2003; Winton and Yerramilli, 2004); Folta and Janney, 2004; Fitza *et al.*, 2009). On the other hand, this stream identifies the tools that can be used to overcome problems in order to develop a satisfactory medium/long term relationship and to avoid inefficiencies regarding both definition of financial products and instruments and maximizing results (see Gompers and Lerner, 1996; Berglof, 1997; Kaplan and Stromberg, 2001 and 2002; Dessein, 2001; Aghion and Bolton, 1992; Klausner and Litvak, 2001; Cumming, 2001 and 2002; Mayer *et al.*, 2003; Schmidt and Wahrenburg, 2003; Bascha and Walz, 2001 and 2002; Cornelli

should be emphasized that on the wave of this type of intervention many codes of self-regulation or corporate governance (including those applied in Italy) were reviewed and revised based on indications given in these documents. Today the definition of independence in the various codes of self-regulation tend to be similar, while still leaving boards free to make an evaluation on a case by case basis. In effect, the content of the various codes can be considered more of a guideline rather than a mandatory rule.

and Yasha, 2003; Isaksson *et al.*, 2004; Litvak, 2004; Repullo and Suarez, 2004; Bien and Hirsch, 2005; Kaplan and Schoar, 2005; Gebhardt and Schmidt, 2006; Hellman, 2006).

The second research stream defines specific rules and structures as regards corporate governance to aid monitoring and control activities by private equity operators. In particular, the analysis concentrates on the size and composition of boards, their tasks and also the characteristics of board members. Actually, empirical evidence shows that one of the options adopted by PE investors to manage and monitor their investments in firms is to exercise direct control by having their own board member (see for instance, Gabriellsson and Huse, 2002; Aoki, 1999; Bruton *et al.*, 2000; Van Den Berghe and Levrau, 2002; Brancato, 2001; Kaplan and Stromberg, 2001; Kaplan *et al.*, 2005; Sapienza *et al.*, 1996; Campbell II and Frye, 2005; Hochberg, 2005; Lehn *et al.*, 2004; Klein, 1998; Gabriellsson and Winlund, 2000; Yacuzzi, 2005; Weir *et al.*, 2003; Dalton *et al.*, 1998; Allen and Song, 2002; Andres *et al.*, 2005; La Porta *et al.*, 1997; Anderson and Reeb, 2003; Villalonga and Amit, 2004; Faccio and Lang, 2002).

For the purpose of our analysis, we concentrate on the third research stream, which focuses on the role of independent directors on boards, emphasizing their contribution in terms of overall performance of the financed firm, but also the difficulties that can be encountered when defining and analyzing such a specific issue. The corporate governance approach is relevant for investors when it can improve a firm's performance.

Most studies focusing on corporate governance structure and use of independent directors regard corporates in general, while the debate on closed-end funds and their management of venture-backed firms is relatively recent. In particular, it started with Lerner (1996) and moved ahead with empirical evidence, almost all related to the US market: Gompers and Lerner (1998; 2000), Gottschalg *et al.* (2004), Hellmann *et al.* (2004), and Kaplan and Schoar (2005). Lerner *et al.* (2005) look more closely at the characteristics of boards of directors in venture-backed firms to see if there was specific evidence determining investor choices over a long-term investment horizon. However, there is still no hard evidence defining the true performance profile of independent members.

Concerning the role of independent directors and their behavior, some empirical evidence is particularly useful to gain a better understanding of this issue. Fich and Shivdasani (2006)³ propose an in-depth analysis of “busy boards” and show that weak corporate governance or monitoring is related to the presence of directors involved in more than three boards. Ferris *et al.* (2003) examine the number of external appointments held by corporate directors and conclude that the evidence does not support calls for limits on directorships held by an individual. Peng (2004) suggests that outsider directors do make a difference in firm performance, if such performance is measured by sales growth, and that they have little impact on financial performance such as return on equity (ROE). Kor and Misangyi (2008) find that the presence of outside directors who have significant managerial industry experience compensate for the dearth of industry experience in young firms’ top management ,

With reference to Internet firms, Sanders and Boivie (2004) find that in the post-IPO stage, the market prefers insider-dominated boards. It appears that Internet firms may be a special context in which insiders help form a more effective board. Insiders have greater access to subjective information regarding top-management performance and may be especially useful when information processing at the board level is critical.

Belkhir (2004) investigate the relationship between board size and performance in a sample of banks and savings-and-loan holding companies. Contrary to theories predicting that smaller boards of directors are more effective, he finds that increasing the number of directors in banking firms does not undermine performance. In particular, he thinks that performance and corporate governance are not as closely linked as previous studies declare (Lipton, Lorsch, 1992; Jensen, 1993) and that the number of directors is the effect of performance and not the contrary. In any case, Belkhir’s results show that there is no negative relation between board size and performance in banking.⁴

³ This empirical study is based on a work dating from 2004. The results that Fich and Shivdasani obtained do not reach a definite conclusion because, on the one hand, companies with a majority of busy outside directors show significantly lower market-to-book ratios and weaker operating performance, but on the other hand, the presence of directors who hold more than one directorship was not more likely to occur in firms that are performing poorly.

⁴ Adams and Mehran (2005) study in depth the relationship between on the one hand, board size and composition and, on the other hand, Tobin’s Q in banking firms, and found a surprising result: a non-negative relationship, which is contrary to the evidence for non-financial firms. As did Belkhir (2004), even these authors concluded that the connection between governance and performance in the banking industry is particular and has no correlation with other industries. Rowe and Davidson III (2002), studying the case of closed-end funds, conclude that the evidence that board composition influences financial performance is not very strong and

Bhagat and Black (2002), starting from the assumption that a “monitoring board” composed almost entirely of independent members is an important component of good corporate governance, analyze a wide sample of US firms and find no supporting evidence for this conventional wisdom. In particular, firms with more independent directors do not perform better than other firms over the long term.

Hooghiemstra and Van Manen (2004) study independent directors as regards their role and what effective degree of independence they have. They affirm that although the majority agreed that monitoring is the main duty of independent directors, there are some doubts as to whether they can perform this “watchdog role” effectively. The primary limitation is pinpointed as being asymmetry of information that leads to the so-called “independence paradox”: to obtain adequate information, non-executives are dependent on the executives they are supposed to supervise and be independent from. Unfortunately, the authors do not suggest any solutions for this situation.⁵

Leblanc and Gillies (2003) look again at some existing findings on corporate governance and directors. They argue that a rather non-homogeneous classification continues to exist because what are considered “external” directors are defined in various manners (for instance, unrelated, independent, outsider), depending on the degree of independence conceived by the regulator drafting the regulations or by parties involved in a contract (i.e. PE investors). For this reason the authors conclude by suggesting a new methodology, which assumes that a board’s effectiveness is a function of the effectiveness of a director that, in turn, depends on independence, competence,⁶ and behavior.

Roberts *et al.* (2005) review findings of major empirical studies concerning the effective ability of agency and stewardship theories⁷ to explain the decision for corporate governance, showing that many critics exist. They propose a new approach to explain the role of non-executive and independent

depends on the definitions of financial performance and board composition as well as the type of econometric model utilized.

⁵ See also Nowak and McKabe (2003).

⁶ Keys and Li (2005) show that after a takeover, professional directors are three times more likely to receive new appointments than other types of directors released from their respective boards or that the proportion of professional directors in above-average performing targets is significantly greater than that in under-performing targets.

⁷ The Stewardship Theory proposes that there is no conflict of interest between managers and owners and that to be successful the organization requires a structure that allows coordination to be achieved most effectively. See: Muth and Donaldson (1998); Demsetz and Villalonga (2001); Gay (2002); Jones and Wicks (1999).

directors based on attitudes, behavior and skills, underlying the elements of control and collaboration as well.⁸

Gillan *et al.* (2003) provide arguments and evidence that corporate governance structures are endogenous responses to the costs and benefits firms face when they choose the mechanisms that comprise those structures. In particular, corporate governance structures differ systematically across industries and firms due to differences in the costs and benefits of the monitoring mechanisms. Their findings are significant because they confirm the importance of different elements in the firm's governance structure. They also suggest that regulatory actions applying a one-size-fits-all criterion may be sub-optimal, and increase contracting costs for some firms.

III. The Italian institutional context for private equity industry

The typical structure available for carrying on private equity activity (henceforth PE) in Italy is the closed-end fund. The legislation introducing this vehicle was enacted with the Law No. 344, of August 13, 1993. All the provisions included in that Law and regarding the civil law issues of the investment funds were replaced by the Legislative Decree No. 58, of February 24, 1998 (The Consolidated Act on Financial Intermediation).

The structure of Italian PE operations is the same in essence as in the US, but is different in form (see Figure 1).

In comparison with limited partnerships, which represent the typical vehicle of PE investments in the US and UK, the closed-end fund's assets are separate from MCO's assets, in order to make the MCO team able to be independent in the selection of the best investment opportunities.

Secondly, the investors of closed-end funds can not get the repayment of their investments before the fund's maturity. Finally, the units of closed-end funds can be traded on a regulated market.

⁸ Even Carpenter and Westphal (2000) analyzed the role of external directors in terms of contribution to strategic decisions, to monitoring activity, to board advice-giving. Van den Berghe and Levrau (2004) contributed to the discussion with an empirical study concerning the evaluation of boards of directors and showed that quantifiable variables are not enough to arrive to a correct conclusion. Nicholson and Kiel (2004) proposed a framework that led to a particular mix of board intellectual capital in which the exact nature of these components will depend on the company's requirements.

**** Insert Figure I about here ****

Funds have a management company (hereafter MCO) which raises capital from investors⁹ and assumes the full responsibility for the management of the fund, including all decisions to invest and divest. However, it may assign specific investment choices to intermediaries which have been authorised to supply asset management services.

The MCO can be controlled by banks, industrial companies, public entities, private investors, or other entities. It can manage more than one fund and can also hold shares in different companies (i.e. industrial companies or financial intermediaries), which are not involved in the PE activity. Each PE fund can finance more than one firm. The MCO appoints funds' representatives, who sit in the boards of directors of portfolio companies and monitor the firms' activities and performances. The same fund's representative can sit in the boards of directors of more than one company. Besides, he can sit in the boards of other companies, which are controlled by the MCO, but are not venture-backed.

Investments made by the fund are kept in custody by the so-called custodian bank, which verifies the legitimacy of the operations of issuance and redemption of the units and the allocation of fund income. It also verifies the correctness of the calculation of the value of the units, or makes the calculation, when it is charged with this task by the management company. Besides, the custodian bank verifies that in transactions involving fund's assets, any consideration is remitted to it within the customary time limits.

IV. Research questions

The aim of our analysis is to investigate the following issues:

- 1) Do independent directors sitting in the investee firms' boards affect the final investment performance?

⁹Usually Italian PE funds are reserved to the so-called "qualified investors", i.e. investment firms, banks, management companies, pension funds, insurance companies, holding companies of banking groups, foreign intermediaries authorised under the law in force in their home country to perform the same activities as those performed by above mentioned intermediaries, banking foundations, natural and legal persons, other entities with specific expertise and experience in transactions involving financial instruments.

The aim here is to verify whether the investment performance is affected by the participation of independent directors in the boards of investee firms, or it only depends on variables concerning the deal, the management company of the closed-end fund, the governance of the firm being funded and financial markets data.

- 2) When independent directors are present, do their subjective and personal characteristics affect deals' final performance?

In order to understand the effectiveness of using independent directors, tests are made on how much subjective and personal features affected investment performance.

Given the empirical evidence and level of homogeneity existing today as regards the concept and definition of independent directors, this paper will use definitions given in the Italian Code of Governance issued by the Milan Stock Exchange¹⁰ not only used by listed companies but also by major unlisted ones and SMEs in order to organize and define criteria for corporate governance. According to article 3.C.1 of the Code, the board of directors should evaluate the independence of its non-executive members. In particular, an individual cannot be considered independent if: he/she

- directly or indirectly, even through subsidiaries, trustees or delegates, controls the issuer or can exercise considerable influence over it, or participates in a quasi-company agreement based on which one or more parties can exercise control of considerable influence over the issuer;
- holds or has held in the past three years, a significant position in the issuer, in one of its strategically important subsidiaries or a company subject to joint control with the issuer, or a company or other body that, even together with others based on a quasi-company agreement, controls the issuer or can exercise considerable influence over the latter;
- directly or indirectly has, or has had in the previous year, a significant business, financial or professional relationship with the issuer, one of its subsidiaries or with one of its important members, or with a party that, even together with others based on a quasi-company agreement, controls the issuer; or who is, or has been in the past three years, an employee of one of the aforementioned parties;

¹⁰ See Borsa Italiana (2006).

- receives, or has received in the past three years, from the issuer or one of its subsidiaries or holding companies, significant compensation in addition to the emoluments established by the issuer’s non-executive board member;
- has been a board member of the issuer for more than nine of the previous twelve years;
- holds the position of executive director in another company in which the executive director of the issuer is a board member;
- is a stakeholder or board member of a company or other body owned by the firm appointed as the issuer’s auditors;
- is a close family member of a person who can be identified as being in one of the positions indicated in the previous points.

V. Data and descriptive statistics

Our empirical investigation uses a very detailed data set covering the Italian private equity market. The quality and originality of this data is important since officially there is no such a comprehensive database in Italy. In addition, the selected period represents almost the entire history of Italian closed-end funds. Before 1999 there were very few funds or investments of this type; in fact, the first is dated 1995.

Data were collected by means of a questionnaire sent to 58 Italian MCOs, which represent the whole population of PE management companies operating before 1999 and that managed all 87 closed-end funds available up to and during 1999. All MCOs were contacted and provided requested data, signing an agreement that we would not disclose the data to other parties. None of these MCOs is totally dedicated to start-up financing; in fact, this type of financing represents only a small part of closed-end fund portfolios – a traditional feature found in Italy and most other European countries, except for the UK.

The 5-year study period runs from 1999 to 2003. We decided that MCOs and PE funds launched after 1999 would be excluded in order to avoid all risks associated with gathering only partial data,

given that the time horizon for closed-end fund investments can be as long as 5-7 years. A total of 987 operations were reviewed from which 698 were used for the purpose of this study as they represent investments made and closed through exit-way (including write-offs) within the 1999-2003 timeframe. The remaining 289 operations are deals in progress; these were not used because they have no final value, so the realized final performance of the deals concerned could not be calculated.

The following details were made available for all MCOs in the study: i) the structure of ownership and board of directors; ii) the number of funds and relevant amounts; iii) financial reports. Information regarding points i) and ii) was cross-checked with two databases: the one maintained by the Bank of Italy and one maintained by AIFI (the Italian Association of Private Equity Investors).

Information available for each PE fund was: i) the number of investments; ii) characteristics of each single investment (financial reports of the participated firm, size of the investment, industry); iii) the internal rate of return for the investment; iv) the board structure of the investee firm in terms of name and profile of each board member. The names of directors sitting on boards were classified as independent or otherwise according to the above-mentioned Italian Code of Governance criteria and were matched against three official databases in order to determine the number of other directorships held in other firms or institutions. The databases used for the matching process were AIDAF (covering Italian family firms), CONSOB (covering listed companies) and Bank of Italy (covering banks and financial institutions).

The review of each of the 698 investments allowed us to collect a significant number of variables. All elements investigated can be subdivided into 4 groups: (a) Information about individual private equity deals; (b) Information about the governance of the firms receiving funds; (c) Information about the MCO of the fund; (d) Financial market and stock exchange data. Details of all the variables are provided in Table I.

***** Insert Table I about here *****

Given our special interest for the influence of independent directors on private equity investment performance, we collected additional data by means of direct interviews with all the 58

private equity firms. These interviews were focused on the agenda and commitments of independent board members, on the characteristics of the relationship linking them to the deal and PE funds and, lastly, on how they behaved in relation to the firm financed. The information coming from interviews was the basis for the construction of the following additional variables.

- CNMd: the total number of seats that the funds' representatives have in boards of firms owned by the funds' MCO (included non PE-backed firms) during the holding period. We use this variable as a proxy for the time that the funds' representatives can devote to monitor the strategic fit and the economic value of the portfolio companies' activities. Our idea is that when funds' representatives are very busy, they are not able to keep their finger on the pulse of the PE-backed firms, nor to monitor their results effectively. As a consequence, we believe that busy board directors generate poorer investments' performance than less busy ones.
- CNMb: the total number of seats that the funds' representatives have in boards of firms owned by the funds' MCO (included non PE-backed firms) before the period of observation. We use this variable to verify if independent directors' past links with the MCO affect the performance of PE investments. In other terms, we intend to highlight if turnover among independent directors influence PE investments' performance.
- CEF: the total number of seats that the funds' representatives have in portfolio companies' boards of directors, during the holding period. The aim of this variable is to investigate if there is a closer relationship between the MCO and the independent director. Compared to CNMd above, here the focus is to find evidence regarding the use of independent directors for PE investments only. Our argument is that more frequent attendance leads to greater care taken during monitoring and control activities concerning a deal.
- TM: it is a dummy variable that takes the value 1 if there is a synchronism of maturity between the boards of directors of the MCO and investee firms, and 0 otherwise. This variable aims at checking if there is a contractual clause linking the duration of the

relationship between the MCO and independent director to the duration of the deal. The variable refers to the independent director's role and motivation: if the relationship with the management company terminates when the investment closes, this will motivate directors to do their best to maximize final performance. Moreover, if a synchronism exists and is statistically important it could be claimed that independent directors are selected with a view to protecting investments only.

- VE: it is a dummy variable that takes the value 1 if the termination of the director's mandate on the board of owned firms, before the expiration of the board, is voluntary, and 0 otherwise. This item investigates if independent directors sit on boards without regard to how investments perform.

***** Insert Table II about here *****

Table II presents descriptive statistics concerning the sample. Panel A includes data on the investment performance. The average annual rate of return for investments is 11.67% with great differences between the different types of operation. Buyout and expansion investments – which account for more than 75% of the total number of investments included in our sample – rank higher with almost 14% and 13% respectively. Instead, early-stage financing deals show a surprisingly low return and only four early-stage financing investments were able to achieve a final performance high enough to be included in the first quintile. This result could be explained by the inexperience of Italian financial institutions in this field or by the time horizon selected.

In terms of holding period, Panel B indicates that the average length is 34 months, with buyouts lasting less (around 2.5 years) and early stage more (about 3.5 years). Panel C shows data on the size of investments and, not surprisingly, shows that buyouts investments are the largest with an amount close to 15 million euros and early stage are the smallest with a very low amount of less than 1 million euro. Panel D provides data on the average share retained by private equity investors. No major differences emerge among the different subcategories with the exception of turnaround

investments with a percentage share of about 16%. Finally, Panel E indicates that most of the investments included in our survey are exited by way of trade sale (615 or 88% of the total sample).

Table II shows also the differences between the independent-director cases (316, or 45.72% of the whole sample) and dependent director cases (382). It is worthwhile noticing that the large use of independent directors in the Italian private equity industry can be explained by either the contribution that reputation and autonomy can provide in the development of relationships and funding actions or by the fact that the choice of independent directors can compensate for a lack of competency or know-how within the financial institution.

By looking at the data, descriptive statistics do not seem to indicate a dramatically different profile between the two subsamples. Holding period, investment size and percentage of acquired shares are in fact very similar. The only relevant differences are in the annual return of turnaround and buyout investments where the independent subsample shows a higher performance. Another difference refers to the selected exit strategy: in the IPO subsample, there are more deals where independent directors are present in the investee firms' board. The evidence suggests that although the exit strategy could not be established with certainty at the entry date, private equity operators tend to use independent directors if they foresee the opportunity to list the stocks of the investee company at exit. This opportunity calls for a higher level of monitoring, lower conflicts of interests and higher governance standards, which are coherent with a larger use of independent directors. Moreover, the presence of an independent director improves a closed-end fund's reputation and standing, and recourse to such individuals is usually exploited in these situations because the IPO exit-way means the firm and financial institution will have much greater visibility.

VI. Method and results

We use a statistical multivariate linear regression model to pinpoint the variables that best explain the annual rate of return for private equity investments (IRR), measured from the starting to

the exit point of the investment,¹¹ whereas different independent variables were used depending on the hypothesis being tested.

From an analytical standpoint the model used can be represented as follows:

$$Y = \alpha + \sum_{i=1}^n \beta_i * X_i + \varepsilon \quad [1]$$

where Y represents the values for IRR and X_i represents the values for other variables taken into account. We estimate different models using different regressors at a time in order to maximize R^2 while eliminating any problem of self-correlation between independent variables. Results are shown in table III

***** Insert Table III about here *****

Regression #1 in table III aims at verifying whether the investment performance is influenced by the presence of independent directors sitting in the investee firms' boards, or it only depends on variables concerning the deal, the management company of the closed-end fund, the governance of the firm being funded and financial markets data (research question #1). Regression #1 shows that an exit-way through IPO significantly increases the final return of the deal. Moreover, we are not surprised to notice that an exit-way through write off is associated to deals which perform negatively. Furthermore, shares held, the investment size and the holding period all show an inverse-type relationship to final returns: lower shareholding and financing and a shorter shareholding period lead to higher final performance. These results are in line with a grandstanding-like PE investor behavior, based on the search for projects that are self-sustaining, requiring low financial resources and producing results right from the very beginning and with a very short period to reach maturity. The presence of an independent director does not show any significant relationship with investment performance. This evidence confirms the result of the test for difference in average IRR between the dependent and independent subsamples, shown in Table I. The test also showed that the only

¹¹ We also run regressions using as dependent variable the excess return (Y-INVIRR net of FREE) and results obtained do not differ significantly from those using the original model. Results are available upon request.

difference in investment performance between the dependent and independent subsamples concerns turnaround and buyout transactions. On the ground of this evidence, we further analyze the effect of the presence of independent directors on IRR and run two additional regressions for the turnaround and buyout subsamples separately (Table IV).

***** Insert Table IV about here *****

The coefficients of the deals' characteristics in regressions #2 and 3 do not show major differences compared to regression #1. Exit way through IPOs or WOFF, as well as HOLD-PER and I-SIZE, maintain sign and significance of the coefficients. %SHARE coefficient keeps its sign, but it is less significant in regression #2 and loses its significance in regression #3.

On the contrary, the importance of the TYPE of directors sitting in the investee firms' boards gains great importance, either in turnaround or buyout subsample. Data highlight that independent directors are able to contribute positively to performance in projects requiring very specific skills, that is buyouts or turnarounds. Thus, the performance of this kind of deals is influenced not only by the investments' characteristics, but also by the type of directors who are appointed by the closed-end fund to sit in the investee firms' boards.

In order to understand why independent directors affect the performances of turnaround and buyout deals, we run an additional set of regressions included in tables from V to VII. In particular, we aim at verifying whether subjective and personal characteristics of independent directors affect IRR (research question #2). The following analyses refer only to turnaround and buyout deals which are managed through independent directors. As regressions #2 and 3 have not shown major differences between turnaround and buyout transactions, in performance determinants, we unify them in a common subsample.

Compared to the first three regressions in Tables III and IV, we exclude the variables which do not give any significant contribution to explaining performance and are not able to increase the models' explicative capability. These variables have been replaced by variables associated with the characteristics of independent directors, as detailed in Section V.

In regression #4 way out variables (IPO and WRITE OFF), HOLD-PER and %-SHARE maintain their statistical significance. Among independent directors' characteristics, two variables have a significant impact on performance: VE and CEF.

***** Insert Table V about here *****

VE (voluntary termination of the mandate) shows an inverse relationship to final return, suggesting that independent directors terminate their mandates when performance is unfavorable. CEF (cumulative number of memberships on boards of firms owned by the closed-end fund), has a positive coefficient, meaning that performance improves with an increase in a director's presence on boards of companies in which the closed-end fund has invested. In other words, results highlight that the commitment and involvement of these directors affect positively the investment performance. The number of board memberships during and before the period of observation (CNMd and CNMb, respectively), as well as the possible synchronism of maturity between the MCO's and investee firms' boards of directors (TM), do not to play any role in influencing the investment performance. In order to further investigate their contribution to the annual rate of return of investments, we run further regressions on decile and quintile annual returns. The aim of the following analysis is to verify whether independent directors' characteristics affect the performance of the best and the worst investments.

Results are shown in Tables VI and VII, respectively.

***** Insert Table VI about here *****

***** Insert Table VII about here *****

Analyzing the performance of the best (first decile and quintile) and worst (last decile and quintile) turnaround and buyout investments clearly highlight the independent directors' characteristics which are statistically significant.

About the best deals, the only significant variable is CNMd, which measures the cumulative number of memberships on boards belonging to the MCO during the period of observation, that is the independent director's overall involvement with the MCO. There is a positive direct relationship with IRR of best deals, whereas there is no relationship with the performance of worst investments. This evidence indicates that busy directors do not affect negatively performances. On the contrary, they seem to contribute to maximize returns, even if the significance of CNMd coefficient is significant at the 10% level.

About the worst performers, the data show that variables concerning the characteristics of independent directors are more significant, in particular CEF (cumulative number of memberships on boards of firms owned by the closed-end fund) and VE (voluntary termination of the director's mandate). As regards the specific commitment with the closed-end fund, measured by means of the variable CEF, we can state that independent directors make a positive contribution when the scenario is negative, whereas their presence does not maximize results when the trend is positive. In this sense, therefore, directors who are deeply involved in the closed-end fund activity, on the one hand, do not maximize profitability but, on the other, do tend to shave losses. This behavior is completely understandable because a loss (or a less than positive result) would reflect badly on the image of the directors concerned.

Concerning VE, our results suggest that independent directors who terminate their mandate with the management company do so when performance is not satisfying. In this sense, independent directors act in a manner consistent with their role and withdraw from deals that they are unable to make perform satisfactorily.

As regards the other independent directors' characteristics, we find no relationship with performance. The coefficient of CNMb (cumulative number of memberships on boards of the MCO before the period of observation, as proxy for turnover among independent directors), is not statistically significant. Thus, we can not state that investment performance is stimulated by the turnover of independent directors. Also TM (the synchronism of maturity between the boards of directors of the management company and firms owned by closed-end fund) seems not to be important. The presence

of clauses in this regard does not seem to provide a greater incentive for independent directors' activities.

VII. Discussion and Conclusion

The paper focuses on factors explaining the performance of investments realized by Italian closed-end funds between 1999 and 2003, especially the contribution made by independent directors. Our starting point is the observation that empirical evidence focusing merely on financial aspects does not provide a definitive picture of the characteristics these individuals should possess, or the tasks they should undertake on the board. We decided to use the definition of independent directors which is provided by Italian regulations, given that it is not significantly different from that in force in many other countries (including countries outside the EU).

Considering the lack of databases for private equity investments in Italy, we used a unique set of data gathered from 58 operators managing 87 closed-end funds. We compiled a set of 698 deals that took place between 1999 and 2003, effectively representing the whole population of operators and instruments existing in Italy in 1999. A wide-ranging set of variables was collected for each operation: characteristics of the deal (i.e., return, exit-way, holding period), characteristics of the external environment (i.e., interest rate for risk-free investments, rate of return in the stock market), characteristics of the closed-end fund and its manager (i.e., number of investments, amounts invested), governance characteristics of firms financed (i.e., total number of independent directors, number of board members). Furthermore, when independent directors were present, an additional series of variables were mapped: (a) present and past involvement of each individual with the closed-end fund and management company; (b) characteristics of the relationship linking the closed-end fund, the independent director and the duration of the investment; (c) behavior of the independent director as regards the firm financed.

All these items were factored into a statistical regression model with annual return on investment as the dependent variable. Use of this model was intended to achieve several objectives, ranging from a search for factors better explaining performance to identifying operating differences

between non-independent and independent directors and the effect of the subjective characteristics of the latter.

The first result showed that characteristics of the deal have an impact on final return; in particular, shareholding, investment size, holding period and exit-way are items that have the greatest effect on final performance. At first, the most surprising result was the neutrality of independent directors, who didn't make a statistically significant impact on the outcome of investments.

Yet, the descriptive statistics inspired us further analyses. Actually, we found that average returns of turnaround and buyout investments are higher when independent directors are present in the investee firms' boards. Thus, we deepened our investigation by focusing on turnaround and buyout deals. We found that independent directors are able to affect positively performance of these transactions, which require very specific skills.

We then focused only on the group of turnaround and buyout investments which involved independent directors and took into account the specific profile of the individuals concerned. From data available it emerged that independent directors resign in the event of negative performance, and that presence in the fund can improve overall performance of an individual deal. We decided to investigate further by applying the model, first to deals with the best performance (first decile and quintile) and then to those that performed worst (last decile and quintile). As far as deals showing best results are concerned, we can assert that the subjective characteristics of independent directors do not help explain performance of private equity deals. Actually, much doubt remains as to the impact of so-called "busy directors" on closed-end fund investment performance. About the worst deals, it is evident that independent directors tend to resign when performance is negative and that their involvement in the closed-end fund's activity consents to shave losses.

The most important outcomes of the empirical tests can be summarized as follows:

- In recent years there has been too much emphasis on corporate governance and, especially, of independent directors as a tool to maximize performance of PE investments.
- In the Italian case, our analysis shows that it is above all the characteristics of deals that explains their performance. In turnaround and buyout deals, which require very specific skills, the presence of independent directors lead to higher IRRs. Yet, as regards the highest returns

variables linked to governance do not have a significant impact on final results, whereas the presence of independent directors shaves losses on worst deals.

Actually, specific traits emerge that characterize the behavior and actions of independent directors, which can be very important from a practical standpoint:

- It appears that the presence of independent or non-independent directors is linked to the type of operation.
- Resignation or termination of the mandate by independent directors is an extremely important signal, given that this occurs when results are negative.
- A high turnover of independent directors do not lead to improved performance.
- When the duration of the mandate and operation are in synchrony, and therefore mandates are for a “fixed term”, performance of deals managed through independent directors does not increase.

Overall these factors have an effect on operations that implies an improvement and updating of the relationship between PE investors and independent directors, while there do not appear to be any messages addressed directly to firms or the authorities and/or legislators.

- As investment performance can above all be explained by business as opposed to corporate governance-related factors, it is reasonable to expect private equity operators will focus on the characteristics of deals. Governance, instead, will be important although not a priority factor, except for those operations requiring special skills.
- The relationship between the independent director’s degree of involvement with the management company and overall results is not clear and in any event does not give a definite indication. This being the case, PE investors should start to monitor the number and type of roles assigned to the various parties with whom they have relations on an ongoing basis. They should then compare these data with returns from deals so that they can vary the level of involvement and optimize use of independent directors.
- A targeted use of independent directors can bring benefits if the skills of individuals are evaluated bearing in mind the type of deal to be implemented.

From a purely scientific standpoint empirical evidence does not provide a definite answer as to why Italian PE investors use independent directors (even in deals not requiring specific skills). Certainly they do not do it to improve performance. This would suggest that further studies are probably necessary in the near future. In effect the results obtained could be misleading for the simple reason that governance is not a factor taken into account in the process of selecting investments, whereas deals' characteristics certainly are. In practice, this would explain the importance of deal-making process variables to the detriment of all others. Furthermore, it could also be interesting to broaden the set of explicative factors for performance to include factors such as contractual clauses establishing the powers for and priorities to be pursued by independent directors, or clauses that reflect the PE investor's financing conditions. As a result of these studies, in effect, different types of roles for independent directors could be instituted. A further study could involve the relationship of variables identified in this paper and items such as improvements to the image of the financial intermediary or enhanced reputation. These could prove more legitimate reasons for such widespread use of independent directors by venture capitalists.

Table I
Variables description

This table shows the variables collected and available in the study. The variables are classified into four groups: (a) information about individual private equity deals; (b) information about the governance of the firms receiving funds; (c) information about the management company of the closed-end fund; (d) financial market and stock exchange data.

Variable Symbol	Description
(a) Information about individual private equity deals	
IRR	Yearly internal rate of return of the investment
I-SIZE	Size of the investment (in millions of euros)
%-SHARE	The percentage of shares in firms owned by the closed-end fund
HOLD-PER	Holding period for the investment (in months)
EARLY	Dummy variable. A private equity investment that concerns seed capital or start-up financing
EXP	Dummy variable. Growth or development investment.
BUYOUT	Dummy variable. Buyout investment.
TURN	Dummy variable. Turnaround financing.
TRADE	Dummy variable. Exit strategy based on a deal between the private equity operator and other financial investors or entrepreneurs
IPO	Dummy variable. Exit strategy based on listing the firm on a domestic or foreign stock exchange, independent of the closed-end fund's decision to either sell or retain shares
WOFF	Dummy variable. Exit strategy based on the write-off of the investment
(b) Information about the governance of the firms receiving funds	
NUM-DIR	Number of the funded firm's independent or dependent directors who are appointed by the closed-end fund
TOT-DIR	Total number of members of the firm's board of directors
TYPE	Dummy variable, which takes value 1 if the director is independent and 0 otherwise
CNMd	Number of board memberships appointed by the management company during the investment
CNMb	Number of board memberships appointed by the management company before the investment
CEF	Number of board memberships of venture-backed companies belonging to the closed-end fund
TM	Contemporaneousness of expiry between the management company's board of directors and venture-backed companies' board of directors
VE	Dummy variables, indicating the voluntary end of the independent director's mandate in the venture-backed company before the term.
(c) Information about the ownership structure of the MCO	
%MCO-FI	This variable indicates the percentage of an MCO's shares held by banks and financial institutions
%MCO-PI	This variable indicates the percentage of an MCO's shares held by private investors
%MCO-IND	This variable indicates the percentage of an MCO's shares held by industrial or service companies
%MCO-PA	This variable indicates the percentage of an MCO's shares held by public authorities or public entities
%MCO-OTH	This variable indicates the percentage of an MCO's shares held by other parties
(d) Financial market and stock exchange data	
Y-IRR _{MKT}	Annual internal rate of return for the investment on the domestic stock exchange, calculated from the starting point to the end of the private equity deal
FREE	Risk-free rate measured at the time of the investment, calculated by using the average rates of return on all 2-year Italian Government bonds

Table II

Descriptive statistics for total sample and for independent directors/dependent directors groups

This table shows descriptive statistics of the sample. Panel A shows the annual rate of return of investments (IRR). Panel B includes data of the holding period (HOLD-PER in months). Panel C shows data on the size of the investments (I-SIZE in million of euros). Panel D shows the percentage of shares retained in investee firms (%-SHARE). Panel E provides information about the exit way. All panels report data for total investments, investments classified by type of deals and investments related to independent directors and dependent directors cases. Between brackets, t-test for difference in mean among dependent and independent sub-samples is available. Level of significance: *,**,*** correspond respectively to 1%; 5%; 10%.

	IRR									
	Number of investments						% of number			
	Total	Dependent	Independent	Total	Dependent	Independent	Total	Dependent	Independent	
Overall Mean (<i>t-ratio</i>)	11.67%	11.87%	11.43%							
		(0.2513)								
Overall Median	11.78%	11.87%	11.58%							
Overall Standard deviation	22.83%	20.98%	24.95%							
EARLY Mean (<i>t-ratio</i>)	3.64%	8.96%	6.03%	115	64	51	16.48%	16.75%	16.14%	
		(0.3557)								
BUYOUT Mean (<i>t-ratio</i>)	14.06%	12.19%	16.46%	358	191	167	51.29%	50.00%	52.85%	
		(-2.3823)**								
EXP Mean (<i>t-ratio</i>)	13.22%	13.08%	11.64%	185	104	81	26.50%	27.23%	25.63%	
		(-0.1387)								
TURN Mean (<i>t-ratio</i>)	9.82%	8.47%	13.38%	40	23	17	5.73%	6.02%	5.38%	
		(-2.2643)**								
		HOLD-PER (number of months)								
Overall Mean (<i>t-ratio</i>)	34.16	34.21	34.1							
		(0.1070)								
EARLY Mean (<i>t-ratio</i>)	42.78	42.38	43.29							
		(-0.3906)								
BUYOUT Mean (<i>t-ratio</i>)	30.36	31.37	29.19							
		(1.1679)								
EXP Mean (<i>t-ratio</i>)	33.49	33.11	33.92							
		(-0.5946)								
TURN Mean (<i>t-ratio</i>)	33	33.91	31.76							
		(0.4664)								
		I-SIZE (million euros)								
Overall Mean (<i>t-ratio</i>)	6.76	6.9	6.58							
		(0.6662)								
EARLY Mean (<i>t-ratio</i>)	0.98	1.01	0.97							
		(0.5052)								
BUYOUT Mean (<i>t-ratio</i>)	15.85	15.83	15.88							
		(-0.0739)								
EXP Mean (<i>t-ratio</i>)	3.76	3.83	3.68							
		(1.1375)								
TURN Mean (<i>t-ratio</i>)	8.17	8.46	7.77							
		(0.5349)								
		% -SHARE								
Overall Mean (<i>t-ratio</i>)	22.69%	23.19%	22.06%							
		(1.1825)								
EARLY Mean (<i>t-ratio</i>)	24.16%	24.30%	23.92%							
		(0.2484)								
BUYOUT Mean (<i>t-ratio</i>)	23.19%	24.13%	23.98%							
		(1.3701)								
EXP Mean (<i>t-ratio</i>)	22.64%	23.14%	22.07%							
		(1.5480)								
TURN Mean (<i>t-ratio</i>)	16.54%	16.30%	16.76%							
		(-0.2561)								
		Exit way								
IPO				40	15	25	5.73%	3.93%	7.91%	
WOFF				43	22	21	6.16%	5.76%	6.65%	
TRADE				615	345	270	88.11%	90.31%	85.44%	

Table III
The determinants of IRR

R^2 is the determinant coefficient, Number is the sample size. Coefficient is the value of each variable, (Stat-t) is the value of Student's t-ratio which tests for coefficients' statistical significance. Constant is the intercept point, FREE is the risk-free rate measured at the time of the investment, Y-IRR_{MKT} is the annual internal rate of return of the investment on the domestic stock exchange, IPO (dummy variable) stands for Initial Public Offering and represents the exit-way when the investor lists the firm on a domestic or foreign stock exchange, WOFF (dummy variable) stands for write-off when the investment is a financial failure, TRADE (dummy variable) represents the case of an exit strategy by trading the shareholding. K is the kind of investment made by the private equity investor: EARLY (dummy variable) if it concerns seed and start-up financing, EXP (dummy variable) if it concerns the firm's development, BUYOUT (dummy variable) if it concerns a buy-out operation (LBO, MBO, etc.), TURN (dummy variable) if concerns a turnaround financing. I-SIZE indicates the size of the investment (in millions euro). %-SHARE is the private equity operators' shareholding acquired by the investment, %MCO is the percentage of management company shares held by different kinds of investors: FI represents banks and financial institutions, PI represents private investors, IND stands for industrial or service companies, PA represents public authorities or public entities, OTH means other parties. HOLD-PER is the holding period in months, TOT-DIR is the total number of people sitting on the firm's board of directors, TYPE (dummy variable) is the presence of independent or non-independent directors. Levels of significance: *, **, *** correspond respectively to 1%; 5%; 10%.

<i>Regression statistics</i>		
R^2	0.687	
Number	698	

	<i>Coefficient</i>	<i>(Stat-t)</i>
Constant	1.38768305	(1.371)
FREE	-1.032789623	(-1.344)
Y-IRR _{MKT}	-0.041897084	(-0.713)
IPO	0.177440951	(8.316)*
WOFF	-0.665418615	(-32.328)*
EARLY	0.001080945	(0.074)
BUYOUT	-0.001224667	(-0.104)
TURN	0.007433932	(0.335)
I-SIZE	-0.000327	(-1.770)***
%-SHARE	-0.158348769	(-2.09)**
%MCO-FI	-0.94445042	(-0.936)
%MCO-PI	-0.936836143	(-0.926)
%MCO-IND	-0.95659886	(-0.945)
%MCO-PA	-0.90175068	(-0.893)
%MCO-OTH	-0.936374249	(-0.929)
HOLD-PER	-0.006287211	(-15.852)*
TOT-DIR	-0.001435845	(-0.436)
TYPE	-0.008218089	(-0.806)

Table IV: The determinants of IRR in turnaround and buyout transactions

R^2 is the determinant coefficient, Number is the sample size. Coefficient is the value of each variable, (Stat-t) is the value of Student's t-ratio which tests for coefficients' statistical significance. Constant is the intercept point, FREE is the risk-free rate measured at the time of the investment, Y-IRR_{MKT} is the annual internal rate of return of the investment on the domestic stock exchange, IPO (dummy variable) stands for Initial Public Offering and represents the exit-way when the investor lists the firm on a domestic or foreign stock exchange, WOFF (dummy variable) stands for write-off when the investment is a financial failure, TRADE (dummy variable) represents the case of an exit strategy by trading the shareholding, K is the kind of investment made by the private equity investor: EARLY (dummy variable) if it concerns seed and start-up financing, BUYOUT (dummy variable) if it concerns a buy-out operation (LBO, MBO, etc.), TURN (dummy variable) if concerns a turnaround financing. I-SIZE is the size of the investment (in millions euro). %-SHARE is the private equity operators' shareholding acquired by the investment, %MCO is the percentage of management company shares held by different kinds of investors: FI represents banks and financial institutions, PI represents private investors, IND stands for industrial or service companies, PA represents public authorities or public entities, OTH means other parties. HOLD-PER is the holding period in months, TOT-DIR is the total number of people sitting on the firm's board of directors, TYPE (dummy variable) is the presence of independent or non-independent directors. Levels of significance: *, **, *** correspond respectively to 1%; 5%; 10%.

TURNAROUND			BUYOUT		
<i>Regression statistics</i>			<i>Regression statistics</i>		
R^2	0.745		R^2	0.638	
Number	40		Number	358	
	Coefficient	(Stat-t)		Coefficient	(Stat-t)
Intercept	2.327919742	(1.668)***	Intercept	0.571654	(0.372)
FREE	-2.614091843	(-1.302)	FREE	0.533571	(0.501)
Y-IRR _{MKT}	-0.075809892	(-0.920)	Y-IRR _{MKT}	-0.03539	(-0.398)
IPO	0.202457484	(7.377)*	IPO	0.128307	(3.732)*
WOFF	-0.696791862	(-23.051)*	WOFF	-0.62998	(-21.738)*
EARLY	-0.003738899	(-0.161)	EARLY	0.016913	(0.766)
BUYOUT	0.005440262	(2.156)**	TURN	-0.01662	(-2.484)**
I-SIZE	-0.001370615	(-1.846)***	I-SIZE	-0.00424	(-1.659)***
%-SHARE	-0.187815341	(-1.700)***	%-SHARE	-0.09541	(-0.890)
%MCO-FI	-1.808791578	(-1.297)	%MCO-FI	-0.24457	(-0.160)
%MCO-PI	-1.845903356	(-1.318)	%MCO-PI	-0.19954	(-0.130)
%MCO-IND	-1.845625125	(-1.318)	%MCO-IND	-0.23987	(-0.156)
%MCO-PA	-1.766918081	(-1.266)	%MCO-PA	-0.20309	(-0.132)
%MCO-OTH	-1.743558663	(-1.253)	%MCO-OTH	-0.29008	(-0.189)
HOLD-PER	-0.006826437	(-11.439)*	HOLD-PER	-0.00574	(-10.559)*
TOT-DIR	-0.000165422	(-0.033)	TOT-DIR	-0.00092	(-0.203)
TYPE	0.1570972144	(2.152)**	TYPE	0.40374	(4.163)*

Table V: Role of governance variables

R^2 is the determinant coefficient, Number is the sample size. Coefficient is the value of each variable, (Stat-t) is the value of Student's t-ratio which tests for coefficients' statistical significance. Constant is the intercept point, IPO (dummy variable) stands for Initial Public Offering and represents the exit-way when the investor lists the firm on a domestic or foreign stock exchange, WOFF (dummy variable) stands for write-off when the investment is a financial failure. %-SHARE is the private equity operators' shareholding acquired by the investment, HOLD-PER is the holding period in months. I-SIZE is the average size of the investment, CNMd is the cumulative number of memberships on boards belonging to the management company during the period of observation, CNMb is the cumulative number of memberships on boards belonging to the management company before the period of observation, CEF is the cumulative number of memberships on boards of firms owned by the closed end fund during the period of observation, TM (dummy variable) is the presence of a synchronism of maturity between the boards of directors of the management company and the firms owned by the closed-end funds, VE(dummy variable) is the voluntary ending of the mandate of director on the board of owned firms before the expiry date of the board. Levels of significance: *, **, *** correspond respectively to 1%; 5%; 10%.

TURNAROUND AND BUYOUT DEALS - INDEPENDENT		
<i>Regression statistics</i>		
R^2	0.756	
Number	398	
	<i>Coefficient</i>	<i>(Stat-t)</i>
Constant	0.522493691	(9.071)*
CNMd	-0.004504396	(-1.066)
CNMb	-0.001035468	(-0.292)
CEF	0.011041951	(2.567)*
TM	-0.004791609	(-0.258)
VE	-0.130792657	(-3.565)*
IPO	0.211664352	(7.794)*
WOFF	-0.648676862	(-19.509)*
HOLD-PER	-0.006617792	(-11.626)*
I-SIZE	-0.002164929	(-1.885)***
%-SHARE	-0.181037197	(-1.711)***

Table VI: Decile analysis

R^2 is the determinant coefficient, Number is the sample size. Coefficient is the value of each variable, (Stat-t) is the value of Student's t-ratio which tests for coefficients' statistical significance. Constant is the intercept point, IPO (dummy variable) stands for Initial Public Offering and represents the exit-way when the investor lists the firm on a domestic or foreign stock exchange, WOFF (dummy variable) stands for write-off when the investment is a financial failure. %-SHARE is the private equity operators' shareholding acquired by the investment, HOLD-PER is the holding period in months. I-SIZE is the average size of the investment, CNMd is the cumulative number of memberships on boards belonging to the management company during the period of observation, CNMb is the cumulative number of memberships on boards belonging to the management company before the period of observation, CEF is the cumulative number of memberships on boards of firms owned by the closed end fund during the period of observation, TM (dummy variable) is the presence of a synchronism of maturity between the boards of directors of the management company and the firms owned by the closed-end funds, VE(dummy variable) is the voluntary ending of the mandate of director on the board of owned firms before the expiry date of the board. Levels of significance: *, **, *** correspond respectively to 1%; 5%; 10%.

TURNAROUND AND BUYOUT DEALS		
INDEPENDENT - FIRST DECILE		
<i>Regression statistics</i>		
R^2	0.740	
Number	19	
	Coefficient	(Stat-t.)
Constant	0.593936644	(3.789)*
IPO	0.245076963	(3.248)*
I-SIZE	0.01300548	(1.252)
%-SHARE	-0.37034023	(-1.311)
HOLD-PER	-0.01586718	(-2.794)*
CNMd	0.023123929	(1.897)***
CNMb	-0.01285834	(-1.196)
CEF	-0.02301653	(-1.392)
TM	0.049413645	(0.963)
VE	-0.06942916	(-0.709)

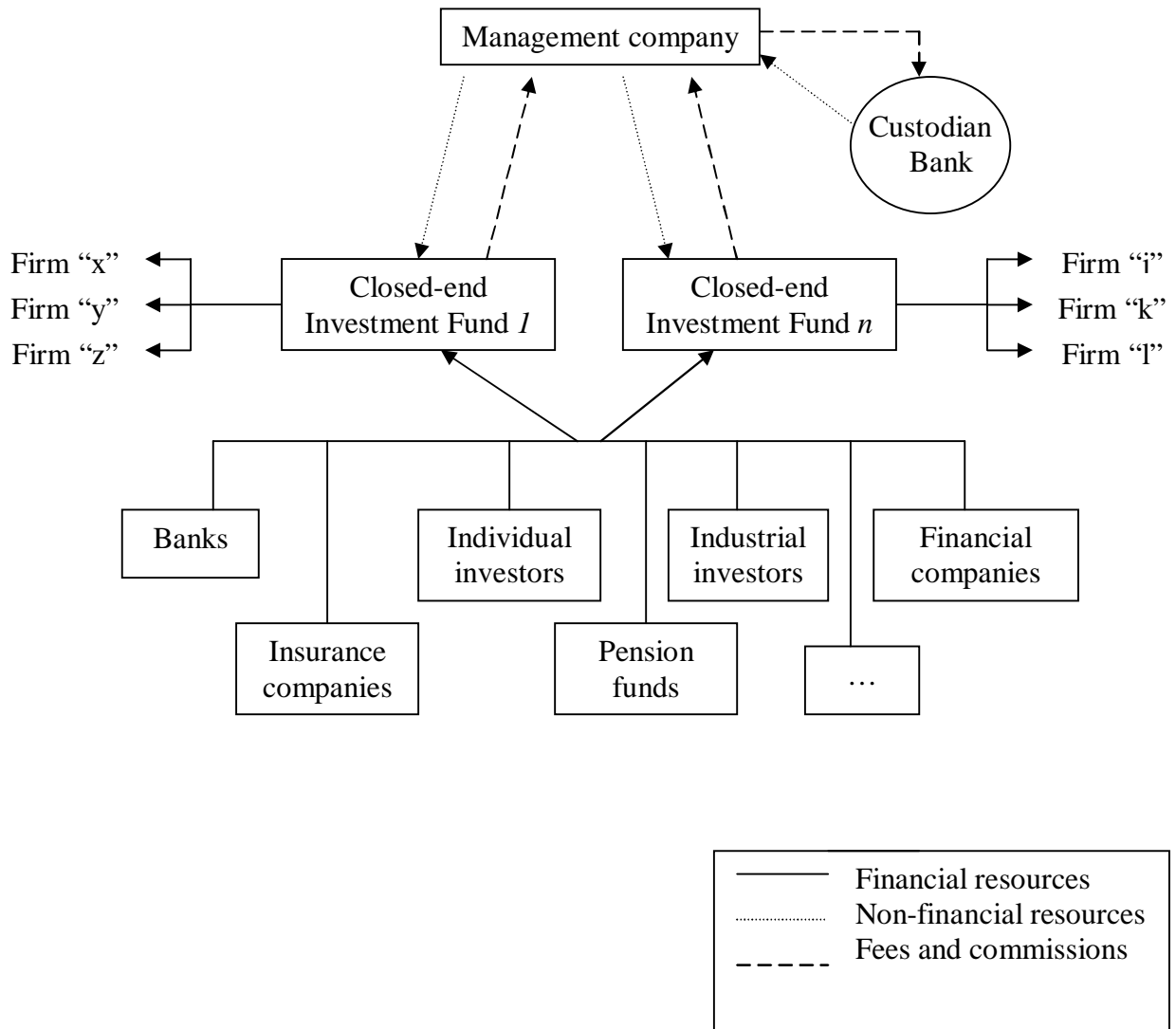
TURNAROUND AND BUYOUT DEALS		
INDEPENDENT - LAST DECILE		
<i>Regression statistics</i>		
R^2	0.855	
Number	19	
	Coefficient	(Stat-t.)
Constant	1.17055941	(1.851)***
WOFF	-0.625518605	(-4.797)*
I-SIZE	-0.069430451	(-1.977)**
%-SHARE	-0.193642014	(-0.248)
HOLD-PER	-0.006592729	(-1.501)
CNMd	-0.038276303	(-0.903)
CNMb	-0.008380833	(-0.249)
CEF	0.074864229	(3.293)*
TM	-0.046689672	(-0.304)
VE	-0.28508551	(-1.984)**

Table VII: Quintile analysis

R² is the determinant coefficient, Number is the sample size. Coefficient is the value of each variable, (Stat-t) is the value of Student's t-ratio which tests for coefficients' statistical significance. Constant is the intercept point, IPO (dummy variable) stands for Initial Public Offering and represents the exit-way when the investor lists the firm on a domestic or foreign stock exchange, WOFF (dummy variable) stands for write-off when the investment is a financial failure. %-SHARE is the private equity operators' shareholding acquired by the investment, HOLD-PER is the holding period in months. I-SIZE is the average size of the investment, CNMd is the cumulative number of memberships on boards belonging to the management company during the period of observation, CNMb is the cumulative number of memberships on boards belonging to the management company before the period of observation, CEF is the cumulative number of memberships on boards of firms owned by the closed end fund during the period of observation, TM (dummy variable) is the presence of a synchronism of maturity between the boards of directors of the management company and the firms owned by the closed-end funds, VE (dummy variable) is the voluntary ending of the mandate of director on the board of owned firms before the expiry date of the board. Levels of significance: *, **, *** correspond respectively to 1%; 5%; 10%.

TURNAROUND AND BUYOUT DEALS INDEPENDENT - FIRST QUINTILE			TURNAROUND AND BUYOUT DEALS INDEPENDENT – LAST QUINTILE		
<i>Regression statistics</i>			<i>Regression statistics</i>		
R2	0.716		R2	0.786	
Number	37		Number	37	
	<i>Coefficient</i>	<i>(Stat-t.)</i>		<i>Coefficient</i>	<i>(Stat-t.)</i>
Constant	0.563081221	(6.17)*	Constant	0.678789899	(2.447)**
IPO	0.209806858	(5.571)*	WOFF	-0.548422426	(-8.153)*
I-SIZE	0.00708066	(1.358)	I-SIZE	-0.035326602	(-2.258)**
%-SHARE	-0.26419265	(-1.527)	%-SHARE	-0.483443643	(-1.321)
HOLD-PER	-0.0135911	(-6.472)*	HOLD-PER	-0.005932569	(-2.425)*
CNMd	0.014660723	(1.861)***	CNMd	-0.011197269	(-0.611)
CNMb	-0.00134871	(-0.198)	CNMb	-0.007773894	(-0.505)
CEF	-0.01949621	(-1.641)	CEF	0.037840422	(2.967)*
TM	-0.00866079	(-0.259)	TM	0.009120967	(0.126)
VE	-0.03030095	(-0.465)	VE	-0.240892518	(-2.504)*

Figure 1: the typical structure of a PE fund



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