

SECONDARY BUYOUTS, PRIVATE EQUITY AND FIRMS' CORPORATE GOVERNANCE

Vincenzo Capizzi*, Renato Giovannini**, Valerio Pesic***

Abstract

During last years numerous studies have focused attention on determinants of leverage buyouts (LBOs), finding strong evidence about the capability of those operations to improve firms' productivity and operating performance. Nonetheless, there is a lack of research concerning the performance realized by secondary buyouts (SBOs), which are operations where a LBO is refinanced with a new ownership structure that includes a new set of private equity financiers and a new debt structure. By the analysis of a initial dataset of 164 transactions occurred in Italy during the period from 2000 to 2008, we find evidence of SBOs' rationales of corporate governance, with significant firms' performance improvements.

Keywords: Leverage, Corporate Governance, Value of Firm, Shareholder, Venture Capital, LBO

*Ph.D., Associate Professor of Banking and Finance, Department of Business Studies and Environment, Vice Director, Eastern Piedmont State University, Novara, Italy

Telephone: +39 0321 375 438, Fax: +39 0321 375 405, E-mail: vincenzo.capizzi@eco.unipmn.it

**Ph.D., Associate Professor of Banking and Finance, Guglielmo Marconi University, Rome, Italy

Telephone: +39 06 377251, Mobile: +39 348 330 5002, Fax: +39 06 37725214, E-mail: r.giovannini@unimarconi.it

***Ph.D., Assistant Professor of Banking and Finance, Department of Banking, Insurance and Markets, La Sapienza University, Rome, Italy

Telephone: +39 06 4976 6260, Fax: +39 17 8275 2912, E-mail: valerio.pesic@uniroma1.it

1. Introduction

Financial research literature has increasingly focused attention on leveraged buyouts (LBOs) and has found extensive evidence that the transactions improve productivity and operating performance (Jensen, 1993; Thompson and Wright, 1995; Cumming, Siegel, Wright, 2007). As Cumming, Siegel and Wright (2007) noted, little research examined the value increases of buyout targets and returns realized from secondary buyouts (SBOs). These are particularly interesting transactions affecting corporate control due to the involvement of private equity investors as both buyers and sellers. (For this reason, they are also called sponsor-to-sponsor transactions.) Typically, an SBO is an LBO of a company that has previously undergone an LBO; for purposes of this research, SBOs also include all tertiary and successive buyouts.

Our aim is to analyze SBOs, which have been made possible in recent years due to favorable conditions such as available liquidity in debt markets and a significant increase in private equity investors seeking control of corporations. SBOs are a recent phenomenon; consequently, there is little empirical research and literature on the topic. This study aims to determine whether SBOs are simply speculative transactions or flow from more substantive rationales of corporate governance.

2. LBOs and Secondary Leveraged Buyouts: the Influence on Firms' Corporate Governance

By analyzing the SBOs that occurred in the Italian market from 2000 to 2008, this research presents evidence regarding the nature of such deals. We study data from SBOs transacted in Italy because the geographical criteria has been retained more appropriate to shortlist a dataset of transactions (Volpin, 2002; Melis, 2000). This paper makes three original contributions. First, it gathers the available literature regarding SBOs, which is very fragmented implementing it with an evidence from these particular deals. Second, the research is based on a detailed dataset (a set of 164 Italian buyouts from the period 2000-2008), generated from accurate research of the Italian market for corporate control. The dataset is unique and original because private equity in Italy generally has limited information disclosure due to legal, fiscal and privacy restrictions. Third, this paper is the first empirical work focused entirely on SBOs that includes both the buy side and the sell side. It examines whether SBOs are just speculative ventures for investors or transactions that can lead to value increases and gains in productivity and operating performance for the subject companies.

Recent studies of LBOs based on shareholder returns data (Kaplan, 1989; Lehn and Poulsen, 1989;

Marais et al., 1989) and company returns (Smith 1990; Smart and Waldfoegel, 1994; Wright at al., 1996) strongly suggest that LBOs generate significant financial returns for investors. Therefore, it is relevant to analyze how private equity investors use SBOs and what happens to acquired companies.

In an SBO, an initial LBO is refinanced with a new ownership structure that includes a new set of private equity financiers and a new debt structure. In general, an LBO allows investors to buy a company with minimal equity commitment but with significant debt which the bought-out company assumes. The company must improve performance simply to service its increased debt obligations (Burriugh, 1990; Cumming, Fleming, Schwienbacher, 2006; Cuny, Talmor, 2007). According to most relevant literature (Jensen, 1986; 1989), LBOs generally result in improved corporate governance mechanisms (such as operating efficiency, governance of debt structure, strongest ownership of equity and the presence of active investors) that reduce agency costs and increase firm value (Bierman, 2003; Cumming, 2006; Bernile, Cumming, Lyandres, 2007). Nonetheless, the burden of additional principal and interest payments limits how much management can improve a company's operating efficiency and increase its profits.

An SBO then effects its own changes to the company, which prompts questions about how such transactions affect company performance. Tied to these questions is the issue of whether SBOs are merely speculative and, consequently, whether investors are just assuming the risk of loss in return for an uncertain prospect of reward (Renneboog, Simons, Wright, 2007). To resolve this we need to determine whether private equity firms have precise plans for target companies and whether they are able to implement them.

Private equity activity is based on buying a company's equity with the goal of increasing share value while addressing two problems of the company: no price signaling from the market and no liquidity support are resolved because private equity operates outside stock exchanges (Gompers, Lerner, 1999; Kaplan, Schoar, 2005; Jensen et al., 2006). After a period of "hands-on" management, the investor hopes to demonstrate to the market an increase in the company's value and so will be able to sell the equity participation at an increased price. This should mean that the longer a private equity fund holds a company, the greater will be the value added (the more intensive the work, at least). In the event of selling shares through a subsequent SBO, this should translate into higher stock prices. Therefore, we hypothesize:

HP 1: We expect a positive correlation between transaction multiples of the SBO and holding period of the exiting fund.

From the buyer's perspective, the price paid in an

SBO transaction represents a baseline; he must be sure that when subsequently selling the shares he will receive at least that value plus the required rate of return ("hurdle rate"). If the holding period of the exiting fund was long, then we can assume that the fund had more time to catch any "low hanging fruit" (easily accomplished tasks that improve performance and create value) and that, consequently, fewer such opportunities remain. Accordingly, we can assume that the longer a company has been held in the portfolio of the exiting investor, buyers in an SBO would pay a lower price in order to allow for sufficient margins for future capital gains. The buyer's motivations act in the opposite direction from the seller's. If unchecked, they would lead to opposite results. Therefore, we hypothesize:

HP 2: We expect a negative correlation between transaction multiples and holding period of the exiting fund.

We assume that a potential SBO investor, based on its due-diligence and expertise, is able to estimate by how much its possible future decisions will increase a company's value. To analyze whether SBOs are speculative transactions or deals based on specific rationales, it is relevant to determine whether there is a preexisting awareness of the private equity investing in an SBO regarding the target company (Diamond, 1985; Crawford, 1987; Cotter, Peck, 2001; Cuny, Talmor, 2007).

We will try to analyze whether the price paid is related to the investor's preexisting awareness of the company's potential for increased value. Investors who believe that they could not implement performance improvements would be willing to pay only reduced prices, while investors who believe that they could add value would be willing to pay higher prices. Therefore, we hypothesize:

HP 3: We expect a positive correlation between the entry multiple and the difference in yearly competitive performance advantage in a specific time after the transaction and competitive advantage/disadvantage gained by the target company before the SBO.

3. Empirical study and analysis

3.1. Dataset description

In order to analyze SBOs in the Italian market for corporate control, we built a dataset (164 observations) that mirrors the whole population of SBOs closed between the years 2000 and 2008 in Italy. It accounts for all the relevant transactions. Building such a dataset required great effort because the buyout market is not well developed in Italy (or in other European countries). Great care was taken to

include each transaction because even a single deal could be significant to our analysis.

The private equity industry in Italy provides very little disclosure to the market because of privacy, fiscal and legal issues. Therefore, this study can be considered unique in all its aspects due to its detailed data regarding transactions, as well as financial information regarding each target company, holding company and special purpose vehicle.

The building of the dataset started with combing through financial sources to find SBOs in the Italian market for corporate control. Research focused on

prominent financial sources: the Private Equity Monitor Yearly Newsletters, Thomson Financial, AIDA-Bureau Van Dijk, Datastream and Merger Market. In particular, a database was built from the Private Equity Monitor (years 2000-2007); all transactions whose “deal origination” was designated as “SBO” and whose “exit strategy” was designated as “releverage” were included in the final dataset. In addition, all transactions listed in Merger Market (Private Equity Exits tool) with an exit strategy of “SBO” were included in the final dataset. The table in Figure 1 summarizes the results.

Database	Search key	Number of observations
Private Equity Monitor Yearly Newsletter	Deal origination – secondary buy-out	53
	Exit – Releverage	37
Merger Market	Exit – SBO	74
TOTAL NUMBER OF OBSERVATIONS (number of deals)		164

Fig. 1 Results of the research of SBOs through financial media

The analysis is conducted without regard to actual debt-to-equity (D/E) ratios. Thus, no threshold level was set for a transaction to be designated as an SBO, and deals in the dataset may have very different amounts of leverage. In order to be included in the dataset, the deals only had to meet the criteria set by the prominent financial media listed above (Private Equity Monitor Yearly Newsletter and Merger Market).

The 164 observations were merged into the final dataset, with the following details and statistics listed for each operation:

- Year: the year in which the transaction was closed;
- Sector: the main industry sector in which the target company operates;
- Lead Investor: the name of the private equity fund sponsoring the transaction and the one with the majority stake in the transaction;
- Lead Investor equity and % of shares: the amount of equity the Lead Investor invested and the Lead Investor’s percentage of relative control in the transaction;
- Co-Investors: the names of other private equity funds, strategic players or private investors participating in the pool of investors with minority stakes in the transaction
- Co-Investor equity and % of shares: the amount of equity a Co-Investor invested and the Co-Investor’s percentage of relative control in the transaction;
- Total shares acquired: the sum of the percentage of shares acquired by the Lead

Investor and the Co-Investors in a target company¹;

- Total invested amount: the amount involved in the transaction, that is, the sum of equity invested and debt borrowed.
- Leverage ratio: the leverage ratio of the purchasers of the target company. It is calculated as total debt of the purchasers divided by total equity of the newly constituted company²;
- Seller: the seller of the target company;
- Holding period of exiting investor (in months): the number of months between the closing of the first LBO and the closing of the SBO (when known); if the exact month of either transaction is unknown, a statistic was built as the year of the SBO minus the year of the former LBO times 12.

The author used the following information-providers to fill any information gaps:

- The online database of “Il Sole 24 Ore”;
- CMBOR (Center for Management Buyout Research) publication of the Business School of the University of Nottingham;
- Private Equity Monitor monthly newsletter and publications;
- MergerMarket Dealscope tool;
- Fineurop Sodiatic newsletters;
- Web sites of the target companies;
- Web sites of the private equity firms.

The following relevant information about the

¹ In an SBO, this is not always 100%.

² Though often very useful for purposes of analysis, this ratio is not available for most transactions.

original LBOs was acquired in the dataset:

- Year: the year in which the transaction was closed;
- Acquisition type: a description of the typology of the first LBO;
- Lead Investor: the name of the private equity fund sponsoring the transaction and the one with the majority stake in the transaction;
- Lead Investor equity and % of shares: the amount of equity the Lead Investor invested and the Lead Investor's percentage of relative control in the transaction;
- Co-Investors: the names of other private equity funds, strategic players or private investors participating in the pool of investors with minority stakes in the transaction;
- Co-Investor equity and % of shares: the amount of equity a Co-Investor invested and the Co-Investor's percentage of relative control in the transaction;
- Total shares acquired: the sum of the percentage of shares acquired by the Lead Investor and the Co-Investors in the Target Company;
- Total invested amount: the amount involved in the transaction, that is, the sum of equity invested and debt borrowed;
- Seller: the seller of the target company to the first private equity fund.

After eliminating any duplicates and transactions for which available data were insufficient for analysis, the final dataset resulted in 88 operations and 72 companies. (The difference is because 14 companies underwent SBOs two or three times,³ and they appear in the dataset for each instance.)

The following companies were excluded from the dataset due to insufficient data about their deals:

- Aive
- Cemp International
- Diasorin
- JAL Group
- Rodriguez Cantieri Navali

3.2. Research method rationale

With the database completed, we tested for any increase of target company value, using the marginal increase of Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) as the main indicator of company value increase (Muscarella, Vetsuypens, 1990; Kaplan, 1989; Desbrierers, Schatt, 2002). If a company increases its operating margin it will also increase its cash flow,

which will cause the company to gain a higher valuation (Andrade, Kaplan, 1998; Amess, 2003; Chou, Gombola, Liu, 2006; Harris, Siegel, Wright, 2005). Consequently, if the SBO investor increases the EBITDA margin, then he has added value to the company. The analysis is conducted without regard to the actual D/E ratio.

To analyze companies' profitability compared to their competitors in the same industrial sector, the average "sector" EBITDA margin was subtracted from the company EBITDA margin. Labeled the *yearly competitive performance advantage*, this measure is used to determine if a company undergoing an SBO has an *ex ante* performance advantage (or disadvantage) over its competitors or if they gain any such advantage (or disadvantage) after the deal. This calculation will enable us to verify whether SBOs are conducted on high performing companies; a positive finding would support assertions made in the literature regarding LBOs (Jensen, 1993; Thompson and Wright, 1995; Cumming, Siegel, Wright, 2007). It will also enable us to confirm whether SBOs are deals with specific rationales, or at least when picking targets, investors look for potential profitability and conduct detailed screening (Lichtenberg, Siegel, 1990; Lee, 1992; Holthausen, Larcker, 1996; Jelic, Saadouni, Wright, 2005; Nikoskelainen, Wright, 2007).

To determine if an SBO investor actually added value to a target company, the following two steps were executed. First, we established a company's average rate of competitiveness before the SBO transaction. This will serve as a baseline in the analysis of company performances after the deal. The company *competitive advantage/disadvantage before the SBO* was found by computing the average *yearly competitive performance advantage* for the five years before the SBO. Second, to test if the SBO purchaser actually made a company more profitable and added value to it, the *competitive advantage/disadvantage before the SBO* was subtracted from the *yearly competitive performance advantage* of each year following the SBO.

There is a common element in an SBO transaction that links the entering investors and the exiting investors but nonetheless assumes a different significance for each: the price paid for company's shares. For the sellers (exiting fund), the deal amount recognizes any value they added to the company and will determinate their final returns on that transaction, especially Internal Rate of Return and the Money Multiple (Palepu, 1990; Loh, 1992; Renneboog, Simons, Wright, 2007). For the buyers (entering fund), the price paid represents the bar that they must surpass in creating company value. To carry out our analysis, and especially to compare the different deals, the price paid in each transaction had to be standardized. The most efficient way to standardize deal prices is to compute transaction multiples. The

³ This means that, including the initial LBO, the company underwent leveraged acquisitions four times!

enterprise value (EV) was computed for each deal; company EBITDA and sales were then used to compute the ratios, EV/EBITDA and EV/SALES.

Total number of deals	164
Duplicates or possible similar deals	72
Deals w/out sufficient info (see list)	5
Total number of deals in the final dataset	87

Fig. 2 Short list of the dataset’s transactions

Companies with 1 secondary buy-out	58
Companies with 2 secondary buy-outs	13
Companies with 3 secondary buy-outs	1
Total number of companies	72

Fig. 3 Short list of the dataset’s companies by number of buyouts (secondary, tertiary, quaternary)

3.3. Dataset description and key findings

3.3.1. The LBO transactions

In building the dataset, great effort was made to find each SBO’s “mother” LBO. In order to understand the motivations behind the SBO, it is helpful to have a complete history of the target company, and especially the particulars of the original LBO.

The average value of the originating LBOs, expressed as the sum of debt and equity involved, was €220 million, and the average percentage of shares acquired was 72 percent. In 47 observations, the LBO was conducted through an investors’ buyout (IBO),

which means that private equity investors were the main sponsors of the original LBO. In 15 deals, a management team supported the transaction and invested in it (MBO). Very important to our analysis, 15 transactions originated from previous SBOs (meaning that they were tertiary or quaternary buyouts). Six buyouts were sponsored by teams external to the company (MBI), and two were public-to-private transactions, which counts a lot in terms of volumes due to the nature of the de-listing operation. There was one case each of a corporate buyout (CBO) and a family buyout (FBO).

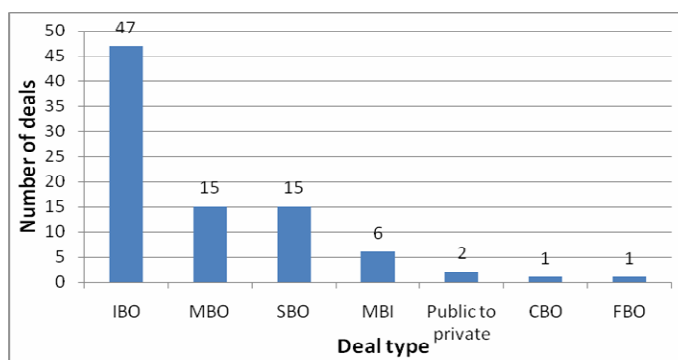


Fig. 4 SBO-originating deals, by type

It is also crucial to identify the year of the first LBO in order to determine whether SBOs are a cyclical phenomenon in the market for corporate control. It may be shown that SBOs are a natural consequence of previous high-volume activity by private equity investors, not finding on the market, when willing to exit from portfolio companies, enough cash availability from strategic player or from capital markets. This would be indicated if the deals originating the SBO were concentrated around a

specific time, for example during two of our target years.

As far as the Italian market for corporate control is concerned, this theory is refuted. The distribution of LBOs that generated SBOs is fairly flat during the years 1997 to 2006, creating a constant pipeline for SBOs (Fig. 5). So far, only two deals in 2006 have originated SBOs, but this is not significant because it was so recent; over time, this number will probably increase.

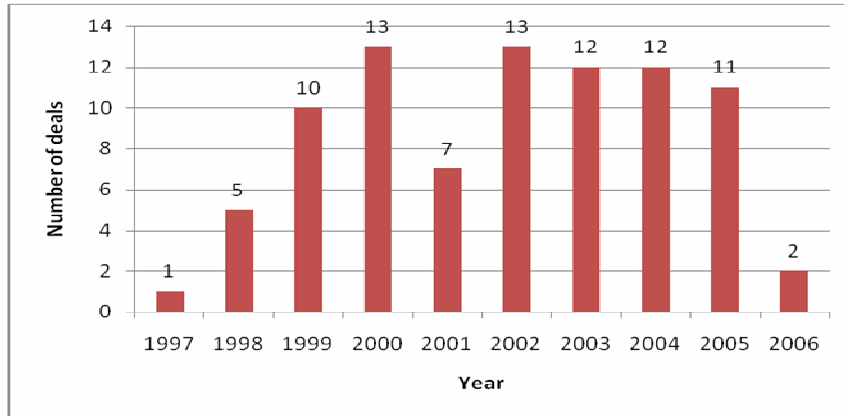


Fig. 5 LBO deals that originate SBOs, by year

Holding periods of Italian LBO companies are fairly equally distributed. There are 29 companies that were held for 24 months or less, and 54 companies

were held longer. Moreover, 18 companies of the sample were held in portfolio for more than four years (Fig. 6).

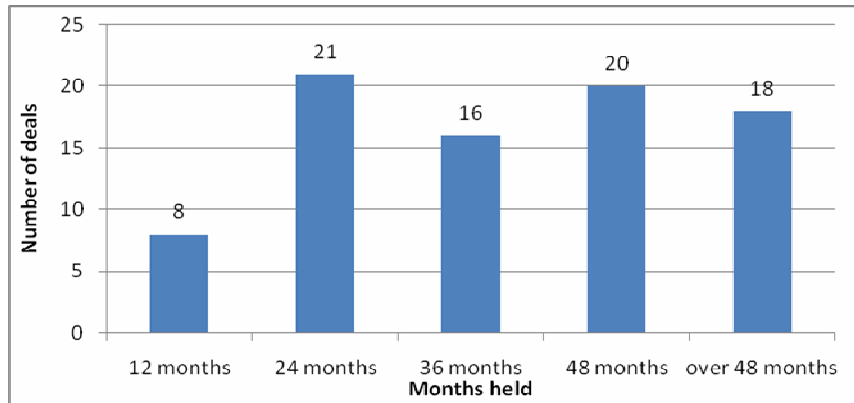


Fig. 6 Holding periods of LBO selling investors

The greatest number of companies (30) that are taken over through SBOs belong to the manufacturing and industrial sector, 12 companies are in the chemical industry, and seven are in business and financial support services (Fig. 7). Such industries are fairly noncyclical, and the literature indicates that they are the same sectors that are most suitable for LBOs (Kaplan, Strömberg, 2008).

It is impressive that seven LBOs were of companies belonging to the luxury and fashion

industry, which is typically a very cyclical industry; this is not consistent with the recognized criteria for ideal LBO candidates. It is also noteworthy that in the energy industry (electricity and gas) only one transaction lead to an SBO. Usually companies in this sector have stable and predictable cash flows, making them good candidates for LBOs (Jensen, 1986; Strömberg, 2008). The probable explanation is that until recently the State owned the energy industry, and so few big players have emerged.

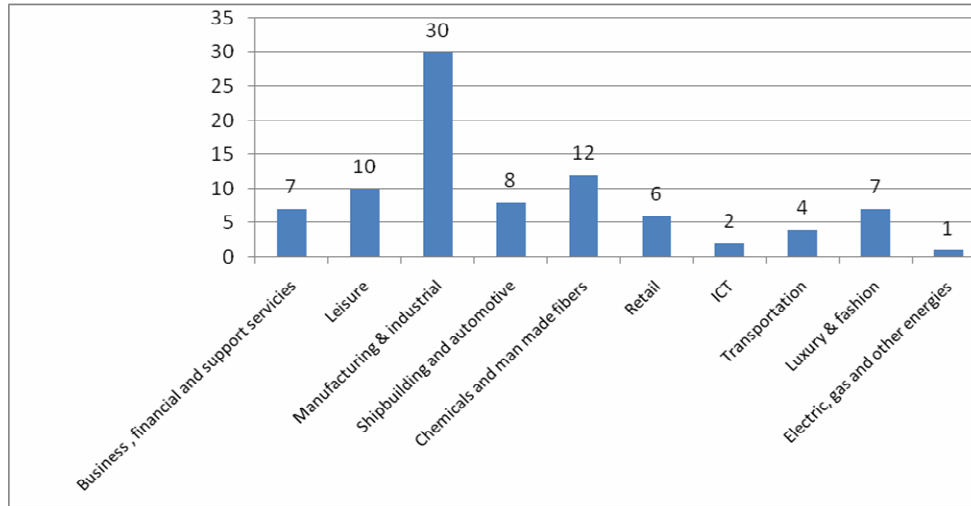


Fig. 7 Sectors of the companies of the dataset

3.3.2. The SBO transaction

For the 87 SBOs observed in the Italian market for corporate control between 2000 and 2008, the average deal size was €271 million, with an even distribution of number of deals among medium and big size (over €50 million).⁴ The most populous category is small deals (under €50 million), with 25 transactions (Fig. 8). There are three likely explanations for the prevalence of so many small deals. First, little capital was employed because very few shares were acquired in each company. Second, target companies had low valuation multiples, and so little capital was employed in acquiring them. And third, companies that were targets of SBOs were simply small in size. On average, the shares acquired were equivalent to 85 percent of each company, and in almost 60 percent of transactions all of the target company's stock was acquired; thus, the first hypothesis can be discarded. Analysis also showed that very few companies in the dataset had low valuation multiples; thus, the second hypothesis is eliminated. Consequently, the main reason for so many small deals is simply the small size of target companies. This looks even likelier if we consider the texture of Italian industry, which is characterized by many small-to-medium sized enterprises.

Ironically, SBOs impose particular difficulties for small firms. They are typically highly leveraged transactions, and end up saddling target companies with large amounts of debt (Weir, Jones, Wright, 2008). The burden of paying down such debt is especially unwieldy for small companies. Such increased debt burdens pose less of a risk to larger firms, which can diversify more and are less exposed

to economic cycles. Consequently, one would think that it would be wiser for SBOs to target bigger firms and avoid smaller ones.

In terms of money volume, SBO⁵ activity peaked in 2006 (Fig. 9). The downward trend since then seems to continue, as volumes for the first half of 2008 are less than a third of 2007 volumes. This is most likely due to the ongoing liquidity crisis in capital markets. If mega deals (more than €500 million) are removed from consideration, the trend is positive until 2007, with a drastic downward swoop in 2008. In addition, volumes are cut in half in every year; this shows that mega deals, though few in number, play a huge role in the Italian market. Especially noteworthy is the amount of 2008 volume that is due to mega deals, more than 90 percent. This is probably due to the current liquidity crisis.

⁴ Size of the transaction refers to the invested amount, which is the sum of Debt and Equity used to acquire the target company.

⁵ Volumes are calculated based only on deals with disclosed amounts, so data are not completely indicative. In 13 of 87 deals, it was impossible to find the amount invested.

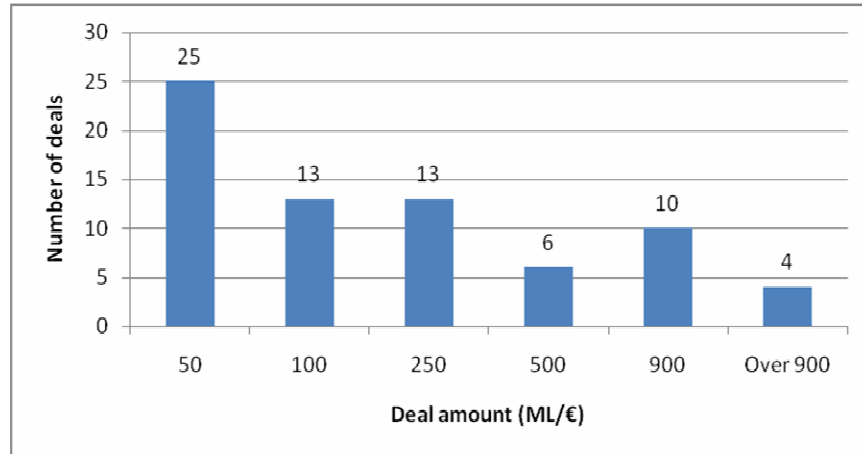


Fig. 8 SBO deals by invested amount

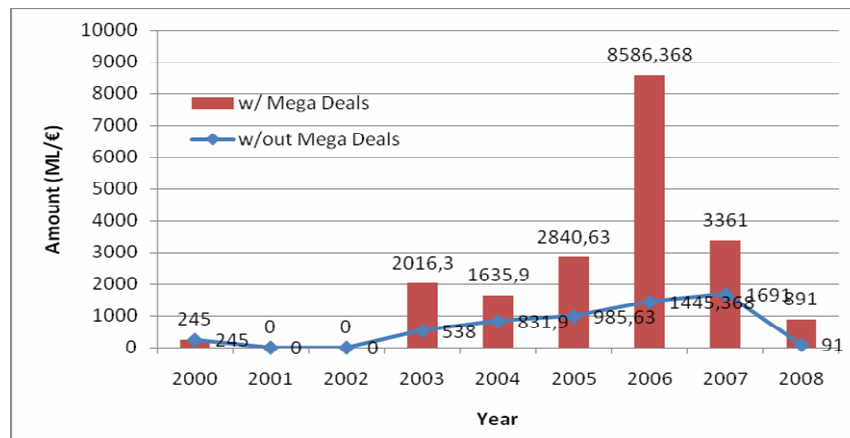


Fig. 9 SBO deals per year in terms of money volume⁶

In terms of number of transactions, a more even distribution is observed among yearly figures (Fig. 10). Nonetheless, amounts increase from year 2000, peak in 2005, and decrease in 2006 and 2007. The first semester of 2008 registered six SBOs, almost the half the amount (13) for all of 2007. Differences in term of mega deals per year are not significant; big deals are not concentrated in any certain period, and they occur every year so they are not to be considered extraordinary.

We analyzed the valuations of target companies, using valuations given by the buying fund, or if available, the valuation that resulted from the negotiations.⁷ The purpose of the analysis was to define a metric for the valuation of companies undergoing an SBO; in the process, we considered multiples achieved in each deal. As enterprise values, we used the deal amount multiplied by the percentage of shares acquired. We then divided these figure by EBITDA and Sales, respectively, from the income statement of the SBO year to calculate two multiples for each company. These multiples were immediately available from the dataset already built and are the ones most commonly relied on by professionals of private equity firms (Bierman, 2003; Weir, Laing, Wright, 2005; Wright, 2007).

Transaction multiples concentrate around “normal” values for EV/EBITDA and EV/SALES. A consistent number of deals reach very high multiple values and consequently assign very high values to the acquired companies. Specifically, nine deals were valued with EV/EBITDA ratios greater than 21 (Fig. 11), and 11 deals were valued with EV/SALES greater than three (Fig. 12). It would be interesting for a future study to analyze whether these companies had some common features before the SBO, and whether they were the best achievers in their sectors or had the greatest performance improvement.

⁶ 2008 column represents only half a year.

⁷ Multiples were computed for only 74 transactions because the amounts of 13 deals were undisclosed.

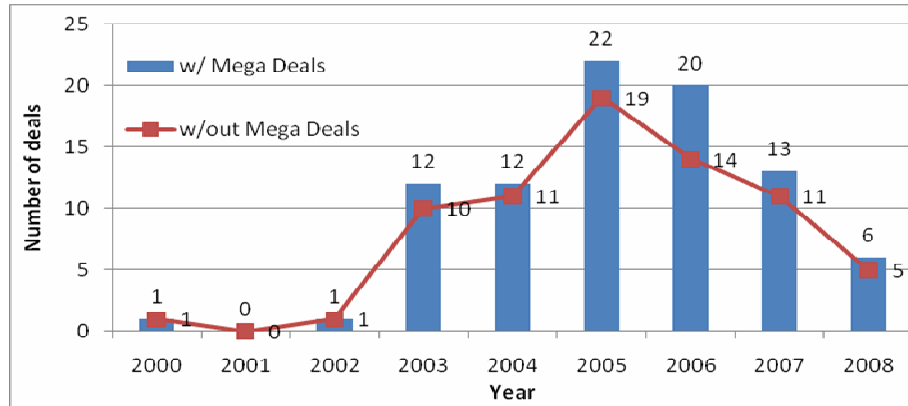


Fig. 10 SBO deals per year⁸

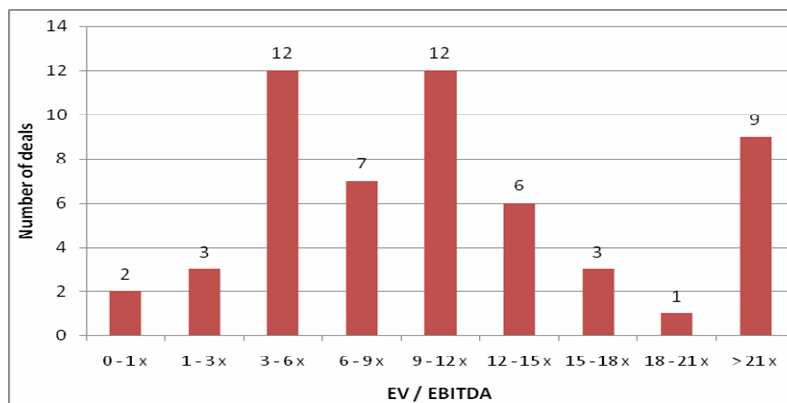


Fig. 11 EV/EBITDA multiples of SBO transactions

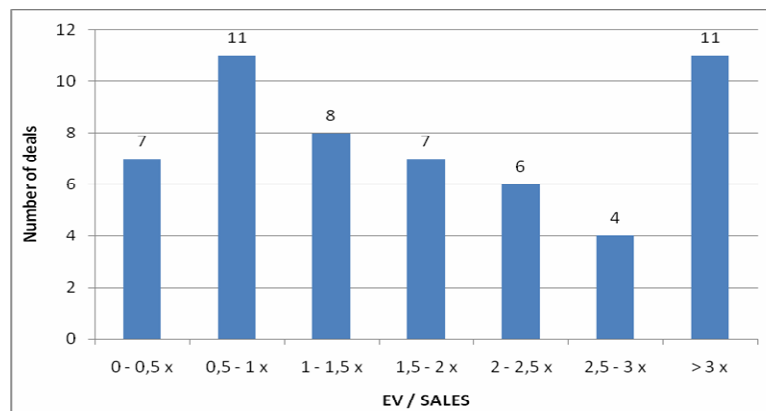


Fig. 12 EV/SALES multiples of SBO transactions

⁸ 2008 column represents only half a year.

3.3.3. Improving governance performance

In his book on private equity and LBOs, Povaly (2007) cites many researchers (Gilbert, 1978; Baker and Wruck, 1989; Jensen, 1989; Muscarella, Vetsuypens, 1990; Kaplan, 1991; Opler, Titman, 1993; Kosedag, Lane, 2002; Peck, 2004) who have documented that firms involved in LBOs typically have high free-cash profiles and low growth opportunities; and subsequent to buyouts, the firms increase their operating efficiency and profitability (Wright, 1991; Wright, Thompson, Robbie, 1992; Zahra, 1995; Van de Gucht, Moore, 1998; Wright, Hoskisson, Busenitz, 2001). We analyze whether SBOs also lead to increased operating efficiency and profitability.

In order to gain perspective on the development of each of the 72 companies, and to measure their operating efficiency and profitability, EBITDA margins were tabulated for years 1996 to 2006. The

EBITDA

EBITDA margin is computed as $\frac{\text{EBITDA}}{\text{SALES}}$.

For statistical purposes, after tabulating results for “relative years” (1996 to 2006), the EBITDA margin was tabulated for “absolute years” (Year 0 is set at the time of the SBO, Time 1 (-1) at one year after (before) the SBO, and Time 2 (-2) at two years after (before) the SBO, and so on.

To collect these data, we mainly used Bureau Van Dijk’s electronically published Aida, a prominent database, to locate balance sheets. LBOs are often conducted through special purpose vehicles, and a target company may change its fiscal code and business name after the acquisition. This caused difficulties in locating some balance sheets because Aida did not have complete sets for all of them. To fill gaps, we referred to scanned-copies obtained directly by Bureau Van Dijk and, when available, to balance sheets downloaded from companies’ web sites.

In order to have benchmarks, EBITDA margins of companies comparable to the ones in our dataset were collected, and results were tabulated for “relative years” and “absolute years.” In order to conduct an unbiased comparison of the EBITDA margin for each company, it was necessary to find comparable companies operating in the same industry, and especially companies that were also similar in size. To achieve greater accuracy and realism, we built a customized set of comparables rather than rely on generalized benchmark sector indicators. This was especially helpful because of the great range of size of our dataset companies. (Sales of the smallest firm were only €2 million, while sales of the biggest firm were more than €1.5 billion.)

In order to find comparable companies, we searched Aida for firms with the same ATECO 2002

code⁹ and with similar sales amounts, plus or minus 40 percent, of a target company’s sales during the last four years available (2006, 2005, 2004, 2003). We tried to find on average 20 comparables for each target company, with a maximum of 30 and a minimum of 10. When not enough comparables were available because the target company’s sales were too big or it operated in a niche business, the ten closest companies in term of sales within the same ATECO 2002 code were selected as comparables.

In some cases, a company’s listed ATECO 2002 code referred to the activity of “financial intermediation” or “holding companies,” reflecting the original purpose of the company created as a shell for purposes of the acquisition. In such cases, we found an appropriate ATECO 2002 code that mirrored the company’s real industrial activity.

⁹ ATECO 2002 is a business classification created by the Italian National Institute of Statistics.

Company / Deal	# of comparables	Company / Deal	# of comparables
AEB	30	Gruppo Lince	10
Alfathem	20	Guala Closures SpA	12
Appliances Components Companies SpA	10	Intercos Italia S.p.A. (Intercos Group srl SPV)	11
Arena International	30	Italmatch Chemicals	30
Arketipo	30	Limoni	10
Azelis 1	15	Lucomed (formerly Medfin)	30
Azelis 2	15	Luxy (spv Seating People S.R.L.)	30
Bianchi Vending (formerly Nuova Bianchi)	14	MC Mini Gears	14
Blumen srl	20	Metalcastello Spa	14
Bluvacanze 1	14	N&W Global Vending Spa (formerly Wittenborg and Necta Vending)	29
Bluvacanze 2	14	Palini&Bertoli (newco Palber Uno)	20
Bodio Properties Srl	15	Piquadro	29
Bruno Magli	11	Raco 1	24
Byte Software House	14	Raco 2	24
Castaldi Illuminazione 1	30	Redecam Group S.p.A.	30
Castaldi Illuminazione 2	30	Rhiag Group Ltd	10
Ceme	30	Riello Group (holded through Sigla Engineering S.p.A.)	12
Co.Import	10	Saet	17
Compagnia Italiana Turismo Spa	27	Schmid s.p.a.	30
De Fonseca	22	Seat Pagine Gialle	13
Ducati	10	Selective Beauty 1	29
Eagle Pictures	10	Selective Beauty 2	29
Eco	10	Servizio Trasporti Combinati - S.T.C.	30
Emmeci s.r.l.	30	Seves (formerly Vetroarredo)	10
Emmegi Detergents	10	Sicurglobal S.p.A.	11
Eurorites SpA	10	Sirti	12
Farmigea	30	Sisal 1	12
Faster SpA 1	28	Sisal 2	12
Faster SpA 2	28	Società Europea Autocaravan SEA 1	10
Ferretti	14	Società Europea Autocaravan SEA 2 (six SPV)	10
Fiat Avio	10	Società Gasdotti Italia (formerly Edison Gas)	29
FL Selenia SPA (Formerly Fiat Lubricants Group) 1	10	Sonus Faber	18
FL Selenia SPA (Formerly Fiat Lubricants Group) 2	10	Stroili Oro 1	13
FL Selenia SPA (Formerly Fiat Lubricants Group) 3	10	Stroili Oro 2	13
Galileo Tp Process Equipment	30	Sympak 1	30
Gamma Croma	26	Sympak 2	30
Gardaland 1	11	Teamsystem	29
Gardaland 2	11	TecnoWind SpA	23
Giochi preziosi (holding Ludica SpA)	13	Trudi	13
Global Garden 1	10	Unopiù	17
Global Garden 2	10	Util Industries	25
Grandi Navi Veloci	12	Vending System	30
Gruppo Argenta 1	10	Wire Industries	20
Gruppo Argenta 2	10		
		<i>Average</i>	18,6

Fig. 13 Comparable companies for the deals of the dataset

3.3.4. Companies performance before the SBO

After comparable companies were selected, “sector” *EBITDA margins* were computed for each company of the dataset. These were the average of *EBITDA margins* of comparables companies for each year, tabulated on the basis of relative and absolute years.

To identify how target companies performed

compared to their sector competitors, the *average “sector” EBITDA margin* was subtracted from the *EBITDA margin of the company*. This measure, called *yearly competitive performance advantage*, is used to determine if a company that underwent an SBO had any *ex ante* competitive performance advantage over its competitors or if they gained any advantage after the deal.

$$EBITDA\ margin_{company\ yr\ N} - EBITDA\ margin_{sector\ yr\ N} == yearly\ competitive\ performance\ advantage_{yr\ N}$$

The results show that the *yearly competitive performance advantage* average of the dataset is positive by at least 3.6 percent and peaks at 9.0 percent the year before the SBO. Years 5 and 6 are not so significant because very few companies underwent SBOs so long ago, but the figures are nonetheless impressive and noteworthy. In the following table, negative numerals designate the number of years before the SBO and positive numerals designate the number of years after the SBO (absolute years).

We can then state that, on average, SBOs are conducted on high performing companies. This finding aligns with and provides empirical evidence for comparable statements in the LBO literature regarding LBOs cited in Section 3.2. It also confirms the hypothesis that SBOs are deals with a specific rationale or that at least, when picking SBO targets, investors look at these characteristic and conduct detailed screening (Fig. 15). The quartile analysis (Fig. 16) gives a clearer picture of the relative

performance distribution of the companies.

6	5	4	3	2	1	SBO YEAR	-1	-2	-3	-4	-5	-6	-7
14,31%	14,11%	12,74%	7,10%	8,99%	8,64%	9,01%	9,80%	8,69%	7,44%	5,67%	9,41%	6,59%	3,60%

Fig. 14 Average yearly competitive performance advantage

	3	2	1	SBO YEAR	-1	-2	-3	-4	-5	-6	-7
1 st quartile	-6,06%	-11,39%	-51,12%	-28,22%	-19,08%	-37,04%	-24,87%	-47,91%	-51,81%	-47,91%	-51,81%
2 nd quartile	1,61%	0,61%	1,75%	2,04%	2,25%	1,10%	0,12%	0,84%	0,46%	-1,19%	0,00%
3 rd quartile	4,23%	5,95%	7,51%	6,11%	7,50%	7,40%	4,09%	5,76%	8,27%	6,74%	0,18%
4 th quartile	8,01%	10,52%	13,21%	12,44%	15,25%	13,86%	14,65%	10,14%	14,54%	13,97%	10,47%
	25,74%	43,60%	36,97%	39,69%	38,67%	42,84%	42,84%	35,26%	81,21%	26,34%	23,84%

Fig. 15 Yearly competitive performance advantage (minimum and maximum values of quartiles)

We set out to analyze differences between SBO operations. Accordingly, we established criteria to classify SBOs as *speculative*, *coerced* or *pure*. There is great agreement among the literature on LBOs and SBOs that a target company must be among the best performers in its sector (Cumming, Siegel, Wright, 2007). For our purposes, target companies that are in the first quartile (worst performers) of their respective industries *ex ante* are deemed to be targets of *speculative* SBOs.

Companies that perform in the second quartile of their industries do not manifest clear advantages vis-à-vis their sector comparables. Looked at three years before the SBO, such companies perform only 0.12 percent better than their sector (Fig. 15); any marginal advantage is insignificant. And focusing on the time one year before an SBO, this quartile reaches a top comparative advantage of 7.5 percent; this is an improvement, but is hardly impressive when compared with the concurrent figures posted by the better performing half of the industry (15.25 percent for the third quartile and 38.67 percent for the fourth quartile). Accordingly, target companies from second quartiles are classified as *coerced* SBOs.

Companies in the third and fourth quartiles have

clear marginal advantages over their comparables. Accordingly, such target companies are classified as *pure* SBO. Focusing on the time three years before an SBO, the comparative advantage of these companies range up to almost 43 percent. And at least 50 percent of SBOs on the Italian market for corporate control are *pure* SBOs, and so are not based on speculative or coercive approaches.

3.3.5. Companies' performances after the SBO

In order to determine whether an investor that takes over a target company through an SBO actually adds value to the company, the following two steps were executed. First, the *competitive advantage/disadvantage gained by the target company before the SBO* was calculated. This measure was computed as an average of *yearly competitive performance advantage* of the five years before the SBO. This process aimed to establish the target company's average grade of competitiveness reached before the SBO transaction. It will be used as the baseline for analyzing company performance after the deal.

$$\frac{\sum_{y=-5}^{-1} \text{yearly competitive performance advantage}_{yr,N}}{5} == \text{competitive advantage/disadvantage gained by the company before the SBO}$$

To test whether the SBO investors actually enhanced profitability and added value to the target company, the *competitive advantage/disadvantage*

$$\text{yearly competitive performance advantage}_{yr,N} - \text{competitive advantage/disadvantage gained by the company before the SBO}$$

The calculation was conducted for the fiscal year of the SBO and three subsequent years (Fig. 16). (Few

gained by the company before the SBO was subtracted from the *yearly competitive performance advantage* of each year following the SBO.

companies in our dataset have a history of more than three years post-SBO.)

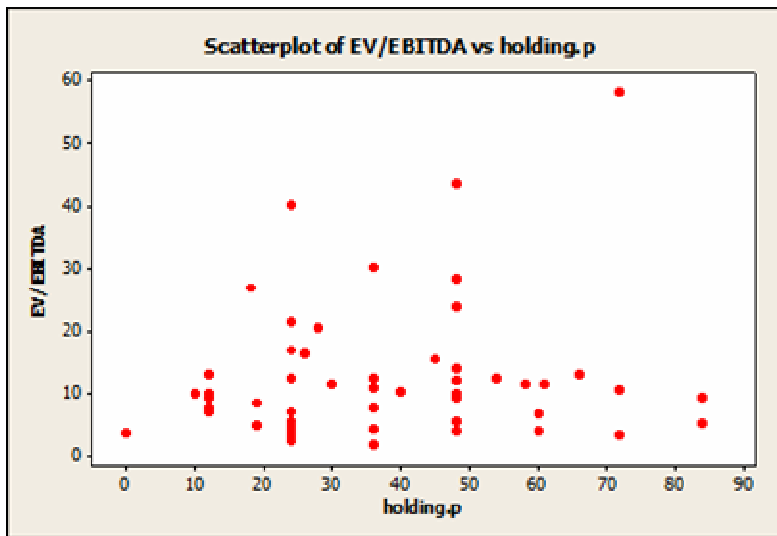
Years after the SBO	3	2	1	SBO YEAR	competitive advantage/disadvantage gained by the company before the SBO	
1 st quartile	0	-5,59%	-11,00%	-5,81%	-44,76%	-31,36%
2 nd quartile	1	-0,85%	-5,52%	1,68%	-1,37%	0,76%
3 rd quartile	2	1,71%	-1,22%	7,03%	1,14%	4,96%
4 th quartile	3	3,24%	3,53%	13,41%	3,62%	13,78%
	4	21,19%	36,84%	37,70%	23,46%	36,30%

Fig. 16 Yearly competitive performance advantage minus competitive advantage gained by target companies before the SBO (minimum and maximum values of quartiles)

3.4. Empirical analysis and results

To compare different deals, the price paid in each transaction was standardized by computing the transaction multiples. We computed EV as the deal amount multiplied by the percentage of shares acquires. We then used company EBITDA and sales

to compute the ratios, EV/EBITDA and EV/SALES. We tested hypotheses HP 1 and HP 2 by conducting respective regressions of EV/EBITDA and EV/SALES against the buying group’s holding period. Figures 17 and 18 show the dispersion charts and regression results.



Regression Analysis: EV/EBITDA versus holding.p

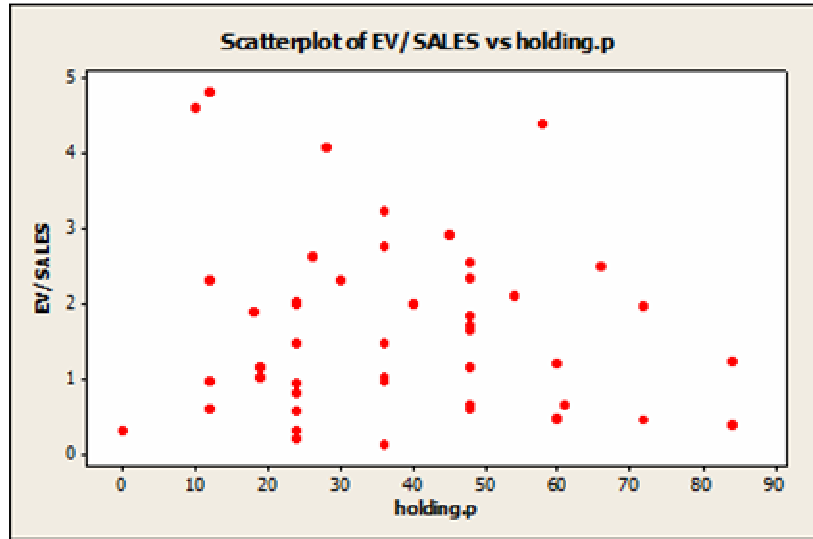
The regression equation is $EV/EBITDA = 10.0 + 0.0716 \text{ holding.p}$

Predictor	Coef	SE Coef	T	P
Constant	10.010	3.304	3.03	.004
holding.p	.072	.077	.93	.358

S = 11.0867 R-Sq = 1.7% R-Sq(adj) = .0%

Analysis of Variance

Source	DF	SS	MS	F	P
Regression	1	105.7	105.7	.86	.358
Residual Error	49	6,022.8	122.9		
Total	50	6,128.5			



Regression Analysis: EV/SALES versus holding.p

The regression equation is
 $EV/SALES = 1.85 - 0.00506 \text{ holding.p}$

Predictor	Coef	SE Coef	T	P
Constant	1.8453	.3589	5.14	.000
holding.p	-0.0051	.0085	-0.59	.555

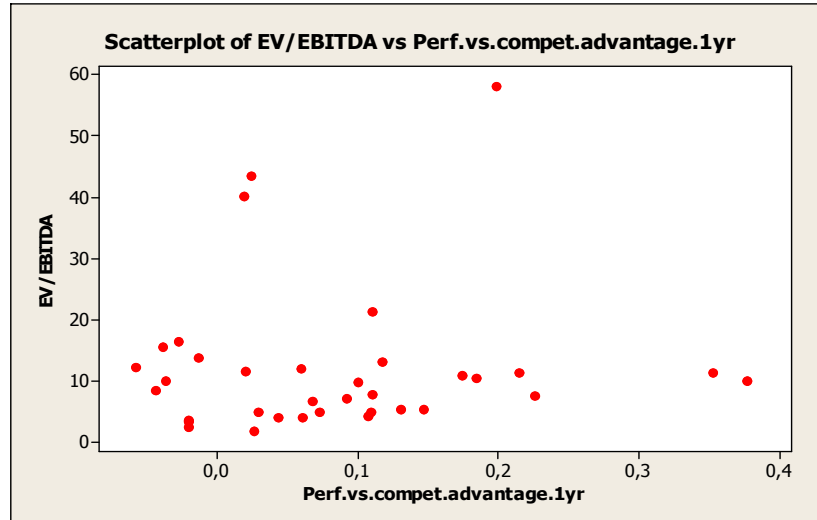
S = 1.17740 R-Sq = 0.8% R-Sq(adj) = 0.0%

Analysis of Variance

Source	DF	SS	MS	F	P
Regression	1	0.490	.490	.35	.555
Residual Error	46	63.769	1.386		
Total	47	64.259			

The Scatterplots and regression results (Fig. 17 and Fig. 18) show that neither hypothesis is confirmed with an R squared coefficient of determination close to zero and a high P-value in both regressions. Possibly, one hypothesis or the other applies, depending on the particulars of a case. Or it could be that price is a result of the complex negotiation process between sellers and buyers, and is influenced only slightly by the amount of time the seller has held the company in portfolio.

We test whether the price an investor pays for a company relates to his pre-deal awareness of his potential to increase the company's value (Hypothesis HP 3). In order to verify this hypothesis, we conducted respective regressions between the entry EV/EBITDA multiples and EV/SALES multiples and the EBITDA margin reached one year after SBO and the average EBITDA margin reached two years after SBO. Figures 19-22 show the dispersion charts and regression results.



Regression Analysis: EV/EBITDA versus Perf.vs.compet.advantage.1yr

The regression equation is $EV/EBITDA = 11.2 + 7.5 \text{ Perf.vs.compet.advantage.1yr}$

Predictor	Coef	SE Coef	T	P
Constant	11.227	2.634	4.26	.000
Perf.vs.compet.advantage.1yr	7.530	19.790	.38	.706

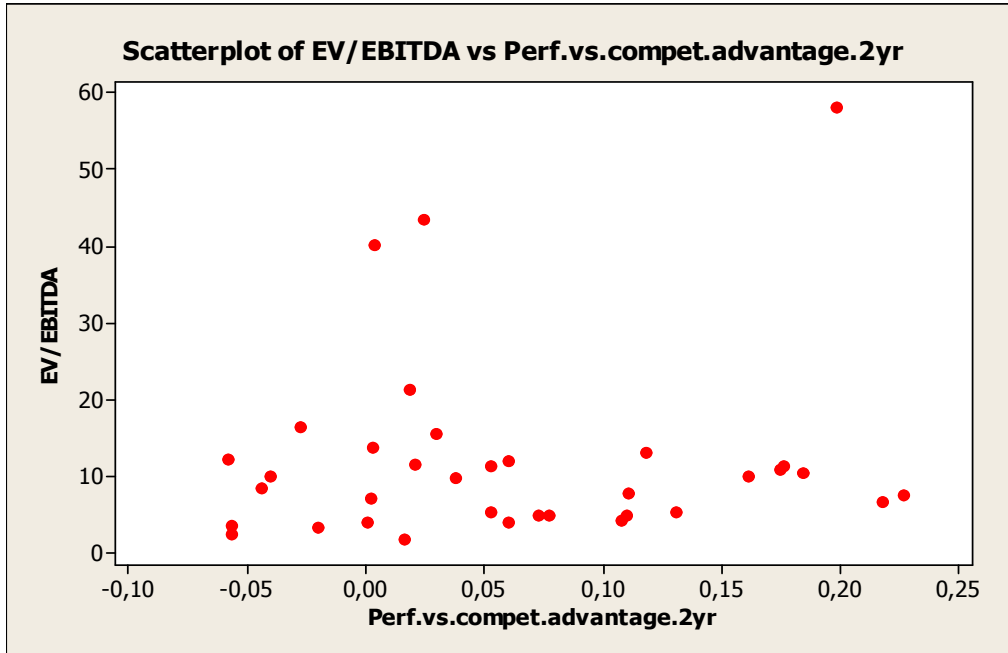
S = 12.1853 R-Sq = 0.4% R-Sq(adj) = 0.0%

Analysis of Variance

Source	DF	SS	MS	F	P
Regression	1	21.5	21.5	.14	.706
Residual Error	33	4,899.9	148.5		
Total	34	4,921.4			

9

Scatterplot and regression of Year 1 competitive performance advantage minus competitive advantage gained by the target company before the SBO versus entry multiple EV/EBITDA



Regression Analysis: EV/EBITDA versus Perf.vs.compet.advantage.2yr

The regression equation is $EV/EBITDA = 10.9 + 15.2 \text{ Perf.vs.compet.advantage.2yr}$

Predictor	Coef	SE Coef	T	P
Constant	10.921	2.557	4.27	.000
Perf.vs.compet.advantage.2yr	15.190	24.910	.61	.546

S = 12.1437 R-Sq = 1.1% R-Sq(adj) = 0.0%

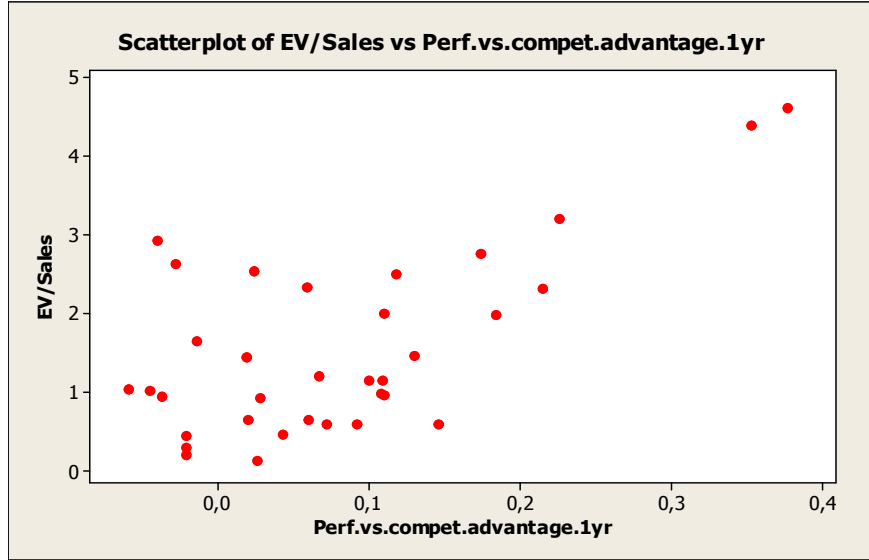
Analysis of Variance

Source	DF	SS	MS	F	P
Regression	1	54.9	54.9	.37	.546
Residual Error	33	4,866.5	147.5		
Total	34	4,921.4			

Fig. 20 Scatterplot and regression of Year 2 competitive performance advantage minus competitive advantage gained by the target company before the SBO versus entry multiple EV/EBITDA

The analysis on the EV/EBITDA multiple (Fig. 19 e Fig. 20) doesn't confirm our third hypothesis and cannot be considered as a good proxy of investor's

preexisting awareness of the company potential for increased value: the results of the regression have a R-squared close to zero and there is an high P-value.



Regression Analysis: EV/Sales versus Perf.vs.compet.advantage.1yr

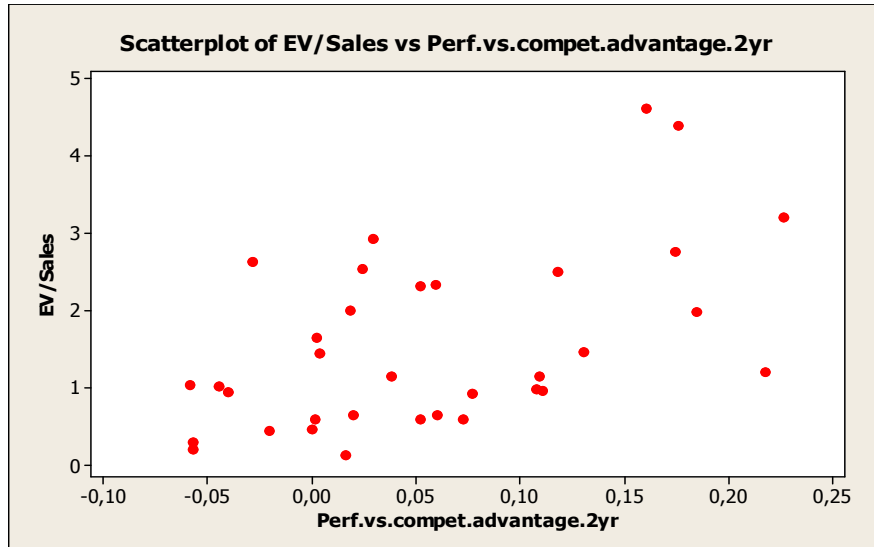
The regression equation is
 $EV/Sales = 0.993 + 7.00 \text{ Perf.vs.compet.advantage.1yr}$

Predictor	Coef	SE Coef	T	P
Constant	.993	.190	5.22	.000
Perf.vs.compet.advantage.1yr	6.997	1.457	4.80	.000

S = 0,88063 R-Sq=41,9% R-Sq(adj)=40,1%

Analysis of Variance					
Source	DF	SS	MS	F	P
Regression	1	17.884	17.884	23.06	.000
Residual Error	32	24.817	.776		
Total	33	42.701			

1 Scatterplot and regression of Year 1 competitive performance advantage minus competitive advantage gained by the target company before the SBO versus entry multiple EV/SALES



Regression Analysis: EV/Sales versus Perf.vs.compet.advantage.2yr					
The regression equation is EV/Sales = 1.13 + 7.35 Perf.vs.compet.advantage.2yr					
Predictor		Coef	SE Coef	T	P
Constant		1.129	.207	5.45	.000
Perf.vs.compet.advantage.2yr		7.349	2.104	3.49	.001
S = 0.982857 R-Sq = 27.6% R-Sq(adj) = 25.3%					
Analysis of Variance					
Source	DF	SS	MS	F	P
Regression	1	11.789	11.789	12.20	.001
Residual Error	32	30.912	.966		
Total	33	42.701			

Fig. 22 Scatterplot and regression of Year 2 competitive performance advantage minus competitive advantage gained by the target company before the SBO versus entry multiple EV/SALES

The two regressions based on the EV/Sales multiple show that the transaction multiples based on Sales are positively related to the company's performance improvement after the SBO. The R-squared value in the regression of the first-year results is 41.9 percent, and the R-squared value in the regression of the second-year is 27.6 percent. P-value in both regressions is very low making them significant. Accordingly, we can state that EV/Sales is a good proxy for performance improvement implemented by the buying fund.

Thus, there is a positive correlation between the price paid, in terms of the entry multiple EV/SALES, and the performance improvement put in place after the SBO. These results are probably due to the investors' awareness before investing of how much they could improve the target company's performance. Investors are willing to pay more if they perceive that the performance improvement will be greater.

This implies that SBO sponsors have an *ex ante* awareness of the possibility of increasing the target company's value. This is exactly the opposite of what a speculative investment is, since the definition of speculation is the assumption of the risk of loss, in return for the *uncertain* possibility of reward. In this case, the awareness of reward, in terms of performance improvement, is known.

4. Conclusions

Our analysis shows that SBOs are not a cyclical phenomenon. Thus, they are not caused only by excess liquidity in the financial system. Consequently, it should not be assumed that they are conducted because there are few other deals to pursue. Even if the flow of private equity deals is sizeable, and even if target companies originate through means other than a previous LBO, SBOs will remain relevant in the

market. A better theory based on our evidence would be that private equity is a business with a limited time horizon and that SBOs compensate for this lack of time.

If SBOs help improve performance, then it is proved that operating under (heavy) leverage may create incentives for top management and workers alike to achieve better results because of greater commitment to their jobs. Strategically, the effect could be to limit or even eliminate investments with negative present values or are part of the company's core business.

The price paid in a SBO transaction, expressed in term of entry multiple EV/SALES or EV/EBITDA, is not based on the holding period of the exiting investor. This implies that there is no acknowledgement of the work done inside the company by the exiting investor.

An SBO implemented on a company with an EBITDA margin lower than its industry sector average does not comply with the usual criteria of target selection posited by many authors who have researched LBOs. Thus, such an SBO can be considered speculative. Based on EBITDA margin differentials of industry comparables, most Italian transactions can be classified as pure SBOs. Accordingly, most SBOs in Italy are not speculative in nature.

The most meaningful result of this work is that it has identified a positive correlation between the price paid for SBOs, in terms of the entry multiple EV/SALES, and the performance improvement put in place after the SBO. This means that an SBO's sponsors have an *ex ante* awareness about the possibility of increasing the target company's value; and the greater the perceived future value increase, the more they are willing to pay. Their awareness of reward, in terms of performance improvement, is known. This is the opposite of a speculative

investment, which is defined as the assumption of the risk of loss in return for the uncertain possibility of reward.

This whole study was conducted without regard to actual D/E ratios of the dataset's transactions. Deals were picked based on information given by financial media we referred to, and capital structures were undisclosed. A possible limit of this study is its lack of an analysis based on capital structure and its influences on the factors tested. Similarly, we did not analyze variables such as debt availability and credit spreads at the time of the transaction, though they may have influenced the decision to undertake an SBO.

This study was conducted on the Italian market for corporate control which, as previously explained, is not as big and developed as in other countries; hence, it could be not fully representative of SBOs transactions. Value creation was measured in terms of EBITDA margins; this is an appropriate measure, but may not give a full picture of a company's profitability or value. This opens the possibility for further research that investigates even "soft" drivers of value creation (e.g., the relationship of the buying fund's management team with the banking system in terms of credit spreads, the company's existing relationship with suppliers, etc.).

SBOs and private equity investments are phenomena less than a decade old in Italy. Consequently, it would have been meaningless to try to analyze the life of a company after an SBO. Such research should wait at least seven years. Points to analyze might include to whom a company is sold after an SBO and whether a capital gain is obtained. Future researchers might consider the present work as a starting point.

References

- Amess, K., 2003. The effects of management buyouts and on firm-level technical efficiency: evidence from a panel of U.K. machinery and equipment manufacturers. *Journal of Industrial Economics* 51, 35-44.
- Andrade, G., Kaplan, S., 1998. How costly is financial (not economic) distress? Evidence from highly leveraged transactions that became distressed. *Journal of Finance* 53, 1443-1493.
- Baker G.P., Wruck, K. H., 1989. Organizational changes and value creation in leveraged buyouts: the case of The O.M. Scott & Sons Company. *Journal of Financial Economics* 25, 163-190.
- Bernile, G., Cumming, D., Lyandres, E., 2007. The size of private equity fund portfolios. *Journal of Corporate Finance* 13, 564-590.
- Bierman, H.J., 2003. *Private Equity—Transforming Public Stock to Create Value*. Wiley, New York.
- Burriugh, B., 1990. *Barbarians at the Gate*. Harper & Row, New York.
- Chou, D.W., Gombola, M., Liu, F.Y., 2006. Earnings management and stock performance of reverse leveraged buyouts. *Journal of Financial and Quantitative Analysis* 41, 407-428.
- Cotter, J.F., Peck, S.W., 2001. The structure of debt and active equity investors: the case of the buyout specialist. *Journal of Financial Economics* 59, 101-147.
- Crawford, E.K., 1987. *A Management Guide to Leveraged Buyouts*. Wiley, New York.
- Cumming D., Siegel, D.S., Wright, M., 2007. Private equity, leveraged buyouts and governance. *Journal of Corporate Finance*, 439-460.
- Cumming, D., 2006. The determinants of venture capital portfolio size: empirical evidence. *Journal of Business* 79, 1083-1126.
- Cumming, D., Fleming, G., Schwienbacher, A., 2006. Legality and venture capital exits. *Journal of Corporate Finance* 12, 214-245.
- Cuny, C., Talmor, E., 2007. A theory of private equity turnarounds. *Journal of Corporate Finance*, 13, 629-646.
- Desbrierers P., Schatt A., 2002. The impacts of LBOs on the performance of acquired firms: the French case. *Journal of Business Finance and Accounting* 29, 695-729.
- Diamond S., 1985. *Leveraged Buyouts*. Dow Jones-Irwin, Homewood.
- Gilbert, F.S., 1978. Financing the leveraged buy-out through the acquired assets. *Harvard Business Review* 7-8, 8-16.
- Gompers, P.A., Lerner, J., 1999. *The Venture Capital Cycle*. MIT Press, Cambridge.
- Harris, R., Siegel, D.S., Wright, M., 2005. Assessing the impact of management buyouts on economic efficiency: plant-level evidence from the United Kingdom. *The Review of Economics and Statistics* 87, 148-153.
- Holthausen, D., Larcker, D., 1996. The financial performance of reverse leverage buyouts. *Journal of Financial Economics* 42, 293-332.
- Jelic, R., Saadouni, B., Wright, M., 2005. Performance of private to public MBOs: the role of venture capital. *Journal of Business Finance and Accounting* 32, 643-682.
- Jensen, M.C., 1986. Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review* 2, 323-329.
- Jensen, M.C., 1989. Active investors, LBOs, and the privatization of bankruptcy. *Journal of Applied Corporate Finance* 2, 35-44.
- Jensen, M.C., 1993. The modern industrial revolution: exit and the failure of internal control systems. *Journal of Finance* 48, 831-880.
- Jensen, M.C., Kaplan, S., Ferenbach, C., Feldberg, M., Moon, J., Hoesterey, B., Davis, C., Jones, A., 2006. Morgan Stanley roundtable on private equity and its import for public companies. *Journal of Applied Corporate Finance* 18, 8-37.
- Kaplan, S., 1989. The effects of management buyouts on operating performance and value. *Journal of Financial Economics* 24, 217-254.
- Kaplan, S.N., 1991. The staying power of leveraged buyouts. *Journal of Financial Economics* 29, 287-313.
- Kaplan, S., 1989. The effects of management buyouts on operating performance and value. *Journal of Financial Economics* 24, 217-254.

28. Kaplan, S.N., Schoar, A., 2005. Private equity returns: persistence and capital flows. *Journal of Finance* 60, 1791-1823.
29. Kaplan, S.N., Strömberg, P., 2008. Leveraged buyouts and private equity. NBER Working Paper Series, WP n. 14207, <http://www.nber.org/papers/w14207>
30. Kosedag, A., Lane, W. R., 2002. Is it free cash flow, tax savings, or neither? An empirical confirmation of two leading going-private explanations: the case of reLBOs. *Journal of Business Finance & Accounting* 29, 257-271.
31. Lee, S., 1992. Management buyout proposals and inside information. *Journal of Finance*, 47, 1061-1080.
32. Lehn, K., Poulsen, A., 1989. Free cash flow and stockholder gains in going private transactions. *Journal of Finance* 44, 771-787.
33. Lichtenberg, F.R., Siegel, D.S., 1990. The effect of leveraged buyouts on productivity and related aspects of firm behavior. *Journal of Financial Economics* 27, 165-194.
34. Loh, L., 1992. Financial characteristics of leveraged buyouts. *Journal of Business Research*, 24(3), 241-252.
35. Marais, L., Schipper, K., Smith, A., 1989. Wealth effects of going private on senior securities. *Journal of Financial Economics* 23, 155-191.
36. Melis, A., 2000. Corporate governance in Italy. *Corporate Governance* 8, 347-355.
37. Muscarella, C. J., Vetsuypens, M.R., 1990. Efficiency and organizational structure: a study of reverse LBOs. *The Journal of Finance* 5, 1389-1413.
38. Nikoskelainen, E., Wright, M., 2007. The impact of corporate governance mechanisms on value increase in leveraged buyouts. *Journal of Corporate Finance* 13, 511-537.
39. Opler T., Titman, S., 1993. The determinants of leveraged buyout activity: free cash flow vs. financial distress costs. *The Journal of Finance* 5, 1985-1999.
40. Palepu, K.G., 1990. Consequences of leveraged buyouts. *Journal of Financial Economics* 27, 247-262.
41. Peck, S.W., 2004. The carrot versus the stick: the role of incentive compensation and debt obligations in the success of LBOs. *American Business Review* 6, 1-12.
42. Povaly, S., 2007. *Private Equity Exits: Divestment Process Management for Leveraged Buyouts*. Springer, Berlin.
43. Renneboog, L.D.R., Simons, T., Wright, M., 2007. Why do public firms go private in the UK? *Journal of Corporate Finance* 13, 591-628.
44. Scholes, L., Wright, M., Westhead, P., Burrows, A., Bruining, H., 2007. Information sharing, price negotiation and management buy-outs of private family-owned firms. *Small Business Economics*, 29(3), pp., 329-349.
45. Smart, S.B., Waldfogel, J., 1994. Measuring the effect of restructuring on corporate performance: the case of management buyouts. *The Review of Economics and Statistics* 76, 503-511.
46. Smith, A., 1990. Capital ownership structure and performance: the case of management buyouts. *Journal of Financial Economics*, 13, 143-165.
47. Strömberg, P., 2008, *The New Demography of Private Equity*, working paper, Swedish Institute for Financial Research.
48. Thompson, S., Wright, M., 1995. Corporate governance: the role of restructuring transactions. *The Economic Journal* 105, 690-703.
49. Van de Gucht, L.M., Moore, W.T., 1998. Predicting the duration and reversal probability of leveraged buyouts. *Journal of Empirical Finance* 5, 299-315.
50. Volpin, P.F., 2002. Governance with poor investor protection: evidence from top executive turnover in Italy. *Journal of Financial Economics* 64, 61-90.
51. Weir, C., Laing, D., Wright, M., 2005. Incentive effects, monitoring mechanisms and the threat from the market for corporate control: an analysis of the factors affecting public to private transactions in the UK. *Journal of Business Finance and Accounting* 32, 909-944.
52. Weir, C., Jones, P., Wright, M., 2008. *Public to Private Transactions, Private Equity and Performance in the UK: An Empirical Analysis of the Impact of Going Private*. Available at SSRN: <http://ssrn.com/abstract=1138616>.
53. Wright, M., 1991. *Buyins and Buyouts: New Strategies in Corporate Management*. Graham & Trotman, London.
54. Wright, M., 2007. *Private Equity and Buyouts: Jobs, Leverage, Longevity and Sell-Offs*. Center for Management Buyout Research, Nottingham.
55. Wright, M., Thompson, S., Robbie, K., 1992. Venture capital and management-led leveraged buyouts: a European perspective. *Journal of Business Venturing* 7, 47-71.
56. Wright, M., Hoskisson, R., Busenitz, L., 2001. Firm rebirth: buyouts as facilitators of strategic growth and entrepreneurship. *Academy of Management Executive* 15, 111-125.
57. Wright, M., Wilson, N., Robbie, K., 1996. The longer term effects of management-led buyouts. *Journal of Entrepreneurial and Small Business Finance* 5, 213-234.
58. Zahra, S.A., 1995. Corporate entrepreneurship and financial performance: the case of management leveraged buyouts. *Journal of Business Venturing* 10, 225-247.