

First Draft: July 2011

This Draft: 14 January 2012

UBI MAJOR MINOR CESSAT:
THE ROLE OF INSTITUTIONAL INVESTORS IN
CONTROLLING SHAREHOLDER PUBLIC-TO-PRIVATE TRANSACTIONS

EMANUELE BAJO

MASSIMILIANO BARBI

MARCO BIGELLI

DAVID HILLIER

Abstract

In Italy, as in many other European countries, listed companies usually go dark through controlling shareholder-initiated tender offers with freeze-outs. We find that the presence of institutional investors, especially when foreign, helps minority shareholders achieve a higher takeover premium and reduces the likelihood of a successful bid. We explore the effect of a number of hitherto unexplored factors on the takeover premium and find that shareholder agreements facilitate the going dark decision. Other factors, such as a threat to merge the target if the firm goes not go dark or external validation of the offer price have no impact on either the likelihood or the premium paid by the controlling shareholder.

JEL classification: G32; G34.

Keywords: Public-to-private transactions; Delisting; Family firms; Tender offer.

The Authors are from the University of Bologna, Italy (Bajo, Barbi and Bigelli), and Strathclyde Business School, University of Strathclyde, UK (Hillier). Corresponding Author: Marco Bigelli, Department of Management, University of Bologna, via Capo di Lucca 34, 40126 Bologna, Italy; e-mail address: marco.bigelli@unibo.it. We would like to thank Lara Guidetti for her helpful research assistance, and Mediobanca Ricerche e Studi for kindly providing some of the data employed in this study. We also thank Gabriella Chiesa, Ettore Croci, Fabrizio Palmucci, Pierpaolo Pattitoni, Barbara Petracci, Sandro Sandri, Massimo Spisni for their useful comments and suggestions. All errors are our responsibility. We are grateful to the Italian Ministry of Research and Higher Education for financial support to this project (PRIN 2008).

1. Introduction

In recent years, extensive evidence has accrued regarding the increasing importance of institutional investors. Unlike individuals, financial institutions tend to own large equity stakes and have a stronger incentive to collect firm-specific information and monitor management. Thanks to the combination of more time, training and a fiduciary responsibility towards their own investors, institutions now play a significant and active role in the corporate governance of firms (Kumar and Lee, 2006). If institutional investors are dissatisfied with a firm's performance or with the board of directors' decisions, they can pressure for a change by selling their holdings (exit strategy) or proactively engage with management via shareholder activism.¹

Clearly, the sole presence of institutional holdings does not guarantee activism effectiveness. If the institutional investor holds a relatively small stake in the company—which is likely with diversified mutual funds—the incentive to undertake proactive monitoring may be negligible. Alternatively, if the institutional investor has a conflict of interest with management or the controlling shareholder, activism is likely to be less desirable or effective because of potential collusion.

Extant literature has investigated several issues associated with the presence of institutional investors, such as determining the salient firm characteristics that are most attractive to financial institutions (Smith, 1996; Gompers and Metrick, 2001), the effect of institutional investors on firm value or performance (Brav *et al.*, 2008; Clifford, 2008;

¹ A large body of work has examined the effectiveness of exit versus activism strategies. See Del Guercio and Hawkins (1999), Gillan and Starks (2000), English *et al.* (2004), Nelson (2006), Brav *et al.* (2008), Del Guercio *et al.* (2008), Kim *et al.* (2009), Lee and Park (2009), Greenwood and Schor (2009), Klein and Zur (2009), Becht *et al.* (2010), Cheng *et al.* (2010), and Ertimur *et al.* (2010) for more information.

Ferreira and Matos, 2008), their impact on the quality of a firm's corporate governance (Ferreira and Matos, 2008; Chung and Zhang, 2011) and the role played by financial institutions as facilitators of cross-border M&As (Ferreira *et al.*, 2009).

With few exceptions, empirical evidence comes almost entirely from the US and the UK. Little attention has been devoted to other countries or to the role played by institutional investors during specific types of corporate events. We contribute to the existing literature by investigating how institutional investors affect going dark decisions. Our dataset comprises the universe of Italian stock market delistings (successful or attempted) between 1998 and 2009, where a controlling shareholder has tried (and often succeeded) to delist their firm from the stock exchange.

Italy is a perfect setting to test the role of institutional investors, because shareholder structure is concentrated, it is characterized by a strong divergence between cash flow ownership and voting rights (Faccio and Lang, 2002), and is often strongly dominated by families. In contrast, the vast majority of delistings research is set in an environment where firms are predominantly widely held and financial institutions have relatively little power or incentive to act alone to resolve firm-based agency conflicts (Masulis *et al.*, 2009). In closely-held firms, institutional shareholders can act as an effective monitor of controlling shareholders.²

We find new evidence of an additional role played by institutional investors during going dark tender offers. Since a high voting premium³ reflects the expected private benefits from

² A developing body of work has examined the benefits of multiple large shareholders on firm performance and value (see, for example, Pagano and Roell, 1998; Bennedsen and Wolfenzon, 2000; Maury and Pajuste, 2005; Laeven and Levine, 2008; and Attig, El Ghouli, and Guedhami, 2010).

³ The average voting premium in Italy is one of the largest among industrialized countries (Nenova, 2003).

controlling a company, in such a context the incentive for the controlling shareholder to fully acquire the firm and delist it has to be large enough to compensate for the future extraction of private benefits that will be lost. Consequently, the decision to launch a public offer over minority shareholders is a clear signal that the bidder expects a gain (net of the premium paid to acquire the shares) from the going dark transaction.⁴ We show that the presence of institutional investors can help in either making the offer unsuccessful (for instance, by not tendering their shares) or by forcing the controlling owner to increase the premium paid, thus allowing minority shareholders to be more fairly compensated for the fundamental value of their tendered shares. Consistent with existing literature (Ferreira *et al.*, 2011 and Aggarwal *et al.*, 2011), we find these effects are more significant when investors are foreign institutions.

We also contribute to the literature on public-to-private (PTP) transactions. Most research on PTP transactions originated from the acquisitions wave that occurred in the US during the '80s and late '90s. Generally, target firms were acquired through leveraged buy-out transactions where the firm's delisting was just a technical effect of the acquisition. Following those waves, several scholars have tried to conceptualize the possible rationales for PTP transactions, proposing explanations based on the realignment of interests between shareholders and managers (Kaplan, 1989a), the free cash flow problem (Jensen, 1986), tax shield gains (Kaplan, 1989b), target undervaluation (Lowenstein, 1985) and the

⁴ There are several ways controlling shareholders can expect to benefit from delisting a firm. For instance, if a company is currently undervalued by the market because of information asymmetry (Tong and Yu, 2011) or a family or pyramid firm value discount (Almeida *et al.*, 2011), the controlling shareholder can buy out minorities at a lower than fundamental (fair) price. Another example is the case of a controlling shareholder who has received an offer from a third party to buy the company in full at an attractive price. The controlling shareholder would then be interested in buying out the company and selling it back immediately after the delisting, hence obtaining a safe profit net of the premium paid to minority shareholders.

enhancement of the corporate governance structure (Admati *et al.*, 1994; Maug 1998). However, these explanations are not particularly appropriate in countries with highly concentrated ownership structures.

In continental Europe, when firms are taken private by controlling owners, a tender offer accompanied by a freeze-out of minority shareholders is the usual strategy. These acquisitions are not made to realign managers and shareholders' interests, since control is usually already in the hands of the dominant shareholder. In addition, closely-held firms are less affected by agency costs of free cash flows and tax shields are also unlikely to be a reason because controlling shareholders could easily leverage the company without taking it private. Among the many proposed rationales for US delistings, only undervaluation and corporate governance structure are likely to play a role in continental Europe.

The present paper contributes to the existing literature in several ways. First, to the best of our knowledge, this is the first paper to investigate controlling owner-initiated tender offers in PTP transactions, which are common in Europe. Second, we report new evidence on the role played by institutional investors in protecting minority shareholders' interests. Third, the present study analyzes the premium offered using new hand-collected variables (from the tender offer prospectuses) such as the threat of a merger with an unlisted company (in the event of an unsuccessful offer), the presence of an agreement among shareholders to tender their shares to the bidder, or a fairness opinion.

The paper is organized as follows. The next section presents the theoretical framework. Section 3 briefly describes the Italian institutional framework and the European takeover directive. In section 4 we offer an instructive case study. Section 5 describes the research methodology. Section 6 reports our main findings. Finally, section 7 concludes the study.

2. Theoretical Framework

The study brings together two streams of research, namely the role played by institutional investors in enhancing corporate governance quality and the literature on public-to-private (PTP) transactions. According to the first strand of literature, institutional investors have a potentially stronger incentive to play an active role in monitoring management behavior since they have—relative to small retail investors—better skills, higher interest in the firm (due to the larger ownership stake) and more ways to impede potentially harmful actions to minority shareholders' interest. Indeed, if institutional investors are not satisfied with the firm's performance or with some managerial decision, they can put pressure on the firm by using their voting power or selling their shares.

Institutional investors have been shown to approve management proposals even when they are detrimental to shareholder value (Brickley *et al.*, 1988) and that the approval rate is higher when they have business ties with the related firm (Davis and Kim, 2007). Ownership ties between institutional investors and controlling shareholders are also another possible conflict of interest that may lead to approval of management proposals (Bigelli and Mengoli, 2011). Some studies (Black, 1998; Karpoff, 2001) show evidence of institutional investors exerting little effort in the monitoring process and find no association between activism and improved operating performance. Other work shows that even when firms are underperforming, it is difficult to remove corporate executives (Black, 1998; Romano 2001; Bebchuck, 2007).

Contrasting evidence suggests a positive relation between institutional holdings and both operating performance (Brav *et al.*, 2008; Clifford, 2008; Ferreira and Matos, 2008) and firm value (Ferreira and Matos, 2008). Klein and Zur (2009) and Clifford (2008) document a positive market reaction at the announcement of institutional investors (namely, hedge

funds) acquiring a stake in the company. Clifford (2008) shows that the effect of both market returns and operating performance is stronger when the firm is targeted by an activist hedge fund.⁵ Greenwood and Schor (2009) posit that the market reaction at the announcement of an activism event is not due to any expected improvement in the target firm's performance but to an increased likelihood that the firm will be taken over. Accordingly, the return around the announcement reflects the market expectation of the future premium paid to acquire the firm's control.

Another branch of literature focuses on those corporate characteristics that attract institutional investors. Financial institutions are more likely to be attracted by larger companies (Smith, 1996; Gompers and Metrick, 2001), higher market liquidity and lower return volatility (Badrinath *et al.*, 1996; Huang, 2009), better managerial performance (Parrino *et al.*, 2003) and corporate governance quality (Ferreira and Matos, 2008; Chung and Zhang, 2011). By analyzing institutional holdings in 23 countries, Aggarwal *et al.* (2011) show that changes in institutional ownership positively affect the quality of governance whilst the opposite does not hold true. The authors also document that foreign institutions are more successful than domestic ones in improving a firm's governance quality. In fact, whilst domestic institutions are more likely to have business ties with local corporations, foreign institutions are more independent and less compelled to be in agreement with management.⁶ Further, the positive effect of foreign investors is found to be stronger in countries with weak investor protection.

⁵ In the US, if a hedge fund reaches the 5% ownership threshold, it must file with the SEC. The fund also has to specify whether its intention for the firm is active (existence of plans to influence the firm or the management in the future) or passive.

⁶ Similar evidence is showed in Ferreira and Matos (2008).

Ferreira *et al.* (2009) investigate the role of institutional investors in cross-border mergers and acquisitions (M&A). They find that the presence of this type of investor increases the propensity of cross-border M&A activity especially in countries with weaker legal environments and less developed markets. The authors argue that institutional investors act as facilitators in the international M&A market, reducing both transaction costs and information asymmetry between target and bidder.

The other component of this research concerns public to private transactions, which originates from the wave of LBOs during the '80s and late '90s that led to a large number of firms going dark. Over the years, several motivations have been proposed by many scholars to explain this phenomenon.

Consistent with the cash flow theory, Lehn and Poulsen (1989) and Opler and Titman (1993) show that LBOs are more frequent for firms with unfavorable investment opportunities and large cash flows. Halpern *et al.* (1999) argue that LBOs can be a solution for the misalignment of interests between shareholders and managers because they concentrate ownership in the hands of a few shareholders. The same authors also suggest that tax motivations (an unexploited tax shield) or poor stock price performance (undervaluation) helps to explain the probability that a firm will be a target of an LBO. More recently Weir *et al.* (2005a; 2005b) report that the probability of observing an LBO in the UK is positively related to institutional ownership and sub-optimal governance structure. Renneboog *et al.* (2007) study the wealth effect (share price reaction at the announcement of a PTP) for shareholders of the target firm. In a daily window [-40; +40] they document a 30% increase in the stock price, whilst pre-transaction shareholders receive a 40% premium. In investigating the determinants of the wealth effect, the authors find that market reaction is positively associated to an unexploited tax shield, past poor

stock performance and incentive realignment, reporting no evidence for the free cash flow hypothesis.

Traditional explanations for PTP transactions are less applicable to countries with concentrated ownership structure since firms are usually delisted via tender offers promoted by the controlling shareholder. In spite of these fundamental differences, research on countries outside of the UK and US has been very sparse. Andres *et al.* (2007) report a 24% cumulative abnormal return (CAR) around the announcement of 115 European LBOs in the 1997-2005 period. They find that the wealth effect is largely associated with a difference in the degree of minority shareholder protection: countries with poorer protection show a stronger market response to announcements of PTPs. The legal protection of minority shareholders is an important factor according to Thomsen and Vinten (2007). The authors show that the frequency of delistings is higher in countries with weaker legal investor protection and increases in response to the adoption of new corporate governance codes. They also find that delisted firms are undervalued, illiquid and slow-growing. More recently, Geranio and Zanotti (2010) study the market response to the announcement of a sample of European PTPs and provide evidence that small and undervalued firms experience wealth improvements, especially when the tender offer is launched by a family (as the controlling shareholder).

3. Institutional background

The delisting of an Italian company is triggered when the percentage of floating shares goes below the 10% threshold and the controlling shareholder declares its intention to delist the company rather than restore the firm's float. It follows that when a listed company has a controlling shareholder, the most common way to take the company private is by promoting

a tender offer to all the minority shareholders in order to overcome the mandated 90% ownership level.⁷ If this threshold is passed and the bidder has declared that the firm is to be delisted, remaining shareholders have a second possibility to tender their shares.

Between 1998 and 2007, the second tender was granted through a mandatory bid that the acquirer had to launch for the residual shares under the same conditions as the first offer. After the introduction of the European takeover directive in 2008, remaining shareholders have a right to sell-out their shares to the bidder at the same price offered in the tender offer (Art. 108 Consolidated Law on Finance). Since 1998, delistings by controlling shareholders could be achieved through a tender offer aimed to gather 90% of the existing shares. Further, when a 95% ownership threshold is surpassed, the controlling owner has the right (granted by the EU directive and Art. 11 of Italian TUF) to freeze-out minority investors at the same offer-price so that 100% ownership of the new private company can be achieved.

In order to minimize the risk of taking the company private with some minority shareholders still on board, the controlling owner often threatens a merge of the vehicle used to launch the bid with the target company. This would either help the owner achieve the 95% freeze-out threshold or give residual minority shareholders the right to withdraw. Shareholders who do not agree with the merge (either because they did not participate in the shareholders meeting or because they abstained or voted against the proposal) are granted the right to withdrawal or to step out of the company at the preceding 6-month average stock price (Article 2437-ter, Paragraph 3 of the Italian Civil Code). Since the

⁷ Moreover, if the controlling shareholder owns less than 30% of the voting rights and purchases more than this, according to the Italian takeover regulation (which applies the equal opportunity rule principle adopted by the UE takeover directive 25/2004) it is compelled to launch a mandatory bid on all the shares at the highest price paid for the shares in the previous 12 months.

tender offer is usually launched at a premium on stock market prices, the right of withdrawal can be exercised at a price which is usually below the offer price and minority shareholders are thus better off in giving up their shares in the tender offer or in the second round (through their sell-out right).

4. The Gewiss Case

An example to clarify the potential role of institutional investors in the event of controlling owner initiated tender offers is provided by Gewiss SpA in 2010. Gewiss is a medium cap electrical components firm with almost €300 million turnover and had been listed on the Italian Exchange since 1988. On May 28th, 2010 the majority shareholder, who already controlled 75.34% of the shares, launched a tender offer on the remaining equity to delist the company from the exchange. In the tender offer's prospectus, the main motivation for the delisting was "a reorganization of the ownership structure, consolidation of the firm's market position and a broader operating flexibility". Such motivations are similar to those found by Croci and Petmezas (2010) on a sample of increase-in-ownership operations made by the controlling shareholder.

An advertisement published on *Il Sole 24 Ore*⁸⁸ (the most influential Italian financial newspaper) showed how the offer price (€4.20 per share) incorporated relevant premiums with respect to the 1-month (+28.2%), 3-month (+35.6%), 6-month (+45%) and 12-month (+43.5%) average stock prices before the announcement. The advertisement also mentioned that those "do not participate in the tender offer would remain a stockholder in an unlisted firm and have a investment which would be hard to liquidate".

⁸⁸ On July 21st, 2010.

At the time of the offer, the second shareholder was a foreign institutional investor, First Eagle Investment Management LLC (a US investment management fund with \$60 billion under management), holding 7.7% of the firm's shares. As Italian regulation requires disclosure of holdings above the 2% threshold, we are unable to trace any institutional investor owing smaller stakes. However, another institutional investor was certainly present: Nextam Partners, a small Italian independent asset manager firm (with €1 billion under management), which owned 1% of the shares. Nextam wrote a letter to the majority shareholder and to the Italian security regulator (CONSOB) and made the letter publicly available on its website and to the press. The letter was asking Gewiss' management (i.e., the controlling shareholder) three questions: (a) what was the meaning of "reorganizing" the firm's ownership structure and if there was a plan to sell the firm at a higher price after the delisting; (b) why the actions to strengthen the firm's position would have damaged its value in the short term; and (c) how did they estimate the proposed offered price, which was considered unfair with respect to several industry comparables.

The controlling shareholder's public answer denied any existing plan to sell the firm after the delisting and said that the price was the result of a fairness opinion made by Credit Suisse which adopted several valuation methods in order to come to the offer price. At the conclusion of the offer period, the majority shareholder's stake did not exceed the 90% threshold required for the delisting and reached only the 87.7% of the shares, mainly because First Eagle Investment Management decided not to tender its 7.7% stake. On April 12th 2011, 11 months later, the majority shareholder launched a second tender offer at a higher price—equal to €5.10 per share—at which First Eagle had agreed to tender his stake. With the adherence of First Eagle and some other minor shareholders the amount of shares held by the majority shareholder after the second tender offer reached 95.65%. Having

passed the 95% threshold, the majority shareholder squeezed-out the remaining minorities by paying them the same price (€5.10 per share) and took 100% of the company private.

5. Data, variable design and descriptive statistics

5.1. Sample data

Our sample comprises all tender offers launched by a controlling shareholder to delist their firm from the Italian Stock Exchange during the period July 1998 to December 2009. The choice of time period is motivated by the introduction of the Consolidated Law on Finance (*Testo Unico della Finanza*, TUF) on the 1st of July 1998.⁹ We define a firm having a controlling shareholder if the first shareholder owns more than 20% of voting rights, the typical threshold adopted in the ownership structure literature (La Porta *et al.*, 1999; Faccio and Lang, 2002). However, we also require that the stake owned by the first shareholder is more than the double than that owned by the second shareholder.¹⁰ We exclude from the sample financial companies (banks, insurances, financial services firms) because their tender offers are subject to the inspection and permission of external independent authorities, (e.g. Bank of Italy for banks and ISVAP (the Supervisory body for private insurance) for insurance companies), and hence subject to a special takeover regime (the Consolidated Law on Banking—*Testo Unico Bancario*, TUB).

⁹ See the Italian institutional background in section 2.

¹⁰ Since the quorum set for the extraordinary general meeting of Italian listed firms is equal to 2/3 of shareholders attending or represented at the meeting, the control of the extraordinary general meeting is shared with the second largest shareholder if she owns more than one half of the votes of the first shareholder.

The offering documents, which are mandatory and set forth the essential details of the deal,¹¹ were manually collected from the website of the Italian financial markets regulator (*Commissione Nazionale per le Società e la Borsa*, CONSOB).¹² As stated earlier, only tender offers explicitly intending to delist the target firm are included in our sample and a total of 63 industrial deals satisfy these conditions. Among them, 51 tender offers resulted in the actual delisting of the target firm's shares. In the remaining 12 instances, the 90% ownership threshold was not reached, the offer was not successful and the firm was not delisted. In spite of the limited number of observations, our dataset covers the universe of all tender offers launched by the controlling shareholder under the current legislation up to the end of year 2009. Table 1 details the characteristics of the transactions included in our sample by year of the tender offer.

[Please insert Table 1 here]

The average (median) value of the deals is about €253 (€80) million. With the exception of the year 2000 (when two large tender offers occurred, Aeroporti di Roma—the concessionaire for the operation of the Rome airport system—and Sondel—a hydro-electric energy utility), the size of the firms involved is rather small, as well as the percentage of equity capital subject to the tender offer. In relative terms, the number of successful delistings is larger during periods of economic downturn, with the peak reached in 2008 -

¹¹ Some offering documents were not downloadable from the CONSOB website. We gratefully acknowledge the help of Mediobanca Ricerche e Studi for providing them to us.

¹² The website is www.consob.it and the offering documents are available in the section *Emittenti | Documenti OPA*.

the midst of the global financial crisis. Table 2 provides further insights on the composition of our sample by industry of the target firm.

[Please insert Table 2 here]

The 63 firms included in our dataset are categorized according to the industry classification of the Italian Stock Exchange.¹³ The highest number of deals (14) involves firms belonging to the “Industrial goods and services” sector, whilst (and unsurprisingly) the largest average transaction value is in the “Utilities” sector (the second most important industry at the Italian Stock Exchange, after the financial sector).

5.2. Variables and descriptive statistics

We collect information on tender offers included in our sample from offering documents. The Italian financial markets regulator (CONSOB) details the standardized sections that an offering document has to contain.¹⁴ We also employ “Il Calepino dell’Azionista”, an annual publication by Mediobanca (the leading Italian investment bank), which provides brief reports on all companies listed on the Italian Stock Exchange. Table 3 details the characteristics of the variables used in this study.

¹³ The industry classification of Borsa Italiana includes the following 19 “supersectors”: Oil and gas, Chemicals, Basic resources, Construction and materials, Industrial goods and services, Automobiles and parts, Food and beverage, Personal and household goods, Healthcare, Retail, Media, Travel and leisure, Telecommunications, Utilities, Banks, Insurance, Real estate, Financial services, Technology.

¹⁴ CONSOB regulation no. 11971 of 14 May 1999, implementing the provisions on issuers of Legislative Decree 58 of February 24, 1998 (TUF).

[Please insert Table 3 here]

The first part of Table 3 describes the characteristics of the target firms. Accounting figures relate to the last available firm's accounts data prior to the tender offer announcement. In terms of size, measured by the natural logarithm of both total assets and sales, firms included in our sample are generally small and mid-cap, representative of the usual size of Italian listed firms. In terms of profitability, the average (median) return on assets (ROA) is 7.44% (7.39%), and there is a slight tendency for a lower operating profitability in the year prior to the tender offer is launched (the average change in ROA is -0.42%). Leverage ratio, measured as debt-to-total assets, is moderate (around 16% both in mean and median terms) and, so is the risk of financial distress (measured by the times interest earned). The number of shareholders refers to the general shareholders meeting immediately preceding the announcement of the offer. Target firms have their equity capital owned by about 4,700 different shareholders, in median. The second part of Table 3 reports some statistics on the deals. In particular, the average (median) equity capital subject to the offer is equal to 41.55% (43.43%), and this figure follows directly from the kind of deals we analyze (as we show below, the controlling shareholders owns approximately the remaining stake of the shares). In 30% of our sample firms (19 instances) there exist a public (i.e., explicit in the offering document) agreement between some (or all the) relevant

shareholders of the target company which commit them to transfer their shares at the beginning of the offering period.¹⁵

In 39 deals (62% of the total) the bidder explicitly warns target firm's shareholders of the offering entity's willingness to delist the target, even through a merger with a private company in case the tender offer is not successful. This private company can also be represented by a special vehicle created by the controlling shareholder of the target firm with the sole objective of launching the tender offer. Obviously, both of these dummy variables should be viewed as an incentive for the target firm's shareholders to tender their shares. Finally, 44% of the deals (28 instances) include a fairness opinion issued by a third party (usually, an investment bank) deeming the offer price to be fair and appropriate.

Table 3 also reports summary statistics of the offer premium and target firm's market performance prior to the tender offer. Both in average and median terms, the offer premium¹⁶ is a positive function of the length of the anticipation window. Relative to other studies on public-to-private transactions, the premium appears substantially lower (see, for instance, Weir *et al.*, 2008 who find a 30-day premium equal to about 45%, or Geranio and Zanotti, 2010, who report a 30-day premium of 21.2%). The firms' market performance is measured as the natural logarithm of the return in the time windows [-31; -60] and [-31; -90], and does not appear to be significantly different from zero.

The last section of Table 3 depicts the characteristics of our sample in terms of ownership structure of the target firms. The subject launching the tender offer has an

¹⁵ By "relevant" we mean that shareholders hold 2% or more of the target firm's equity capital. In fact, the law (TUF) requires that equity holdings equal or greater than 2% of a listed company have to be disclosed to the Italian market authority (CONSOB).

¹⁶ The premium paid by the bidder to the target firm's existing shareholders is computed as the natural logarithm of the ratio between the offer price and the market price of the share a number of trading days preceding the tender offer announcement (anticipation window).

average (median) stake in the target firm's equity capital—measured as percentage of voting capital—of 58% (56.6%). It is interesting to note that this figure is approximately equal to the 100%-complement of the portion of equity capital over which the offer is launched. The second most influential shareholder is an institutional investor, as defined in this study in 28 firms under analysis (44% of the sample). We include in this category banks, insurance companies, hedge funds, pension funds and mutual funds. Regardless of the equity stake, 30 firms have at least an institutional investor in their ownership structure and in 20 of them there is at least one *foreign* institutional investor. In terms of voting rights, when an institutional investor is present as second major shareholder, its average (median) stake of voting rights is 5.9% (4.3%).

Table 4 provides more details on the ownership structure of target firms, distinguishing between the domesticity of institutional investors (Italian vs. foreign investors).¹⁷ In particular, 15 firms have one institutional investor in their ownership structure with a shareholding about 1 percent, and one third of them is a foreign investor; nine firms have two institutional investors and thirteen (out of eighteen) are foreign institutions. Finally, few firms have more than two institutional investors, with a maximum of five (two instances). Notably, when one or more foreign institutional investors are present, they hold a considerable stake of the firm's voting rights. As it is clear from comparing columns 5 and 8 of Table 4, the average voting right per investor is generally higher when foreign investors are present.

¹⁷ Financial literature usually keeps hedge funds separate from other institutional investors. In our sample few hedge funds are present (8) and only 7 firms show hedge funds in their ownership structure. For that reason we decided not to take into account this distinction in our analysis.

[Please insert Table 4 here]

[Please insert Table 5 here]

Table 5 depicts the correlation matrix for the variables. Leaving structural correlations aside (e.g., the positive correlation between size and leverage, and size and number of shareholders, and the negative correlation between equity capital subject to the offer and stake of the controlling shareholder), it is worth mentioning the positive correlation between size and presence of institutional investors (as generally documented by the existing literature, e.g. Ferreira and Matos, 2008), the negative correlation between size and voting rights of foreign investors and the negative relation between the presence of institutional investors and the voting rights of the controlling shareholder (bidder).

These two last results are apparently counterintuitive. However, our sample is predominantly composed of small firms and reports only few mid-cap firms. It is therefore likely that, given the small size and the consequent lower level of liquidity, institutional investors prefer to take a substantial position in smaller firms. This allows them to exert their influence with a lower initial investment and in those firms whose floating stake is relatively larger, in order to avoid illiquidity problems in case of exit. This is *a fortiori* true from 1998, when the Consolidated Law on Finance came into effect, since it lowered the percentage of voting rights required to exercise some minority rights (e.g., 2 and 5 percent). It is reasonable to assume that, given the same monetary investment, institutional investors consider a significant stake in a small firm more valuable than a minor stake in a firm of bigger dimensions.

6. Results

This aim of this section is twofold: understanding the role of institutional investors in determining the likelihood of a voluntary delisting being successful, and disentangling the acquisition premium among its main components. In particular, we are interested in comprehending whether the presence of institutional holdings in the ownership structure affects the premium that the controlling shareholder is willing to offer to convince other shareholders to tender their shares. We conjecture that, in most cases, the controlling shareholder promotes voluntary delistings in order to gain pecuniary benefits from buying out minorities at a (temporarily) depressed stock price. Institutional investors, more skilled and informed than small shareholders and households, can oppose the plans of the controlling shareholder or, at least, make the acquisition more expensive, thus allowing minorities to share the gains from the delisting with the controlling shareholder.

[Please insert Table 6 here]

Table 6 shows the results of the first investigation: the likelihood of the voluntary delisting being successful. Model 1 does not include any of the variables related to the institutional holding, as the main goal is addressing the role of the structure of the offer. The presence of an agreement among shareholders to surrender their shares positively affects the chances of a successful offer. In fact, the agreement increases *de facto* the number of shares directly and indirectly in the hands of the bidder and reduces the percentages of shares to be bought. Quite surprisingly, the threat of merging the listed

company with another private does not seem to produce any effect, probably because investors do not consider it credible. As a matter of fact, if the 90% threshold is not reached, controlling shareholders rather prefer to launch a subsequent offer and take 100% of the company private rather than proceeding with the merger.

The presence of a fairness opinion does not impact on the probability of success of the offer. The probability of a successful delisting is positively associated—with a generally strong significance level—with the magnitude of the bid premium:¹⁸ everything else constant, the higher the premium offered, the more attractive the offer for current shareholders. This finding is not *per se* surprising as the main driver for a successful acquisition is the premium offered relative to the current share price. In this sense, for this type of investigation, the premium represents essentially a control variable. The number of shareholders is another important variable that determines the success of the transaction. The coefficient is negative and significant, suggesting that a more dispersed minority ownership makes it more arduous for the controlling shareholder to accumulate a position until the minimum threshold for the squeeze-out. Conversely, the percentage of equity capital under bid is not significant. These two findings combined suggest that the probability of a successful offer does not depend on the number of shares to be bought but rather on the number of subjects to be persuaded to tender their shares.

Across the different models, firm size has a positive and slightly significant coefficient indicating that tender offers launched on smaller firms have a lower probability to reach the 90% success threshold needed to take the company private. This is consistent with the

¹⁸ In this set of regressions we use a 30-day premium (where day 0 is the tender offer announcement date). However, as a robustness check, we have also used different type of pre-announcement premium window without any significant changes in the results.

reported significant and negative correlation coefficient between ownership by foreign institutional investors and firm size in our sample of small firms. Prior firm performance¹⁹ does not seem to influence the probability of the tender offer's success.

In subsequent models we introduce the role of institutional holdings, by examining the effect of the presence of institutional investors without any geographical specification (model 2) or, more explicitly, the role of foreign investors (model 3). These two models, comparable in terms of the other explanatory variables, show that institutional investors alone do not produce any effect, whilst the presence of foreign institutional investors makes the delisting threshold more unlikely to be reached. Similar evidence—but with a stronger statistical significance—emerges from the following logit models. Model 4 indicates, along with the insights emerged from previous regressions, that the higher the percentage of voting rights owned by institutional investors, the less likely the 90% threshold (required for the delisting) is overcome by the controlling shareholder.

Model 5 disentangles the effects of Italian and foreign institutional ownership and adds some robustness to the role played by the latter. In fact it shows that only greater holdings by foreign institutional investors reduces the probability of a successful delisting, and supports earlier research (Ferreira *et al.*, 2011; Aggarwal *et al.*, 2011), according to which the role of foreign institutional ownership is stronger than domestic, given the conflict of interests characterizing local investors.

In conclusion, the probability of a successful tender offer that leads to delisting is positively associated with the presence of an agreement among blockholders, the magnitude of the premium offered, a lower number of shareholders, and the firm's size (moderate

¹⁹ Here we use the 30 days performance before the premium window (from -31 to -60). Likewise, different and longer windows are not statistically significant.

effect). There is also a greater chance of success when the target firm has no foreign institutional holdings. In fact, we show that institutional investors—especially if foreign—make it harder for controlling shareholders to delist their firm. This result is consistent with our conjecture that controlling shareholders take firms dark to earn a pecuniary benefit deriving from buying out minorities at a price lower than the fair value of the shares (undervaluation hypothesis).

[Please insert Table 7 here]

We now investigate the determinants of the bid premium when a tender offer to delist is successful.²⁰ Since the controlling shareholder will have 100 percent ownership of the firm and not be able to extract any further private benefits at the expense of minority shareholders (since there aren't any), we conjecture that the potential gain from taking the firm private has to be substantial. However, since the bidder does not obtain the shares at the current price, but with an 11.86% average tender offer premium, the gain is somehow shared between the controlling and the minority shareholders, in line with what is found by Croci and Petmezas (2010) on their sample of increase-in-ownership transactions.

Ceteris paribus, the higher the bid premium, the larger the gain accruing to minority shareholders. We hypothesize that institutional investors, who are more skilled and informed than other retail investors, are better able to assess the fair value of a company

²⁰ Conversely to the logit analysis, we now consider only the sample of successful offers that resulted in the delisting of the company. We believe that including into the analysis unsuccessful offers would severely bias our results as an effect of the showed association between probability of success and premium size.

and, consequently, they will oppose any delisting plan that does not properly compensate for the value of the tendered shares. We also believe that the opposition is stronger and more effective if carried out by foreign institutions, since they should have fewer business ties with the controlling shareholder.

Table 7 reports the OLS estimates of the bid premium in the tender offer as a function of the following explanatory variables: firm characteristics (size, leverage, change in operating profits), stock price characteristics (past volatility and performance); the tender offer structure (fairness opinion, threat of a merger with a private company and presence of an agreement among shareholders to surrender their shares); ownership structure (ownership by the controlling shareholder, number of shareholders); and holdings by institutional investors (foreign and domestic). Deliberately, in the first model, we do not include institutional ownership variables so we can understand the role of the other determinants first. In subsequent models, we add different proxies of (foreign and domestic) institutional holdings in order to study the role of these types of investors in voluntary delistings promoted by the controlling shareholder.

The first model shows that several variables under consideration have little influence on the bid premium. In terms of firm characteristics, smaller firms generally require a smaller premium to be delisted. According to our hypothesis and earlier results, the absence of institutional ownership increases the likelihood of a successful bid and, correspondingly, lowers the premium needed to persuade other shareholder to tender their shares. No other firm characteristics have any significance.

Unlike some other studies (Lehn and Poulsen, 1989; Opler and Titman, 1993), leverage also has little importance. This finding does not surprise us as previous literature has mostly analyzed PTP transactions largely financed by debt. In that scenario, the tax shield

coming from the new debt was an important value driver. For our sample, this argument is not applicable since the controlling shareholders (through their power over management) could have increased firm leverage to benefit from the incremental tax shield without having to take the company private.

In terms of stock characteristics, whilst volatility does not influence the size of the premium, past price performance seems to be highly important. In fact, the poorer the share price performance before the tender offer, the more likely the controlling shareholder perceives it as undervalued and is willing to offer a higher premium to buy out minority shareholders.²¹

Quite surprisingly, we find no effects for the role of the offer's structure. We already showed that neither the presence of a fairness opinion nor the threat of a merger with an unlisted firm is able to influence the success of a voluntary delisting. We additionally find that both variables have no influence on the bid premium and although we provide evidence that the presence of a shareholder agreement increases the likelihood of a delisting, there appears to be no impact of this variable on the bid premium.

The last group of variables concerns the firm's ownership structure:²² the magnitude of the premium is negatively related to the equity capital under offer, whereas the number of shareholders is not significant. This may appear counterintuitive, since a larger equity stake under offer should make it harder to take the company private. However, it is also true that an offer for a large equity percentage makes the acquisition of minority

²¹ In these regressions we use performance from -60 to -31 days from the announcement (one-month window). We limit the window to -31 days, as we use for the dependent variable the 30-days premium. As a robustness check, we have also used different performance windows (3, 6 and 12 months). The effect of past performance is still present (but slightly weaker) for the 3-month window but tend to disappear for larger windows.

²² As we noted, model 1 does not consider the effect of institutional holdings.

shareholdings more expensive, unless the controlling shareholder offers a lower premium. Accordingly, the premium should be negatively associated with this variable.

Next, we incorporate the role of institutional ownership in determining the premium. By including institutional cumulative voting rights (model 2) we provide clear evidence of a positive association between premium size and institutional holdings. The positive coefficient indicates that, consistent with our hypothesis, the larger the stake owned by institutional investors, the higher the premium that the controlling shareholder is likely to offer. The same evidence is confirmed by the following model that replaces the cumulative institutional voting rights with the voting rights of the second largest shareholder, if they belong to a financial institution. The coefficient is still positive and strongly significant, suggesting that the presence of an influential institutional blockholder can have a strong effect on the size of the bid premium.

To conclude, we test whether the domesticity of the institutional investor has any effect on the bid premium. We previously showed that foreign funds are better able at impeding controlling owner initiated delisting attempts. We motivated the result recalling the fact that foreign institutions are more independent and less tied to the controlling shareholder. As a consequence, foreign shareholders are more likely to oppose any attempt to delist a company if they—and, as a result, the minority shareholders—are not fairly remunerated for the value of their shares. Accordingly, we expect foreign institutional shareholdings to have a positive impact on the bid premium.

From models 4 to 6 in Table 7, it seems evident that the cumulative voting rights for both domestic and foreign institutional investors have a positive effect on the premium. However, the stake owned by foreign investors is more significant. These findings suggest that although institutional investors can pressure the controlling shareholder to offer a

larger premium, foreign investors are even more successful in this type of activity, as illustrated in the Gewiss SpA case reported in Section 3.

7. Conclusions

To our knowledge this is the first study which provides evidence on the size of premium paid for voluntary delisting offers promoted by the controlling shareholder. Our analysis is based on a manually collected sample of tender offer prospectuses, which allows us to investigate new explanatory variables never considered up to now. These are a) the threat of a merger with an unlisted company (in the event of an unsuccessful offer); b) the presence of an agreement among shareholders to surrender their shares to the controlling shareholder; and c) a fairness opinion offered by an independent entity.

In this paper we find evidence of a new role played by institutional investors in tender offers launched by the controlling shareholder with the express aim to take the firm private. Our study is based on an Italian sample of tender offers, which is an ideal framework of analysis since research to date has focused on environments where shareholders normally have low ownership stakes. In Italy—like across all continental Europe—listed companies are usually taken private by controlling shareholders through tender offers with a regulatory freeze-out on minority shareholders. The presence of institutional investors in the target firm's ownership structure both reduces the likelihood of the firm being taken private and helps minorities receive a higher premium. These effects are more significant when investors are foreign institutions, most probably because they have less conflicts of interest with the controlling shareholder.

References

Admati, A.R., Pleiderer, P. and J. Zechner, 1994, Large shareholder activism, risk sharing, and financial market equilibrium, *Journal of Political Economy* 102, 1097-1130.

Aggarwal, R., Erel, I., Ferreira M.A. and P.P. Matos, 2011, Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics* 100, 154-181.

Almeida, H., Park, S.Y., Subrahmanyam, M.G., and D. Wolfenzon, 2011, The structure and formation of business groups: Evidence from Korean chaebols, *Journal of Financial Economics* 99, 447-475.

Andres, C., Betzer, A. and C. Weir, 2007, Shareholder wealth gains through better corporate governance—The case of European LBO-transactions. *Financial Markets and Portfolio Management* 21, 403-424.

Badrinath, S.G., Kale, J.R. and H.E. Ryan, 1996, Characteristics of Common Stock Holdings of Insurance Companies, *Journal of Risk and Insurance* 63, 49-76.

Bebchuk, L.A., 2007, The Myth of the Shareholder Franchise, *Virginia Law Review* 93, 675-732.

Bigelli, M. and S. Mengoli, 2011, Self-Expropriation Versus Self-Interest in Dual-Class Voting. *Financial Management* 40, 677-699.

Black, B.S., 1998, Shareholder Activism and Corporate Governance in the United States, *The New Palgrave Dictionary of Economics and the Law* 3, 459-465.

Brav, A., Jiang, W., Partnoy, F. and R. Thomas., 2008, Hedge Fund Activism, Corporate Governance, and Firm Performance, *Journal of Finance* 63, 1729-1775.

Brennan, M.J., Cheng, X. and F. Li, 2011, Agency and Institutional Investment, *European Financial Management* 18, 1-27.

Chung, K.H. and H. Zhang, 2011, Corporate Governance and Institutional Ownership. *Journal of Financial and Quantitative Analysis* 46, 247-273.

Clifford, C.P., 2008, Value creation or destruction? Hedge funds as shareholder activists, *Journal of Corporate Finance* 14, 323-336.

Croci, E. and A. Del Giudice, *Forthcoming*, Ownership, Family Control, LBOs, and Country Effects: An Analysis of European Going-Private Transactions, *European Financial Management*.

Croci, E. and D. Petmezas, 2010, Minority shareholders' wealth effect and stock market development: Evidence from increase-in-ownership M&As, *Journal of Banking and Finance* 34, 681-694.

Davis, G.F. and E.H. Kim, 2007, Business ties and proxy voting by mutual funds, *Journal of Financial Economics* 85, 552-570.

Faccio, M. and L.H.P. Lang, 2002, The ultimate ownership of Western European corporations, *Journal of Financial Economics* 65, 365-395.

Ferreira, M.A., Massa, M. and P. Matos, 2010, Shareholders at the Gate? Institutional Investors and Cross-Border Mergers and Acquisitions, *Review of Financial Studies* 23, 601-644.

Ferreira, M.A. and P. Matos, 2008, The colors of investors' money: The role of institutional investors around the world, *Journal of Financial Economics* 88, 499-533.

Friedman, B.M., 1996, Economic Implications of Changing Share Ownership, *Journal of Portfolio Management* 22, 59-70.

Geranio, M. and G. Zanotti, *Forthcoming*, Equity Markets Do Not Fit All: an Analysis of Public-to-Private Deals in Continental Europe, *European Financial Management*.

Gompers, P.A. and A. Metrick, 2011, Institutional Investors and Equity Prices, *Quarterly Journal of Economics* 116, 229-259.

Greenwood, R. and M. Schor, 2009, Investor activism and takeovers, *Journal of Financial Economics* 92, 362-375.

Grossman, S.J. and O.D. Hart, 1980, Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation, *Bell Journal of Economics* 11, 42-64.

Halpern, P., Kieschnick, R. and W. Rotenberg, 1999, On the heterogeneity of leveraged going private transactions, *Review of Financial Studies* 12(2), 281 -309.

Huang, J., 2010, Dynamic Liquidity Preferences of Mutual Funds, *SSRN working paper*, available at: <http://ssrn.com/paper=967553>.

Jensen, M.C., 1986, Agency costs of free cash flow, corporate finance and takeovers, *American Economic Review* 76, 323-329.

Kaplan, S.N., 1989a, The effects of management buyouts on operating performance and value, *Journal of Financial Economics* 24, 217-254.

Kaplan, S.N., 1989b, Management buyouts: evidence on taxes as a source of value, *Journal of Finance* 44, 611- 632.

Karpoff, J.M., 2001, The Impact of Shareholder Activism on Target Companies: A Survey of Empirical Findings, *SSRN working paper*, available at: <http://ssrn.com/paper=885365>.

Klein, A. and E. Zur, 2009, Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors, *Journal of Finance* 64, 187-229.

La Porta, R., Lopez-de-Silanes, F., and A. Shleifer, 1999. Corporate ownership around the world, *Journal of Finance* 54, 471-517.

Lehn, K. and A. Poulsen, 1989, Free Cash Flow and Stockholder Gains in Going Private Transactions, *Journal of Finance* 44, 771-787.

Lowenstein, L., 1985, Management buyouts, *Columbia Law Review* 85, 730-784.

Masulis, R.W., Wang, C. and F. Xie, 2009, Agency Problems at Dual-Class Companies, *Journal of Finance* 64, 1697-1727.

Maug, E., 1998, Large shareholders as monitors: is there a trade-off between liquidity and control?, *Journal of Finance* 53, 65-98.

McCahery, J.A., Starks, L.T. and Z. Sautner, 2010, Behind the Scenes: The Corporate Governance Preferences of Institutional Investors, *SSRN working paper*, available at: <http://ssrn.com/paper=1571046>.

Opler, T. and S. Titman, 1993, The Determinants of Leveraged Buyout Activity: Free Cash Flow vs. Financial Distress Costs, *Journal of Finance* 48, 1985-1999.

Parrino, R., Sias, R.W. and L.T. Starks, 2003, Voting with their feet: institutional ownership changes around forced CEO turnover, *Journal of Financial Economics* 68, 3-46.

Renneboog, L., Simons, T. and M. Wright, 2007, Why do public firms go private in the UK? The impact of private equity investors, incentive realignment and undervaluation, *Journal of Corporate Finance* 13, 591-628.

Romano, R., 2000, Less Is More: Making Shareholder Activism A Valued Mechanism Of Corporate Governance, *Yale Law & Economics Research Paper* 241, available at: <http://ssrn.com/paper=218650>.

Shleifer, A. and R.W. Vishny, 1986, Large Shareholders and Corporate Control, *Journal of Political Economy* 94, 461-488.

Smith, M.P., 1996, Shareholder Activism by Institutional Investors: Evidence for CalPERS, *Journal of Finance* 51, 227-52.

Thomsen, S. and F. Vinten, 2007, Delistings in Europe and the Costs of Governance, *SSRN working paper*, available at: <http://ssrn.com/paper=986603>.

Weir, C., Laing, D. and M. Wright, 2005, Undervaluation, private information, agency costs and the decision to go private, *Applied Financial Economics* 15, 947-961.

Weir, C., Laing, D. and M. Wright, 2005, Incentive Effects, Monitoring Mechanisms and the Market for Corporate Control: An Analysis of the Factors Affecting Public to Private Transactions in the UK, *Journal of Business Finance & Accounting* 32, 909-943.

Table 1 – *Tender offers aimed at delisting by year*. The table reports the number and the value (mean, median and total value, € million) of Italian tender offers (successful and unsuccessful) aimed at delisting in the period July 1998 to December 2009 by year.

Year	N	MEAN VALUE	MEDIAN VALUE	TOTAL VALUE
1998	1	12.97	12.97	12.97
1999	4	66.07	79.02	264.27
2000	8	792.31	407.03	6,338.47
2001	4	103.34	76.05	413.35
2002	7	604.86	242.74	4,234.02
2003	6	71.34	49.91	428.06
2004	6	90.75	26.27	544.51
2005	4	101.95	72.94	407.81
2006	2	45.11	45.11	90.22
2007	6	186.02	101.30	1,116.11
2008	12	165.30	128.30	1,983.63
2009	3	44.74	45.66	134.23
Total	63	253.45	79.78	15,967.65

Table 2 – *Tender offers aimed at delisting by sector of the target firm*. The table reports the number and the value (mean, median and total value, € million) of Italian tender offers aimed at delisting in the period July 1998 to December 2009 by sector of the target firm. Super-sectors classification by Borsa Italiana, the Italian Stock Exchange, has been used.

Sector	N	MEAN VALUE	MEDIAN VALUE	TOTAL VALUE
Chemicals	5	822.76	272.70	4,113.80
Basic resources	1	97.69	97.69	97.69
Construction and materials	1	356.99	356.99	356.99
Industrial goods and services	14	152.45	56.45	2,134.31
Automobiles and parts	5	202.57	228.74	1,012.85
Food and beverage	1	128.86	128.86	128.86
Personal and household goods	11	160.87	117.78	1,769.56
Healthcare	1	242.74	242.74	242.74
Retail	1	580.61	580.61	580.61
Travel and leisure	7	82.47	58.76	577.31
Telecommunications	4	75.40	27.20	301.59
Utilities	5	839.58	515.87	4,197.91
Real estate	3	97.16	45.66	291.47
Technology	4	40.49	37.36	161.96
Total	63	253.45	79.78	15,967.65

Table 3 – Descriptive statistics of variables. The table reports descriptive statistics for the sample of 63 Italian tender offers aimed at delisting in the period July 1998 to December 2009. All balance sheet variables refer to the last balance sheet approved before the tender offer announcement. *Log total assets* and *log sales* represent the natural logarithm of the total assets and sales, respectively; *time interest earned* is the ratio between EBIT and interest expenses; *leverage* is the ratio between net financial position and total assets (net of cash); *ROA* is measured as the ratio between EBIT and total assets; *change in ROA* is the difference between ROA the year before the tender offer announcement and ROA one year ahead; *volatility* is the annualized 250-day standard deviation of target stock log-returns; *number of stockholders* is the number of stockholders present at the target company general shareholders meeting preceding the tender offer announcement; *equity capital tender offer* is the percentage of voting capital subject to tender offer; *dummy agreement* is a binary variable taking 1 if the tender offer prospectus mentions an agreement between shareholders to surrender their shares to the offeror; *dummy fairness* is a binary variable taking 1 if the tender offer price fairness is stated by an external entity; *dummy merger* is a binary variable taking 1 if the tender offer prospectus indicates the offeror willingness to merge the target company with a private firm in case the delisting threshold (90% of the voting capital) is not reached; *x-day premium* is the natural logarithm of the ratio between the tender offer price and the market price of the stock x trading days ahead the tender offer announcement, where $x = 1, 5, 30, 90, 360$; *performance [-31; -60]* and *performance [-31; -90]* are the natural logarithm of the return in the time windows [-31; -60] and [-31; -90] relative to the tender offer announcement, respectively; voting right bidder is the percentage voting right in the hands of the offeror; *dummy 2nd shareholder is institutional* is a binary variable taking 1 if the second shareholder is an institutional investor; *dummy institutional investors* is a binary variable taking 1 if the target firm ownership structure includes institutional investors; *dummy foreign institutional investors* is a binary variable taking 1 if the target firm ownership structure includes foreign institutional investors; *voting rights 2nd shareholder institutional*, *voting rights institutional investors* and *voting rights foreign institutional investors* represent the percentage voting rights of the second shareholder if institutional, of institutional investors (cumulative) and of foreign institutional investors only, respectively. *, **, *** denote statistical significance (t-test for zero mean) at 10%, 5% and 1% level, respectively.

VARIABLE	N	MEAN	ST DEV	Q1	MEDIAN	Q3
Log total assets	61	12.85	1.249	12.07	12.92	13.54
Log sales	61	12.51	1.297	11.67	12.36	13.24
Times interest earned	56	8.89	14.04	1.80	4.86	10.07
Leverage (debt-to-total assets) (%)	61	15.88	25.53	1.95	16.17	33.83
Return on assets (ROA) (%)	60	7.44	6.16	3.54	7.39	11.42
Change in ROA (%)	60	-0.42	7.37	-2.25	0.19	1.90
Volatility (%)	59	33.40	11.02	26.13	32.58	38.39
Number of shareholders	49	11,528.5	21,941.7	1,611.0	4,682.0	11,534.0
Equity capital tender offer (%)	63	41.55	17.91	27.82	43.43	50.02
Dummy agreement	63	0.30	0.46	.	.	.
Dummy fairness	63	0.44	0.50	.	.	.
Dummy merger	63	0.62	0.49	.	.	.
1-day premium (%)	62	4.85*	23.16	1.07	5.76	14.07
5-day premium (%)	62	7.63***	24.34	2.35	9.32	18.45
30-day premium (%)	62	11.86***	26.33	4.71	14.99	23.21
90-day premium (%)	60	13.34***	27.04	1.62	17.07	28.50
360-day premium (%)	57	16.99***	40.93	-10.95	19.66	44.63
Performance [-31; -60] (%)	60	-0.20	11.88	-6.80	1.29	6.75
Performance [-31; -90] (%)	60	0.79	16.20	-6.92	2.09	9.67
Voting rights bidder (%)	63	58.06	17.93	48.30	56.57	71.56
Dummy 2 nd shareholder is institutional	63	0.44	0.50	.	.	.
Dummy institutional investors	63	0.48	0.50	.	.	.
Dummy foreign institutional investors	63	0.32	0.47	.	.	.
Voting rights 2 nd shareholder institutional (%)	28	5.91	4.58	2.41	4.25	7.88
Voting rights institutional investors (%)	30	8.38	7.32	2.64	6.26	13.11
Voting rights foreign institutional investors (%)	20	8.69	5.84	4.01	8.23	11.28

Table 4 – *Presence of institutional investors in the target firm ownership structure.* The table reports the number of target firms having x institutional investors in their ownership structure, with $x = 0, 1, \dots, 5$, distinguishing between Italian (domestic) *vs.* Foreign institutional investors, along with their average cumulative voting rights per firm and average voting right per single institutional investor. Only blockholders retaining a minimum stake of 2% in the target firms are included, as 2% is the minimum threshold above which shareholders are compelled to disclose their stake in the company.

Total no. of institutional investors	No. of firms	DOMESTIC INVESTORS			FOREIGN INVESTORS		
		No. of investors	Avg. cumul. VR per firm (%)	Avg. VR per investor (%)	No. of investors	Avg. cumul. VR per firm (%)	Avg. VR per investor (%)
0	33
1	15	10	4.11	4.11	5	5.83	5.83
2	9	5	3.24	3.24	13	6.93	4.80
3	2	2	8.26	4.13	4	5.69	2.84
4	2	0	.	.	8	13.14	3.28
5	2	5	8.04	3.22	5	20.29	8.12

Table 5 – Correlation matrix of variables. The table reports the correlation coefficients between variables employed in the analysis. *Log total assets* and *log sales* represent the natural logarithm of the total assets and sales, respectively; *leverage* is the ratio between net financial position and total assets (net of cash); *change in ROA* is the difference between ROA the year before the tender offer announcement and ROA one year ahead; *volatility* is the annualized 250-day standard deviation of target stock log-returns; *number of stockholders* is the number of stockholders present at the target company general shareholders meeting preceding the tender offer announcement; *equity capital under tender offer* is the percentage of voting capital subject to tender offer; *dummy agreement* is a binary variable taking 1 if the tender offer prospectus mentions an agreement between shareholders to surrender their shares to the offeror; *dummy fairness* is a binary variable taking 1 if the tender offer price fairness is stated by an external entity; *dummy merger* is a binary variable taking 1 if the tender offer prospectus indicates the offeror willingness to merge the target company with a private firm in case the delisting threshold (90% of the voting capital) is not reached; *30-day premium* is the natural logarithm of the ratio between the tender offer price and the market price of the stock 30 trading days ahead the tender offer announcement; *performance [-31; -60]* and *performance [-31; -90]* are the natural logarithm of the return in the time windows [-31; -60] and [-31; -90] relative to the tender offer announcement, respectively; *voting right bidder* is the percentage voting right in the hands of the offeror; *dummy institutional investors* is a binary variable taking 1 if the target firm ownership structure includes institutional investors; *dummy foreign institutional investors* is a binary variable taking 1 if the target firm ownership structure includes foreign institutional investors; *voting rights institutional investors*, *voting rights foreign institutional investors*, *voting rights 2nd shareholder institutional* represent the percentage voting rights of institutional investors (cumulative), of foreign institutional investors only and of the second shareholder if institutional, respectively. *, **, *** denote statistical significance at 10%, 5% and 1% level, respectively.

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	#17	#18	#19	
#1 Log total assets	1.00																			
#2 Log sales	0.89 ***	1.00																		
#3 Leverage (debt-to-total assets)	0.34 ***	0.22 *	1.00																	
#4 Change in ROA	-0.03	-0.02	0.21	1.00																
#5 Volatility	0.03	-0.06	0.10	0.19	1.00															
#6 Number of shareholders	0.55 ***	0.51 ***	-0.14	-0.12	0.08	1.00														
#7 Equity capital under tender offer	0.11	0.12	-0.06	-0.07	0.00	0.21	1.00													
#8 Dummy agreement	0.01	0.03	0.05	-0.12	-0.04	-0.05	0.00	1.00												
#9 Dummy fairness	0.09	0.12	0.02	0.04	-0.03	0.19	0.03	0.18	1.00											
#10 Dummy merger	0.18	0.26 **	0.02	-0.28 **	-0.24 *	0.19	-0.04	0.16	0.18	1.00										
#11 30-day premium	0.15	0.27 **	0.11	0.24 *	-0.03	0.20	-0.19	-0.12	0.11	0.18	1.00									
#12 Performance [-31; -60]	-0.16	-0.12	0.04	-0.04	0.09	0.05	0.06	-0.01	0.11	-0.20	-0.25 **	1.00								
#13 Performance [-31; -90]	-0.09	-0.06	-0.06	-0.22 *	-0.21 *	0.15	0.10	0.10	0.11	0.09	-0.26 **	0.69 ***	1.00							
#14 Voting rights bidder	-0.12	-0.14	0.05	0.07	0.00	-0.21	-0.99 ***	-0.01	-0.03	0.02	0.20	-0.05	-0.10	1.00						
#15 Dummy institutional investors	0.09	0.24 *	-0.03	0.06	-0.02	0.19	0.34 ***	-0.07	0.17	0.29 **	0.23 *	-0.10	-0.18	-0.32 ***	1.00					
#16 Dummy foreign institutional investors	0.31 *	0.26	0.41 **	0.16	-0.17	-0.06	0.28	-0.05	-0.09	-0.06	-0.07	0.21	0.34 *	-0.28	.	1.00				
#17 Voting rights institutional investors	-0.25	-0.22	0.06	0.04	-0.03	-0.29	0.34 *	0.06	0.03	-0.11	0.34 *	0.08	0.15	-0.34 *	.	0.42 **	1.00			
#18 Voting rights foreign institutional investors	-0.52 **	-0.45 **	-0.17	0.11	0.04	-0.61 **	0.11	-0.03	0.08	-0.06	0.43 *	-0.20	-0.14	-0.10	.	.	0.95 ***	1.00		
#19 Voting rights 2nd shareholder institutional	-0.32 *	-0.27	-0.03	0.11	0.07	-0.38 *	0.23	0.29	-0.08	-0.06	0.34 *	-0.01	0.05	-0.23	.	0.25	0.87 ***	0.83 ***	1.00	

Table 6 – *Likelihood of delisting as a function of explicative variables.* The table reports the results of a logit regression where the dependent variable is a binary variable taking 1 if the tender offer aimed at delisting is successful (i.e., resulted in the delisting of the target firm). *Log sales* represents the natural logarithm of the sales; *leverage* is the ratio between net financial position and total assets (net of cash); *change in ROA* is the difference between ROA the year before the tender offer announcement and ROA one year ahead; *volatility* is the annualized 250-day standard deviation of target stock log-returns; *number of stockholders* is the number of stockholders present at the target company general shareholders meeting preceding the tender offer announcement; *equity capital under tender offer* is the percentage of voting capital subject to the tender offer; *dummy agreement* is a binary variable taking 1 if the tender offer prospectus mentions an agreement between shareholders to surrender their shares to the offeror; *dummy fairness* is a binary variable taking 1 if the tender offer price fairness is stated by an external entity; *dummy merger* is a binary variable taking 1 if the tender offer prospectus indicates the offeror willingness to merge the target company with a private firm in case the delisting threshold (90% of the voting capital) is not reached; *30-day premium* is the natural logarithm of the ratio between the tender offer price and the market price of the stock 30 trading days ahead the tender offer announcement; *performance [-31; -60]* and *performance [-31; -90]* are the natural logarithm of the return in the time windows [-31; -60] and [-31; -90] relative to the tender offer announcement, respectively; *voting right bidder* is the percentage voting right in the hands of the offeror; *dummy institutional investors* is a binary variable taking 1 if the target firm ownership structure includes institutional investors; *voting rights institutional investors*, *voting rights foreign institutional investors*, *voting rights domestic institutional investors*, *voting rights 2nd shareholder institutional* represent the percentage voting rights of institutional investors (cumulative), of foreign institutional investors only, of domestic institutional investors only and of the second shareholder if institutional, respectively. Standard errors are depicted in parentheses. *, **, *** denote statistical significance at 10%, 5% and 1% level, respectively.

VARIABLES	(1) Model	(2) Model	(3) Model	(4) Model	(5) Model
Dummy institutional investors		-1.85 (1.309)			
Dummy foreign institutional investors			-2.95* (1.566)		
Voting rights institutional investors				-21.14** (10.366)	
Voting rights foreign institutional investors					-97.01* (56.806)
Voting rights domestic institutional investors					218.98* (124.616)
Log number of shareholders	-1.58* (0.824)	-1.72** (0.876)	-1.74** (0.810)	-2.32** (0.995)	-4.92* (2.520)
Dummy agreement	5.86** (2.443)	2.24 (2.197)	2.29 (1.846)	3.85*** (1.462)	7.98** (3.102)
Dummy fairness	0.02 (0.955)				-0.22 (1.844)
Dummy merger	-1.32 (1.606)				-1.53 (1.909)
30-day premium	7.49* (4.124)	5.48* (2.808)	5.07** (2.493)	6.30*** (2.122)	11.90*** (4.502)
Performance [-31; -60]	-4.51 (5.161)			-6.35 (7.169)	-18.21 (11.663)
Performance [-31; -90]		-1.50 (6.188)	1.45 (6.226)		
Voting rights bidder		9.13 (6.730)	7.16 (6.621)		
Equity capital under tender offer	-3.38 (3.313)				
Log sales	0.84 (0.527)	1.34 (0.852)	1.58* (0.825)	1.63* (0.839)	1.68* (0.866)
Leverage (debt-to-total assets)	-1.74 (3.127)	0.49 (2.907)	1.43 (3.125)	-1.91 (3.008)	
Change in ROA		-18.05 (16.570)	-12.22 (16.109)	-2.18 (7.505)	
Constant	6.75 (6.482)	-4.07 (7.414)	-5.79 (7.193)	2.46 (4.131)	27.02 (17.005)
Observations	47	46	46	46	47
Pseudo R-squared	0.47	0.54	0.57	0.51	0.60

Table 7 – Regression analysis of the tender offer premium as a function of explicative variables. The table reports the results of an OLS regression where the dependent variable is the 30-day tender offer premium, i.e. the natural logarithm of the ratio between the tender offer price and the market price of the stock 30 trading days prior to the tender offer announcement. *Log sales* represents the natural logarithm of the sales; *leverage* is the ratio between net financial position and total assets (net of cash); *change in ROA* is the difference between ROA the year before the tender offer announcement and ROA one year ahead; *volatility* is the annualized 250-day standard deviation of target stock log-returns; *number of stockholders* is the number of stockholders present at the target company general shareholders meeting preceding the tender offer announcement; *equity capital under tender offer* is the percentage of voting capital subject to the tender offer; *dummy agreement* is a binary variable taking 1 if the tender offer prospectus mentions an agreement between shareholders to surrender their shares to the offeror; *dummy fairness* is a binary variable taking 1 if the tender offer price fairness is stated by an external entity; *dummy merger* is a binary variable taking 1 if the tender offer prospectus indicates the offeror willingness to merge the target company with a private firm in case the delisting threshold (90% of the voting capital) is not reached; *30-day premium* is the natural logarithm of the ratio between the tender offer price and the market price of the stock 30 trading days ahead the tender offer announcement; *performance [-31; -60]* and *performance [-31; -90]* are the natural logarithm of the return in the time windows [-31; -60] and [-31; -90] relative to the tender offer announcement, respectively; *voting right bidder* is the percentage voting right in the hands of the offeror; *dummy institutional investors* is a binary variable taking 1 if the target firm ownership structure includes institutional investors; *voting rights institutional investors*, *voting rights foreign institutional investors*, *voting rights domestic institutional investors*, *voting rights 2nd shareholder institutional* represent the percentage voting rights of institutional investors (cumulative), of foreign institutional investors only, of domestic institutional investors only and of the second shareholder if institutional, respectively. Heteroscedasticity robust standard errors are depicted in parentheses. *, **, *** denote statistical significance at 10%, 5% and 1% level, respectively.

VARIABLES	(1) Model	(2) Model	(3) Model	(4) Model	(5) Model	(6) Model
Voting rights 2nd shareholder institutional			1.50*** (0.512)			
Voting rights institutional investors		1.01*** (0.339)				
Voting rights foreign institutional investors				0.93*** (0.313)	1.06** (0.505)	
Voting rights domestic institutional investors				1.53** (0.593)		1.81* (0.919)
Log number of shareholders	0.02 (0.012)					
Dummy agreement	-0.01 (0.030)	0.01 (0.029)	-0.00 (0.028)	0.02 (0.035)	0.02 (0.033)	-0.00 (0.029)
Dummy fairness	0.01 (0.026)	-0.01 (0.029)	-0.01 (0.029)	-0.03 (0.033)	-0.02 (0.029)	-0.02 (0.030)
Dummy merger	0.05 (0.035)	-0.01 (0.031)	-0.01 (0.033)	-0.01 (0.035)	-0.01 (0.036)	0.01 (0.036)
Performance [-31; -60]	-0.42*** (0.119)	-0.45*** (0.117)	-0.41*** (0.106)	-0.56*** (0.141)	-0.52*** (0.125)	-0.54*** (0.127)
Voting rights bidder		0.20* (0.119)	0.15 (0.105)			
Equity capital under tender offer	-0.21* (0.115)			-0.25** (0.104)	-0.16 (0.132)	-0.14 (0.120)
Log sales	0.04*** (0.013)	0.03** (0.011)	0.03** (0.011)	0.03** (0.015)	0.02 (0.013)	0.03** (0.014)
Leverage (debt-to-total assets)	-0.04 (0.099)					
Change in ROA	-0.05 (0.196)			-0.28 (0.295)	-0.35 (0.220)	-0.12 (0.224)
Volatility	0.13 (0.156)			0.10 (0.151)	0.16 (0.171)	0.10 (0.184)
Constant	-0.47*** (0.125)	-0.35* (0.185)	-0.33* (0.189)	-0.23 (0.181)	-0.13 (0.163)	-0.25 (0.172)
Observations	38	50	50	49	49	49
Adj. R-squared	0.35	0.32	0.31	0.35	0.26	0.22