

What decides the effectiveness of nonexecutive directors' monitoring? Evidence from UK M&As

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Abstract

This paper investigates the drivers of nonexecutive directors' effective monitoring by utilizing UK M&A deals from 2005 to 2009, and also examines how the financial crisis affects the drivers. We find that the effective monitoring is mainly and steadily driven by cash incentive, but the ownership incentive only takes significant effects before the financial crisis. The discipline from market such as financial crisis has positive effects on nonexecutive directors' monitoring efficiency, but reluctantly. We also find that the proportion of nonexecutive directors has a hint of negative relationship with bidders' abnormal returns, but the relationship is significant before the financial crisis. This may indicate that the UK's board has inefficient nonexecutive directors.

Introduction

Nonexecutive director takes an increasingly important role in corporate governance around the world, especially after the financial crisis from 2007. Though nonexecutive directors are not involved in daily operating decisions, they are usually viewed as a counterweight to executive directors, assisting in monitoring the companies by employing their expertise. Nonexecutive directors' monitoring efficiency is viewed as one of the important standards in assessing the board quality. From past experience, corporate governance quality is more likely to be reviewed when there are financial scandals or crisis, for example, the UK's Cadbury Report (1992) generated by the case such as Maxwell and the US's Sarbanes-Oxley Act (2002) stimulated by the scandal such as Enron. Nonexecutive directors' monitoring efficiency was questioned again after the credit crisis since 2007. We will investigate the drivers of nonexecutive directors' monitoring which is presented by CARs around the announcement date, whether it is determined by the nonexecutive proportion in board or their cash or ownership incentives by using the UK M&A deals from 2005 to 2009, and also examine the effects of financial crisis on the effectiveness of monitoring.

Investors are willing to view the appointment of new nonexecutive directors as good news (Rosenstein and Wyatt, 1990), while whether the nonexecutive directors are efficient in monitoring are still debatable until now. The study on the effectiveness of nonexecutive directors' monitoring role is mainly discussed through two threads. One is from the perspective of the number or proportion of nonexecutive directors, for example Weisbach (1988), Byrd and Hickman (1992), Hermalin and Weisbach (1991), Bhagat and Black (2001),

and Andres and Vallelado (2008). Weisbach (1988) and Byrd and Hickman (1992) find that more nonexecutive seats in the board is a beneficial to the company. However, Hermalin and Weisbach (1991) and Bhagat and Black (2001) find no relationship between board composition and firm performance. Though the level of nonexecutive proportion is widely used in measuring their monitoring effectiveness, this standard alone is not comprehensive enough. The companies may just improve the proportion to comply with the principles and create an independent image of the board. Actually, if the individuals in the board are not properly incentivized, hardly could the nonexecutive directors perform efficiently. So another thread is studied from the angle of nonexecutive directors' incentive, such as Hempel and Fay (1994), Perry (1999), Bryan et al. (2000) and Yermack (2004). Though Hempel and Fay (1994) find that nonexecutive directors' compensation are not related with firm performance, Perry (1999), Bryan et al. (2000) and Yermack (2004) get the conclusion that utilizing nonexecutive directors' compensation incentives can benefit the firm either in performance or in CEO turnover.

We study the monitoring role efficiency of nonexecutive directors by employing UK M&A dataset based on the following reasons. First, event study such as M&A is a very effective method to test the nonexecutive performance because board has the responsibility to review the acquisition proposal put forward by management (Kontz, 1967; and Weiss, 1991). Bacon (1985) provides the evidence that nonexecutive directors are experts at monitoring the costs and benefits of acquisitions. M&As as big investment decisions are closely greatly concerned with the further strategy and development of bidders, so they should be taken seriously in the proposing and processing periods. Nonexecutive directors as the key monitoring role in the boards, should employ their independent view and specific knowledge to take the roles and benefit the shareholders. In this paper, we will examine whether the characteristics of nonexecutive directors have impacts on bidders' announcement period abnormal return.

Second, UK has some specialities in corporate governance compared with US and other countries. UK, as the first-mover in the reform of corporate governance in the world issued the Cadbury Report (1992), which proposed the recommendations that the public listed companies should have at least three nonexecutive directors, and was changed to at least 50% later. But the requirement is not rigorous, the proportion can be changed according to different situations of companies. As UK is in the common law system, its Corporate Governance Code is operated in the "comply or explain" approach, which is understood as companies either obey the code or give reasonable explanations to non-compliance. The flexibility of the code gives the UK companies enough freedom to develop their corporate governance constitutions to improve their firm performance. UK also has a unique nonexecutive remuneration system, that is nonexecutive directors can only receive salaries or fees but no incentives such as cash bonus, stock grants, stock options, or pensions, different with the US ones who can receive more kinds of incentives. And the stocks owned by nonexecutive directors are usually bought by themselves. So the UK nonexecutive

directors are considered to be more independent and more likely to mitigate agency problems. Different with papers studying on the US, we separately test the cash and ownership incentives, and use the nonexecutive remuneration to operating income which has never been used before to measure the cash incentive, and use the percentage of nonexecutive directors' ownership to measure the ownership incentive. In the UK, the chairman, who has the responsibility to ensure the board runs effectively, takes a traditionally influential role in the board. Though the chairman is suggested to be nonexecutive, according to the 'comply or explain' principle, a small proportion of companies still have executive chairman (but not CEO). We will firstly investigate the effects of executive chairman on bidder's M&A decision.

Third, the monitoring inefficiency of nonexecutive directors is questioned and blamed in the credit crunch since 2007. As we mentioned in the beginning, the corporate governance regulations are usually reviewed after financial scandals and collapse, so we will compare the effects of nonexecutive directors on announcement period abnormal returns before and after the financial crisis. The first aim of the sub-sample test is to find whether the nonexecutive directors should take some responsibility in the financial crisis. And the second aim is to find whether the nonexecutive directors' monitoring efficiency is improved after the financial crisis. This is the first paper reviewing the nonexecutive directors' responsibilities in financial crisis from both the perspectives of their proportion in the board and their incentives. As banks and other financial institutions have higher requirements in corporate governance restricted by the high fiduciary duties, they will usually perform differently to non-financial firms, for example, Andres and Vallelado (2008) find a U shape relationship between the nonexecutive directors and firm performance. We will test the financial bidders and non-financial bidders separately to investigate whether some differences exist in the two groups of UK bidders.

We use 319 UK M&As ranging from 2005 to 2009 to study the nonexecutive directors' monitoring effectiveness. We find that the percentage of nonexecutive directors is irrelevant with the bidders' announcement period abnormal returns in the whole sample, consistent with Hermalin and Weisbach (1991). However, we found a significantly negative relationship between percentage of nonexecutive directors and CARs before the financial crisis, but the relationship no longer exist after the financial crisis. This could indicate that excessive and passive nonexecutive directors make the board work less efficiently before the financial crisis but improved after that as the market pay greater attention to corporate governance. It may also indicate that the deals made in bad times are more cautious and originated by the bidders' needs. Either explanation supports that the monitoring effectiveness of bidders' nonexecutive directors to the deals are greatly influenced by the external discipline from market. We also find that nonexecutive directors' cash incentive is effective to help benefit the bidders significantly during the whole range, especially in the deals with non-financial bidders. As the nonexecutive directors' remuneration is at a very low level, a little increase will bring more positive incentive but no need to worry about the

arising of managerial power problem occurring in the study of the CEOs' remuneration. Though the nonexecutive directors' ownership has a significantly positive impact on bidders' CARs, it is no longer effective after the financial crisis. As there is a huge difference in nonexecutive directors' ownership in 2008 and 2009, averagely 1.18% and 3.09% respectively, it seems the bidders' nonexecutive directors still need time to recover their confidence to the market. which may be caused by the huge reduction of executive chairman Though the executive chairman reduced largely after the financial crisis, they begin to work more effeciently and benefit the bidders after the financial crisis. The reduction indicates either the overall company on the market reduced the negative executive chairman or the bidders with positive executive chairman are more likely to proceed M&As. And we also examine the impacts of some other corporate governance characteristics on bidders CARs, such as duality, board size, CEO ownership, CEO remuneration, and executive directors' remuneration, and find that paying too much remuneration to CEO is not a good incentive approach.

This paper consists of 5 sessions. Session 2 reviews the literatures on the composition of board and nonexecutive incentives. Session 3 describes the sample, variable, and data. Session 4 analyse the results obtained in detail. Last, we discussed the limitations and implications of this study.

Literature Review and Hypothesis

M&As and Nonexecutive directors

Nonexecutive directors are entitled by most regulations that they have the responsibility to monitor acquisition proposal. And due to their specific knowledge and experience, nonexecutive directors are considered to be experts or have expertise at monitoring acquisition proposal. The previous studies on the effects of nonexecutive proportion to the monitoring efficiency of targets' boards get debatable results, some focus on targets, such as Shivdasani (1993), Cotter et al. (1997), and Bange and Mazzeo (2004); some focus on banking industry, such as of Brickley and James (1987) and Subrahmanyam et al. (1997); and some focus on tender offers Cotter et al. (1997) and Byrd and Hickman (1992). Shivdasani (1993)'s study on hostile takeovers find that outside directors and hostile takeovers are substitute corporate governance mechanisms. Cotter et al. (1997) find that the target with a majority of outside directors is more likely to benefits their shareholders with higher initial tender offer premium, bid premium revision and stock gains around the tender offer period. However, Bange and Mazzeo (2004) get contradictory results showing that the independent board is less likely to get higher bid premium. Brickley et al. (1994)'s evidence that the stock price movement around the announcement date of poison pills is positive when the board is dominated by nonexecutive directors, which indicates that nonexecutive directors act on behalf of shareholders' interests. Brickley and James (1987)'s results partly support that nonexecutive directors are an effective internal mechanism for control which is a

substitution device of the market for corporate control when the external environment is weak in monitoring and discipline the companies. However, Subrahmanyam et al. (1997) find a negative relationship between the proportion of outside directors and bidders' announcement-period abnormal returns. They also find that the ownership of outside directors has a positive impact on bidder's return. Byrd and Hickman (1992) find in tender offers that the bidders with independent directors more than 50% have significantly higher announcement period abnormal returns, but the relationship between proportion of nonexecutive directors and abnormal returns is nonlinear, suggesting that inefficient independent outside directors may exist. In this paper, we also want to discover what decide the effective monitoring of nonexecutive directors in UK M&As, the proportion of non-executives on the board, ownership or remuneration, and whether the financial crisis have some impacts on the value created by M&As market?

Board composition

In the concept of empirical study, board independence is usually viewed as the proportion of non-executives on the board. In the common sense of shareholders, they view more nonexecutive directors as a good signal because these people will represent the shareholders and monitor the company. Though in theory, Jensen and Meckling (1976) and Shleifer and Vishny (1997) proposed that outside directors will help the company mitigate agency problem and perform better, in the empirical studies, it is still debatable whether the company could be monitored more efficiently with more nonexecutive directors. Weisbach (1988), Guthrie et al. (2012) and Knyazeva et al. (2013) provide the evidence from the perspective of CEO monitoring. Weisbach (1988) provide evidence that nonexecutive-dominated board is more effective in monitoring the CEOs by removing them after bad company performance. Recently, Knyazeva et al. (2013) find positive relations exist between nonexecutive proportion and either the incentive-based CEO pay or CEO turnover performance sensitivity, which strongly support the monitoring role of nonexecutive directors. But Guthrie et al. (2012) doubt the effectiveness of the nonexecutive directors, concluding that they seem not as powerful as assumed by the managerial power hypothesis in constraining the CEO pay. Other studies focus on the effects of the proportion of non-executives on firm performance or appointment (Baysinger and Butler, 1985; Rosenstein and Wyatt, 1990; Peng, 2004; Hermalin and Weisbach, 1991; and Bhagat and Black, 2001). Baysinger and Butler (1985) find that the board independence measured by the proportion of nonexecutive directors only have a mediate and lagged effect on firm performance. Rosenstein and Wyatt (1990) find that when new outside directors are appointed, the share price around the announcement date increases significantly, which support the theory that outside directors represent the shareholders interest. Peng (2004) find that more nonexecutive directors will help the company to perform better. However, Hermalin and Weisbach (1991) and Bhagat and Black (2001) give the contradict results. Hermalin and Weisbach (1991) find no relationship between board independence and firm performance which is measured by Tobin's Q. Bhagat and Black (2001) not only find no positive effects on

long-term performance but also find hints of negative relationship between nonexecutive composition and firm performance. In the banking industry, Andres and Vallelado (2008) find an inverted U-shaped relationship between the proportion of nonexecutive directors and firm performance. Is the independence of board really determined by the proportion of outside directors? In our view, this question should also consider the, external monitoring and individual incentives. The external monitoring and individual incentives will be discussed in the latter paragraphs. If the company appoints the nonexecutive directors based on their specific needs, such as legal issues, financial consulting, or personal industrial relationship, the nonexecutive directors are more likely to have a positive impacts on the company. If the company appoints more nonexecutive directors just to obey the requirements of regulation, the redundancy problems are readily to stemmed, which will not bring positive effects to the company. Though UK code is flexible in requirement of board composition, which is over 50% nonexecutive directors, the market and shareholders have already formed the view that a company with nonexecutive-dominated board is more likely to perform better (Dahya and McConnell, 2005). So it is very possible that UK's proportion of nonexecutive directors is more than needed. So we do not expect that nonexecutive-dominated board will have positive impacts on firm performance.

Nonexecutive directors' incentives

Previous literature studying the financial incentives of nonexecutive directors are mainly categorised into total compensation incentive (Yermack, 2004; Linn and Park, 2000; and Deutsch et al., 2007) and stock-based incentive (Morck et al., 1998; Hermalin and Weisbach, 1998; and Noe and Rebbello, 1996). Morck et al. (1998) documents that outside directors' ownership can affect the firm value which is measured by Tobin's Q. Both Hermalin and Weisbach (1998) and Noe and Rebbello (1996) conclude that incentive-based payments are an effective method to enhance the monitoring efficiency of outside directors by developing models. Perry (1999) finds that outside directors' effective monitoring of CEO behaviour is positively related to their stock-based incentive. Linn and Park (2000) find that the compensation incentive for outside directors is helpful in mitigating agency problems. Deutsch et al. (2007) document a U-shaped relationship between stock and stock option pay for outside directors and a firm's acquisition rate. Yermack (2004) find that nonexecutive director's compensation changes with the firm performance. Then it is reasonable to infer that nonexecutive directors can be effectively incentivised by remuneration through assisting the firm to perform better. So the nonexecutive directors' remuneration is very possible to be a driver of firm performance. Though the stock ownership can stimulate the nonexecutive directors to be monitor the executive directors' decision on behalf of their own profits, Morck et al., (1998) also propose that high-level ownership of outside directors can also generate the entrenchment problem. Therefore, we will examine the ownership incentive and cash incentive separately to avoid the interference from mixed effects of ownership incentive. And also, as UK's remuneration to nonexecutive director is dominated by cash payment, such as fees or salaries, and nearly no appearance of bonus, pension,

stock grants or stock options, cash is the most direct incentive to them. Additionally, ~~though~~ UK's firms require nonexecutive directors to own some of their stocks, the stock is not given as stock grants, they are bought by the nonexecutive director themselves. This enables them to be more keen to make gains, and improve their monitoring efficiency consequently. So we propose that the ownership incentive and cash incentive will affect the bidders' announcement period returns significantly.

Financial crisis

Another question is who monitors the nonexecutive directors? If the nonexecutives are monitored by the market, then the market could only add the rewards or punishment on the firms after the consequences occurred, so there will be a lagged effect on the composition of board. As we mentioned earlier, after each financial scandal or collapse, corporate governance regulations (for example, Cadbury (1992) and Sarbanes- Oxley Act (2002)) are reviewed or revised. Though the financial crisis since 2007 was originated from financial institutions, it greatly and widely influenced nearly every industry because most of the listed companies had directly or indirectly involved in buying or selling securitized products. The board independence was questioned again on whether nonexecutive directors effectively monitored the managers' excessive risk-taking behaviors. We will investigate the monitoring efficiency of nonexecutive directors before and after the financial crisis, and if they didn't perform their duty properly, have they improved the efficiency after the market discipline. Additionally, we also separately test the deals with non-financial bidders and financial bidders as previous studies usually treat them different due to the fiduciary requirements (Brickley and James, 1987; Subrahmanyam et al., 1997; Ferris and Yan, 2007). We try to determine the different impacts of nonexecutive directors on the two kinds of bidders.

Sample

Our sample constitutes 319 UK completed M&A deals ranging from 2005 to 2009. Several constraints are used in sample selection: 1) As UK takes corporate governance reform earlier and has an advanced development than most of other countries, we only use the UK domestic deals to let the results fully explain the UK corporate governance properties and avoid the different regulation influences from other countries. 2) Only the deals with at least 10 million dollars in value are selected to prevent the bias from the small deals. 3) Following most of the literatures in M&As, we exclude the deals with relative size less than 5% which receive less attention by both the board of directors, shareholders and potential investors. 4) As deals in the same day with the same bidder are readily to cause meaningless repetition, these deals are deleted. In our sample, 272 deals are performed by non-financial acquirers and 46 are completed by financial ones. The deals information is downloaded from Thomson One Banker. The stock price and the accounting performance data are from the Datastream. All the data about the corporate governance are hand collected from the

annual reports. As some companies are poor in information disclosure, we exclude the firms without all the information we needed in corporate governance.

Variables

The ownership of non-executive directors, CEOs, and executive directors other than ~~but~~ CEOs is measured by the ordinary shares held by each group. The percentage ownership of each group is calculated based on the total outstanding ordinary shares in the last calendar year end. Though some previous literature, for example Bryan et al. (2000) and Deutsch et al. (2007) use the value of the stock granted to non-executive directors in a calendar year as the ownership incentive variable, we only use the percentage of ownership representing the ownership incentive by considering that stock price is very unstable and are readily affected by the macroeconomic environment. As UK non-executive very rarely obtained bonus and nearly no chance to get stock options and pensions, the non-executive remuneration is just the salary or fees revealed in the most recent annual reports. While the CEO remuneration include more incentives than the non-executives, constituted by salary, bonus, pension and stock grants. Executive chairman represent the chairman who is also an executive director but CEO (so there is no overlapping between duality and executive chairman), which is a dummy variable, and equal to one if yes. This variable is special for UK who uses 'comply or explain' standards, to test whether the companies that choose their chairman as executive directors will affect the investors' sentiment. Duality means the CEO is also a chairman. Some previous papers find that duality is not a good corporate governance signal to the market due to the conflicts of the two roles. We will see whether the conflicts also exist in the UK companies.

Six aspects of the bidders are controlled for in our tests. Book to market value (BTMV) is calculated as the total asset divided by the total market capitalization, in explaining whether the bidders are overvalued or undervalued. According to Dong et al. (2006), bidders with higher BTMV will get higher bidders' announcement period returns, indicating that investors prefer the deals with undervalued bidders. Leverage is the long-term debt to the total equity, which is a double-edged sword. High leverage could be a good signal, which brings a company benefits, such as tax shields, management discipline, and avoids dilution of ownership, but it could also convey negative information, including difficulty in repayment and lower credit rating. We use operating income to total assets to represent the profitability of bidders, and assume that the higher the ratio, the higher the announcement period return. Relative size is the ratio between the deal value and the acquirer's market value. The relative size of the deal could affect the bidder's return evidenced by Asquith et al. (1983), that is when the target relative to the acquirer is bigger, returns to the acquirer is higher. RUNUP is the cumulative stock returns 250 days before the announcement date. Higher RUNUP means the acquirer is overvalued. Investors will make adverse selection when stock is misvalued, and affect the announcement period stock price. VOLATILITY is the standard deviation of stock returns 250 days before the announcement date. Volatility

represents the risk of a stock. The higher the risk, the higher are the potential returns. As found by Duffee (1995), a positive contemporaneous relation exists between firm stock return volatility and firm stock returns. Cash represents the percentage of cash used in the payment. Study of Servaes (1991) provides evidence that bidders obtain more benefits from cash payments than stock payment.

Data description

Table 1 shows the trend of each variable. Panel A illustrates the trends of the whole sample, panel B gives the trends of non-financial deals, and panel C shows the trends of financial deals. As the sample is dominated by non-financial deals, the trend of the percentage number of deals in each year is the same in the whole sample and non-financial sub-sample. Affected by the global financial crisis, the trend of deals' number has a huge decrease from 2007 to 2009 in both the whole sample and the sub-samples, indicating that macro-economic situation can seriously affect the activity of M&As market. But the CARs change inconsistently with the deals' number. In the whole sample (Panel A) CARs reduce from 1.45% to 1.11% from 2005 to 2007, but increase from 1.11% to 4.33% after the crisis (2007-2009). For the non-financial deals, the abnormal returns reach the highest point in 2009, which is 2.71%; and for the financial ones, the CARs are 10.33% and 9.98% in 2008 and 2009, respectively. This phenomenon implies that the low-active M&A market may benefit the bidders more than the high-active market.

The percentage of nonexecutive directors decreased year by year from 2005 to 2007, but increased rapidly after the financial crisis in all the samples. In 2007, the percentage of nonexecutive directors in the whole sample and non-financial sub-sample is 47.69% and 48.49% separately, a little lower than the requirement of UK Corporate Governance Code. But in the financial sub-sample, the number is 42.84%, which is nearly 10% lower than the requirement. Two implications can be inferred that, first, the boards which are not dominated by non-executive directors are not good signals to the economy; or second, companies neglect the significance of the nonexecutive monitoring in good times. The number increase to 56.93%, 53.63% and 68.48% in 2009 each of the whole sample, non-financial sample, and financial sample respectively. This may indicate that the acquirers try to employ the increase of nonexecutive directors to lift the corporate governance effectiveness in bad times, and eventually to improve firm performance, especially for the financial bidders. The percentage of nonexecutive ownership fluctuates a lot during the five years, but all hit the highest point in 2009, 3.09%, 3.36% and 2.16% respectively for the whole, non-financial and financial samples. It seems that the nonexecutive directors in UK began to recover confidence to the market, so they would like to hold more stocks. But the nonexecutive remuneration to operating income in 2009 in each subsample is all lower than that in 2007, and even negative in non-financial deals. On one hand, this may be caused by the poor operating income in the financial crisis, and on the other hand, it could also be the reason that nonexecutive directors' cash incentives are reduced due to the loss. No

acquirer's board in 2009 is in led by executive chairman. Before the crisis the average bidders who use executive chairman is quite high, nearly one-fifth. It could be a natural reduce by abiding the UK Corporate Governance Code year by year, or a realization of the harm of the conflicts caused by the executive chairman.

The board size is in slightly decreasing from 2005 to 2009. But the duality has a dramatic increase in 2009 for both the non-financial and financial firms, constituting nearly one fifth of the sample. The percentage of CEO ownership and executive directors ownership but CEO both decreased dramatically after the financial crisis, and the CEO remuneration to operating income also decreased to the lowest point—2.43% on average in 2009. These changes perfectly coincide with the variation of the economic situation.

[Table 1]

Table 2 shows the data statistics of the whole sample (Panel A), non-financial subsample (Panel B) and financial subsample (Panel C). The average CARs for the whole sample is 1.61%, which means the bidders are able to get benefits from the M&As, different with some previous studies' (Servaes, 1991, Duggal and Millar, 1999 et al.) conclusion that bidders' value deteriorate in M&As. For non-financial deals, the average CARs is 1.25%, which is lower than the financial deals, averaged at 3.7%. The percentage of nonexecutive directors is just at the bottom line of the UK CG requirement—50% either in the nonfinancial sample and financial sample, which indicate companies are reluctant to increase the proportion of nonexecutive directors. This could be for the reason that the bidders do not want too much monitoring in their decision process, or for that they do not believe nonexecutive directors' monitoring is effective but just increase the cost. The percentage of nonexecutive directors' ownership is 2.22% on average, and the non-financial bidders has a slightly higher proportion—2.33% than the financial bidders—1.58%. But the financial acquirers have a higher nonexecutive remuneration to operating income—2.15%, than the non-financial bidders—2.16%. The nonfinancial bidders seems value long term incentive more than the financial ones. There is higher proportion of executive chairman in financial bidders (26%) than that in non-financial ones (15%). And financial bidders also have one more directors on average in the bidders' boards than in non-financial ones. According to the CEO data statistic, it is obvious that financial bidders rely more on the CEO than non-financial bidders. The CEO duality level is higher in financial firms, the same with the percentage of CEO ownership, and CEO remuneration to operation income. It seems that financial bidders even more believe that CEOs takes a significant role in a company and can contribute more to the company by providing more incentives.

[Table 2]

Results

Table 3 shows the results for the whole sample. Column (1), (2) and (3) present the effects of the proportion of nonexecutive directors, ownership incentive and cash incentive independently. Column (4) shows the results including all the independent variables. Though the percentage of nonexecutive directors is not significant, it forecasts a trend of negative relationship with the abnormal returns, which is consistent with Bhagat and Black (2001). This result contradicts with the expectation of the issues of regulation and shareholders, and alerts the shareholders that more nonexecutive directors may not mean better corporate governance. The percentage of nonexecutive ownership only shows a positive significant sign at the 10% level, which cannot fully assure the relationship. Seeing from the huge fluctuation of nonexecutive ownership showed in data description, we infer that the insignificant may be caused by the nonexecutive directors' inconsistent confidence to the market and their investment decision. However, the nonexecutive remuneration to operating income is positively significant related with the abnormal returns at the 1% level which confirms our assumption that the cash incentive stimulates the nonexecutive directors to work effectively as monitors. The results of cash incentive are consistent with our hypothesis. As ownership incentive is more determined by nonexecutive directors themselves, besides to solve the agency problems, it may more likely to reflect the nonexecutives' investment considerations, such as the market timing and their own investment portfolio, the incentive may not take effect as perfect as cash incentive, which is directly and purely controlled by the company. So the effective monitoring of nonexecutive directors is mainly driven by the cash incentives, no matter before or after the financial crisis, but not the board independence. These results indicate that the board monitoring effectiveness should be improved from the individual nonexecutive directors, who are incentivised individually, but not just increase the number in quantity. As for other corporate governance variables, the $\log(\text{board size})$ is negatively related with CAR11 at the 5% significance level, indicating that big board is not a good for effective corporate governance, consistent with Yermack (1996). The CEO remuneration can damage the bidders' interests with its increasing, which is negatively associated with abnormal returns at the 1% significance, supporting the managerial power hypothesis.

[Table 3]

Table 4 illustrates the comparison of results before and after the financial crisis. Before the financial crisis, the percentage of nonexecutive directors is negatively associated with CAR11 at the 1% significance level, which indicates that bidders have too many nonexecutive directors who fail to perform the monitoring role, indicating that they monitor the bidders inefficiently. After the financial crisis, the percentage of nonexecutive directors is not significantly related with the CAR11, which means that they cannot affect the bidders' benefits significantly. The explanation of this change can either be that the monitoring efficiency of nonexecutive directors is improved overall after the financial market discipline or that only is the companies with efficient nonexecutive-monitoring became involved in M&A deals. Either explanation is consistent with our assumption that the financial crisis can

positively affect the nonexecutive-monitoring efficiency. The bidders employ ownership incentive works efficiently before the financial crisis, and there is a positive relationship between percentage of nonexecutive ownership and CAR11 at 3% significance, while after the financial crisis, the significance disappeared. These results implicate that ownership incentive is not an effective method when market is fluctuated, which affects nonexecutive directors investment decision a lot. The cash incentive has no change during the crisis, which always positively affects the bidders' returns significantly. It seems that bidders believe cash incentive can deeply affect ~~stem~~ the nonexecutive directors' monitoring, without managerial power problems due to their low level of remuneration compared with executive directors. The executive chairman who brings positive effects to the company begins to become significant after the financial crisis. Stewardship theory is supported by the results in our tests, the executive chairman seems not a bad signal to the company and could be a positive signal after the crisis due to their close relationship with the company and self-achievement stimulation. Maybe after the financial crisis, the chairman who is the dominant person in the board should know the business very well and powerful enough to rescue the bidder from bad situation by making reasonable M&A decisions. For other corporate governance variables, only the CEO remuneration to operating income changes its result after the financial crisis, which is negatively significant before the crisis at the 1% level, but no longer significant after the crisis. These results indicate that the CEO remuneration is too high before the financial crisis and may generate the managerial power problems. After the alerts from the financial crisis, the bidders may realize this problem and reduce the CEO remuneration, or only the bidders with CEOs who have less serious managerial problems proceed M&As, either way supports that CEO's performance is disciplined by the market.

[Table 4]

Table 5 shows the results of non-financial bidders and financial bidders. We find that there is a ineffectiveness of nonexecutive directors in nonfinancial bidders, bringing negative effects. But this phenomenon is not found in the financial bidders, supporting that higher proportion of nonexecutive directors is reasonable. Both the ownership incentive and cash incentive positively affect the nonfinancial bidders, at 5% and 1% significance respectively. However, the significance does not appear in the test with financial bidders, but an indication of negative effects of both incentives found on bidders' returns. This may imply that the financial bidders give the nonexecutive directors too much incentive to generate agency problems and managerial power. The cash and ownership incentives to CEOs are both negatively related with the non-financial bidders' returns at the 1% significance level, reflecting that CEOs' incentives is too much to generate agency problems in non-financial bidders. But the significance also disappears in the test on financial bidders, and shows a trend of slightly positive effect of both incentives on financial firms. Limited by the size of the sample, the deals with financial bidders is only 47, so it is also possible that the insignificance appeared in the test on financial bidders is all caused by the small sample.

[Table 5]

Conclusions

Though many researchers have studied the roles of nonexecutive directors in corporate governance, their findings are contradictory. This paper studies the monitoring effectiveness of nonexecutive directors on UK bidders' gains from two perspectives-- board composition and individual incentives. M&As are able to reflect the monitoring role more clearly because nonexecutive directors have the duty to check the M&As' proposals by employing their specific knowledge and experience. UK is an ideal country to study the nonexecutive directors as UK is the first-mover in the development of corporate governance around the world since the issue of Cadbury (1992). We also made a comparison of the effects before and after the financial crisis. As corporate governance regulations are always blamed seriously after financial scandals and collapse, we will also study how the financial markets regulate and affect the nonexecutive directors monitoring efficiency.

We find that the proportion of nonexecutive directors overall have an indication of negative effects on bidders' return. Before the financial crisis, ineffective nonexecutive directors may exist as the relationship between proportion of nonexecutive directors and bidders' return is significantly negative. But after the financial crisis, though there is still an indication of negative relationship, it is no long significant. One explanation of this change is that the companies find that non-executives are ineffective, so the overall proportion is reduced through the discipline of market. Another explanation is that only are the bidders with relatively more optimum nonexecutive directors' proportion involved in M&A deals. Either explanation shows that the nonexecutive directors' monitoring effectiveness is improved after financial crisis, supporting the market disciplining role. And the nonfinancial bidders seem more negatively affected by the proportion of nonexecutive directors than financial ones.

We also find that the monitoring efficiency of nonexecutive directors is driven by the individual incentives to them, especially the cash incentive. The nonexecutive remuneration to operating income is always positively related with bidders' abnormal returns at 1% significance, but the ownership incentive is only effective before the financial crisis. As amount of the remuneration paying to nonexecutive directors is far smaller than that to executive directors, no managerial power issues will be generated and the nonexecutive directors could be incentivised more directly. Less incentive comes from stock ownership may be caused by the UK remuneration characteristics to nonexecutive directors. The nonexecutive directors very rarely receive rewards beyond cash, such as bonus, stock grant, pensions, or stock options, and the ownership they process mainly depend on purchasing by themselves, so the stock can hardly stem the nonexecutive directors as it is in the US. The nonexecutive directors in non-financial bidders are incentivised significantly by both stock and cash, but it becomes to an indication of negative effect in deals with financial bidders.

The results in our paper contradict the common sense view that increasing the proportion of nonexecutive directors is good for the company. So if the shareholders could understand the composition of board as flexible as the principles claim, they could benefit more from the nonexecutive directors' effective monitoring. As the individual cash incentive to nonexecutive directors is the mainly driver of the effective monitoring, companies could relatively increase their salary or fees to get more benefits from their monitoring. Additionally, market can discipline corporate governance effectively to some extent, but it is reluctant. Companies should be more positively and sensitively in adjusting their corporate governance policies in ordinary running but not forced to change after financial crisis.

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Table 1 Time trend

This table shows the average value of each variable in each year. Panel A shows the trends of the whole sample, Panel B shows the trends of nonfinancial deals, and Panel C shows the trends of financial deals. CAR11 is the cumulative abnormal return around the announcement date from 5 days before to 5 days after. % of Nonexecutive directors= Number of nonexecutive directors/ Number of board members. Ownership incentive=Total ordinary shares owned by nonexecutive directors/Total ordinary shares outstanding in the company. Cash incentive=Total nonexecutive directors' salaries and fees/ Operating income. Exechairman is a dummy variable, which equals 1 when chairman is an executive director. Board size is the total number of directors in the board. Duality is a dummy variable, which equals 1 when CEO is also a chairman. % of CEO ownership= Total ordinary shares owned by CEO/Total ordinary shares outstanding in the company. CEO REM/OPIN=CEO's total remuneration including salary, benefits, bonus, pension/Operating income. BTMV is book to market value. Leverage=Debt/Total assets. OPIN/TA=Operating income/Total assets. Relsize=Deal value/Acquirer's market value 4 weeks before the announcement date. RUNNP is the cumulative stock returns 250 days before the announcement date. VOLATILITY is the standard deviation of stock returns 250 days before the announcement date. Cash is the percentage of cash used in the payment. All the variables related with accounting data are measured at the date of the annual report in the year before the deal. a, b, c represent the significance at 1%, 5% and 10%, respectively.

Panel A						
	2005	2006	2007	2008	2009	Total
No. of Deals	88	77	85	42	27	319
%	27.59%	24.14%	26.65%	13.17%	8.46%	100%
CAR11	1.45%	1.22%	1.11%	1.92%	4.33%	
% of Nonexecutive directors	51.46%	50.88%	47.69%	52.22%	56.93%	
Ownership incentive	2.35%	1.52%	2.95%	1.18%	3.09%	
Cash incentive	0.81%	1.43%	1.75%	2.26%	-0.24%	
EXECHAIRMAN	21.59%	18.18%	16.47%	11.90%	0.00%	
DUALITY	10.23%	2.60%	4.71%	4.76%	18.52%	
Board size	738.64%	728.57%	709.41%	714.29%	692.59%	
% of CEO ownership	3.64%	7.42%	6.43%	2.72%	1.83%	
CEO REM/OPIN	1.82%	6.85%	5.44%	4.29%	2.43%	
% of Executive ownership but CEO	3.44%	3.94%	4.06%	3.52%	1.20%	

BTMV	153.79%	139.51%	151.95%	132.03%	225.88%
Leverage	27.44%	25.74%	20.87%	29.47%	26.38%
OPIN/TA	5.89%	8.59%	4.50%	11.01%	14.82%
Relsize	23.40%	29.34%	18.31%	14.05%	20.22%
RUNUP	22.66%	27.47%	24.10%	-21.19%	11.32%
VOLATILITY	1.62%	1.76%	1.65%	2.58%	3.76%
CASH	77.71%	80.84%	70.78%	75.10%	60.92%

Panel B

	2005	2006	2007	2008	2009	Total
No. of Deals	81	66	73	31	21	272
%	29.78%	24.26%	26.84%	11.40%	7.72%	100%
CAR11	1.46%	1.27%	1.55%	-1.06%	2.71%	
% of Nonexecutive directors	51.62%	50.73%	48.49%	52.53%	53.63%	
Ownership incentive	2.48%	1.43%	3.28%	0.88%	3.36%	
Cash incentive	0.78%	1.56%	1.45%	1.99%	-0.86%	
EXECHAIRMAN	19.75%	19.70%	12.33%	6.45%	0.00%	
DUALITY	9.88%	3.03%	4.11%	3.23%	19.05%	
Board size	723.46%	710.61%	678.08%	719.35%	666.67%	
% of CEO ownership	3.85%	6.55%	6.58%	1.93%	1.80%	
CEO REM/OPIN	1.67%	6.91%	4.49%	5.44%	2.00%	
% of Executive ownership but CEO	3.40%	2.96%	3.65%	4.05%	1.15%	
BTMV	133.45%	113.24%	145.30%	120.78%	204.14%	
Leverage	28.57%	25.26%	17.95%	31.66%	17.31%	
OPIN/TA	6.10%	9.41%	4.66%	13.92%	17.63%	
Relsize	23.58%	31.98%	18.05%	9.59%	20.37%	
RUNUP	21.88%	26.79%	26.76%	-17.55%	20.41%	
VOLATILITY	1.64%	1.75%	1.69%	2.47%	3.78%	
CASH	76.89%	79.45%	71.62%	79.78%	62.16%	

Panel C

	2005	2006	2007	2008	2009	Total
No. of Deals	7	11	12	11	6	47
%	14.89%	23.40%	25.53%	23.40%	12.77%	100%
CAR11	1.30%	0.93%	-1.59%	10.33%	9.98%	
% of Nonexecutive directors	49.67%	51.79%	42.84%	51.35%	68.48%	
Ownership incentive	0.81%	2.05%	0.94%	2.00%	2.16%	
Cash incentive	1.07%	0.61%	3.56%	3.01%	1.91%	

EXECHAIRMAN	42.86%	9.09%	41.67%	27.27%	0.00%
DUALITY	14.29%	0.00%	8.33%	9.09%	16.67%
Board size	914.29%	836.36%	900.00%	700.00%	783.33%
% of CEO ownership	1.22%	12.65%	5.52%	4.94%	1.95%
CEO REM/OPIN	3.57%	6.49%	11.28%	1.06%	3.95%
% of Executive ownership but CEO	3.93%	9.81%	6.52%	2.03%	1.37%
BTMV	389.13%	297.15%	192.38%	163.73%	301.95%
Leverage	14.39%	28.64%	38.65%	23.28%	58.12%
OPIN/TA	3.45%	3.68%	3.54%	2.81%	5.00%
Relative size	21.34%	13.51%	19.91%	26.62%	19.69%
RUNUP	31.69%	31.52%	7.88%	-31.45%	-20.48%
VOLATILITY	1.42%	1.83%	1.42%	2.88%	3.70%
% of Cash	87.23%	89.17%	65.68%	61.89%	56.59%

Table 2 Data Statistics

This table shows the data statistics. Panel A shows the data statistics of the whole sample, Panel B shows the data statistics of nonfinancial deals, and Panel C shows data statistics of financial deals. CAR11 is the cumulative abnormal return around the announcement date from 5 days before to 5 days after. % of Nonexecutive directors= Number of nonexecutive directors/ Number of board members. Ownership incentive=Total ordinary shares owned by nonexecutive directors/Total ordinary shares outstanding in the company. Cash incentive=Total nonexecutive directors' salaries and fees/ Operating income. Exechairman is a dummy variable, which equals 1 when chairman is an executive director. Board size is the total number of directors in the board. Duality is a dummy variable, which equals 1 when CEO is also a chairman. % of CEO ownership= Total ordinary shares owned by CEO/Total ordinary shares outstanding in the company. CEO REM/OPIN=CEO's total remuneration including salary, benefits, bonus, pension/Operating income. BTMV is book to market value. Leverage=Debt/Total assets. OPIN/TA=Operating income/Total assets. Relsize=Deal value/Acquirer's market value 4 weeks before the announcement date. RUNNP is the cumulative stock returns 250 days before the announcement date. VOLATILITY is the standard deviation of stock returns 250 days before the announcement date. Cash is the percentage of cash used in the payment. All the variables related with accounting data are measured at the date of the annual report in the year before the deal.

Panel A					
	Mean	Median	St Dev	Min	Max
CAR11	1.61%	0.84%	10.81%	-37.68%	100.23%
% of Nonexecutive directors	50.88%	50.00%	14.08%	0.00%	100.00%
% of Nonexecutive ownership	2.22%	0.24%	5.54%	0.00%	39.12%
Nonexecutive remuneration to Operating income	1.31%	0.82%	5.45%	-46.46%	33.70%
EXECHAIRMAN	16.30%	0.00%	37.00%	0.00%	100.00%
DUALITY	6.90%	0.00%	26.59%	0.00%	100.00%
Board size	721.32%	700.00%	218.74%	400.00%	1900.00%
% of CEO ownership	5.02%	0.61%	10.32%	0.00%	62.91%

CEO REM/OPIN	4.38%	3.41%	15.88%	-90.00%	84.51%
% of Executive ownership but CEO	3.55%	0.34%	7.60%	-0.35%	64.83%
BTMV	153.09%	112.06%	165.52%	0.00%	1824.96%
				-	
Leverage	25.46%	11.24%	45.27%	112.75%	351.00%
OPIN/TA	7.63%	7.59%	21.33%	-90.93%	274.30%
Relative size	21.98%	9.90%	49.74%	3.00%	581.53%
RUNUP	17.47%	18.26%	34.51%	-98.72%	107.67%
VOLATILITY	1.97%	1.71%	1.09%	0.11%	8.24%
CASH	74.85%	93.13%	32.00%	0.00%	100.00%
No.	319				

Panel B

	Mean	Median	St Dev	Min	Max
CAR11	1.25%	0.81%	9.46%	-37.68%	63.42%
% of Nonexecutive directors	50.82%	50.00%	13.51%	0.00%	84.62%
% of Nonexecutive ownership	2.33%	0.24%	5.84%	0.00%	39.12%
Nonexecutive remuneration to					
Operating income	1.16%	0.87%	5.44%	-46.46%	33.70%
EXECHAIRMAN	14.71%	0.00%	35.48%	0.00%	100.00%
DUALITY	6.62%	0.00%	26.34%	0.00%	100.00%
Board size	703.31%	700.00%	202.81%	400.00%	1900.00%
% of CEO ownership	4.86%	0.61%	9.96%	0.00%	55.56%
CEO REM/OPIN	4.15%	3.44%	15.17%	-90.00%	84.51%
% of Executive ownership but CEO	3.26%	0.28%	6.82%	-0.13%	48.46%
BTMV	135.74%	104.42%	120.36%	0.00%	991.86%
				-	
Leverage	24.40%	11.59%	41.59%	112.75%	318.85%
OPIN/TA	8.30%	8.00%	22.95%	-90.93%	274.30%
Relative size	22.29%	9.77%	52.98%	3.00%	581.53%
RUNUP (one year before)	19.78%	19.02%	33.07%	-79.28%	107.67%
VOLATILITY (one year before)	1.94%	1.69%	1.04%	0.11%	7.90%
% of Cash	75.29%	93.08%	31.20%	0.00%	100.00%
No.	272				

Panel C

	Mean	Median	St Dev	Min	Max
CAR11	3.70%	1.29%	16.60%	-17.97%	100.23%

% of Nonexecutive directors	51.22%	50.00%	17.16%	20.00%	100.00%
% of Nonexecutive ownership	1.58%	0.40%	3.23%	0.00%	14.36%
Nonexecutive remuneration to					
Operating income	2.16%	0.54%	5.51%	-7.77%	30.43%
EXECHAIRMAN	25.53%	0.00%	44.08%	0.00%	100.00%
DUALITY	8.51%	0.00%	28.21%	0.00%	100.00%
Board size	825.53%	800.00%	274.63%	400.00%	1700.00%
% of CEO ownership	5.96%	0.61%	12.29%	0.00%	62.91%
CEO REM/OPIN	5.68%	2.47%	19.66%	-29.68%	83.16%
% of Executive ownership but CEO	5.20%	1.49%	11.04%	-0.35%	64.83%
BTMV	253.49%	180.93%	303.26%	1.98%	1824.96%
				-	
Leverage	31.58%	9.05%	62.70%	100.19%	351.00%
OPIN/TA	3.59%	3.31%	7.58%	-27.62%	23.25%
Resize	20.17%	10.89%	23.67%	3.19%	117.36%
RUNUP	4.13%	13.25%	39.73%	-98.72%	80.69%
VOLATILITY	2.15%	1.73%	1.33%	0.57%	8.24%
CASH	72.34%	100.00%	36.57%	0.00%	100.00%
No.	47				

Table 3 Results of whole sample from 2005-2009

Dependent variables are the cumulative abnormal returns from -5 to +5 days around the announcement date. The first row of independent variables shows the coefficient value, and the second row shows the P-value. CAR11 is the cumulative abnormal return around the announcement date from 5 days before to 5 days after. % of Nonexecutive directors= Number of nonexecutive directors/ Number of board members. Ownership incentive=Total ordinary shares owned by nonexecutive directors/Total ordinary shares outstanding in the company. Cash incentive=Total nonexecutive directors' salaries and fees/ Operating income. Exechairman is a dummy variable, which equals 1 when chairman is an executive director. Board size is the total number of directors in the board. Duality is a dummy variable, which equals 1 when CEO is also a chairman. % of CEO ownership= Total ordinary shares owned by CEO/Total ordinary shares outstanding in the company. CEO REM/OPIN=CEO's total remuneration including salary, benefits, bonus, pension/Operating income. BTMV is book to market value. Leverage=Debt/Total assets. OPIN/TA=Operating income/Total assets. Relsize=Deal value/Acquirer's market value 4 weeks before the announcement date. RUNNP is the cumulative stock returns 250 days before the announcement date. VOLATILITY is the standard deviation of stock returns 250 days before the announcement date. Cash is the percentage of cash used in the payment. All the variables related with accounting data are measured at the date of the annual report in the year before the deal. a, b, c represent the significance at 1%, 5% and 10%, respectively.

Variable	(1)	(2)	(3)	(4)
C	0.06 (0.24)	0.04 (0.44)	0.06 (0.20)	0.07 (0.16)
% of Nonexecutive directors	-0.05 (0.29)			-0.04 (0.37)
% of Nonexecutive ownership		0.14 (0.20)		0.17 (0.10)
Nonexecutive remuneration to Operating income			0.98 (0.00) ^a	0.99 (0.00) ^a
DUALITY	-0.02 (0.27)	-0.02 (0.36)	-0.03 (0.21)	-0.03 (0.20)
Executive Chairman	0.01 (0.62)	0.01 (0.44)	0.01 (0.74)	0.00 (0.84)
LOG(Board size)	-0.03 (0.11)	-0.03 (0.11)	-0.05 (0.03) ^b	-0.04 (0.04) ^b

% of CEO ownership	-0.02 (0.80)	-0.01 (0.85)	-0.04 (0.55)	-0.05 (0.37)
CEO REM/OPIN	-0.03 (0.48)	-0.04 (0.37)	-0.32 (0.00) ^a	-0.32 (0.00) ^a
% of board ownership but CEO	-0.11 (0.20)	-0.09 (0.31)	0.00 (0.98)	-0.01 (0.86)
BTMV	0.00 (0.87)	0.00 (0.80)	0.00 (0.74)	-0.01 (0.75)
Leverage	-0.02 (0.26)	-0.02 (0.20)	-0.01 (0.33)	-0.01 (0.47)
OPIN/TA	0.00 (0.70)	0.00 (0.73)	0.00 (0.64)	0.00 (0.57)
Relsize	-0.01 (0.58)	-0.01 (0.50)	0.00 (0.81)	0.00 (0.80)
RUNUP	0.00 (0.97)	0.00 (0.95)	0.01 (0.60)	0.01 (0.68)
VOLATILITY	2.68 (0.00) ^a	2.55 (0.00) ^a	2.46 (0.00) ^a	2.46 (0.00) ^a
CASH	0.00 (0.61)	0.00 (0.75)	0.00 (0.72)	0.00 (0.63)
Adjusted R-squared	6.50%	6.67%	13.49%	13.86%

Table 4 Comparison of results before and after financial crisis

This table shows the comparison of the results before and after the financial crisis. Dependent variables are the cumulative abnormal returns from -5 to +5 days around the announcement date. The first row of independent variables shows the coefficient value, and the second row shows the P-value. CAR11 is the cumulative abnormal return around the announcement date from 5 days before to 5 days after. % of Nonexecutive directors= Number of nonexecutive directors/ Number of board members. Ownership incentive=Total ordinary shares owned by nonexecutive directors/Total ordinary shares outstanding in the company. Cash incentive=Total nonexecutive directors' salaries and fees/ Operating income. Exechairman is a dummy variable, which equals 1 when chairman is an executive director. Board size is the total number of directors in the board. Duality is a dummy variable, which equals 1 when CEO is also a chairman. % of CEO ownership= Total ordinary shares owned by CEO/Total ordinary shares outstanding in the company. CEO REM/OPIN=CEO's total remuneration including salary, benefits, bonus, pension/Operating income. BTMV is book to market value. Leverage=Debt/Total assets. OPIN/TA=Operating income/Total assets. Relsize=Deal value/Acquirer's market value 4 weeks before the announcement date. RUNNP is the cumulative stock returns 250 days before the announcement date. VOLATILITY is the standard deviation of stock returns 250 days before the announcement date. Cash is the percentage of cash used in the payment. All the variables related with accounting data are measured at the date of the annual report in the year before the deal. a, b, c represent the significance at 1%, 5% and 10%, respectively.

Variable	Before Crisis	After Crisis
C	0.13 (0.01)	0.09 (0.39)
% of Nonexecutive directors	-0.16 (0.00) ^a	-0.04 (0.67)
Ownership incentive	0.20 (0.03) ^b	0.21 (0.43)
Cash incentive	0.75 (0.00) ^a	1.10 (0.01) ^b
Executive Chairman	-0.02 (0.12)	0.10 (0.03) ^b
DUALITY	-0.02 (0.45)	-0.04 (0.33)
LOG(Board size)	-0.03 (0.16)	-0.06 (0.16)
% of CEO ownership	-0.07	0.06

	(0.16)	(0.71)
CEO REM/OPIN	-0.28	-0.29
	(0.00) ^a	(0.10)
% of board ownership but CEO	-0.08	-0.40
	(0.31)	(0.07) ^c
BTMV	0.00	-0.01
	(0.97)	(0.18)
Leverage	-0.01	-0.01
	(0.63)	(0.55)
OPIN/TA	0.01	0.00
	(0.85)	(0.94)
Relsize	0.00	0.00
	(0.91)	(0.99)
RUNUP	0.03	-0.02
	(0.14)	(0.58)
VOLATILITY	-0.28	4.39
	(0.73)	(0.00) ^a
CASH	0.00	0.00
	(0.06) ^c	(0.45)
<hr/>		
Number of deals	204	115
<hr/>		
Adjusted R-squared	15.52%	25.88%
<hr/>		

Table 5 Results of non-financial bidders and financial bidders

This table shows the results of nonfinancial deals and financial deals. Dependent variables are the cumulative abnormal returns from -5 to +5 days around the announcement date. The first row of independent variables shows the coefficient value, and the second row shows the P-value. CAR11 is the cumulative abnormal return around the announcement date from 5 days before to 5 days after. % of Nonexecutive directors= Number of nonexecutive directors/ Number of board members. Ownership incentive=Total ordinary shares owned by nonexecutive directors/Total ordinary shares outstanding in the company. Cash incentive=Total nonexecutive directors' salaries and fees/ Operating income. Exechairman is a dummy variable, which equals 1 when chairman is an executive director. Board size is the total number of directors in the board. Duality is a dummy variable, which equals 1 when CEO is also a chairman. % of CEO ownership= Total ordinary shares owned by CEO/Total ordinary shares outstanding in the company. CEO REM/OPIN=CEO's total remuneration including salary, benefits, bonus, pension/Operating income. BTMV is book to market value. Leverage=Debt/Total assets. OPIN/TA=Operating income/Total assets. Relsize=Deal value/Acquirer's market value 4 weeks before the announcement date. RUNNP is the cumulative stock returns 250 days before the announcement date. VOLATILITY is the standard deviation of stock returns 250 days before the announcement date. Cash is the percentage of cash used in the payment. All the variables related with accounting data are measured at the date of the annual report in the year before the deal. a, b, c represent the significance at 1%, 5% and 10%, respectively.

Variable	Non-financial bidders	Financial bidders
C	0.14 (0.00)	-0.21 (0.24)
% of Nonexecutive directors	-0.14 (0.00) ^a	-0.01 (0.96)
Ownership incentive	0.19 (0.03) ^b	-0.35 (0.56)
Cash incentive	1.17 (0.00) ^a	-0.06 (0.92)
Executive Chairman	0.00 (0.85)	0.04 (0.46)
DUALITY	-0.02 (0.35)	0.03 (0.70)
LOG(Board size)	-0.04 (0.05) ^b	-0.01 (0.88)

% of CEO ownership	-0.02 (0.72)	0.10 (0.57)
CEO REM/OPIN	-0.39 (0.00) ^a	0.05 (0.81)
% of board ownership but CEO	-0.37 (0.00) ^a	0.02 (0.93)
BTMV	0.00 (0.88)	0.00 (1.00)
Leverage	0.00 (0.74)	-0.05 (0.16)
OPIN/TA	0.01 (0.80)	0.00 (0.83)
Relsize	0.00 (0.99)	0.06 (0.46)
RUNUP	0.01 (0.48)	0.07 (0.16)
VOLATILITY	0.74 (0.15)	10.96 (0.00) ^a
CASH	0.00 (0.22)	0.00 (0.60)
Number of deals	272	47
Adjusted R-squared	19.97%	54.76%