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BOARD GENDER DIVERSITY AND THE ACQUISITION ANNOUNCEMENT ON FRIDAY. EVIDENCE FROM SPAIN♦

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Keywords: investor inattention, corporate board, gender diversity, acquisition announcement, Spanish market

JEL classification: G11; G14; G34; G41

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Abstract

In this research we examine whether the likelihood of announcing an acquisition on Friday depends on the gender diversity of the corporate board. To do so, we use a sample of 252 cash-financed acquisitions of listed and non-listed firms made by listed Spanish firms from 2004 to 2018. Prior evidence has confirmed the phenomenon of investor inattention for acquisition announcements of non-listed firms on Fridays. Our results confirm that firms with greater gender diversity on the board are less likely to make acquisition announcements of listed targets on Friday, thus avoiding investor inattention. Specifically, our results suggest that female directors provide higher quality information and are more concerned about investors. A negative and significant relationship is also observed between board size and independence, which could be explained by the improvement in information disclosure resulting from increased monitoring.

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1. Introduction

Previous research has analysed the impact of board gender diversity on the process of mergers and acquisitions (M&A) (e.g., Chen et al., 2016; Dowling & Aribi, 2013; Huang & Kisgen, 2013; Levi et al., 2014). Since the board of directors is the mechanism that advises and monitors the decisions of the board, the presence of female directors is likely to influence the outcome of the acquisition (e.g., the target firm's characteristics, the premium paid, and the riskiness of the acquisition). However, to the best of our knowledge, the influence of the composition of the corporate board on the timeliness of the acquisition announcement had not been analysed so far. Therefore, we incorporated this aspect to the analysis.

The Friday effect means that investors could pay less attention to information released on Friday than to similar information released on other trading days of the week. The reasoning is that investors might get distracted by the weekend plans and thus pay less attention to corporate news on Friday, which would result in a market underreaction to the announcement. Previous literature has found evidence of the Friday effect on merger announcements (Adra & Barbopoulos, 2018; Farinós et al., 2021; Louis & Sun, 2010; Siganos, 2019; Reyes, 2018,). Specifically, Farinós et al. (2021) are the first to have found a significantly lower market reaction to all-cash acquisition announcements of unlisted targets in terms of price when the limited investor attention on Friday is considered.

In view of the previous results, we explore whether the presence of women on the board of directors might affect the announcement of an acquisition on Friday. The presence of women in management positions implies more prudent decision-making because they are more risk-averse than men (Eckel & Grossman, 2008; Sapienza et al., 2009), less overconfident than men (Huang & Kisgen, 2013) and less keen on being exposed to competition (Geneezy et al., 2003; Hoghart et al., 2012). If, as observed in previous literature, the participation of women in the board of directors is associated with the publication of a greater volume and quality of information (Armstrong et al., 2014; Gul et al., 2011), greater ethical behaviour by not manipulating information, greater attention to investors (Adams et al., 2011; Matsa & Miller, 2010) and better supervision of managers (Adams & Ferreira, 2009), it would be reasonable to think that boards including women do not announce acquisitions on days affected by a potential limited investor attention.

To perform our analyses, we employ a final sample of 252 cash-financed acquisition announcements of listed and unlisted target firms released by listed Spanish firms from 2004 to 2018. We focus on all-cash acquisitions announcements of listed and unlisted firms for several reasons. On the one hand, cash acquisitions allow us to avoid the interferences of the strategic behavior of overvalued companies engaged in stock-financed acquisitions (Adra & Barbopoulos, 2018). On the other hand, the target status choice (private vs. public) is one of the most relevant characteristics in the acquisition process (Louis & Sun, 2010). Thus, there are several differentiating characteristics between both types of acquisitions (liquidity, ownership structure, information asymmetry and bargaining power) that investors have to consider in their investment decision and that suggest the need for a separate analysis. In fact, Moeller et al. (2004) for the US market, Petmezas (2009) for the UK market, Martynova and Renneboog (2011) for several European countries, and Farinós et al. (2017) for the Spanish market, among others, document significant, positive abnormal announcement returns to acquirers of unlisted targets regardless of firm and deal characteristics, and zero o negative abnormal returns in the case of listed firm acquisitions.

Our results suggest that firms with greater gender diversity on the board are less prone to making acquisition announcements of listed targets on Fridays. The results seem to indicate that female directors provide higher quality information and are more concerned about investors. A negative and significant relationship is also observed between board size and independence and the likelihood of announcement an acquisition on Friday, which could be explained by the improvement in information disclosure resulting from increased monitoring.

This study provides further evidence on the effects of women in leading corporate roles by examining their influence on the M&A process. To the best of our knowledge, this is the first study that analyses the role of female directors in the publication of information on Friday. It reinforces studies on the disclosure of quality information by listed companies.

The remainder of the study is organized as follows. Section 2 discusses the hypotheses under analysis. Section 3 describes our sample. In section 4 we present the methodology used to explain the Friday effect found for announcements of cash-financed acquisitions of unlisted firms. Section 5 shows the results. Section 6 concludes.

2. Literature Review and Hypothesis to be tested

The issue of female representation on the boards of directors of public companies has become a relevant question due to the increase in the percentage of female directors over time. The board is the governance mechanism that is responsible for reporting high quality information. In line with previous research, this study considers three board characteristics that measure the board's effectiveness or ability to perform its monitoring and advisory functions. These are the percentage of female directors, the percentage of independent directors and the size of the board.

In recent years, different arguments in favour of board gender diversity have been discussed. From the simplest, which is related to equal opportunities and the inclusion of half of the society's talent, to others related to different theories that can be complementary.

Some studies based on Agency Theory have shown that gender diversity can improve the monitoring of executives by the board by reducing agency costs (Adams & Ferreira, 2009) and enabling higher levels of public disclosure and higher accounting quality (Armstrong et al., 2014; Gul et al., 2011). Also, Kanagaretnam et al. (2007) and Klein (2002) suggest that board diversity favours the volume and quality of information, which allows the reduction of information asymmetries. Nygaard (2011) argues that the incorporation of female directors increases the quality of boards' monitoring, but only in firms where information asymmetry was low. Overall, agency theory predicts that a greater gender diversity of the board may improve shareholders' value and the quality of the decisions. Additionally, Gavious et al. (2012) suggest that firms' valuations by analysts as well as by investors in the market are positively affected by the presence of female directors. Diversity is believed to affect a firm's long-term and short-term financial value in several ways (Carter et al., 2003). Keys et al. (2002) find that diversity promoters add more value to shareholders than non-diversity promoters do. Also, a greater number of female directors could improve stock price informativeness (Gut et al., 2011).

Furthermore, previous studies based on the Stakeholder Theory have made different contributions to the effect of women's participation on the board. These studies have shown that firms with more female directors are more stakeholder oriented (Adams et al., 2011; Matsa & Miller, 2011). In this line, other authors argue that a greater number of female directors increases the ability to reflect stakeholder interest (Carter, 2006; Rindova, 1999).

Another aspect discussed in the literature is behavioural differences between men and women. Some authors have also argued that differences between female and male behaviour observed in the general population exist even in leadership positions, noting that female directors are more risk-averse (Eckel & Grossman, 2008; Sapienza et al., 2009) and less overconfident than male directors (Huang & Kisgen, 2013) and are keen on being exposed to competition (Gneezy et al., 2003, Hoghart et al., 2012).

The literature indicates that women tend to take fewer risks than men (Barber & Odean, 2001; Dwyer et al., 2002; Powel & Ansic, 1997). In this manner, the presence of women on the board of directors decreases the risk of the company, since women show greater risk-aversion than men (Adams & Ferreira 2003; Croson & Gneezy, 2009; Faccio et al., 2016).

In recent years, there have been many legislative initiatives aimed at promoting women's participation as a way to reduce inequality and harness the talents of half of the society. The enactment by different countries of quota laws (mandatory or recommended) that pursue the equal participation of men and women has been instrumental in improving women's access to leadership positions, as have been the goals established by international organizations such as the EU and the UN. In 2007, Spain became one of the first countries in the European Union to implement a recommended gender quota law for women's participation on boards (Spanish Organic Law 3/2007, of 22 March). Specifically, this law encouraged firms to increase the share of female directors to 40% by 2015.

The presence of female directors on corporate boards is associated with firms' tendency to make acquisitions and with the bid premium paid. Levi et al. (2014) show a negative and significant association between the number of female directors and the number of acquisitions bids. Also, these authors suggest that the number of female directors is negatively and significantly associated with the size of the bid premium. These findings are consistent with women being less overconfident than men. Levi et al. (2008) found that bidders whose CEOs are also chairpersons of the board and bids with all-cash payment are positively associated with the bidder's cumulative abnormal return (CAR).

Chen et al. (2019) argue that female directors are associated with less aggressive investment policies and better acquisition decisions. Kanter (1987) also noted that highly innovative companies tend to employ more women. These findings are consistent with theories that suggest that women are less likely to take risks. On the question of firm size, Han et al. (2019) found that enterprise size has a significantly negative impact on the presence of female CEOs. Adams and Ferreira (2009) found that in firms with strong governance, however, enforcing gender quotas in the boardroom could ultimately decrease shareholder value. One possible explanation is that greater gender diversity could lead to overmonitoring in those firms. Chen et al. (2016) showed that the presence of female directors on boards tends to lead to more competitive interactions, so that decision-making processes are less likely to be characterised by rapid consensus.

Based on the above evidence, we focused on whether the presence of women on the board of directors favours the likelihood of announcing a firm acquisition on Friday and whether this decision is conditioned by the public or private status of the company. This behaviour could owe to the higher quality of the information released by women. Moreover, the acquisition announcement may also be determined by behavioural differences between women and men.

Thus, we considered female directors in the study of the Friday effect in the Spanish market resulting from the fact that investors might get distracted by the weekend and pay less attention to merger announcements on that day. Investors' attention plays an important role in the decision-making process and in the determination of asset prices. Some authors have attempted to explain how investors' attention affects the incorporation of information into prices. Peng and Xion (2006) and Peng et al. (2007) showed that limited attention affects the processing of information, since it leads investors to determine asset prices based more on market and industry information than on firm-specific information. Siganos (2019) observed that target firms experience a greater positive abnormal return on acquisitions announced on Mondays than on those announced on other days of the week, and that investors overreact to merger announcements on Mondays after daylight saving time. Glasner (2020) suggested that investors pay more attention to the market on Mondays than on other days. Farinós et al. (2021) found that the acquirers' average abnormal return on acquisitions of private targets is positive and statistically significant any time of the day on all business days except on Fridays. Thus, we examined the different market response to Friday and non-Friday all-cash acquisition announcements. In addition, as previous studies focusing on the Spanish market have confirmed the limited investor attention to the acquisition announcements of unlisted companies (Farinós et al., 2021a, 2021b), we differentiated between listed and unlisted companies. As we have pointed out above, we used all-cash acquisitions because ample prior evidence has shown that, on average, investors react positively and significantly to those involving privately owned targets (Farinós et al., 2017, 2020).

In the context of the above reasoning, the following hypothesis was formulated:

Hypothesis 1 (H1). The likelihood of making an acquisition announcement on Friday is higher in companies with a lower percentage of female directors

3. Methodology

Though our variable of interest is the board's gender diversity, based on prior studies of corporate governance's, we control for board and firm characteristics. Control variables are used to isolate the effects of other factors that have a predictable influence on the dependent variable, namely, board size and board independence.

Regarding board independence, when studying female directors, previous evidence finds consensus on the fact that the improvement in decision-making processes is favoured by the presence of independent directors on the board (Fama & Jensen, 1983; Fich & Slezak, 2008). In this way, several authors reinforce the role of independent directors on the board in promoting more direct communication. Shivdasani (1993), Cotter et al. (1997) and Hermalin et al. (1998) show that boards dominated by independent directors are more likely to make decisions in the interest of shareholders.

The impact of board size on the firm is unclear. Some evidence supports the benefits of large boards based on the need for advice or monitoring in large and complex firms, which depends more heavily on external resources (Adams & Ferreira, 2009; Fama & Jensen, 1983). For example, indebted firms are more dependent on external resources and more financially complex. Thus, they would need more advice, which would be reflected by larger boards (e.g., Boone et al., 2007; Coles et al., 2008; García & Herrero, 2018). On the other hand, other studies have linked larger boards to communication and coordination problems that lead to less efficient and slower decision-making. Jensen (1993) considers that larger boards of directors reduce the ability to monitor and advise managers because of a lack of coordination, which may encourage executives to pursue their own private interests to the detriment of the general interests of the company. Moreover, Yermack (1996) showed that larger boards are associated with lower firm value than smaller boards because of increased information asymmetry, which makes it difficult to reach a consensus in the decision-making process.

We consider a set of standard observable firm characteristics. Table 4 shows a variety of observable acquirer characteristics that the literature has documented to be related to bidder returns (e.g., Capron & Shen, 2007; Farinós et al., 2017; Martynova & Renneboog, 2008). Subsets of these characteristics are used as control variables in DellaVigna and Pollet (2009), Louis and Sun (2010) and Farinós et al. (2021) when studying the Friday inattention phenomenon.

Table 1. Acquirer corporate board composition and firm characteristics

Variable	Label	Definition
		Acquirer board composition
Gender diversity	GEN	Number of women directors divided by the total number of directors
Independent directors	IND	Number of independent directors divided by the total number of directors
Board size	BSIZE	Total number of directors
		Acquirer firm characteristics
Standardized market value	SMV	Market value of the acquirer's common stock 20 trading days prior to the acquisition announcement date (in millions of euros) divided by the level of the IGBM market index at each point of time. This is to avoid the obvious problems with unstandardized values when using a wide sample horizon (Mitchell & Stafford, 2000).
Market-to-book ratio (MTB)	MTB	Market value of the acquirer's common stock 20 trading days prior to the acquisition announcement date divided by the book value of the acquirer's common stock at the end of the year prior to the acquisition announcement date.
Return on Assets Ratio (ROA)	ROA	Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) divided by the acquiring firm's book total assets at the end of the year prior to the acquisition announcement date.
Leverage	LEV	Total book debt to total book financing of the firm.
Analysts	AN	Number of analysts following the acquirer at the date of the announcement (data available from 2005).

We employ the conventional *t*-test for the mean differences between Friday announcements and non-Friday announcements assuming unequal variances in the univariate analysis.

In order to study the likelihood of acquiring an unlisted firm we employ a probit regression where the dependent variable is the unlisted indicator that takes value one if the acquisition announcement concerns an unlisted firm and zero otherwise. In the same way, the likelihood of announcing an acquisition on Friday is analysed with a probit regression. In the probit regression, the dependent variable is the Friday-announcement indicator that takes value one if the acquisition is announced on Friday and zero otherwise.

4. Sample

4.1. Sample Selection

Information on acquisitions (announcement date, identity of bidders and targets, payment method, etc.) performed by Spanish listed firms was manually collected from the Spanish Security Exchange Commission (*Comisión Nacional del Mercado de Valores*, hereafter CNMV) web page.

Given that an acquisition may be announced when the market is closed, we needed to define the day of the acquisition announcement and the event day (t_0). The announcement day is the calendar day on which the CNMV publishes the official acquisition communication, regardless of the time of the day at which it is released. The event day (t_0) is the trading day when the first closing price is available after the official acquisition communication to the CNMV.

The necessary economic and financial information for this research comes from the *Banco de España* (Spanish Central Bank) webpage and SABI, Amadeus and Orbis databases. Following Chang (1998) and others, the sample comprises «completed control acquisitions» exclusively. We define a completed control acquisition as one in which the buyer has increased its ownership position to over 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 (*Sistema de Interconexión Bursátil Español*, hereafter SIBE) over the period 1998–2018, that is, 378 acquisition announcements. For an acquisition announcement to remain in the final sample, it needs to meet the criteria showed in Table 2.

After the application of the aforementioned criteria, we obtained a sample that comprised 252 all-cash acquisition announcements of unlisted firms from 2004 to 2018.

Table 2. Sample selection process.

		Observations
Initial Sample		378
Less:		
(i)	The method of payment is not all cash	(45)
(ii)	The exact time of the official acquisition announcement on the CNMV website is unknown	(1)
(iii)	Information on the participation of women in CA is not available	(80)
Final Sample		**252**

4.2. Sample Characteristics

Table 3 shows the number of announcements made on Friday (55) and non-Friday (197), as well as the distribution of announcements between the acquisition of listed and unlisted companies. As expected, the largest sample corresponds to the acquisition of unlisted companies announced on non-Friday, while the smallest sample corresponds to the acquisition of listed companies announced on Friday.

Table 3. Number of acquisition announcements

	Full sample	Listed	Unlisted
Announcements	252	57	195
Friday	55	19	36
Non-Friday	197	38	159

Table 4 presents the descriptive statistics for the full sample and the differences in mean for listed and unlisted firms for the set of variables selected in Section 3 (see Table 1). Table 5 shows their correlation matrix.

Table 4. Descriptive statistics

	Full sample				**Listed [1]**	**Unlisted [2]**	
	Mean	**SD**	**Min**	**Max**	**Mean**	**Mean**	**[1]- [2]**
GEN	0.11	0.10	0.00	0.43	0.12	0.11	0.01
	[252]				[57]	[195]	(0.4797)
BSIZE	12.65	4.01	5	24	13.81	12.31	1.50
	[252]				[57]	[195]	(0.0199)
IND	0.36	0.18	0.00	0.88	0.40	0.34	0.06
	[252]				[57]	[195]	(0.0131)
SMV	6.45	12.68	0.00	73.33	13.52	4.38	9.14
	[252]				[57]	[195]	(0.0015)
MTB	2.86	3.20	-0.93	37.22	2.53	2.97	-0.44
	[242]				[56]	[186]	(0.2050)
ROA	5.22	4.43	-12.25	33.80	4.98	5.30	-0.31
	[247]				[57]	[190]	(0.5875)
LEV	0.49	0.25	0.00	1.70	0.52	0.48	0.04
	[252]				[57]	[195]	(0.2020)
ANA	9.54	9.71	0	42	13.90	8.25	5.65
	[219]				[50]	[169]	(0.0020)

Notes: The number of observations is presented in brackets. The *p*-values are presented in parentheses. The *t*-tests for the mean differences assume unequal variances.

Examining Table 4, the descriptive statistics for the board characteristic of the acquiring firm reveal that the average board size is 12.65 members. Of these members, 11.39% are women and 35.66% are independent directors. Of the total of 252 acquisition announcements in the sample, 57 are of listed firms and 195 of unlisted ones. If we analyse the differences between both subsamples, we observe that listed firms present on average higher quality and more independent boards than unlisted firms. Although gender diversity is greater in listed firms, the difference with unlisted firms is not significant.

The correlation analysis tests the relationships between all the variables in the analysis (see table 3). According to Hair et al. (2010), there is a multicollinearity problem when the independent variables show correlations higher than 0.8 or 0.9. In any case, the absolute values of the coefficients are lower than these values, indicating no multicollinearity problems in the regression analysis.

Table 5. Correlation matrix statistics for the full sample.

	GEN	BSIZE	INDEP	SMV	MTB	ROA	LEV	ANA
GEN	1							
BSIZE	0.0027	1						
INDEP	0.0777	-0.1018	1					
SMV	-0.0632	0.418	0.3085	1				
MTB	-0.0355	-0.151	-0.0591	-0.0039	1			
ROA	0.0803	-0.1423	-0.1319	-0.027	0.4885	1		
LEV	-0.0078	0.2243	0.1526	0.3253	-0.0398	-0.2395	1	
ANA	0.0503	0.5152	0.2527	0.6713	-0.0668	0.0112	0.3384	1

Next, we focused on the day of the announcement. Panel A of Table 6 reports the average characteristics of Friday and non-Friday acquisitions announcements for the full sample, whereas Panel B and C show the mean characteristics conditional on the listing status of the target. It is worthy to note that none of the corporate board characteristics shows a significant difference between non-Friday announcements and Friday announcements. Only one of the acquirer characteristics shows a significant difference between non-Friday announcements and Friday announcements. Specifically, the results show that acquirers of listed targets have a significantly lower market-to-book ratio when the bid announcement is made on Friday. For the rest of characteristics, no significant differences are found regardless of whether the announcer belongs to the full sample or to the acquisition of a listed/unlisted target.

Table 6. Average characteristics of Friday vs. non-Friday announcements

	Friday announcements [1]	Non-Friday announcements [2]	[1]−[2]
Panel A: Full Sample			
GEN	0.1142	0.1138	0.0003
	[55]	[197]	(0.9825)
BSIZE	2.5021	2.4805	0.0216
	[55]	[197]	(0.6345)
INDEP	0.3719	0.3524	0.0195
	[55]	[197]	(0.4818)

SMV	6.7018	6.3787	0.3231
	[55]	[197]	(0.8764)
MTB	3.0594	2.8091	0.2503
	[54]	[188]	(0.7407)
ROA	5.4796	5.1501	0.3296
	[55]	[192]	(0.6737)
LEV	0.4891	0.4845	0.0046
	[55]	[197]	(0.8992)
ANA	8.7736	9.7831	-1.0095
	[53]	[166]	(0.5414)
Panel B: Acquisition announcements of unlisted targets			
GEN	0.1202	0.1093	0.0108
	[36]	[159]	(0.5564)
BSIZE	2.4714	2.4562	0.0151
	[36]	[159]	(0.7616)
INDEP	0.3667	0.3378	0.0289
	[36]	[159]	(0.4432)
SMV	3.3545	4.6138	-1.2592
	[36]	[159]	(0.2766)
MTB	3.6303	2.8071	0.8231
	[36]	[150]	(0.4618)
ROA	5.6819	5.2056	0.4763
	[36]	[154]	(0.6662)
LEV	0.4924	0.4715	0.0210
	[36]	[159]	(0.6423)
ANA	7.0588	8.5481	-1.4893
	[34]	[135]	(0.3533)
Panel C: Acquisition announcements of listed targets			
GEN	0.1028	0.1327	-0.0299
	[19]	[38]	(0.2719)
BSIZE	2.5603	2.5823	-0.0219
	[19]	[38]	(0.8158)
INDEP	0.3817	0.4134	-0.0317
	[19]	[38]	(0.4094)
SMV	13.0441	13.7636	-0.7196
	[19]	[38]	(0.9034)
MTB	1.9178	2.8168	-0.8991
	[18]	[38]	(0.0194)
ROA	5.0963	4.9247	0.1716
	[19]	[38]	(0.8545)
LEV	0.4828	0.5390	-0.0562
	[19]	[38]	(0.3859)
ANA	11.8421	15.1613	-3.3192
	[19]	[31]	(0.3708)

Notes: The number of observations is presented in brackets. The *p*-values are presented in parentheses. The *t*-tests for the mean differences assume unequal variances.

5. Results

First, we tested whether the gender diversity of the board of directors is related to the decision to buy a listed or an unlisted firm. Table 7 shows the probability of acquiring an unlisted company. The coefficient of women directors is significant and negative, that is, the higher the percentage of women directors, the lower the likelihood of acquiring an unlisted company and the higher the probability of acquiring a listed company. The rest of the board variables are not significant.

Table 7. Probit model regression for the target status

	Dep. var.: Unlisted target
GEN	-2.2304
	(0.090)
BSIZE	0.68914
	(0.213)
INDEP	-0.7296
	(0.374)
SMV	-0.0335
	(0.017)
MTB	0.2131
	(0.027)
ROA	-0.0014
	(0.969)
LEV	-0.4672
	(0.455)
ANA	-0.0356
	(0.09)
Constant	-1.3770
	(0.346)
Year	Yes
Pseudo R^2	0.3547
N	166

Notes: The *p*-values are presented in parentheses.

Some behavioural traits of women in managerial positions may favour the acquisition of listed companies over unlisted ones. Thus, female executives are characterised by more prudent decision-making because they are more risk-averse than men (Eckel & Grossman, 2008; Sapienza et al., 2009), less overconfident than men (Huang & Kisgen, 2013) and less interested in competing (Geneezy et al., 2003; Hoghart et al., 2012). Chen et al. (2019) argue that female directors are associated with less aggressive investment policies and better acquisitions. In addition, female board participation is associated with higher volume and quality of disclosures (Armstrong et al., 2014; Gul et al., 2011), greater ethical behaviour (i.e., unmanipulated information disclosure), greater attention to investors (Adams et al., 2011; Matsa & Miller, 2010) and greater oversight of managers (Adams & Ferreira, 2009).

Thus, the preference of female executives for the acquisition of listed companies would be based on a more prudent behaviour in their investment decisions. Differences in information availability may influence the acquirer's choice (Farinós et al. 2017). The acquisition of listed companies is characterised by less asymmetric information, greater disclosure of information and greater liquidity. Thus, Capron and Shen (2007) and Feito-Ruiz et al. (2014) found that, if information asymmetry is excessive, acquirers prefer to buy a listed firm even though the information asymmetry would lead to a discount in the price paid for a private firm.

Second, we analysed whether the gender diversity of the board determines the likelihood of making an acquisition announcement on Friday. Table 8 shows the results obtained for the full sample. The probability of announcing an acquisition on Friday does not depend on the board characteristics analysed nor on the firm characteristics. Only the number of analysts that follow the acquirer has a significant relationship with Friday announcements. Specifically, we find a significant negative relationship between the number of analysts and the likelihood of announcing an acquisition on Friday, which, in turn, implies that firms making Friday announcements may be less visible.

Table 8. Probit model regression for the full sample

Dependent variable: Friday announcement					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
GEN	-0.7339			-0.8930	-0.6770
	(0.543)			(0.469)	(0.596)
BSIZE		0.1331		0.2113	0.5182
		(0.667)		(0.481)	(0.239)
INDEP			0.2821	0.3811	0.5551
			(0.633)	(0.542)	(0.406)
SMV					0.0133
					(0.232)
ROA					0.0223
					(0.297)
MTB					0.0171
					(0.576)
LEV					0.3944
					(0.323)
ANA					-0.0312
					(0.062)
Constant	-0.8000	-1.1928	-1.0115	-1.4323	-2.5076
	(0.012)	(0.085)	(0.007)	(0.044)	(0.0379)
Year	Yes	Yes	Yes	Yes	Yes
Firm	Yes	Yes	Yes	Yes	Yes
PSEUDO R2	0.0292	0.0279	0.0282	0.0322	0.0595
N	219	219	219	219	196

Notes: The *p*-values are presented in parentheses.

Regarding the announcement of the acquisition of unlisted firms, Table 9 shows a positive and significant relationship between acquisition announcements on Friday and large boards: the higher the number of directors, the higher the probability of announcing an acquisition of an unlisted company on Friday. One possible explanation is that large boards tend to suffer from lack of coordination and delayed decision-making that may encourage the announcement of an acquisition of an unlisted company on Friday. The acquisition announcement of an unlisted company might be more feasible, even in environments of greater asymmetric information, as there would be no need for an auction-like procedure and the bidder would have more bargaining power.

This result, jointly with the evidence from Farinós et al. (2021) of the existence of investor inattention around unlisted acquisition announcements made on Fridays, suggests that opportunistic managers could use this lack of coordination shown by large boards to make opportunistic acquisition announcements on Fridays, especially on target firms for which there is less public information, such as unlisted ones.[1]

Table 9. Probit model regression for unlisted firms

	Dependent variable: Friday announcement				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
GEN	0.4033			0.1418	0.3174
	(0.755)			(0.915)	(0.823)
BSIZE		0.1892		0.2363	0.9780
		(0.570)		(0.487)	(0.059)
INDEP			0.3833	0.4642	1.0179
			(0.492)	(0.440)	(0.135)
SMV					-0.0252
					(0.294)
ROA					0.0092
					(0.739)
MTB					0.0648
					(0.033)
LEV					0.6764
					(0.190)
ANA					-0.0299
					(0.127)
C	-0.8930	-1.2816	-1.0088	-1.6107	-3.9329
	(0.008)	(0.091)	(0.005)	(0.060)	(0.005)
Year	Yes	Yes	Yes	Yes	Yes
Firm	Yes	Yes	Yes	Yes	Yes
PSEUDO R2	0.037	0.0378	0.0384	0.0409	0.1028

[1] In untabulated results, we also find for the sample used in this analysis that the abnormal return for the acquirer of unlisted companies on Fridays is significantly lower than that obtained on non-Friday acquisition announcements.

N	164	164	164	164	146

Notes: The *p*-values are presented in parentheses.

The results obtained for the subsample of acquisition announcements of listed companies are presented in Table 10. The results are substantially different from those obtained for the full sample and for the unlisted target sample. They show that boards with higher gender diversity are less prone to announce the acquisition of a listed firm on Friday, as we find a negative and significant coefficient for the variable gender in all the models of Table 10. The results are robust to the inclusion of all of the corporate board variables and the firm characteristics. A possible explanation may be that firms in which there is a greater proportion of women directors have a greater probability of announcing acquisitions in periods of attention (Monday to Thursday) because they provide higher quality information and are more concerned about stakeholders than firms with a lower proportion of women directors. Therefore, they do not take advantage of investor inattention.

Table 10. Probit model regression for listed firms

Dependent variable: Friday announcement					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
GEN	-4.5834			-4.5314	-8.5144
	(0.061)			(0.053)	(0.009)
BSIZE		-0.3610		-0.5028	-2.2077
		(0.533)		(0.465)	(0.069)
INDEP			-2.0056	-2.1699	-8.8805
			(0.249)	(0.207)	(0.001)
SMV					0.0893
					(0.000)
ROA					0.0227
					(0.809)
MTB					-1.6178
					(0.000)
LEV					-0.3090
					(0.811)
ANA					-0.0592
					(0.105)
Constant	0.5343	0.4613	0.2393	2.4713	13.691
	(0.432)	(0.770)	(0.737)	(0.208)	(0.002)
Year	Yes	Yes	Yes	Yes	Yes
Firm	Yes	Yes	Yes	Yes	Yes
PSEUDO R2	0.0609	0.0164	0.04	0.0964	0.3761
N	47	47	47	47	44

Notes: The *p*-values are presented in parentheses.

A negative and significant relationship is also observed between board size and the proportion of independent directors. So, the larger the size of the board, the lower the probability of announcing the acquisition of a listed firm on Friday. Following our argument above in the case of unlisted companies, large boards suffer from a lack of coordination and difficulties in reaching a consensus and, although managers might want to take advantage of this to make an opportunistic announcement on Friday, when the target is a listed company about which there is a lot of public information, managers do not try to take advantage of the possible investor inattention.

Also, for acquisition announcements of listed firms, the results show that the more independent directors they have, the less likely they are to announce the bid of buy a listed company on a Friday. This could be explained by the greater monitoring and improved information transmission. Overall, the results partially confirm H1, since it only holds for listed companies.

6. Conclusions

In this study we analysed whether gender diversity of the corporate board influences the probability of acquiring public or private companies and of announcing such acquisitions on Friday. We introduced the listing status of the target firm in our study as this is a key characteristic in the value creation associated to any acquisition process. As previous literature in the field shows, there are several differential characteristics between both types of acquisitions (liquidity, ownership structure, information asymmetry and bargaining power) that investors have to consider in their investment decision and that suggest the need for a separate analysis.

The motivation of this study comes from the evidence in previous research for the Spanish market of investor inattention to acquisition announcements made on Friday. This result leads us to wonder whether the characteristics of the board of directors, and specifically its gender diversity, may be related to the decision to announce an acquisition on a low attention day such as Friday, or to communicate the acquisition during periods of higher attention. For this purpose, we used a sample of 252 all-cash financed acquisition announcements of listed and unlisted target firms released by Spanish listed firms over the period 2004–2018.

Consistent with the more prudent behaviour of women compared to men, we find that companies with a higher percentage of women are more likely to buy a listed company than an unlisted one.

The greater participation of women directors on acquisitions of listed firms is also observed in the day of announcement. So, we find that those boards with higher gender diversity are less likely to announce the acquisition of a listed firm on Friday. Our results are consistent with the notion of women directors being associated with greater disclosure of high-quality information and with higher concern about stakeholders. However, gender diversity does not influence the likelihood of announcing the acquisition of an unlisted target on Friday.

Regarding other corporate board characteristics analysed, the independence of the board is only related to the acquisition announcements of listed targets. That is, the greater the independence of the board the lower the likelihood of an acquisition being announced on Friday. This result is coherent with the idea that independent directors improve information transmission and monitoring of managers.

However, the board size is a controversial attribute. The larger the board, the lower the likelihood of an acquisition announcement of listed targets on Friday. On the contrary, regarding acquisition announcements of unlisted firms, the larger the board, the higher the likelihood of announcing an acquisition on Friday. These results are in line with studies that associate large boards with problems of coordination that opportunistic managers benefit from in order to make Friday acquisition announcements of unlisted firms for which there is little public information. In any case, further research about managers' behaviour is needed because of the different results we observe for acquisitions of listed companies.

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