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Abstract

We investigate the relation between corporate governance characteristics of hostile takeover targets and the choice to employ 'harmful' resistance that is not perceived as being motivated by shareholders' interests. We find that harmful resistance is associated with firms where managers have more pronounced ownership-based and age-related incentives for control, and directors have equity interests less aligned to stockholders. These firms also have less independent boards, are exposed to weaker discipline from outside blockholders, and are inferior performers. In the presence of harmful resistance, the market is less optimistic about the chances of bid completion, and there is a greater likelihood of managerial turnover.

JEL classification: G34

Keywords: Takeover bid; Resistance; Corporate Governance; Stockholder returns; C.E.O. turnover.

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1. Introduction

Resistance by the management of a takeover target firm can be perceived to be undertaken in the interests of its shareholders, or perceived to be motivated by other considerations, like managerial entrenchment behavior, that potentially neglect or negatively impact shareholders' interests (hereafter 'harmful resistance').[1] Apart from the seminal contribution of Dann and DeAngelo (1988), the extensive extant literature on hostile takeovers has devoted little attention to the distinction between takeover resistance that is 'adverse' for shareholders, and resistance that is in shareholder interest.[2] In this paper we investigate the factors influencing the choice by target managers to employ harmful resistance following an unsolicited and rejected takeover bid.

We empirically investigate the forces driving target company resistance by modeling the managerial choice of whether to implement harmful resistance. The general consensus in the literature is that corporate governance can influence company value through an effect on manager choices, although the level of the effect is subject to debate (compare for instance Gompers, Ishii and Metrick, 2003, and, Cunat, Gine and Guadalupe, 2012). Our empirical results show that harmful resistance responses are more likely in situations involving weak incentives and weak corporate governance. These results hold after accounting for potential endogeneity issues. Firms in our sample that institute resistance strategies that neglect shareholder interests have Chief Executive Officers (C.E.O.s) with more pronounced ownership-based and age-related incentives for control, and other directors with equity interests less

[1] An example of the latter is the 27 billion euros hostile takeover of Arcelor by Mittal Steel in 2006 – one of the largest ever hostile takeover contests in Europe. After a period of staunch shareholder opposition, and in what amounted to the overriding tactic in Arcelor's bid defence against Mittal Steel, Arcelor finally agreed to acquire a large stake in a steel producer Severstal that would give rise to a merger and also allow its top directors to continue to remain in office. See the Financial Times throughout May and June 2006 for a comprehensive commentary on the Arcelor/Mittal Steel takeover contest, especially the reports on May 26, 2006 and June 26, 2006.

[2] Becht, Bolton and Roell (2005, pg. 16), in an extensive survey of the literature, say: "Little or no work to date has been devoted to the question of identifying which actions or investments constitute 'entrenchment behavior' and which do not."

closely aligned to stockholders. Firms that follow such strategies have less independent boards, are exposed to weaker discipline from active outside blockholders, and are inferior performers.

We also show that such actions do not go unnoticed by the capital market. In new results to the literature, we find the capital market-wide assessment of the probability the bid will be successful is significantly smaller for bids accompanied by harmful resistance. Finally, using the choice to engage in harmful resistance as a potential indicator of a more deep-seated managerial agency problem, we also find that harmful resistance is associated with post-bid consequences for target C.E.O.s. We specifically find that an increased likelihood of subsequent C.E.O. turnover is associated with a bid in which target managers engage in harmful resistance. However, while C.E.O. turnover can be more frequent following such events, we find that the longer-term employment opportunities of target C.E.O.s, including subsequent executive positions as well as director positions, are not directly affected any more than for other resisting firms. Our evidence does show however that the effect of C.E.O. turnover per se is associated with smaller likelihood of longer-term post-bid employment opportunities.

Classifying resistance as either harmful or otherwise must ultimately involve assessing how the capital market views such resistance. The criteria we use to identify harmful resistance relies both on previously documented results on specific defensive resistance actions, as well as capital market price change indicators at the time the resistance is announced. The former criterion is specifically motivated by Dann and DeAngelo (1988) in that we too include all defensive asset restructuring and other blocking tactics that are *prima-facie* suggestive ex-ante of managerial entrenchment, or at least actions not overtly or necessarily motivated by shareholder interests. For the latter criterion, we specifically consider whether the target company's share price reacts negatively to announcement of the resistance, an indicator we take as not being in the best overall interest of shareholders. Such cases could include

actions driven by a managerial entrenchment motive as well as managerial neglect of the 'duty of loyalty'.[3]

Research examining takeover resistance has generally aggregated all forms of resistance together or focused on a specific type of resistance tactic (see Betton, Eckbo and Thorburn, 2010, for a recent survey of the literature on corporate takeovers.) Examples include the adoption of poison pills or anti-takeover provisions (DeAngelo and Rice, 1983; Linn and McConnell, 1983; Jarrell and Poulsen, 1987; Brickley, Lease and Smith, 1988; Agrawal and Mandelker, 1990; Brickley, Coles and Terry, 1994; Comment and Schwert, 1995; Heron and Lie, 2006), the use of defensive cash payouts (Denis, 1990; Heron and Lie, 2006), and the use of staggered boards (Bebchuk, Coates IV and Subramanian, 2002; Bebchuk and Cohen, 2005; Faleye, 2007). In contrast our interest is in disaggregating resistance choices into those that adversely affect shareholders and those that do not. In this way, this paper follows Dann and DeAngelo (1988), who examine a multiplicity of takeover responses by target managers. Our study differs in that we relate the choices made to the internal and external governance characteristics of the target firms involved, and investigate how markets interpret and use information about these choices.

Unsolicited takeover bids play an important role in the market for corporate control. Ex-ante, the threat of a takeover bid represents an external control mechanism serving in principle to motivate managers to operate the firm they oversee efficiently (Fama and Jensen, 1983). Ex-post, successful bids serve to reallocate corporate resources to their highest valued use and provide a means for disciplining errant or incompetent managers. The ex-ante threat of takeover however can be influenced by target managements' ability to thwart the offer once it is made. A positive market response to takeover resistance has generally been interpreted as evidence of resistance acting to enhance shareholder wealth via a better bargaining position and the ability to extract a high premium (Schwert, 2000; Bates and Becher, 2012). On the other hand a negative reaction has been interpreted as evidence of managers

[3] "The duty of loyalty requires directors and officers to act in good faith, to act in the best interests of the corporation and its stockholders, and to refrain from receiving improper personal benefits as a result of their relationship with the corporation." (Forrester and Ferber, 2012, at http://www.mofo.com/files/Uploads/Images/RRDonnelley-2012-Fiduciary-Duties.pdf). And similarly as pertains to the U.K., see Part 10, Section 172 of the Companies Act (http://www.legislation.gov.uk/ukpga/2006/46/contents).

seeking to cement their entrenchment and extend their private benefits of control (Huang and Walkling, 1987; Cotter and Zenner, 1994).

Target management actions designed to thwart an offer with the intent of entrenching management and/or preserving the inefficient use of corporate resources are at odds with maximizing shareholder wealth (Schwert, 2000; Bebchuk and Cohen, 2005). Alternatively, bid resistance by target management can represent a strategic maneuver designed to maximize the price offered to target shareholders (Stulz, 1988; Berkovitch, Bradley and Khanna, 1989; Berkovitch and Khanna, 1990; Schwert, 2000). The choice of how an unsolicited takeover bid is resisted therefore has both important economic implications as well as potential links to the incentives and pressures faced by target managers, in particular those established by the corporate governance umbrella covering the target firm. In this study we ask and answer the following question: conditional on an unsolicited offer being rejected by a target firm, what determines whether resistance is driven by motives based on shareholder interest; or is driven by considerations like managerial self-interest that neglect, or are adverse to, the interests of shareholders? The U.K. takeover market provides a natural setting for the empirical investigation because U.S.-style, pre-emptive, anti-takeover mechanisms are absent, and thus do not contaminate managerial resistance in direct response to an unsolicited bid. Our results emphasize the relation between the internal and external corporate governance characteristics of targets in unsolicited offers that actively resist, the types of resistance choices selected by target managers, and the implications of those choices.

How managers respond to bids is an important economic factor influencing both the payoffs to target stockholders as well as the distribution of corporate resources (Jensen and Ruback, 1983; Jarrell, Brickley and Netter, 1988; Andrade, Mitchell and Stafford, 2001). The debate over the efficacy of takeover resistance is by no means settled and has led some to propose that resistance should be forbidden (Bebchuk, 2002). Explanations for why managers resist takeover bids are typically couched in terms of stockholder interest motives or managerial self-interest. The 'stockholder interest' hypothesis proposes that managers resist bids because they have superior information about the true value of the firms under their control and seek to extract a takeover premium for target stockholders reflecting this valuation

(Franks and Mayer, 1996; Schwert, 2000). Resistance motivated by stockholder interests would therefore involve strategies that increase information about company fundamentals and any value gap, and/or that would incite competing bids. The opposing hypothesis states that target company managers resist bids to deliberately avoid the potential personal consequences of the firm being taken over. Such consequences might include the loss of any private benefits of control, including any non-tangible utility that comes from overseeing a large organization and any labor market discipline that might follow a successful takeover (Morck, Shleifer and Vishny, 1988). For these reasons our main focus is on unsolicited offers that are in fact resisted.

Resistance by target management is often associated with the notion of the offer being viewed as hostile. Schwert (2000) finds that a commonly used measure of hostility, as identified by the commercial vendor Securities Data Corporation (S.D.C.), does not lead to the conclusion that the valuation impacts of hostile versus friendly offers are different. Furthermore, he finds that strategic bargaining, rather than non-value maximizing behaviour by target management, is the motivation for hostility. Schwert (2000) concludes that bid resistance is a bargaining tool that is used by target management to improve the terms of the takeover for their shareholders. Schwert (2000) treats all hostile offers as a single group whereas in our study, as mentioned earlier, we identify resisting targets on the basis of whether or not they engage in harmful resistance that is not motivated by shareholder interest. Aside from Dann and DeAngelo (1988), studies of takeover resistance have not discriminated between resistance motivated by managerial self-interest and resistance motivated by shareholder interests. Our study makes such a distinction allowing us to draw new empirical conclusions about the determinants and effects of harmful versus other *bona fide* resistance. Contemporaneous research by Bates, and Becher (2012) also focuses on takeover resistance. In contrast to their study we specifically differentiate between 'good' and 'bad' resistance, and the determinants and implications of the type of resistance chosen by target managers. In this way we add an alternative perspective on takeover resistance that has largely gone unaddressed in the literature.

In addition to the above, this research also contributes to the segment of the literature focusing generally on the impact of managerial entrenchment or malfeasance on mergers and takeovers. The

conclusion of this branch of the literature has been that managerial entrenchment is associated with bad acquisitions (Jensen, 1986; Masulis, Wang and Xie, 2007; Harford, Humphery-Jenner and Powell, 2012).[4] While this literature has tended to focus on bidder decisions, our contribution is on the other side, focusing instead on the question of how managerial self-interest or entrenchment influences the choices made by targets when faced with a takeover bid.

Section 2 describes our sample and how we classify target firms in terms of resistance choice. Section 3 describes predictions and the variables we examine. Section 4 reports and discusses results on the relations between the variables described in Section 3 and target company resistance choice. Section 5 examines the relation between the capital market's assessment of the probability of success and managerial resistance choice. Section 6 reports on C.E.O. post-bid turnover and longer-term employment opportunities of target company C.E.O. s. Section 7 presents our conclusions.

2. The sample

2.1 Sample identification

Our empirical investigation is based on the U.K., which provides a natural setting for focusing on target resistance activities following an offer because the ex-ante structural takeover defenses mentioned earlier that potentially deter takeovers are absent. A distinguishing feature of the U.K. market for corporate control is that the regulatory environment in the U.K. effectively shields stockholders from U.S. style shark repellents or poison pills.[5] This is an important institutional feature in the context of our

[4] Masulis, Wang and Xie (2007) and Harford, Humphery-Jenner and Powell (2012) take the Gompers, Ishii and Metrick (2003) index as an ex-ante proxy for governance where weak governance implies a form of entrenchment and test whether the index is associated with bad acquisition choices. Such an index, even if it is a reliable way of capturing entrenchment, is less applicable in the U.K. because the regulatory setting has always protected stockholders from anti-takeover provisions of one kind or another.

[5] See Rule 21 of *The Takeover Code*, available at http://www.thetakeoverpanel.org.uk/the-code/download-code.

research question, since it allows us to focus on direct responses to an offer in a setting in which ex-ante anti-takeover devices are absent, and thus do not contaminate our investigation of resistance.[6]

Our sample is drawn from the population of unsolicited takeover bids for U.K. firms during the period 07/1989-12/2003. We selected this sample period for three primary reasons. First, there was limited disclosure of corporate governance structures pre-1989 in the U.K.. Second, for the part of our analysis dealing with the potentially disciplinary consequences of bid resistance, we need to track the aftermarket employment opportunities of target C.E.O.s for up to 3 years beyond the completion of the bid. Third, there were relatively few unsolicited bids immediately preceding and during the global financial crisis.

The initial sample is identified from Acquisitions Monthly and the S.D.C. Platinum Mergers and Acquisition Database and includes completed as well as failed unsolicited takeover bids. We exclude takeover targets that are not publicly traded or are traded in the alternative investment market, those operating in the financial/real estate industry and those operating in heavily regulated industries, specifically the utility/telecommunication, public transport, broadcasting, and newspaper industries.

The latter half (1997-2003) of our sample period was associated with a shift to a more stringent corporate governance regime in the U.K. including increased emphasis on board independence from top management. In particular the 1997-2003 period saw the publication of the "Combined Code: Principles of Good Governance and Code of Best Practice" in 1998 and refinements to the Code, along with the implementation of disclosure requirements on compliance with the Code imposed by the London Stock Exchange (refer to: http://www.ecgi.org/codes/documents/cadbury.pdf). The fraction of unsolicited offers during 1989-1996 was roughly 18.3% of the total offers for that period while the number was 10.2% for the period 1997-2003. One explanation for the decline in the proportion of unsolicited offers is

[6] See Stout (2002) for a discussion of the potential ex-ante benefits of anti-takeover provisions. Aside from Rule 21, the Companies Act provides that investors in U.K. companies are also entitled to call for an Extraordinary General Meeting if the shareholders calling for this meeting hold 10% or more of the voting shares. At such a meeting those shareholders may put forward resolutions to appoint and/or remove directors. In other words, even though most directors in the U.K. are only put up for election once every 3 years (staggered board), a would-be acquiring company – provided it has sufficient shareholder support – can oust the management of a U.K. listed company in a relatively short space of time.

that the increased attention to stockholder interests due to the shift in governance emphasis may have resulted in a greater willingness on the part of management to negotiate friendly deals consistent with the finding in Bange and Mazzeo (2004) that more independent boards are more likely to negotiate. While we do not emphasize these results, consistent with the presence of a time effect we observe significantly higher percentages of independent directors and outside blockholdings during the 1997-2003 period for our sample together with a greater incidence of bidders approaching targets prior to the bid and harmful resistance. As such we control for this time effect in the analyses that follow.

2.2 Resistance identification and classification

We identify resistance activities implemented by target companies by reading the full text of every offer-related announcement filed with the Regulatory News Service (R.N.S.) of the London Stock Exchange (L.S.E.) for each bid in the sample. We define a publicly resisted (rejected) bid as the first takeover attempt of a target firm to be formally initiated and then rejected within a period of at least 1 year. We account for all subsequent offers, including those from third parties, officially announced up to 1 year after the resolution of the first bid. The final sample includes 121 publicly resisted takeover bids for 119 unique target firms. The only target firms appearing twice had sample bids separated by at least 2 years. The sample therefore includes only unsolicited offers that are resisted, and, as such, the results we present are conditional on both the joint observation of an unsolicited bid, and resistance to that bid by the target, allowing us to focus on the motives for resistance. To the extent that we are unable to account for any firms that might otherwise have resorted to harmful resistance had they not either been immune to takeover bids or been able to negotiate acceptable offer terms, our results will be biased against finding any association between corporate governance and takeover resistance. That would also be the case for any firms that might otherwise have engaged in *bona fide* resistance had they not been able to negotiate acceptable offer terms.

Arguably, certain specific types of defensive restructuring resistance actions are *prima-facie* suggestive ex-ante of managerial entrenchment, or at least actions not overtly or necessarily motivated by shareholder interests. These include: (1) Spin-offs/sell-offs which are divestments that deny bidders

access to assets of value, (2) Mergers/acquisitions/joint ventures which make target firms more cumbersome to acquire due to size, strategic, or antitrust grounds, or, which eliminate bidders directly, (3) Stock repurchases/special dividends which involve payouts that eliminate a bidder's access to excess cash held by the target, and, in the case of targeted repurchases, that increase the proportion of stock in the hands of friendly (to management) stockholders, (4) Going private transactions which use competing management buyouts to create bidding contests, potentially reducing bidder expected gains, (5) Management changes which make removal of newly appointed officers especially costly because of special contractual payments triggered by a takeover, and (6) The enlistment of friendly third party participants who acquire stakes that will effectively block the takeover leaving the extant management team in control.[7] Dann and DeAngelo (1988), in a study of resisted U.S. takeover contests, show empirically that share prices fall, on average, in response to the above-listed types of defensive restructuring resistance activities, and conclude that such activities are evidence of managers seeking to cement their entrenchment. On the other hand, resistance actions that, for example, resolve information asymmetry by enhancing the availability of value relevant information about the higher true worth of target firms (relative to the bid), strengthen the relative bargaining positions of shareholders during the course of takeover bids, and are in the interests of shareholders.[8]

We use the six specific types of defensive restructuring resistance actions listed above as our starting point for classifying cases in our sample that represent harmful resistance. We then identify those cases in this subgroup for which there was a negative abnormal stock price reaction associated with the resistance announcement. We use market adjusted daily returns to estimate the reactions where the market proxy is the F.T.S.E. All Share Index. Our reliance on the negative capital market reaction to the resistance announcement provides a market-driven classification method based upon how shareholders greeted the resistance, given that a negative reaction would in general be inconsistent with the action

[7] The potential ramifications of many of these activities are reviewed in the extensive survey of Betton, Eckbo and Thorburn (2010).

[8] Examples are releasing new financial and strategic information measures to aid in justifying and communicating higher target firm valuations, lobbying significant stockholders, and soliciting third party takeover attempts.

being perceived as in the best interests of shareholders.[9] There are fifty cases in the harmful resistance group so identified, 41% of the total sample of 121 unsolicited and resisted offers. If the classification system we employ is excessively noisy it should reduce the power of the tests we report to reject the null.

Frequencies of the specific resistance tactics employed by the 50 targets in the harmful resistance group are presented in Table 1. Spin-offs/sell-offs are the most commonly employed measures, with defensive divestment proposals being used by 46% of the firms in the focus group. Mergers/acquisitions/joint ventures are used in 30% of the cases, and 16% employ stock repurchases/ special dividends. Going private transactions, management changes, and the use of white squires are used less frequently, in 10%, 10% and 8% of the cases respectively. On average, 1.2 different tactics are used by target boards in the harmful resistance group. The proportion of targets using spin-offs/sell-offs drops from roughly 58 % during the 1989-1996 period to 35% during the 1997-2003 period. In contrast, there is nearly a trebling in the percentage using stock repurchases/special dividends. Table 1 also displays the average abnormal returns for each tactic group at the time the action is announced. We report averages only for brevity, but emphasize, as is displayed in column 3 of the table, that the percentage of cases with a negative reaction is equal to 100% for each category.

Roughly 15% of all 121 targets in the sample engaged in asset restructuring prior to a bid and roughly 21% had management changes. The fractions did not however differ between the first and second halves of the sample period (1989-1996 and 1997-2003) (Z-statistics for differences in proportions: 0.15 (asset restructuring) and 0.06 (management changes)). These results suggest the resistance strategies used by the sample firms were not likely the result of changes in the tendencies of boards to implement such strategies prior to a bid.

Thirty four percent (34%) of the target boards (out of 121) directly solicit third party bids. The fraction is significantly higher (abs. Z-statistic: 2.91) during the latter half of the sample period (49% versus 24%). Thirty nine percent (39%) of these cases involve members of the harmful resistance group

[9] That said, for our sample, the overwhelming majority of cases - almost all - falling within the ambit of the six defensive resistance strategies listed above as having the potential to be adverse to shareholder interests, display resistance-announcement related negative abnormal returns.

and as such represent defenses of last resort (or 'white knights') as distinct from the remaining cases of pure bidder solicitation. Furthermore, where a 'white knight' ends up acquiring the target, the C.E.O. remains in place 50% of the time compared to only 28% for cases of pure bidder solicitation. Twenty four percent (24%) of the sample firms issued higher (defined as at least 10%) profit announcements when opposing takeover offers. This proportion declined significantly (absolute Z-statistic: 2.20) between the first and second halves of the sample period (14% versus 31%). Twenty four percent (24%) of these cases involve members of the harmful resistance group indicating that these actions, in contrast to those defining that group, are more consistent with target managers seeking improved payoffs for shareholders.

3. Predictions and variable measurement

3.1 Internal and external incentives and governance and resistance choice

A target's choice to resist may be influenced by the internal and/or external governance conditions it faces at the time of the bid. For instance Berkovitch and Khanna (1990) develop a theoretical model in which target managers' underlying motivation is shareholder wealth maximization but in which defensive strategies arise and are optimal. However, the authors also conclude that resistance strategies can lead to negative revaluations of the target. This can occur when managers use resistance to entrench their positions. The effect is compounded when the effectiveness of managerial monitoring by shareholders is weak (Berkovitch and Khanna, 1990, section III.B.). Mechanisms that may link shareholder and manager interests include such things as the alignment of manager wealth and income with stockholder wealth, the configuration of the board of directors, and the presence of investors who hold large blocks of shares giving them the potential to influence manager actions.

Some empirical evidence suggests target boards are less inclined to resist bids per se the greater are the potential net wealth gains for target managers in the event of a takeover (Walkling and Long, 1984; Cotter and Zenner, 1994). Cotter and Zenner (1994) conclude that the fraction and value of managerial ownership is the driving force and that these personal wealth effects exceed the present value of lost compensation resulting from dismissal following a successful takeover. Demsetz (1983), Fama

and Jensen (1983), Stulz (1988) and Morck, Shleifer and Vishny (1988) have argued that large managerial ownership stakes can give rise to managers extracting greater private benefits of control if those stakes allow them to maintain control. If the personal benefits to managers from entrenchment outweigh the losses they incur from not pursuing shareholder wealth maximization then there is an incentive for them to seek to maintain the status quo. Larger ownership stakes could therefore promote resistance for entrenchment reasons and might in fact be selected strategically by target managers. We use the percentage of outstanding stock held beneficially by the C.E.O. of the target company to test for the presence of these effects. Information on ownership stakes for our sample companies along with the additional variables described in this section and those that follow are obtained from several sources: Companies House filings, the Corporate Register, the R.N.S. and Datastream.[10]

Holmström (1982) and Gibbons and Murphy (1992) argue that agency problems worsen as managers approach retirement and begin to care less about their long-term career prospects. This suggests that a positive relation may exist between C.E.O. age and resistance driven by managerial self-interest. In the same vein, Dechow and Sloan (1991), Antia, Pantzalis, and Park (2010) and Serfling (2012) provide evidence that older managers focus excessively on actions with short-term gains. Jenter and Lewellen (2011) provide evidence that C.E.O.s closer to retirement are more willing to accept takeovers at lower premiums, that is they may be less prone to resist. Taken together we capture these effects by hypothesizing and testing the proposition that C.E.O. age is non-linearly related to resistance with age becoming a less important factor as retirement age is approached. We capture this effect using C.E.O. age and its square.

Gillan (2006) refers to the board of directors as "… the lynchpin of corporate governance" (p. 385). This view stems from the fiduciary obligation of the board to shareholders, and the board's principal role of monitoring and disciplining management (see for instance, Bhagat and Black, 1999,

[10] All U.K. registered companies have always been required to deposit a copy of their annual report and accounts, and other director and stockholder related filings, with Companies House. The Corporate Register has been published at least bi-annually since 1989 and provides a means of tracking executive and director positions across U.K. listed companies. The R.N.S. has always collated all material news in an as disclosed form from listed companies to the L.S.E.. Stock prices and returns and financial data are sourced from Datastream.

2002; Hermalin and Weisbach, 2003). The beneficial ownership of directors other than the C.E.O. has the potential to enhance director incentives to monitor managerial behavior. At the same time, directors other than the C.E.O are less likely to enjoy private benefits of control. Boards that are aligned with shareholder interests may in principle seek to keep harmful resistance actions of managers in check. Under such conditions we would expect that more aligned boards would be less likely to support harmful resistance. The percentage of the outstanding equity shares beneficially held by directors other than the C.E.O. is our measure of the direct alignment between those board members and stockholders.

Directors may also be more prone to serve the interests of stockholders if the board is sufficiently independent of the C.E.O. Directors are broadly deemed to be autonomous when no discernible personal, employment, or business connections to the firms on whose boards they reside exist nor to the managers of those firms. Directors who serve on the boards of more than one firm have added incentives to act as good stewards because this contributes to the building up of their reputation capital in the market for directors. One force potentially driving independent directors to act in the interest of shareholders is the value of their reputation in the director labor market (Kaplan and Reishus, 1990; Shivdasani, 1993, in the specific context of takeovers). We construct two alternative measures of target board independence. The first measure is based on board composition and equals the percentage of the board members who are outsiders and also hold at least one, non-interlocking, directorship at another firm. A non-interlocking directorship is defined as one in which the non-aligned director can serve as a C.E.O., but on whose board the target C.E.O. does not reside.[11] Our second measure is a dummy variable that takes the value 1 if an outside director holding at least one, non-interlocking, directorship at another firm is also chair of the board and 0 otherwise. If independent boards act in shareholder interests we expect the more independent are resisting target boards the less likely they are predicted to engage in harmful opposition tactics.

Another important characteristic of the board that may play a role in board decision-making is the number of board members. Yermack (1996) has shown that large boards tend to be associated with lower

[11] In which the eligible companies in question are members of a non-regulated industry (not in the financial/real estate, utility/telecommunication, public transport, broadcasting, and newspaper industries) and have a full listing on the L.S.E..

firm valuations. Jensen (1993) argues that boards containing more than 8 members function less effectively and are easier for the C.E.O. to control. In contrast Coles, Daniel and Naveen (2008) suggest a non-linear relation exists between board size and value. We measure the size of the board using the number of target firm directors.

Outside blockholders can potentially play an active role in corporate control (Shleifer and Vishny, 1986) and can facilitate hostile takeover bids (Shivdasani, 1993). Target managers' responses to an unsolicited bid may be influenced by the pressure brought to bear on them by outside blockholders. We define a non-aligned blockholding as a blockholding of at least 5% of total equity votes, over which managers do not exercise control and that is not held by any target director. We use total shares held by such blockholders as a percentage of all shares to measure aggregate blockholder influence. Initial bidder toehold interests are excluded from the measure of blockholder ownership.

All data on governance related variables are measured as close as possible to, but before the bid date.

3.2 Other factors

Franks and Mayer (1996) and Schwert (2000), among others, find that unsolicited offers are not necessarily directed at only inefficiently managed firms. However, the managers of inefficiently managed target firms may stand to lose more (jobs, reputations, private benefits of control, etc.) than their counterparts at firms that are efficiently managed as a result of a successful takeover. If true such managers are predicted to engage in entrenchment motivated resistance. We measure company efficiency using the pre-bid market to book value of the target firm and the target's asset turnover ratio both for up to 2 years ending at the fiscal year-end prior to the bid. Market value of assets is computed as the common stock price multiplied by the number of outstanding shares, plus the book value of non-equity securities and total debt. The stock price is measured 30 days prior to the bid or prior to any official rumor period, whichever is longer. The book value of tangible assets (total assets minus intangibles) is used as the denominator for both performance measures.

The cost of acquiring information about target firms has been inversely linked to managers' decisions to resist takeover bids (Fishman, 1988, for a theoretical justification and Jennings and Mazzeo, 1993, for empirical evidence). Managers of target firms with relatively more publicly available information who choose to resist are likely not motivated by a desire to increase the information set available about their firm. Our proxy for information availability is based upon firm age. We define firms with less information as those whose shares have been fully listed for 6 years or less (Jennings and Mazzeo, 1993). A binary variable labeled 'Young firm' is used to identify such cases. The natural logarithm of firm size proxied by pseudo market value (as previously defined) is has been employed by numerous authors including Mikkelson and Partch (1989), Cotter and Zenner (1994), and Schwert (2000).

The offer premium reveals in part the bidder's beliefs about the value creation potential of acquiring the target as well as the likelihood that the offer will be met with resistance. In the takeover models of Giammarino and Heinkel (1986), Fishman (1988) and Hirshleifer and Png (1989) for instance a large offer premium reveals a high bidder valuation of the target. Inefficiently managed targets present an opportunity for value creation that may include reorganization and dismissal of the target's top management team as first proposed by Manne (1965). A larger premium may thus be viewed by the inefficient manager as an indicator that if the takeover is successful dismissal may be likely and thus lead to harmful resistance. In contrast, managers who are motivated by stockholder wealth interests (efficient managers) will resort to resistance to improve the terms of what they view as inferior bids. Initial bid premiums have been associated with the likelihood of resistance, with lower premiums, on average, being rejected at a greater rate (Jennings and Mazzeo, 1993). However, such studies do not directly consider what we refer to as harmful resistance. Initial bid premiums are computed as the percentage difference between the offer price and the target firm's stock price, adjusted for the effects of takeover rumor.[12]

[12] For the case of offers involving an exchange of common stock, the bidder's stock price is taken 5 trading days before the bid announcement date. The bid rumor adjustment is similar to that described for the target firm's market value of assets. Bates and Becher (2012) primarily focus on an abnormal premium (actual minus predicted premium). When we compute predicted premiums in a similar manner from within our sample and include the abnormal premium in place of the actual premium the results to follow are unchanged.

Bidder toe-holds have been shown to be an important element in takeovers and to exhibit both variation across bidders as well as the observation that many bidders hold smaller pre-bid share positions than the maximally legal ownership level (Jennings and Mazzeo, 1993; Betton and Eckbo, 2000; Betton, Eckbo and Thorburn, 2009). Goldman and Qian (2005) develop a model in which optimal toehold positions account for post-bid target value if an offer fails due to resistance, and show toehold positions are endogenous in the model. This occurs within a setting in which the motive for target resistance is to preserve target managers' private benefits of control and the ex-ante probability of takeover is increasing in the bidder toehold. Betton Eckbo and Thorburn (2009) conclude that if the target management is expected to resist regardless of the size of the toehold, then acquiring a toehold is always optimal. This also suggests the toehold may be endogenous. Walking (1985), Jennings and Mazzeo (1993) and Betton and Eckbo (2000) find that toehold bidding increases the probability of takeover success. Managers that choose to resist takeover bids will find it increasingly difficult to do so for entrenchment reasons the greater is the voting power behind these toehold interests. We measure toeholds as the percentage of total equity votes controlled by initial bidders immediately prior to the announcement of the offer. As an alternative proxy for the bargaining power of initial bidders an indicator variable is used to identify cases where either the bidder already has a representative on the target board, or a dissident target director pledges support for the bidder.

Resistance may also be related to the terms of the offer and to whether the bidder makes a genuine approach to the target's board before launching the bid. For instance, the model developed by Fishman (1988) suggests that cash bids are more likely to be accepted. Bids for cash have been weakly associated with less bid resistance (Jennings and Mazzeo, 1993), while bidder approach has been strongly connected to a lower propensity for opposition (St-Pierre, Gagnon and Saint-Pierre, 1996). 'Full cash terms' is a dummy variable that takes the value of 1 if the initial bid is a cash offer and 0 otherwise. 'Bidder approach' is an indicator variable used to identify cases where the initial bidder makes an approach to the target board before launching their bid.

3.3 Descriptive statistics

Table 2 presents descriptive statistics for the target firms. Data are presented for the harmful resistance group and for all other resisting targets. C.E.O.s of target firms classified in the harmful resistance group own an unconditional mean beneficial equity interest of 2.30% of their firms' stock, although the median stake is considerably less at only 0.09%. In contrast mean C.E.O. holdings for the remaining targets equals 1.47%. The unconditional means (and medians) of the two groups are not significantly different using a mean difference t-test or the Kruskal-Wallis test for equality of medians. The average and median age of a C.E.O. in the sample is 52 years. The difference in the unconditional means (medians) of C.E.O. age between the two groups is not significant.

Directors of target firms in the harmful resistance group, excluding C.E.O.s, have a mean and median personal stock interest of 1.24% and 0.30%, respectively. In contrast director ownership for the remaining targets is larger: mean 2.89%, median 0.44%. However conventional tests indicate neither the unconditional means nor medians are statistically different between the groups. C.E.O. and other director equity stakes do however exhibit cross-sectional variation (harmful resistance group: 6.3% and 2.5%; all other targets: 4.1% and 8.2%).

Targets in which the C.E.O. and board chair positions are separated and where the board chair is also an independent director are observed less frequently for firms in the harmful resistance group (20% versus 45%) and the difference in the proportions is statistically significant. Independent directors constitute roughly 17% of the board for the harmful resistance group and about 19% for all other targets. The mean (and median) number of directors is roughly the same for both the harmful resistance group and all others and equals 7 members. Outside blockholdings are statistically significantly smaller for the harmful resistance group (25% versus 32%) and this is true for both the means and the medians.

The mean (median) offer premiums are not statistically different between the two groups. This is also true for the fraction of the target's shares held as a toehold, for the fraction of cases in which a dissident director sympathetic to the bidder was present, for the fraction of cases in which a full cash offer was made, and whether the bidder approached the target prior to the bid.

Average and median statistics for the company performance proxies reveal that, for the 2 year period preceding the initial takeover bids, non-harmful resisting firms have market to book value ratios in excess of the harmful resistance group and have asset turnover ratios that are also larger. But these differences are not statistically different from zero. The non-harmful resistance group is made up of younger firms (those that have been fully listed 6 years or less) and the difference in the fractions of younger firms in both groups is statistically significant.

There is a 1.6 fold increase between the periods 1989-1996 and 1997-2003 in the mean number of independent directors on the boards of resisting targets. This result is consistent with the overall structure of U.K. boards having changed significantly in response to numerous independent reports on corporate governance practices and the publication of the "Combined Code: Principles of Good Governance and Code of Best Practice". This finding also potentially explains our earlier observation that a relatively smaller percentage of takeover offers are unsolicited during the period 1997-2003. That is, a greater degree of board independence may have eased the path for would-be acquirers to privately negotiate deals with incumbent directors. We also find that the incidence of bidders approaching targets before a bid increased from 19% to 43% between the sub-periods although curiously a greater fraction of such approaches is observed for cases involving targets that ultimately follow harmful resistance strategies. This latter result is perhaps consistent with bidders seeking out firms that are not performing as well only to be dismissed by target management. Taken together these observations are consistent in spirit to those of Boone and Mulherin (2007) who find a takeover market in the 1990s that is increasingly characterized by pre-public negotiation.

4. Resistance, managerial incentives and corporate governance

Table 3 presents the average marginal effects of variables selected to represent the hypotheses described in Section 3 on the probability of choosing a value decreasing resistance strategy (harmful resistance). We model the choice variable as a probit specification. Similar results (not tabulated) are found for logit specifications. Marginal effects in probit (or logit) models are related to all of the

estimated coefficients of the model and hence examining the estimated coefficients by themselves can lead to potential misinterpretations (Woolridge, 2002; Long and Freese, 2006). Following convention, marginal effects for binary explanatory variables are measured as the difference in the evaluated probability when the variable takes the value 1 minus the value when it equals 0. The dependent variable takes the value 1 for each of the 50 cases we classify as being associated with value decreasing resistance and 0 otherwise. As already mentioned, our results are conditional on the bid being unsolicited and being resisted. For convenience we refer later to the 'probability' of harmful resistance resistance but it should be understood that what we are speaking of is conditional on the bid being unsolicited and resisted.

It is possible that one or more of the right hand side variables in the model are endogenous. Specifically the explanatory variables offer premium and bidder toehold might potentially be endogenous (Fishman, 1988; Hirshleifer and Thakor, 1994; Cotter, Shivdasani and Zenner, 1997; Bange and Mazzeo, 2004; Betton, Eckbo and Thorburn, 2009). Likewise, C.E.O. and outside blockholder ownership might also reflect strategic choices by managers and investors that could be related to benefits of control and hence to the choice of resistance. In the discussion that follows we comment on the results of tests for exogeneity for each of these variables. We do not present all the results for brevity but in Table 3 do include the results for models that treat the offer premium as potentially endogenous. We present two sets of results in Table 3. In one set of results the offer premium is treated as an exogenous variable by assumption. In the second set of results we treat the offer premium as if it is potentially endogenous and test the null hypothesis that the variable is exogenous using a Wald test (Woolridge, 2002).

Columns labeled 'Probit' in Table 3 report average marginal effects for each explanatory variable in the model treating the offer premium as exogenous by assumption. Z-test statistics for the null hypothesis that the marginal effects equal zero are reported in parentheses. A marginal effect measures the partial of the expected probability of the choice to select a value decreasing resistance tactic with respect to an explanatory variable. The average marginal effect is computed by evaluating the marginal effects at every observation and then averaging (Woolridge, 2002). Columns labeled '2-stage' report

average marginal effects for models in which the offer premium is treated as an endogenous variable. The modeling assumption is that the choice variable is described by a probit model while the continuous endogenous variable is described by a linear model with normally distributed errors.[13] These models are estimated using maximum likelihood methods (Woolridge, 2002). Wald test statistics of the null hypothesis that the variable labeled 'offer premium' is exogenous are reported at the bottom of each column labeled 2-stage.[14] In every case we cannot reject the null hypothesis of exogeneity of the offer premium (p-values for the test all exceed 0.05 by a healthy margin). The resulting estimated coefficients for all other variables are of the same sign and have the same general magnitudes and significance levels as those shown in the columns labeled Probit. The same applies to tests of exogeneity for the other potentially suspect right hand side variables: C.E.O. ownership, outside blockholder ownership and the bidder toehold level.[15] Based upon these collective results we therefore focus our discussion on the results for the basic probit models reported in the columns labeled 'Probit'.

We also include in the models estimated the pre-bid run up of the target's stock, computed as the daily cumulative market (F.T.S.E. All Share index) adjusted return over the 12 month period prior to the bid or prior to any official rumor period, whichever is longer. Industry controls are also included but are not tabulated for brevity. Due to the sample size we identify each target with one of four industry sectors: natural resources, industrials, consumer goods, and services. Dummy variables for industry sector membership are then constructed. The dummy variables for industrials, consumer goods, and services are included in the model with the intercept absorbing the natural resources sector.

[13] See Newey (1987) and Woolridge (2002). We use the pre-bid run-up of the target's stock and the natural logarithm of target firm size as instrumental variables (see Betton,Eckbo and Thorburn (2010)).

[14] For the maximum likelihood estimation with a single continuous endogenous variable, the test is simply a Wald test that the correlation between the error terms in the structural equation and the reduced-form equation for the endogenous variable is equal to zero.

[15] Following Demsetz and Lehn (1985) and Holderness (2009) we use the natural logarithm of target firm size and the standard deviation of daily target stock returns as instruments for these other potentially endogenous explanatory variables.

The probability of observing a resistance choice placing the target in the harmful resistance group increases with the size of the C.E.O.'s equity ownership interest.[16] This result is consistent with the proposition that larger levels of managerial ownership can give rise to managers wielding more power and extracting greater private benefits of control as suggested by Demsetz (1983), Fama and Jensen (1983), Morck, Shleiffer and Vishny (1988) and Stulz (1988). This observation is plausible given the nature of our sample. Unsolicited and resisted offers suggest that a negotiated deal may have already failed, or that the target's management rejected any overtures from the bidder, both of which could be due to managers seeking to maintain their private benefits of control. Broadly consistent with our findings are the results presented by Moeller (2005) who finds that higher C.E.O. stock ownership, in addition to other proxies for low target stockholder control, is associated with a smaller takeover premium. One explanation for the result is that instead of negotiating a large takeover premium that would benefit shareholders, target C.E.O.s reach a side-deal with the bidder insuring they continue to receive private benefits which could come in the form of a generous severance package. Our results differ however from Walkling and Long (1984) and Cotter and Zenner (1994) who find that managers are more likely to reject bids the lower is their ownership stake. Our sample of managerial choices is different from these studies however in that we distinguish between harmful and non-harmful resistance which means we are not pooling all resistance actions together.

Takeover bid resistance is non-linearly related to C.E.O. age. Older managers use harmful opposition strategies with greater frequency, but this effect is partially mitigated for much older C.E.O.s. Neither the C.E.O. stock ownership nor age effects are affected by controlling for top managers who have only recently (within the 12 month period prior to bid announcement) become the top managers of target firms. Our findings for C.E.O. stock ownership and age echo those of Harford (2003) who documents that target C.E.O.s with a higher predicted probability of not being retained have a greater propensity to

[16] This result is not sensitive to using the logistic transformation of the percentage of shares held by the C.E.O. (not tabulated) employed in Demsetz and Lehn (1985) and Demsetz and Villonga (2001).

resist, rather than recommend, takeover bids. Later we show that harmful resistance is associated with a higher probability of target C.E.O. turnover.

The results consistently show that boards, excluding the C.E.O., that own more stock are less likely to endorse a harmful opposition strategy.[17] Results in the literature show that resisting boards tend to have lower ownership interests relative to those favoring takeover bids (Morck, Shleifer and Vishny, 1988; Cotter and Zenner, 1994). Our results indicate that the level of board ownership discriminates between resistance driven by manager-driven motives in contrast to stockholder interests.

The estimation results for models (1) and (3) show that choices that place the target in the harmful resistance group are less probable when the board chair is independent and holds at least one other, non-interlocking, directorship. This is the result we would expect if these chairpersons act as an important counterweight to the C.E.O. and whose reputations are potentially valuable. The result is robust to the inclusion of a control identifying those firms that only initiated a dual leadership structure in the 12 months prior to being the target of a takeover.

In model (5) the board leadership variable is replaced with the percentage of the board that are independent and that hold at least one other, non-interlocking, directorship. The coefficient on this variable while negative is not statistically significant at conventional levels. A significant shift in the corporate governance environment occurred in the U.K. during 1997-2003 including movement towards more outside director representation on boards. We construct an interaction variable equal to the product of 'Independent directors (%)' and a dummy variable that takes the value 1if the takeover bid occurred during the period 1989-1996 and (0) otherwise. The coefficient of the interaction variable as reported under model (7) is negative and statistically significant. The result indicates that board composition is an important factor but that its influence is restricted to the period 1989-96.

There is no statistically significant association between target board size and harmful resistance. Using the natural logarithm of board size (not tabulated) does not alter this conclusion. Bange and

[17] In contrast, Harford (2003) documents the potentially adverse impact of takeover bids on non-C.E.O.-directors' (including outside directors') wealth and future board seats.

Mazzeo (2004) find that targets with larger boards are more likely to receive unsolicited offers. All the offers in our sample are unsolicited. Our result indicates that there is no marginal board size effect on resistance choice given an unsolicited offer.

The marginal effect of the variable non-director-aligned blockholdings ('outside blockholdings') on the probability of resistance choices placing the firm in the harmful resistance group is negative and statistically significant. This finding is robust to alternative measures of blockholdings, including a Herfindahl-type measure capturing block holding concentration (not tabulated). The result is consistent with the hypothesis that the presence of blockholders discourages harmful resistance as suggested by Shleifer and Vishny (1986

The negative effects of the market to book and asset turnover ratios suggest that more efficient managers are less likely to resort to harmful resistance strategies and consequently less efficient managers more likely. This relation is what we would predict if poorly performing managers fear disciplinary consequences and/or engage in the use of corporate resources that do not maximize value. The results are robust to alternative time periods over which market to book and revenue to tangible assets ratios are computed. The significant performance differences observed in Table 3 remain after netting out median industry effects (Morck, Shleifer and Vishny, 1988).

Morck, Shleifer and Vishny (1988) conclude that there is a greater propensity for poorer performing and older firms to be the targets of disciplinary takeover bids. Also, consistent with this view, the results presented in Table 3 reveal that harmful resistance resistance is less likely for younger firms. Information about such firms is also likely to be less precise. Fishman (1988) argues that poor quality/ more costly information about target firms creates a bargaining imbalance, which we argue is more likely to induce the use of pro-stockholder resistance strategies. Neither the differential effects related to past performance nor those emanating from the cost of information acquisition are affected by the inclusion of target firm size.

The positive sign for the effect of the offer premium implies a greater likelihood of observing harmful opposition in response to higher initial bid premiums. One explanation for this result is that a

higher premium signals to target managers that the bidder is not only very serious about gaining control but also believes the target's value can be enhanced, possibly through a reorganization of the target's management team. In contrast, managers resorting to harmful opposition resist irrespective of the level of the premium. In contrast, the other targets have chosen to resist because the managers perceive that the initial offer premium undervalues their firm.Varying the target stock price used to estimate initial bid premiums does not lead to different inferences.

Model (1) contains a control for bidder toehold. The results suggest that toehold interests are not associated with the use of harmful resistance strategies. However, we find that bidder toehold and outside blockholdings are highly positively correlated (43%) and the result is statistically significant at the 0.05 level. We estimate the model including bidder toehold but excluding outside blockholdings (not tabulated) and find that bidder toehold has a negative and statistically significant marginal effect. We also substitute the factor identifying cases in the sample where initial bidders have representation on target boards, or are supported by dissident incumbent directors, for the toehold interest variable. The result is a generally significant, negative effect for the variable. Cotter, Shivdasani and Zenner (1997) find that such a factor is significantly and inversely related to bid resistance in U.S. contests. Initial bidders that have representatives, or the backing of dissidents, on target boards are less likely, therefore, to face harmful resistance.

Finally, a cash only offer is not associated with the nature of bid resistance. This is also true for cases in which the bidder approached the target before the public offer. If target managers are intent on retaining their positions and control of the firm then they will resist whether the bidder has made takeover ovations prior to the public bid or not or whether the offer is for cash despite the potential positive aspects of a cash offer (see, Fishman, 1989; and the empirical results of Jennings and Mazzeo, 1993). We treat the choice to offer cash as exogenous. Theory and by and large all empirical studies of the choice to offer cash find that the choice is a function of bidder characteristics in contrast to target characteristics or behavior (Martin, 1996; Faccio and Masulis, 2005).

In summary, takeover bid resistance motivated by harmful resistance is more likely the greater are the personal stock interests of C.E.O.s, and as these top managers approach the peak of their executive careers (grow older). Boards of directors that are more closely aligned with stockholders through equity ownership and/or are more independent of management are associated with a reduced propensity for harmful opposition. Harmful resistance is also a less probable response the more concentrated are outside blockholdings, and the better performing are target firms. Lower information quality about the target decreases the probability of harmful resistance while higher initial bid premiums increase its likelihood.

Overall we consistently reject the null hypothesis that all the coefficients of each of the estimated models are equal to zero using a Wald test.

5. Conditional expectations about the probability of bid success

The results presented in Table 3 suggest that harmful defensive resistance is associated with weaknesses in managerial incentives and governance. If the relations between resistance choice and incentives were simply a statistical artifact we would not expect the capital market to reflect the implications of such resistance in target stock price revisions at the time of the bid. Simply looking at the market reaction by itself is insufficient to tease out the answer to this question. One must account for the expected probability of success as well as the premium offered to assess whether capital market participants initially regard resistance choice as having a direct consequence. We now provide such an examination.

The capital market revaluation of the target at the time of the bid reflects both the offer premium as well as the market-wide assessment of the probability the bid will be successful. In simple terms $\Delta P = \left(Offer\ Pr emium\right)\ x\ \left(p\right)$ where p represents the assessed probability the offer will succeed and ΔP represents the change in the target's share price when the offer is for all target shares, and the

expected price if the offer fails equals the pre-offer price.[18] Of course in an empirical analysis ΔP must be suitably adjusted for general market movements. A natural question is whether the probability of success assessed by the market at the time of the bid is different for firms in the harmful resistance group.

We measure target share price reaction to a bid as the cumulative abnormal return (C.A.R.) over the period from 30 trading days prior to any bid rumor, or the formal announcement date if no rumor circulated, through the offer announcement date. The market index used as a basis for the simple market model is the F.T.S.E. All Share Index. The market model is estimated for each case using the 120 trading days leading up to 30 days prior to the first announcement or rumor date. The mean and median target company C.A.R.s for the announcement interval equal 24% and 26% respectively and both are significantly different from zero at conventional levels of significance, consistent with most results reported in the literature (Franks and Harris, 1989; Betton, Eckbo and Thorburn, 2010).

We estimate the assessed probability of success by regressing target company C.A.R.s on the initial offer premium and several control variables that have been shown to be related to the response of target company share prices to bids (see for instance Betton, Eckbo and Thorburn, 2010). Table 4 reports the results. We are interested in the estimated coefficient on the offer premium which reflects as noted earlier the market assessment of the probability of success. We present estimates for the harmful resistance group of companies and separately for the remaining sample bids in columns (1) and (2) respectively, whereas column (3) reports results of a full interaction model based on a dummy variable defined by membership in the harmful resistance group. The estimated coefficients on the offer premium variable equal 0.422 for the harmful resistance group and 0.654 for all other targets. These numbers represent the assessed probability of success for each group respectively. Clearly the point estimates differ and suggest that the assessed probability of success is smaller (about 42%) for the harmful resistance subsample but nevertheless significantly different from zero. In column (3) we present a full

[18] See Cotter and Zenner (1994). See also Asquith (1983), Bradley, Desai and Kim (1983), Ruback (1988), and Fabozzi, Ferri, Fabozzi and Tucker (1988) for evidence that target company share prices in unsuccessful offers revert back to pre-offer levels. .

interaction model in which the interaction dummy equals 1if the case belongs to the harmful resistance group and 0 otherwise. The coefficient on the interaction variable defined as the dummy times the offer premium is negative (-0.232) and statistically significant at the 0.05 level. The inference is therefore that the market's assessment of the probability of success is significantly smaller for those cases in which resistance reflects harmful resistance. Thus not only is harmful resistance fueled by weak governance, as shown in Table 3, but at the outset the market believes that such resistance reflects a lower probability the bid will be successful in imposing an opportunity cost on target shareholders. We repeat the analysis using the estimated probability of harmful resistance for model (1) in Table 3. A full interaction model akin to model (3) of Table 4 is estimated. We find the results (not tabulated) are comparable to those presented in Table 4.

How does the initial assessed market-based probability of success compare with actual success rates within the sample? Takeover attempts ultimately leading to a complete change in control for the target firm are identified as bids that are ultimately declared unconditional in all respects. This essentially means that the shareholders of the target company have agreed to sell to the bidder. The overall success rate for the total sample is roughly 70%, but this proportion is only 60% for the harmful resistance group compared to 77% for the remaining targets. If the market's initial beliefs about the probability of success are conditioned on information available at the time of the initial bid, and nothing changes to alter those beliefs (that is, expected managerial actions and the market environment prove to be true on average), then the ultimate success rate should roughly equal the initial expected success rate. The actual success rates for both groups suggests that other influences following the initial bid worked to increase the success rates for the two groups. We find that these factors are the attraction of a third party offer and whether the final offer is for cash, both of which have a positive and statistically significant influence on the probability of success. The average marginal effects on the probability of success (Z-statistics) for an estimated probit model of ultimate success (not tabulated) equal: third party offer, 0.368 (5.03); full cash offer, 0.305 (2.95). In contrast the average marginal effect on success of resistance choice that places the target in the harmful resistance group is not significantly different from zero. McFadden's R^2 for the

model equals 0.22. Thus while the market-wide initial belief is that resistance driven by harmful resistance reduces the probability of success, subsequent actions of third party bidders raise the probability of success. It is important however to remember that we are here referring to ultimate success rates and that 40% of those cases exhibiting harmful resistance ultimately fail.

6. C.E.O. turnover and reputation

Harmful resistance that destroys shareholder wealth is potentially an indicator of a more pervasive agency problem. Hence it can be a reflection of potentially unobservable variables or forces that characterize managerial self-interest or entrenchment. In this section we employ membership in the harmful resistance group as an indicator of a more deep-seated problem and explore whether the association between this indicator and events that arise subsequent to the takeover contests are consistent with the existence of such problems.

In Table 5 we use resistance choice as a potential indicator of a more deep-seated problem, which may include an agency problem but may also capture managerial quality or ability. Alternatively from the results presented in Table 3 we infer that the choice to adopt harmful resistance is associated with weak incentives and weak corporate governance. The extant literature suggests that the strength of corporate governance and managerial incentives influence the disciplining of managers of poorly performing firms through turnover (Weisbach, 1988; Kang and Shivdasani, 1995; Volpin, 2002). Therefore if membership in the harmful resistance group captures the presence of more deep-seated value-related problems within the firm and if internal and external forces move to correct the problem following a takeover contest, then we should see adjustments in the employment positions of the C.E.O.'s involved. We emphasize that we are using the classification variable here as an indicator or manifestation of managerial problems and as such we are not arguing that the resistance choice necessarily causes the changes in the employment opportunities of the C.E.O.'s in the sample. We examine three outcome variables as pertain to target company C.E.O.'s. The first is post-bid C.E.O. turnover. Here a binary

variable is used to identify cases where the C.E.O. either is turned over by the successful bidder (which can be a third party), or relinquishes office in the 12 months following a failed takeover attempt.

The general consensus in the literature is that weak performance is associated with C.E.O. turnover (Coughlan and Schmidt, 1985; Warner, Watts, and Wruck, 1988; Martin and McConnell, 1991; Dahya, McConnell and Travlos, 2002; Kini, Kracaw and Mian, 2004; Kaplan and Minton, 2012). We use the abnormal pre-bid run up in the target's share price over the 1 year period ending 30 days before (rumor of) the bid. Most studies of post-takeover target management turnover focus on successful offers. Agrawal and Walkling (1994) observe that target C.E.O.s are more likely to be replaced when a bid succeeds than when it fails. Our sample includes both successful and unsuccessful offers. We therefore control for whether the bidder is successful. The intuition being that if a takeover is completed (is successful) this provides the bidder with the opportunity to replace the target's management. We also include target size as a control variable as this is known to be correlated with numerous company characteristics.

In our sample we find that of the 54 cases in which C.E.O. turnover occurred 46 of those were associated with successful takeovers.

For all bids (completed or otherwise) 52% of the C.E.O.s represented in the harmful resistance group turn over compared to only 39% for the remaining targets. Even for C.E.O.s who employ harmful resistance but are still acquired there remains a 37% chance of being retained.[19]

The average marginal effects computed from a probit specification in which C.E.O. turnover is the dependent variable are presented in column (1) of Table 5. C.E.O. turnover is positively related to membership in the harmful resistance group consistent with such actions on the part of managers revealing self-interest as well as weak incentives and governance. This result suggests that turnover is associated with harmful resistance. Turnover is negatively related to prior performance and is positively

[19] Bates and Becher (2012) only focus on failed bids. If we consider only the failed bids in our sample then the rate of C.E.O. turnover for the harmful resistance group (20 cases) is 35% compared to 6% for the remaining targets (16 cases). Furthermore, the market-adjusted returns from bid announcement through to 1 year post-bid (clean of any further bids) are -3.01% and 18.02% for the harmful resistance and remaining target groups, respectively.

related to bid success. The results on prior performance are consistent with those reported by others such as Martin and McConnell (1991) and Kini, Kracaw and Mian (2004) but suggest that managers that exhibit behaviors suggestive of shareholder neglect are more likely to be replaced. Harford (2003) also finds that a successful takeover attempt is one of the few important determinants in predicting the post-bid retention of inside directors. All average marginal effects aside from target size are statistically significant.

Moving from the position of a C.E.O. of a previously listed firm to a top manager of a subsidiary, or privately owned company, would likely not carry the same status or necessarily the same level of benefits, including control benefits. If the managerial labor market and the market for directors penalize C.E.O.s following harmful resistance then we should expect there to be a low likelihood that such C.E.O.s will secure top executive or director positions following a takeover (Fama and Jensen, 1983; Harford, 2003). We therefore divide the sample cases according to whether target C.E.O.s serve as the top executive of a listed firm in any of the 2 years following either bid completion or the 12 month period after the failure of a takeover attempt.[20] Seventy-two percent (72%) of the target C.E.O.s in the harmful resistance group do not continue to run listed firms after resisting takeover bids. Interestingly the percentage is roughly the same for all other resisting targets in the sample.

In a similar fashion, we also gather information on whether the C.E.O.s of the target companies in our sample go on to serve on the boards per se of listed companies We find that 58% do not hold a director position following a takeover contest. This percentage is also the same for the harmful resistance group and the other resisting targets. [21]

[20] In which the eligible companies are members of a non-regulated industry (not in the financial/real estate, utility/telecommunication, public transport, broadcasting, and newspaper industries and have a full listing on the L.S.E..

[21] If we consider only the failed bids in our sample then the rate of target C.E.O. attrition from the top executive positions of listed firms is 65% for the harmful resistance group compared to 38% for the remaining targets. The attrition rates for post-bid directorships are 55% and 19% for the harmful resistance and remaining target groups, respectively.

Columns (2) and (3) of Table 5 present results for models of the post-bid probability that a target C.E.O. will not (binary dependent variable takes the value 1) serve as a top executive or director, respectively, of a listed company. The explanatory variables are the same as those previously described for the model of C.E.O. turnover. The harmful resistance factor does not directly influence post-bid employment of a C.E.O. either as a top executive or as a director. However, if the bid is successful the impact is to increase the C.E.O.s probability of not holding such positions. Finally, C.E.O.s who are associated with larger targets face a decreased probability of not holding a position following a takeover. These results are statistically significant and are consistent with Harford (2003) who documents the potentially adverse impact of takeover bids on directors' wealth and future board seats.

Columns (4) and (5) of Table 5 drop the variable capturing whether the takeover bid is successful to instead investigate the relation between target C.E.O. turnover and their subsequent holding of a top executive position or a position as a director. These results indicate that the probability of not holding such positions following a takeover contest increases if the C.E.O. leaves the target company. The results are significant at approximately the 5% level for both cases. Agrawal and Walkling (1994) also conclude that target C.E.O.s who lose their jobs generally fail to find another senior executive position within a 1-3 year post-bid period.

7. Conclusions

The theoretical and empirical literature on takeovers is vast. Yet surprisingly little is known about the motivations and drivers behind the multiplicity of actions taken by managers to resist takeover bids. This paper attempts to address this deficiency by classifying resistance strategies according to whether they are harmful to stockholders. A distinction between resistance motivated by managerial self-interest/preservation and resistance motivated by shareholder wealth is fairly well grounded in the theoretical literature. Empirically, however, studies have either treated resistance as a homogenous response or else focused in isolation on predominantly pre-emptive, anti-takeover measures. In the spirit of Dann and DeAngelo (1988), we include all defensive asset restructuring and other blocking tactics in

our harmful resistance group provided these actions elicit a negative return stock price reaction on announcement. What we label as the harmful resistance group is then compared to the other resisting targets in our sample. The overall sample of 121 resisted bids is drawn from the 1989-2003 period in the U.K.. Conducting the study on U.K. resisted takeovers allows us to consistently capture managers' responses to bids in the absence of pre-emptive, anti-takeover mechanisms, made ineffectual under the U.K. rules.

Our analysis reveals new insights, in particular, into the role of incentive and governance structures of resisting firms. Firms in our sample resorting to harmful resistance strategies are found to have top managers with more pronounced ownership-based and age-related incentives for control, and other directors with equity interests less closely aligned to stockholders, as distinct from firms using resistance tactics designed to promote stockholder wealth. Firms that follow harmful resistance strategies have less independent boards, are exposed to weaker discipline from active outside blockholders, and are inferior performers. Prior studies have generally found no significant relation, or mixed results, when considering the effect of managerial incentives and corporate governance on either takeover resistance per se or the adoption of specific, anti-takeover measures. Managers are also found to pursue harmful resistance strategies in the presence of higher initial offer premiums and greater information availability about their firms. Previously it was known only that lower initial offer premiums were more likely to be resisted than recommended. Our observations on the nature of resistance are insensitive to an endogenous treatment of many of its determinants.

Furthermore, we find that the likelihood of resistance being motivated more by managerial self-interest is factored in adversely to announcement period returns as the capital market gauges its expectations of bids succeeding. The completion rate for resisted bids in our sample is ultimately influenced by the emergence and solicitation of third party offers, which are more prevalent among the other resisting firms in the sample. Finally, an incumbent C.E.O has a greater likelihood of being disciplined (turned over) when resisting for reasons that are harmful to shareholders. C.E.O. turnover has in turn an overriding detrimental effect on the aftermarket, board employment of these incumbent

managers. Previous studies have not documented an effect of takeover resistance in general on C.E.O. turnover that is incremental to pre-bid performance.

The continued relevance of the ongoing academic debate on takeover resistance is starkly illustrated by the controversy that persisted in the European Union until member states reached less than harmonious agreement on the extent to which anti-takeover mechanisms and bid resistance tactics should be controlled through the European Takeover Directive (2004/25/EC). Our study of the potential drivers and effects of resistance motivated by harmful resistance gives credence to those on both sides of the Atlantic who favour constraints on managerial actions driven by bad faith as distinct from those that legitimately enhance bargaining power on behalf of stockholders.

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Table 1

Resistance tactics.

Percentage of targets using specific resistance tactics for the subsample of 50 resisted U.K. takeover bids classified as members of the harmful resistance group from a sample of 121 publicly resisted U.K. takeover bids from the period 1989-2003. Membership in the harmful resistance group of resisting targets is defined by a target experiencing a negative share price reaction at the announcement of the resistance action for each of the tactics listed. Resistance tactics: (1) Spin-offs/sell-offs which are divestments that deny bidders access to assets of value; (2) Mergers/acquisitions/joint ventures which make target firms more cumbersome to acquire due to size, strategic or antitrust grounds, or which eliminate bidders directly; (3) Stock repurchases/special dividends which involve payouts that effectively eliminate bidders' plans for the utilization of excess cash held by the target, and, in the case of targeted repurchases, that increase the proportion of stock in the hands of friendly stockholders; (4) Going private transactions which use competing management buyouts to create potentially costly bidding contests; (5) Management changes which make removal of newly appointed officers especially costly because of special contractual payments ('golden parachutes') triggered by a takeover; and (6) White squires which involve solicitation of friendly third party participants who acquire a stake that will effectively block the takeover. Market-adjusted returns at announcement of the resistance actions use the F.T.S.E All Share index as the market proxy.

	1989-2003 (50 bids)	**Average market-adjusted return at announcement of action (%)**	**% of market-adjusted returns that are <0**	**1989-1996 (24 bids)**	**1997-2003 (26 bids)**
Resistance tactic	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Spin-off/sell-off	46.0%	-2.72	100	58.3%	34.6%
Merger/acquisition/joint venture	30.0%	-3.46	100	25.0%	34.6%
Stock repurchase/special dividend	16.0%	-1.24	100	8.3%	23.1%
Going-private transaction	10.0%	-1.36	100	4.2%	15.4%
Management change	10.0%	-0.77	100	12.5%	7.7%
White squire	8.0%	-1.37	100	8.3%	7.7%

Table 2

Descriptive statistics.

Descriptive statistics for target firm and initial offer characteristics by resistance strategy for a sample of 121 publicly resisted U.K. takeover bids 1989-2003. Membership in the harmful resistance group is as described in Table 1. Target/initial offer characteristics: C.E.O. ownership (%) is the percentage of outstanding equity at the bid announcement date in which the most influential target officer (based on title, and, if no officer carries the title 'Chief Executive Officer (C.E.O.)', on compensation) has a beneficial interest. C.E.O. age is the age of the target C.E.O. at bid announcement. Other directors' ownership (%) is the percentage of outstanding equity at the bid announcement date in which target directors other than the C.E.O. have a (non-duplicated) beneficial interest. Independent chairperson (=1) is a binary variable equal to one if the director serving as target chairperson at the bid announcement date is non-aligned (no personal, employment, or business connections to affect their oversight) and holds at least one other directorship, that is non-interlocking (we permit the non-aligned chairperson to serve as an executive director elsewhere provided the target C.E.O. is not on the same board), in a fully listed firm outside the financial/real estate, utility/telecommunication, public transport, broadcasting, and newspaper industries. Independent directors (%) is the proportion of independent (as described for Independent chairperson) target board members (including the C.E.O.) at the bid announcement date. Board size is the number of target firm directors (including the C.E.O.) at the bid announcement date. Outside blockholdings (%) is the percentage sum of non-aligned (as described for Independent chairperson) stock interests wielding at least 5% of total target equity votes (excluding initial bidder toeholds) at the bid announcement date. Offer premium is the percentage difference between the unit initial offer value (using the bidder's stock price 5 trading days before the bid announcement date for offers involving an exchange of common stock) and the target firm's stock price (adjusted for rumor as per the Valuation ratio described below). Bidder toehold (%) is the percentage of total target equity votes controlled by the initial bidder and any connected parties immediately prior to offer announcement. Bidder/dissident director (=1) is a binary variable equal to one if the initial bidder has a representative on the target board, or a dissident target director pledges support for this bidder. Full cash terms (=1) is a binary variable equal to one if the initial bid offers full cash terms (including a full cash alternative to the main terms). Bidder approach (=1) is a binary variable equal to one if the initial bidder makes a genuine approach to the target board before launching their bid. Valuation ratio is the average market to tangible book value of assets (where market value of assets is the common stock price multiplied by the number of outstanding shares plus the book value of non-equity securities and total debt, and the denominator is total assets minus intangibles) of the target firm for the two financial years preceding the bid announcement date (adjusting the more recent market value of equity to just before an unofficial rumor period of 30 trading days plus any official rumor period). Asset turnover is the average sales to tangible assets ratio of the target firm for the two financial years preceding the bid announcement date. Young firm (=1) is a binary variable equal to one if the target firm has been fully listed for 6 years or less at the bid announcement date. Sample size is determined by data availability. **, * indicates significance at the 1% and 5% levels, respectively.

(**Table continued on following page**).

Table 2 (continued)

Target/initial offer characteristics	Targets in the harmful resistance group: Mean (1)	Media (2)	Proportion of targets/offers (3)	All other resisting targets: Mean (4)	Median (5)	Proportion of targets/offers (6)	Difference: t-stat. for mean diff. (7)	Kruskal-Wallis χ^2 med. diff. (8)	Z-stat. for prop. diff. (9)	Sample size (10)
C.E.O. ownership (%)	2.30	0.09		1.47	0.14		0.83	-0.03		121
C.E.O. age	52.02	53.00		51.24	51.00		0.86	-0.78		120
Other directors' ownership (%)	1.24	0.30		2.89	0.44		-1.62	-0.67		121
Independent chairperson (=1)			0.20			0.45			-2.85**	121
Independent directors (%)	16.61	16.67		18.74	16.67		-0.78	-0.71		121
Board size	7.18	7.00		7.10	7.00		0.19	0.00		121
Outside blockholdings (%)	25.05	24.50		32.23	33.00		-1.99*	-3.97*		121
Offer premium (%)	39.34	31.47		30.89	28.04		1.07	-0.36		120
Bidder toehold (%)	11.52	1.00		15.23	5.00		-1.19	-1.09		121
Bidder/dissident director (=1)			0.06			0.17			-1.79	121
Full cash terms (=1)			0.62			0.75			-1.49	121
Bidder approach (=1)			0.34			0.25			1.03	121
Valuation ratio	1.27	1.17		1.33	1.18		-0.69	-0.12		115
Asset turnover	1.29	1.20		1.46	1.43		-0.96	-1.71		115
Young firm (=1)			0.06			0.24			-2.62**	121

Table 3

Resistance choice.

Average marginal effects of explanatory variables on the probability of target board resistance reflecting harmful resistance for a sample of 121 publicly resisted U.K. takeover bids 1989-2003. Absolute values of z-statistics are presented (in parentheses) for tests of the null hypothesis that the average marginal effect is equal to zero and are computed using robust standard errors. Base model from which the marginal effects are computed is a probit specification in which the dependent variable takes the value 1 if the target belongs to the harmful resistance group and 0 otherwise. Columns labeled Probit treat Offer premium as exogenous by assumption. Columns labeled 2-Stage treat Offer premium as endogenous and present Wald tests statistics of the null hypothesis that Offer premium is exogenous. Pre-bid run-up of the target's stock (described below) and the natural logarithm of target firm size (market value of assets of the target firm for the financial year preceding the bid announcement date, where market value of assets is the common stock price, adjusted to just before an unofficial rumor period of 30 trading days plus any official rumor period, multiplied by the number of outstanding shares plus the book value of non-equity securities and total debt). P-values > 0.05 indicate the null of exogeneity is not rejected at that level. 2-stage model estimated by maximum likelihood methods. Wald test of model statistics test the null hypothesis that the estimated coefficients of the model are jointly equal to zero. Refer to Table 1 for definitions of target board resistance reflecting harmful resistance and to Table 2 for definitions of variables. Pre-bid run-up (%) is the daily cumulative market (F.T.S.E. All Share index) adjusted target stock return over the 12 month period ending 30 trading days either prior to the earliest release concerning a bid rumor, or the initial offer announcement if there is no formal disclosure anticipating a takeover attempt. 1989-1996 bid (=1) takes the value 1 if the initial bid is publicly resisted during the period 1989-1996 and 0 otherwise. Sample size is determined by data availability. **, * indicates significance at the 1% and 5% levels, respectively.

(**Table continued on following page**).

Table 3 (continued)

	Dependent variable: Targets in the harmful resistance group = 1, otherwise = 0							
	Probit (1)	**2-Stage (2)**	**Probit (3)**	**2-Stage (4)**	**Probit (5)**	**2-Stage (6)**	**Probit (7)**	**2-Stage (8)**
C.E.O. ownership (%)	**0.044**	**0.035**	**0.042**	**0.030**	**0.041**	**0.030**	**0.036**	**0.027**
	(4.66)**	**(2.88)****	**(4.13)****	**(2.89)****	**(4.12)****	**(2.81)****	**(4.07)****	**(2.92)****
C.E.O. age	**0.239**	**0.226**	**0.212**	**0.206**	**0.225**	**0.216**	**0.227**	**0.219**
	(2.63)**	**(2.51)***	**(2.29)***	**(2.28)***	**(2.42)***	**(2.39)***	**(2.53)***	**(2.51)***
$(\text{C.E.O. age})^2$	**-0.022**	**-0.020**	**-0.019**	**-0.019**	**-0.021**	**-0.020**	**-0.021**	**-0.020**
	(2.47)*	**(2.34)***	**(2.17)***	**(2.14)***	**(2.29)***	**(2.24)***	**(2.41)***	**(2.36)***
Other directors' own (%)	**-0.078**	**-0.082**	**-0.076**	**-0.083**	**-0.076**	**-0.081**	**-0.078**	**-0.084**
	(4.39)**	**(4.83)****	**(3.96)****	**(4.56)****	**(4.26)****	**(4.72)****	**(4.39)****	**(4.69)****
Ind. chair (=1)	**-0.240**	**-0.248**	**-0.204**	**-0.217**				
	(2.84)**	**(2.92)****	**(2.68)****	**(2.77)****				
Board size	-0.025	-0.023	-0.026	-0.026	-0.025	-0.024	-0.023	-0.023
	(1.25)	(1.17)	(1.43)	(1.39)	(1.28)	(1.21)	(1.33)	(1.32)
Outside blockholdings (%)	**-0.007**	**-0.007**	**-0.008**	**-0.008**	**-0.008**	**-0.008**	**-0.007**	**-0.006**
	(2.92)**	**(2.97)****	**(3.41)****	**(3.63)****	**(3.84)****	**(3.87)****	**(2.95)****	**(2.94)****
Valuation ratio	-0.141	**-0.164**	**-0.170**	**-0.208**	**-0.172**	**-0.206**	**-0.160**	**-0.192**
	(1.83)	**(2.12)***	**(2.11)***	**(2.56)***	**(2.02)***	**(2.42)***	**(2.13)***	**(2.42)***
Asset turnover	**-0.165**	**-0.155**	**-0.170**	**-0.162**	**-0.170**	**-0.161**	**-0.181**	**-0.171**
	(3.37)**	**(3.17)****	**(3.24)****	**(3.36)****	**(3.55)****	**(3.50)****	**(3.84)****	**(3.79)****
Young firm (=1)	**-0.546**	**-0.510**	**-0.509**	**-0.468**	**-0.515**	**-0.479**	**-0.507**	**-0.473**
	(5.04)**	**(3.95)****	**(5.46)****	**(4.48)****	**(5.34)****	**(4.50)****	**(5.81)****	**(5.15)****
Offer premium (%)	**0.004**	**0.003**	**0.003**	**0.003**	**0.003**	**0.003**	**0.003**	**0.003**
	(3.41)**	**(2.31)***	**(3.09)****	**(2.27)***	**(3.10)****	**(2.29)***	**(2.64)****	**(2.09)***
Bidder toehold (%)	-0.004	-0.004						
	(1.54)	(1.36)						
Full cash terms (=1)	**-0.193**	**-0.194**	-0.159	-0.162	-0.157	-0.158	-0.131	-0.125
	(2.20)*	**(2.22)***	(1.87)	(1.88)	(1.81)	(1.80)	(1.65)	(1.56)
Bidder approach (=1)	0.095	0.107	0.076	0.095	0.093	0.109	0.099	0.112
	(1.00)	(1.11)	(0.87)	(1.07)	(1.05)	(1.23)	(1.17)	(1.32)
Pre-bid run-up (%)	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001
	(1.20)	(0.91)	(1.34)	(1.17)	(1.66)	(1.45)	(1.42)	(1.35)

Table 3 (continued)

	Dependent variable: Targets in the harmful resistance group = 1, otherwise = 0							
	Probit (1)	**2-Stage (2)**	**Probit (3)**	**2-Stage (4)**	**Probit (5)**	**2-Stage (6)**	**Probit (7)**	**2-Stage (8)**
1989-1996 bid. (=1)	**-0.304**	**-0.304**	**-0.283**	**-0.290**	**-0.307**	**-0.308**		
	(3.66)**	**(3.77)****	**(3.19)****	**(3.49)****	**(3.54)****	**(3.65)****		
Bidder/dissident dir. (=1)			-0.224	**-0.240**	**-0.238**	**-0.256**	**-0.285**	**-0.302**
			(1.94)	**(1.97)***	**(1.98)***	**(2.03)***	**(2.55)***	**(2.63)****
Independent directors (%)					-0.005	-0.005		
					(1.60)	(1.51)		
Ind. dir (%) x 1989-1996 bid (=1)							**-0.012**	**-0.012**
							(2.99)**	**(3.07)****
McFadden's R^2	0.38		0.39		0.37		0.37	
Wald test of model	39.58	41.02	37.22	40.25	41.72	40.13	41.18	38.62
p-value	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01
Observations	114	113	114	113	114	113	114	113
Wald test for exogeneity of Offer premium		1.26		1.36		1.16		0.40
p-value		0.26		0.24		0.28		0.53

Table 4

Market assessment of the probability of bid success.

Linear regressions of announcement period cumulative abnormal returns (C.A.R.s) for a sample of 121 publicly resisted U.K. takeover bids from the period 1989-2003. Announcement period C.A.R.s (in %) are computed as daily cumulative abnormal (F.T.S.E. All Share index adjusted) target stock returns over the period from 30 trading days before bid rumor, or formal announcement if no prior 12 month rumor related disclosure, through to the initial offer announcement date. Harmful resistance is a binary variable equal to one if the target is classified as described in Table 1 and 0 otherwise. Target size (ln) is as defined in Table 3. Offer premium (%), bidder toehold (%) and Full cash terms (=1) are as defined in Table 2. Sample size is determined by data availability. T-statistics are reported in parentheses and are computed using robust standard errors. **, * indicates significance at the 1% and 5% levels, respectively. Assessed probability the offer will be successful is shown in bold

	Dependent variable:		
	Target company announcement period CARs		
	Harmful resistance group	**All others**	**Full interaction model**
	(1)	**(2)**	**(3)**
Offer premium (%)	**0.422**	**0.654**	**0.654**
	(9.83)**	**(13.23)****	**(12.48)****
Bidder toehold (%)	-0.394	-0.234	-0.234
	(2.88)**	(2.75)**	(2.59)*
Full cash terms (=1)	16.464	3.973	3.973
	(3.97)**	(1.14)	(1.08)
Target size (ln)	3.438	1.145	1.145
	(2.91)**	(1.17)	(1.11)
Harmful resistance (=1)			-47.263
			(1.53)
Harmful resistance (=1) x Off. Premium (%)			**-0.232**
			(3.52)**
Harmful resistance (=1) x Bidder toehold (%)			-0.161
			(1.03)
Harmful resistance (=1) x Full cash terms (=1)			12.491
			(2.35)*
Harmful resistance (=1) x Target size (ln)			2.293
			(1.52)
Constant	-65.925	-18.662	-18.662
	(2.69)**	(0.94)	(0.89)
Adj. R-squared	0.74	0.76	0.75
F-statistic	34.73	54.36	39.49
p-value	0.00	0.00	0.00
Observations	49	70	119

Table 5

Post-bid C.E.O. outcomes.

Average marginal effects of explanatory variables on the probability of (1) Chief Executive Officer (C.E.O.) turnover, (2) C.E.O. non-retention of a position as a top executive at the target or another firm, and (3) C.E.O. non-retention of a position as a director at the target firm or another firm. C.E.O. turnover is a binary variable that takes the value 1 if the target C.E.O. either is turned over by the successful bidder, or relinquishes office in the 12 months following a failed takeover attempt, and 0 otherwise. C.E.O. non-retention of a top executive position is a binary variable that takes the value 1 if the target C.E.O. does not go on to be a top executive of a fully listed firm (outside the financial/real estate, utility/telecommunication, public transport, broadcasting, and newspaper industries) in any of the 2 years following either bid completion or the 12 month period after the failure of a takeover attempt, and 0 otherwise. C.E.O. non-retention of a director position is a binary variable that takes the value 1 if the target C.E.O. does not go on to be a director of a fully listed firm (from a non-regulated industry as defined above) in any of the 2 years following either bid completion or the 12 month period after the failure of a takeover attempt, and 0 otherwise. The sample is composed of 121 publicly resisted U.K. takeover bids from the period 1989-2003. Absolute values of z-statistics are presented (in parentheses) for tests of the null hypothesis that the average marginal effect is equal to zero and are computed using robust standard errors. Base model from which marginal effects are computed is a probit specification in which the dependent variable takes the value 1 or 0 as described above. Harmful resistance (=1) is as defined in Table 1. Pre-bid run-up (%) and Target size (ln) are as defined in Table 3. Bid successful (=1) is a binary variable equal to one if the prevailing bid (that can be from a third party) is ultimately declared unconditional in all respects. Sample size is determined by data availability. **, * indicates significance at the 1% and 5% levels, respectively.

	C.E.O. turnover	**C.E.O. without post-bid top executive position**	**C.E.O. without post-bid directorship**	**C.E.O. without post-bid top executive position**	**C.E.O. without post-bid directorship**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
Harmful resistance (=1)	**0.204**	0.085	0.127	0.016	0.051
	(2.22)*	(0.95)	(1.42)	(0.21)	(0.61)
Pre-bid run-up (%)	**-0.003**	-0.001	-0.001	-0.001	-0.001
	(2.55)*	(1.03)	(0.82)	(1.02)	(0.81)
Bid successful (=1)	**0.339**	**0.275**	**0.272**		
	(3.74)**	**(3.01)****	**(3.11)****		
Target size (ln)	0.021	**-0.063**	**-0.114**	**-0.061**	**-0.109**
	(0.74)	**(2.80)****	**(5.71)****	**(2.94)****	**(5.41)****
C.E.O. turnover (=1)				**0.160**	0.161
				(2.03)*	(1.95)
McFadden's R^2	0.12	0.13	0.18	0.09	0.15
Wald test	20.64	16.07	26.82	13.69	22.29
p-value	0.00	0.00	0.00	0.01	0.00
Observations	120	120	120	120	120

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