SHAREHOLDER WEALTH CREATION IN RESPONSE TO ANNOUNCEMENTS OF ACQUISITIONS OF UNLISTED FIRMS: EVIDENCE FROM SPAIN

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Abstract

We investigate shareholder value creation of Spanish listed firms in response to announcements of acquisitions of unlisted companies and compare this experience to the purchase of listed firms over the period 1991–2006. Similar to foreign markets, acquirers of listed targets earn insignificant average abnormal returns, whereas acquirers of unlisted targets gain significant positive average abnormal returns. When we relate these results to company and transaction characteristics our findings diverge from those reported in the literature for other foreign markets, as our evidence suggests that the listing status effect is mainly associated with the fact that unlisted firms tend to be smaller and lesser–known firms, and thus suffer from a lack of competition in the market for corporate control. Consequently, the payment of lower premiums and the possibility of diversifying shareholders' portfolios lead to unlisted firm acquisitions being viewed as value–orientated transactions.

Keywords: acquisition of unlisted firms, Spanish market, event–study.

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1. INTRODUCTION

Any textbook on corporate finance teaches that the main (only) objective of managers is to make decisions that maximize firm's value, increasing, as a result, its shareholders' wealth. One of the major managerial decisions is to acquire a firm. However, since the seminal paper of Jensen and Ruback (1983), financial literature has mainly focused on the target shareholder wealth creation of listed firms when studying the market for corporate control. Evidence has generally suggested that the announcement of a takeover bid generates positive gains (that is, economically and statistically significant positive abnormal returns) to these shareholders. On the contrary, financial literature has paid less attention to the acquirer's shareholder wealth reaction to the announcement of a takeover bid. In this case, evidence shows that the bidding firm's shareholders earn, on average, a zero abnormal return at the acquisition's announcement.[1] Therefore, if bidder returns are not positive, why do firms make acquisitions? Fuller *et al*. (2002) discuss some possible explanations. They note that (i) zero returns to bidders would be consistent with a competitive corporate control market in which firms earn "normal" returns in their operations; (ii) the uncertain outcome of the event could make it difficult to isolate the market's perception of the offer; (iii) the stock price reaction to an acquisition may only represent the surprise component of the acquisition; and (iv) even good acquisitions might have little impact on the bidder's stock price if targets are small relative to the bidder. In addition, previous research has documented that bidder's abnormal returns are related to a number of factors such as the mode of payment [Travlos (1987)] or the diversification into new industries and foreign countries [Doukas and Travlos (1988)].

Nevertheless, many of these conclusions were based on listed firms, while acquisitions involving privately held companies represent an important segment of the

[1] Though there is a tremendous variation in these returns.

whole market for corporate control.[2] Recent studies on mergers and acquisitions that explicitly split their samples into publicly and privately held target companies show this pattern. For instance, Moeller *et al*. (2004) use a sample that contains all completed U.S. mergers and acquisitions between 1980 and 2001 (12,023 acquisitions) where 2,642 were publicly held targets and 5,583 were privately traded targets;[3] Petmezas (2009) examines a sample of 2,973 domestic acquisitions by UK public companies over the period from 1984 to 2003, in which listed target firms represented 242 companies and unlisted target firms were 2,731; and Faccio *et al*. (2006) employ a sample of 4,429 acquisitions over the period 1996 to 2001 by companies incorporated in 17 Western European countries where 735 of the targets were listed on an exchange and 3,694 were unlisted companies.

Aforementioned papers and other studies [Chang (1998), Ang and Kohers (2001) and Fuller *et al*. (2002) for the US market; Draper and Paudyal (2006) for the UK market; Martynova and Renneboog (2011) for 28 European countries] document significant positive abnormal announcement returns to acquirers of unlisted targets, whereas results for buyers of listed companies are mixed (either zero or significant negative abnormal announcement returns). Acquirers of private targets gain irrespective of the mode of payment (cash, shares or mixed) and the size of the bidder –or the relative size of the target compared to the acquirer. In contrast, abnormal returns for buyers of listed firms depend on the mode of payment and size, meaning the higher the relative target size (the larger acquirer size) paying with shares, the greater the loss.

Thus the study of privately held company acquisitions is of interest not only because of the volume of operations in which they are involved, but also because they exhibit different characteristics from listed targets. For example, liquidity, ownership structure, information asymmetry and bargaining power make differences between both groups of firms that suggest the need for a separate analysis.[4]

Previous research on acquirer's abnormal returns in the Spanish market is scarce and shows that acquirer's shareholders gain an insignificant abnormal return on the

[2] Note that listed/unlisted, public/private and publicly held/privately held companies are used as interchangeable terms.
[3] Moeller *et al*. (2004) classified 3,799 acquisitions as subsidiary targets.
[4] In section 3 we further discuss these differential characteristics.

acquisition's announcement date.[5] Nevertheless, these studies perform their analyses on samples of listed bidder and target firms and unrestricted stake bids.

This is the first study on the Spanish market that investigates shareholder value creation for Spanish listed firms to the acquisition announcement of unlisted companies and compares this experience to the bid for listed firms.[6] The lack of research on acquisitions of private companies raises the question of whether previous evidence in the Spanish market holds true for purchases of private firms. Moreover, we control for a variety of firm and transaction characteristics, namely method of payment, buyer's size, relative size of the target and industry and geographical diversification. We also examine robustness of our results by estimating excess returns through the CAPM and the three–factor model developed by Fama and French (1993). In addition, we employ parametric and non parametric tests of abnormal returns.

Our results regarding the listing status of the target firm are similar to other studies in foreign markets as we find that acquirers of listed targets earn insignificant average abnormal returns, whereas purchasers of unlisted targets gain significant positive average abnormal returns regardless of the pricing model used in the estimation procedure. However, when we relate these results to firm and transaction characteristics our results diverge from those reported in the literature for other foreign markets. Hence, our evidence suggests that the listing status phenomenon is mainly associated with the fact that unlisted companies tend to be smaller and lesser–known firms, and thus suffer from a lack of competition in the market for corporate control. As a result, the payment of lower premiums and the possibility of diversifying shareholders' portfolios lead to unlisted firm acquisitions being viewed as value–orientated transactions.

Although researchers have made much effort in performing multi–country studies (in particular in Europe), in our opinion studies for individual countries are necessary. As we state above, some of the evidence from Spain is not consistent with

[5] See García and Ferrando (1992), Fernández and García (1995), Fernández and Gómez–Ansón (1999) and de Miguel *et al*. (2003).

[6] Note that in our analysis, the terms bidder, acquirer, purchaser and buyer are used interchangeably because for an acquisition to remain in the sample, we require a full transfer of control.

that achieved in multi–country studies in which Spanish acquiring firms were included.[7] In our opinion, there are some possible explanations for this discrepancy, such as sample selection bias since European samples are dominated by acquisitions by UK firms (so that UK acquisitions could overwhelm the results from other countries), data availability and consistency, or proper abnormal returns measurement.[8] Therefore, individual–country studies can be a good way to test the robustness of evidence from multi–country studies.

The remainder of the paper is organized as follows. Section 2 discuses some hypothesis to explain the listing status effect. Section 3 reviews several determinants of acquirer's return and the evidence achieved in previous studies. Section 4 describes our sample and the methodology used. The results are discussed in section 5. Section 6 concludes.

2. WHY SHOULD THE LISTING STATUS OF THE TARGET FIRM MATTER?

Various hypotheses have been proffered to explain the observed phenomenon of different bidder firm reaction to the announcement of a private firm acquisition. However, not all of them predict positive abnormal returns for buyers acquiring an unlisted target or, at least, that they gain more than buyers of listed targets. In any event, none of them have been fully successful.

On one hand, Ang and Kohers (2001), Fuller *et al*. (2002) and Draper and Paudyal (2006), among others, point out that privately held companies tend to have greater ownership concentration which may imply lower agency conflicts when an outside bidding offer is made. Moreover, they do not suffer from public scrutiny that may pressure them to sell. These characteristics provide them with stronger bargaining

[7] For instance, Faccio *et al*. (2006) include 119 Spanish listed acquirers and Martynova and Renneboog (2011) comprises 55 Spanish listed bidders. However, none of them perform a separate analysis for Spain.

[8] Faccio *et al*. (2006), for instance, compute announcement date abnormal return as the daily acquirer stock return minus the daily return of the Datastream stock market index of the acquirer's home country. Though this may play as a proxy, it is not a proper way to compute risk–adjusted abnormal returns. See Campbell *et al*. (2010) for an insightful discussion of this topic.

power and the freedom in deciding when and to whom to sell.[9] These characteristics suggest that acquirers of unlisted targets should gain less than acquirers of listed targets.

On the other hand, Chang (1998) hypothesises that if the market for corporate control is competitive, takeovers should be a zero NPV transaction and therefore the bidding firm should gain no abnormal returns (at least when it is paid with cash).[10] On the contrary, competition in the market for privately held companies is likely to be weak as the availability of information to create competition is poor. This lack of information availability means that (i) private targets, particularly small ones, face greater difficulties to signal their value to investors [Becchetti and Trovato (2002)], and (ii) that the bargaining power of purchasers of privately held targets increase. As a result, buyers of private firms can experience positive abnormal returns since the likelihood of underpayment is high.

Literature also suggests two hypotheses from the perspective of the Agency theory. First, managers motivated by a desire to maximise their private benefits will be willing to buy large and prestigious firms and to pay high premiums for them which, in turn, will have a negative effect on the bidder's stock price. Listed firms are usually larger and better known than privately held companies. Draper and Paudyal (2006) claim that the acquisition of smaller and less well–known firms would be viewed by investors as a value–orientated bid, that is, as an acquisition motivated by the desire to maximise shareholder's wealth.[11] Further, when the acquisition is paid with shares, it is likely that an outside blockholder could be created as, by definition, private firms are closely held [Fuller *et al*. (2002)]. Nevertheless, when a listed company is acquired such concentration is unlikely to emerge since public targets generally have less concentrated ownership. Therefore, the existence of a large blockholder allows for greater monitoring of a bidder's management, thus increasing value [Chang (1998)].[12] The reduction of agency costs either because of an objective alignment or an increase in monitoring

[9] That is, they have a "valuable timing option" [Ang and Kohers (2001, p. 725)].

[10] We discuss firm and transaction characteristics effects on acquirer's abnormal returns on the announcement date in section 3.

[11] Moreover, these authors point out that smaller private target firms may also be integrated more easily into the business of the acquiring firm than larger listed targets.

[12] The correlation between active monitoring of managerial activities and lower agency costs has been documented by Ang *et al*. (2000) and others.

activity suggest that purchasers of private firms gain positive abnormal returns when acquiring private targets.

Finally, Hansen and Lott (1996) put forward an alternative explanation for why bidders perform relatively better in an acquisition of a private target than a public target. They assume that investors are diversified, so the aim of the manager of a firm is not to maximize shareholder value but to maximize the value of the shareholder's portfolio. Hence, when a public bidder acquires a public target, the acquirer's shareholders will be indifferent since, as they are diversified investors, they own stock in both firms. However, when a public bidder acquires an unlisted target, the acquirer's shareholders will capture part of the gains of the acquisition (assuming the bid is value increasing).

3. FIRM AND TRANSACTION CHARACTERISTICS EFFECT ON BIDDER WEALTH CREATION.

Extant literature has documented several determinants of bidder returns that we present below. Specifically, we discuss the method of payment for the target, the size of the acquirer, the relative size of the target compared to the bidder, whether acquirer and target belong to related or unrelated industries and whether the acquisition is a domestic or a cross–border transaction. We highlight the related evidence found on privately held firm acquisitions.

a. Method of payment

In the framework of Myers and Majluf (1984) model, bidding firm managers will offer stock as the medium of exchange when they believe that their own shares are overvalued. Hence, the market reaction to this sort of acquisition proposal will be negative.

On the contrary, evidence on unlisted targets shows that buyers gain higher abnormal returns for stock offers relative to cash offers. Fuller *et al*. (2002) explain this different behaviour by the creation of a blockholder (discussed in section 2) and favourable tax implications for private firm owners. They argue that when cash is used as the mode of payment, the purchasing firm's owners face immediate tax implications,

which are deferred if stock is employed. If this tax deferral option is valuable to owners, they may accept a discounted price equal to, at most, the value of the option. This lower price will be reflected in the higher bidder returns for stock offers. As a result, Travlos (1987), Chang (1998) and Fuller *et al*. (2002) suggest that the listing effect is actually a method of payment effect.

However, Ang and Kohers (2001) for the US market, Draper and Paudyal (2006) and Petmezas (2009) for the UK market, and Faccio *et al*. (2006) for 17 Western European countries find similar results: regardless of the payment method, abnormal returns for buyers of private targets are significantly greater than zero and significantly greater than abnormal returns for buyers of public targets. Therefore, these findings suggest that although a method of payment effect exists, it is separate and distinct from the listing effect.

b. Size of the acquirer

Previous literature has documented a size effect in the acquirer's stock returns in which larger bidders get lower abnormal returns. Moeller *et al*. (2004) perform a thorough study of this issue on a large sample of US mergers and acquisitions. They find that acquisitions by small firms gain higher abnormal returns. When they split their sample into listed and unlisted targets, they report that small buyers obtain significant positive abnormal returns regardless of the listing status of the target, but large buyers' gains depend on the listing status of the target firm. Hence, large acquiring firms have significant positive abnormal returns for unlisted targets but significant negative abnormal returns for listed targets. They conclude that large firms offer larger acquisition premiums than small firms, which is consistent with Roll's (1986) managerial hubris hypothesis of corporate takeovers.

As Moeller *et al*. (2004) point out that small firms make small acquisitions and large firms make large acquisitions, Faccio *et al*. (2006) conjecture if their results (that is, European acquirers of listed targets gain insignificant abnormal returns but significant positive ones when bidding unlisted targets) may be a size effect since larger bidders tend to buy listed targets while smaller bidders tend to buy unlisted targets. However, they find that both large and small acquirers earn significant positive

abnormal returns when buying unlisted targets and negative abnormal returns when buying listed targets.

c. Relative size of the acquisition

Asquith *et al*. (1983) report that bidders' abnormal returns are related to the relative size of the merger since even good acquisitions could have little impact on the purchaser's stock price if targets are small relative to the bidder. Fuller *et al*. (2002) document, for the US market, that there is a positive relationship between the unlisted target's relative size and the acquirers' positive abnormal returns; whereas for public targets, acquirers gain significant negative abnormal returns if the relative size of the target is high.[13] Specifically, they find that as the relative size of the target increases for a private acquisition, returns to the purchaser using stock are greater than if the buyer had used cash. On the other hand, they find that for public targets, as the relative size of the target increases, the returns become more positive for cash offers, more negative for stock offers, and hardly change for combination offers. Fuller *et al*. (2002) argue that this market reaction discrepancy to the acquisition of private and public targets could be explained by: (i) an illiquidity effect in private firms due to a lack of competition in the market for privately–held corporate control; and/or (ii) the increasing likelihood of a blockholder formation when stock is used as the method of payment since the relative size of the private target to the bidder increases.[14]

Draper and Paudyal (2006) also analyse the relative size effect on listed and unlisted bidders' abnormal returns at the announcement date but for a sample from the UK market.[15] Similarly to Fuller *et al*. (2002), they report greater significant positive abnormal returns for high relative size ratio acquisitions of unlisted targets, though this result only holds when the offer is paid with cash since they find greater positive

[13] They compute the relative size of the target as the target value divided by acquirer market value in the month prior to the announcement date.

[14] See section 2 for a further discussion of these clues.

[15] In order to clarify the exposition, we have altered the original results of Draper and Paudyal (2006) as they calculate relative size in an inverse way than Fuller *et al*. (2002), dividing the bidder's market capitalization 10 days prior to the announcement by the value of the deal.

abnormal returns for unlisted targets with low relative size ratio when stock is used as the mode of payment.[16]

d. Related vs. unrelated industry acquisition

Although diversifying acquisitions are expected to generate operational and financial synergies, previous literature [Comment and Jarrell (1995), Healy *et al*. (1997) and more recently Martynova and Renneboog (2011), for instance] documents value destruction from unrelated industry (diversifying) acquisitions. Several difficulties with diversification have been pointed out as bidders face a higher likelihood of overvaluing targets outside of their core business as their knowledge base of the target industry is lower [Balakrishna and Koza (1993)], or because of bureaucratic rigidities between bidder and target firms [Shin and Stulz (1998)].

Evidence on acquisitions of unlisted targets is mixed and most of it comes from cross–sectional regression analysis.[17] Hence, Ang and Kohers (2001) report that within–industry acquisitions evoke less positive bidder reactions than diversified deals;[18] Fuller *et al*. (2002) and Faccio *et al*. (2006) show insignificant industry impact on abnormal announcement returns for both listed and unlisted targets, whereas Draper and Paudyal (2006) find that only acquirers of listed firms show a significant negative effect.

In a thorough study, Petmezas (2009) investigates acquisitions during high– and low–valuation periods and finds significant positive abnormal announcement returns to acquirers of private targets either in diversifying or non–diversifying acquisitions during high–valuation periods. During low–valuation periods, diversifying acquisitions of unlisted targets show significant positive abnormal returns.[19] Therefore, results on unlisted target acquisitions do not support the previous evidence.

[16] For public targets they find similar results to Fuller *et al*. (2002)

[17] In this sort of analysis, several independent variables are used in order to explain estimated bidders' abnormal returns.

[18] However, they find insignificant different reaction when they refined their diversification measure by controlling cross–industry transactions which are small relative to the size of the acquirer.

[19] Petmezas' (2009) results for public targets are considerably different from unlisted targets acquisitions since non–diversifying acquisitions exhibit significant negative abnormal returns either during high– or low–valuation periods while diversifying acquisitions show insignificant abnormal returns.

Finally, in a related research, Capron and Shen (2007) find that acquirers are less likely to buy a private target when they enter a new industry. They suggest that this result agrees with difficulties in identifying a private firm outside the buyer's core business or when facing greater evaluative uncertainty when evaluating a private target in an unfamiliar domain.

e. Domestic vs. cross–border acquisition

Firms involved in cross–border acquisitions are likely to benefit from a number of synergies that are unavailable to firms involved in domestic acquisitions, like expanding their business into new markets as a response to globalisation. Therefore, ceteris paribus, the wealth effect may be higher in cross–border deals.[20] However, regulatory and cultural differences between countries may impede the integration of target companies. If the market anticipates these difficulties it may discount the expected acquisition gains [Conn *et al*. (2005), Moeller and Schlingemann (2005)].

Focusing on the listing status of the target firm, we discussed above that Hansen and Lott (1996) explain the listing effect by arguing that shareholders of the purchaser are diversified investors. Faccio *et al*. (2006) argue that a necessary condition for the Hansen and Lott (1996) argument is that shareholders of the acquirer and target companies overlap to some extent, and point out that given the wide documented home bias in investors' portfolios [Lewis (1999), for instance] it is highly unlikely that shareholders of acquirers will own shares in a significant number of foreign companies. If this is the case, abnormal returns for cross–border acquisitions of listed targets should be similar to those for unlisted targets. Faccio *et al*. (2006) results do not support the Hansen and Lott (1996) hypothesis as they find significant positive abnormal returns for bidders regardless of whether the unlisted targets were domestic or not.[21]

On the contrary, Fuller *et al*. (2002) report that bids for foreign private firms have a negative and significant impact on abnormal returns on the acquisition's

[20] Martynova and Renneboog (2011) report higher bidder's significant positive abnormal returns in cross–border acquisitions using a sample with 28 European countries.

[21] They find insignificant abnormal returns when the target company is a listed firm either for domestic or cross–border acquisitions.

announcement date, but insignificant abnormal returns when the foreign target firm is publicly held.

4. SAMPLE AND METHODOLOGY

4.1. SAMPLE SELECTION AND DESCRIPTIVE CHARACTERISTICS

Information on acquisitions (announcement date, identity of bidders and targets, payment method, etc) driven by Spanish listed firms is obtained from the Spanish Security Exchange Commission (*Comisión Nacional del Mercado de Valores* –CNMV) web page. Once the official date was identified for each acquisition, we search the financial press in Factiva dataset for any previous rumour or leak in order to price the market information arrival. Given the Spanish *Equity Market Law*, the CNMV orders a firm trading halt when it considers that a relevant piece of information could affect a firm's market price.[22] Thus, we only consider a rumour about an acquisition if the CNMV halts trading. Consequently, the event–day (t_0) will coincide with the halt date because a rumour appeared in the press or the official acquisition communication date to the CNMV. The necessary economic and financial information for this research comes from *Sociedad de Bolsas S.A.* and SABI, Amadeus and Thomson ONE Banker data bases.

As do Chang (1998), Fuller *et al*. (2002), Faccio *et al*. (2006), and others, for an acquisition to be included in the sample, we require that it be a "completed control acquisition". We define a completed control acquisition as one in which the buyer increased its ownership position to greater than 50%, regardless of the amount of the target firm's stake previously owned by the buyer. Therefore, our initial sample consists of all acquisitions conducted by listed firms in the Spanish market (SIBE) over the period 1991 to 2006, that is, 180 purchases. For an acquisition announcement to remain in the final sample, it needs to meet the following criteria:

(i) We have selected those purchasing firms for which stock market data was available in the period that comprises 120 days before and 5 days after the

[22] For instance, the CNMV always orders the trading halt of firms involved when a takeover is officially announced (article 33 of the Spanish *Equity Market Law*).

acquisition announcement date (event–day). The application of this criterion excluded three acquisition announcements.

(ii) No other contaminating event must exist in the five days prior to and after the event–day that may affect the target firm price, such as dividend payments, equity issues or stock splits. Six acquisition announcements were excluded.

(iii) We have required that no other acquisition announcements took place by a bidder firm in the 120 days before the event–day. We found twenty nine such announcements that overlap.

(iv) Finally, information about the listing status must have been released. Eight acquisition announcements were excluded.

Application of these criteria yielded a sample of 134 acquisitions where 46 of the targets were listed on an exchange and 88 were unlisted companies.

Table 1 exhibits comparative descriptive statistics for acquisitions involving privately held and publicly held companies. In line with previous studies from other markets, the number of privately held company purchase announcements in our sample largely exceeds that for publicly held companies (88 to 46 announcements) and cash is employed as the mode of payment in most of the cases both for listed and unlisted target bids. The sample shows some interesting features regarding geographical and industry characteristics. For example, acquisitions of unlisted targets are equally likely to involve a domestic (51%) or a cross–border deal (49%), but in acquisitions of listed targets cross–border acquisitions are mainly involved (65%). Using two–digit CNAE codes to classify industries,[23] Table 1 indicates, contrary to Capron and Shen (2007) findings, that firms acquiring privately held companies focus on a diversification strategy but publicly held firm acquisitions are equally likely to be diversifying or within–industry transactions.

[23] CNAE codes are the Spanish equivalent to US SIC codes.

Table 1

Summary statistics for acquirer and target companies by listing status of target. An acquisition is classified as cross–border if the acquirer and the target are from different countries. An acquisition is classified as within–industry if the target has the same primary two–digit CNAE code (the Spanish equivalent to US SIC code) as the acquirer. The acquirer's market value is the market value of the acquirer's common stock in the most recent December or June to the acquisition announcement date. Acquirer and target's total assets are the value of total assets at the end of the year prior to the announcement date. Target firm's relative size is computed as target's total assets divided by acquirer's total assets.

	Full sample	Listed targets	Unlisted targets
Number of acquisition announcements			
• Total	134	46	88
• By method of payment			
Cash	112	33	79
Stock	12	9	3
Mixed	8	3	5
• By geographical scope			
Domestic	61	16	45
Cross–border	73	30	43
• By industry scope			
Diversification	92	25	67
Within–industry	42	21	21
Market value of the bidder (in million €)			
Mean	7,744.63	15,889.66	3,487.00
Median	1,575.56	3,381.38	649.20
No. cases	134	46	88
Acquirer total assets (in million €)			
Mean	18,604.29	36,729.61	9,437.46
Median	1,459.02	4,514.87	846.45
No. cases	131	44	87
Target total assets (in million €)			
Mean	2,045.13	5,421.29	271.22
Median	51.10	269.98	23.49
No. cases	90	31	59
Relative size of the target			
Mean	0.38	0.57	0.27
Median	0.04	0.20	0.03
No. cases	90	31	59

Table 1 also gives data on the size of the bidder and the target and their relative sizes. Acquirer's size is measured (i) by the market value of an acquirer's common stock in the most recent December or June prior to the acquisition announcement date, and (ii) by total assets at the end of the year previous to said date. Regardless of how size is measured, buyers of listed targets are five times as large as buyers of unlisted targets. The target's size is measured through total assets at the end of the year prior to the announcement date. In this case, differences in size between listed and unlisted

companies are even greater as the average publicly held target firm is twenty times bigger than the average privately held target firm. As a result, the target firm's relative size (computed as the target's total assets divided by the acquirer's total assets) is higher both on average and median for publicly held companies.

4.2. ESTIMATION OF ABNORMAL RETURNS

We employ conventional event study methodology in order to compute abnormal returns (AR) and cumulative abnormal returns (CAR). As stated above, we define the event day (t_0) as the earlier of the date when the issue is communicated to the CNMV and the date when the issue is published by a financial journal and causes a bidder's trading halt. The event window is defined to be an eleven–day window centred on the day of the announcement (t_0–5, t_0+5), and the estimation window ('uncontaminated' interval) is defined to be a 100–day window (t_0–26, t_0–125).

In order to ensure the robustness of our results to model specification, we estimate 'uncontaminated' risk factors from the Capital Asset Pricing Model (CAPM) and the three–factor model developed by Fama and French (1993) that we show in expressions 1 and 2, respectively:

$$R_{it} - R_{ft} = \alpha_i + \beta_i (R_{mt} - R_{ft}) + \varepsilon_{it}, \quad [1]$$

$$R_{it} - R_{ft} = \alpha_i + \beta_i (R_{mt} - R_{ft}) + s_i \, \mathrm{SMB_t} + h_i \, \mathrm{HML_t} + \varepsilon_{it}, \quad [2]$$

where R_{it} is the simple daily return of the acquirer firm i on day t, R_{ft} is the daily return on *Letras del Tesoro* (Spanish Treasury Bill), R_{mt} is the return on a value–weighted market index (specifically the Madrid Stock Exchange Index –IGBM), $\mathrm{SMB_t}$ is the difference in the returns of value–weighted portfolios of small stocks and big stocks, and $\mathrm{HML_t}$ is the difference in the returns of value–weighted portfolios of high book–to–market stocks and low book–to–market stocks.[24]

In addition, given the size of our samples, we test the significance of average abnormal returns with the conventional parametric procedure and bootstrap methodology in order to take into account the possibility of non-normality.

[24] See Fama and French (1992, 1993) for details on the construction of the SMB and HML factors.

5. RESULTS

5.1. ACQUIRER'S ABNORMAL RETURNS AND TARGET FIRM LISTING STATUS

Tables 2 and 3 exhibit the purchaser's daily abnormal returns (ARs) and cumulative abnormal returns (CARs), respectively, in the event–window (t_0–5, t_0+5) for the full sample of acquisitions and for acquisitions classified into listed and unlisted targets. In both tables, Panel A shows abnormal returns estimated through the CAPM, whereas Panel B shows abnormal returns estimated through the Fama–French three–factor model.

Consistent with international evidence, we find in Table 2 that buyers of unlisted targets gain significant positive abnormal returns on the acquisition announcement date regardless of the model used in the AR estimation. Specifically, bidder firm shareholders gain around a 1% abnormal return, while shareholders of firms purchasing listed companies experience insignificant negative abnormal returns. As a result, the overall sample of acquisitions amounts to a significant positive abnormal return on the event–day of 0.53%.

Faccio *et al*. (2006) conjecture that any leakage of information would be more likely to happen for deals involving two listed firms than for transactions in which only the acquirer is listed. If such leakage occurs and the purchase is anticipated, significant abnormal returns prior to and zero abnormal returns on the announcement date of listed firm acquisitions would be consistent. Nevertheless, as in Faccio *et al*. (2006), we do not find significant abnormal returns prior to the announcement date for acquisitions of either listed or unlisted targets.

Table 2

Acquirer's daily abnormal returns (ARs) around the acquisition announcement day (t_0). The daily abnormal return for each acquisition is estimated employing in the estimation of the 'uncontaminated' risk factors the Capital Asset Pricing Model (CAPM) and Fama–French three–factor model. Daily abnormal returns are calculated for the full sample of acquisitions and acquisitions of listed and unlisted targets, respectively. Significance for means is based on *t*–test and bootstrap methodology. All the abnormal returns are expressed in percentage.

Day relative to the announcement–day (t_0)	Full sample	Listed targets	Unlisted targets
Panel A: Daily Abnormal Returns (ARs) estimated through the CAPM			
–5	-0.11	0.08	-0.17
–4	0.05	-0.16	0.03
–3	0.16	0.13	0.15
–2	0.09	0.11	0.04
–1	0.31**	0.11	0.32
0	0.53*	-0.29	[b] 1.01***
+1	0.58	0.12	0.82
+2	-0.03	0.36	-0.20
+3	0.00	0.39	-0.26
+4	-0.22	0.30	-0.48
+5	-0.05	0.23	-0.19
Panel B: Daily Abnormal Returns (ARs) estimated through the Fama–French three–factor model			
–5	-0.09	0.06	-0.12
–4	0.05	-0.15	0.03
–3	0.17	0.13	0.17
–2	0.12	0.14	0.07
–1	0.26	0.03	0.28
0	0.53*	-0.27	[b] 0.99***
+1	0.55	0.15	0.77
+2	0.00	0.43	-0.20
+3	-0.01	0.45	-0.30
+4	-0.16	0.36	-0.44
+5	-0.05	0.24	-0.18

[a, b, c] Significantly different from zero at the 1%, 5% and 10% level, respectively, using the *t*–test.

***, **, * Significantly different from zero at the 1%, 5% and 10% level, respectively, using bootstrap methodology.

Table 3

Acquirer's cumulative abnormal returns (CARs) around the acquisition announcement day (t_0). The cumulative abnormal return is estimated employing in the estimation of the 'uncontaminated' risk factors the Capital Asset Pricing Model (CAPM) and Fama–French three–factor model. Cumulative abnormal returns are calculated for different intervals around the acquisition announcement day (t_0). Table exhibits results for the full sample of acquisitions and acquisitions of listed and unlisted targets, respectively. Significance for means is based on *t*–test and bootstrap methodology. All the cumulative abnormal returns are expressed in percentage.

Interval relative to the announcement–day (t_0)	Full sample	Listed targets	Unlisted targets
Panel A: Cumulative Abnormal Returns (CARs) estimated through the CAPM			
(–1,+1)	[c] 1.42***	-0.06	[c] 2.15***
(–1,0)	[b] 0.84**	-0.18	[b] 1.32***
(0,+1)	1.11*	-0.16	[c] 1.83***
(–5,+5)	1.30	1.38	1.06*
(–5,0)	[c] 1.03*	-0.03	[c] 1.37**
(1,+5)	0.28	[c] 1.41*	-0.31
(–2,+2)	1.48**	0.41	1.98**
(–2,0)	[b] 0.93**	-0.08	[b] 1.36***
(+1,+2)	0.55	0.49	0.62
Panel B: Cumulative Abnormal Returns (CARs) estimated through the Fama–French three–factor model			
(–1,+1)	[c] 1.34**	-0.10	[c] 2.04***
(–1,0)	[c] 0.79**	-0.24	[b] 1.27***
(0,+1)	1.08*	-0.13	[c] 1.76***
(–5,+5)	1.36*	1.58	1.05
(–5,0)	[c] 1.04**	-0.06	[c] 1.41**
(1,+5)	0.32	[c] 1.64**	-0.36
(–2,+2)	1.46*	0.47	1.91*
(–2,0)	[b] 0.91**	-0.11	[b] 1.33**
(+1,+2)	0.54	0.58	0.57

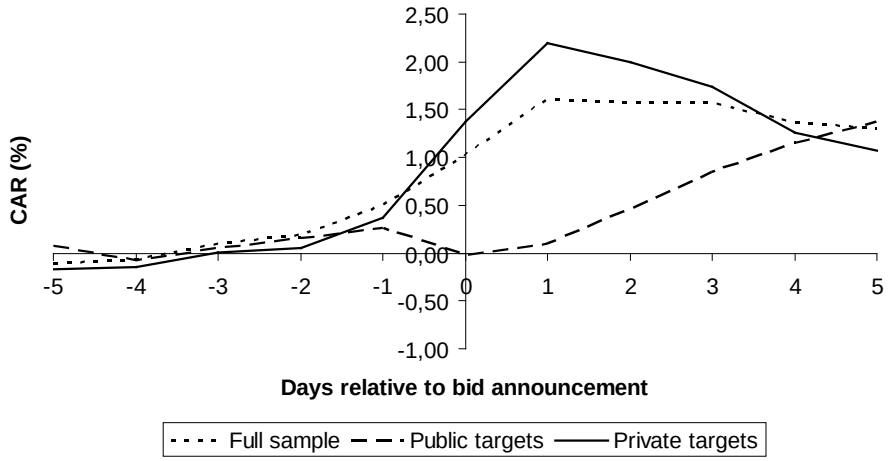
[a, b, c] Significantly different from zero at the 1%, 5% and 10% level, respectively, using the *t*–test.

***, **, * Significantly different from zero at the 1%, 5% and 10% level, respectively, using bootstrap methodology.

Table 3 reports, and Figure 1 illustrates, cumulative abnormal returns (CARs) for different intervals inside the event–window (t_0–5, t_0+5). All the intervals that contain the event–day (t_0) show significant positive CARs when buying an unlisted target, being the three–day interval (t_0–1, t_0+1) that shows the higher CAR (2.15% with CAPM and 2.04% with Fama–French model). Interestingly, Figure 1 shows that during the post–announcement period (t_0+1, t_0+5), the average CAR for unlisted firm acquisitions insignificantly declines (–0.34% or –0.36%, depending on the model) but the average CAR for listed target companies significantly increases (1.41% or 1.64%, depending on the model). These results would be consistent either with post–announcement additional

information releases about the acquisition that may alter investor perception on the value creation or with investors slowly processing the information released on the announcement date.

Figure 1. CAR of acquisition firms



5.2. ACQUIRER'S ABNORMAL RETURNS ACCORDING TO FIRM AND TRANSACTION CHARACTERISTICS

Given the evidence shown in Tables 2 and 3 of a listing status effect, now we explore if bidder, target and transaction characteristics may affect the acquiring shareholder's value creation. Table 4 exhibits results for three–day window CARs centred on the announcement date (t_0–1, t_0+1) when the sample is split according to these characteristics.

Table 4

Acquirer's three–day Cumulative Abnormal Returns (CARs) by characteristics of acquirer, deal, target and listing status of target. Table exhibits three–day window CARs centred on the announcement date (t_0–1, t_0+1) and associate statistics. CARs are estimated employing in the estimation of the 'uncontaminated' risk factors the Capital Asset Pricing Model (CAPM) and Fama–French three–factor model. The top number for each group is the acquirer's mean CAR and the second number is the number of observations. Significance for means is based on *t*–test and bootstrap methodology. All the cumulative abnormal returns are expressed in percentage.

	CAPM			Fama–French three–factor model		
	Full sample	**Listed targets**	**Unlisted targets**	**Full sample**	**Listed targets**	**Unlisted targets**
Panel A: By method of payment						
Cash	[c] 1.61***	0.58	[c] 2.11***	[b] 1.51***	0.50	[c] 1.99***
	112	33	79	112	33	79
Stock	0.65	0.59	0.83	0.72	0.66	0.88
	12	9	3	12	9	3
Mixed	0.16	1.65	3.54	0.13	1.70	3.48
	8	3	5	8	3	5
Stock+Mixed	0.45	-0.93	2.52	0.48	-0.87	2.51
	20	12	8	20	12	8
Panel B: By size of the acquirer						
Big	-0.19	-1.27	0.32	-0.28	-1.35	0.19
	65	31	34	65	31	34
Small	[b] 3.03***	2.44	[a] 3.41***	[b] 2.96***	2.50	[c] 3.32***
	69	15	54	69	15	54
Panel C: By relative size of the acquisition						
High	1.28	1.65	1.00	1.27	1.71	0.93
	55	21	34	55	21	34
Low	0.29	-2.60*	[b] 1.12***	0.16	-2.81*	[b] 1.00***
	35	10	25	35	10	25
Panel D: By related vs. unrelated industry acquisition						
Diversifying	1.52*	-0.14	[b] 1.11***	1.41	-0.07	[c] 1.03**
	92	25	67	92	25	67
Within–industry	2.79	0.04	5.45*	2.62	-0.12	[c] 5.25**
	42	21	21	42	21	21
Panel E: By domestic vs. cross–border acquisition						
Domestic	0.96	1.65	0.71	0.87	1.70	0.57
	61	16	45	61	16	45
Cross–border	1.77*	-0.97	3.65*	1.70*	-1.05	[c] 3.58***
	73	30	43	73	30	43

[a, b, c] Significantly different from zero at the 1%, 5% and 10% level, respectively, using the *t*–test.
***, **, * Significantly different from zero at the 1%, 5% and 10% level, respectively, using bootstrap methodology.

5.2.1. METHOD OF PAYMENT

Panel A of Table 4 shows that when acquisitions are paid for with cash, shareholders of acquiring firms gain significant positive abnormal returns for unlisted

target biddings but insignificant CARs when acquiring a listed company. This result differs from Chang's (1998) for the US market, but is similar to Fuller *et al*. (2002) and Moeller *et al*. (2004) also for the US market, Draper and Paudyal (2004) and Petmezas (2009) for the UK market, and Faccio *et al*. (2006) for 17 European countries.

The results when cash is the mode of payment are consistent with a different level of competition in the market for listed and unlisted corporate control as we discussed in section 2. Hence, insignificant abnormal returns for buyers of listed targets reflect a zero NPV transaction due to a highly competitive market, whereas positive abnormal returns for purchasers of unlisted targets show that the acquiring firm's shareholders appropriate the excess value gained from underpayment.

Although we do not find significant abnormal returns when the choice of payment is different from *all–cash* bids either for listed or unlisted targets, evidence is inconclusive due to the small size of the subsamples, even when we combine acquisitions paid only with stocks and with a mix of cash and stocks. In any event, the scarce number of *all–stock* bids implies that the explanation based on a reduction of agency costs of the acquirer firm by the creation of an outside blockholder does not hold.

5.2.2. SIZE OF THE ACQUIRER

Panel B of Table 4 exhibits average three–day CARs of listed and unlisted targets sorted by the size of the acquiring company. We classify buyers according to their market value, where the market value is computed as number of shares outstanding times market price per share at the end of the most recent December or June prior to the acquisition announcement date. Then we classify an acquirer as big if its market value is greater than the median market value of all companies listed in the Spanish market on the date of its market value computation. Otherwise, the acquirer is classified as small.

We find that only small firms that bid unlisted targets experience significant positive abnormal returns. All other classifications show insignificant abnormal returns. These results differ from those achieved by Moeller *et al*. (2004) for the US market and Faccio *et al*. (2006) for 17 European countries (see section 3.b).

Our evidence suggests that there is not a size effect that explains our results (that is, significant positive abnormal returns for unlisted targets and insignificant ones for listed targets) since not only large buyers experience insignificant abnormal returns but small acquirers that buy listed targets also experience them. Instead, our results seem to confirm that (i) big acquirers pay greater premiums regardless the listing status of the target, as Moeller *et al*. (2004) point out; and (ii) buyers, regardless of their size, pay greater premiums for listed companies due to higher competition in the market for corporate control.

5.2.3. RELATIVE SIZE OF THE ACQUISITION

We partition the returns to purchasers on the relative size of the target company compared to the purchaser in Panel C of Table 4. The relative size of the target is computed as the target's total assets divided by the acquirer's total assets. We classify a relative size as high if it is greater than the sample median relative size, and low otherwise.

High relative size buyers earn insignificant abnormal returns for both listed and unlisted targets. In contrast, low relative size acquirers gain (slightly) significant negative abnormal returns for public companies but significant positive abnormal returns for unlisted firms. This evidence diverges from that reported by Fuller *et al*. (2002) and Draper and Paudyal (2006) and it is contrary to the notion that as acquisitions of small companies generate smaller amounts of synergy (in absolute terms), even good acquisitions could have little impact on the buyer's stock price if targets are small relative to the buyer.

Our results support the notions that (i) the acquisition of smaller and less well–known firms are viewed by investors as value–orientated transactions; and (ii) there exists an illiquidity effect in private firms due to a lack of competition in the market for privately–held corporate control which is particularly intense for smaller unlisted firms. On the other hand, as most of the acquisitions in our sample are non *all–stock* bids, the results do not support an explanation based on a large blockholder formation that could reduce agency costs.

5.2.4. RELATED VS. UNRELATED INDUSTRY ACQUISITION

In Panel D of Table 4 we compare announcement abnormal returns to diversifying and within–industry acquisitions for acquirers of privately and publicly held companies. An acquisition is classified as within–industry if both the acquirer and the target have the same 2–digit CNAE code.

In contrast to previous evidence, we find significant positive abnormal returns for buyers of unlisted targets but insignificant ones for buyers of listed targets either in diversifying or within–industry acquisitions. Significant positive abnormal returns for unlisted acquisitions are greater when both the acquirer and the target are from the same industry. Therefore, our results do not suggest value destruction from unrelated industry acquisitions.

5.2.5. DOMESTIC VS. CROSS–BORDER ACQUISITION

Results in Panel E of Table 4 suggest a significant positive reaction to cross–border acquisitions of unlisted target firms as the level of significance is low. All other classifications show insignificant acquirers' abnormal returns.

Our results diverge from those of Fuller *et al*. (2002) and Faccio *et al*. (2006) and support Hansen and Lott's (1996) conjecture. Though Faccio *et al*. (2006) argue that abnormal returns for cross–border acquisitions of listed targets should be similar to those for unlisted targets under the hypothesis proposed by Hansen and Lott (1996), our evidence suggests that acquiring companies' shareholders positively value the acquisition of companies that are very unlikely to be in their portfolios.

6. CONCLUSIONS

This study is the first research that investigates the wealth created for Spanish listed firms' shareholders around acquisition announcements for listed and unlisted target companies over the period 1991–2006. As in other foreign markets (US, UK and several continental European countries) bidders of listed companies earn insignificant average abnormal returns, whereas acquirers of unlisted firms gain significant positive

average abnormal returns regardless of the pricing model used in the estimation procedure.

As well, we investigate if value creation is related to bidder, target and transaction characteristics. Specifically, we explore the method of payment for the target firm, the size of the acquirer, the relative size of the target compared to the acquirer, whether the buyer and the target belong to related or unrelated industries and whether the acquisition is a domestic or a cross–border transaction. In general terms our results diverge from those reported in the literature for other foreign markets.

Our evidence suggests that the positive reaction of the purchasing firm's shareholder wealth to unlisted firm acquisitions is mainly related to characteristics associated with the unlisted companies themselves. That is, unlisted firms tend to be smaller and less well–known and therefore, when they are involved in an acquisition process, this lack of information leads to lower competition in the market for corporate control. Consequently, the payment of lower premiums and the possibility of diversifying shareholder's portfolios lead to unlisted firm acquisitions being viewed as value–orientated transactions.

Finally, though further investigation will be required to identify fundamental factors behind the listing status phenomenon, managers who are about to evaluate alternative acquisitions may take into account the listing status of target companies.

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