What Actually Causes Management To Resist A Takeover Bid: Price Improvement Or Managerial Entrenchment?

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Abstract

We find that a greater extent of antitakeover provisions is not only more likely to deter a bid, but also more likely to cause management resistance in the event of a bid. The deterrent effect is likely to be decreasing in the cost of acquiring information about a firm. Our findings provide robust support for the notion that entrenchment causes managers to resist a bid, rather than that the motive for management resistance is to compensate for weaker, shareholder, bargaining power. We also find that a greater potential for price improvement is unlikely to cause management to resist a bid.

Keywords: takeover bid; management resistance; antitakeover provisions; price improvement; managerial entrenchment

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1. Introduction

In the event of a firm becoming the target of a takeover attempt it is largely at management's discretion as to whether, and by what means, to resist the bid. One hypothesis is that management resistance is motivated by stockholders' interests because shareholders are less willing to accept a lower quality offer, especially when the cost of acquiring information about the firm is higher (see Fishman, 1988; Hirshleifer and Titman, 1990). An alternative hypothesis is that management resistance is motivated by self-interest because managers are unwilling to accept a higher quality offer at the expense their jobs and any private benefits of control (see Baron, 1983). With large, potentially divergent stakes for shareholders and managers, there remains the challenge for researchers, and corporate legislators in contemplating placing restrictions on managerial discretion (such as a passivity/no board veto rule), of establishing beyond reasonable doubt whether it is price improvement or managerial entrenchment that actually causes management to resist a bid.[1] In this study, we take up this considerable challenge.

The core difficulty is starkly illustrated by Berkovitch and Khanna (1990) in which they theorize that even a more extreme form of management resistance, what they refer to as a value-reducing defensive strategy, can be beneficial for shareholders.[2] This is because only by deploying, or threatening to deploy, a value-reducing defensive strategy (such as the other post-offer defenses – standstill agreement, litigation, and asset restructuring – that Ruback, 1987, describes) and thus reducing, or threatening to reduce, the value of the target firm to a specific bidder, but not to potential bidders, can management elicit a higher quality offer from another

[1] Easterbrook and Fischel (1981) are the first to make the case for altogether removing management's discretion as to whether, and by what means, to resist a bid. A more recent case for the enactment of a no board veto rule is made by Bebchuk (2002). For a case for placing some restrictions on managerial discretion in response to the threat of a takeover, see Gilson and Schwartz (2017).

[2] Stulz (1988) theorizes much the same, but in the specific context of a post-offer defense that can increase managerial control of voting rights, such as a targeted repurchase or liability restructuring.

bidder, or bargain for the same from the bidder that it intends to discriminate against. They also stress, however, that a value-reducing defensive strategy can be open to abuse by a management that is already relatively entrenched and thus subject to weaker internal monitoring.

However, the decision by management to resist a bid, and potentially deploy a value-reducing defensive strategy, is likely to depend on the extent of the target firm's antitakeover provisions (such as the pre-bid defenses – staggered/classified board, super-majority amendment, fair price amendment, and poison pill – that Ruback, 1987, also describes). The hypothesized motives for management to deploy pre-bid defenses are similar to those for post-offer defenses (that is, increased bargaining power or managerial entrenchment). Straska and Waller (2014) discuss these motives at length in the context of antitakeover provisions and provide an extensive review of the associated literature. As they draw to the reader's attention, a common way to proxy for the extent of the target firm's antitakeover provisions is to use the Gompers, Ishii, and Metrick (2003) index (hereafter the GIM index), which adds one for each antitakeover provision that a firm has from a total of twenty-four. As such, we hypothesize the following dependences, conditional on motive, between the target firm's GIM index and the likelihood of management resistance. On the one hand, a negative relationship is expected for management resistance that is motivated by price improvement. This is because a higher GIM index is more sufficient to elicit or bargain for a higher quality offer alone of management resistance. On the other hand, a positive relationship is expected for management resistance that is motivated by managerial entrenchment. This is because a higher GIM index is an indication that managers are already relatively entrenched and therefore that management resistance is more open to use and thus abuse.

As a solution to the difficulty of establishing beyond reasonable doubt whether it is price improvement or managerial entrenchment that actually causes management to resist a bid, we use an instrumental variables (IV) regression for the likelihood of management resistance. We instrument for the GIM index in ways similar to Karpoff, Schonlau, and Wehrley (2017), by constructing separate, pseudo GIM indices for same-age (peer) firms and headquarters-

proximate (HQ) firms, but excluding any such firms that share the same industry as the focus firm, and constructing the pseudo GIM indices many years before the focus firm year. Since they find that a higher GIM index is more likely to deter a bid, we include the same instruments in a reduced form regression for bid likelihood to generate a lambda and account for the effect of censoring firm years absent a bid. As an identification strategy for the purpose of generating a bid lambda for the IV regression for the likelihood of management resistance, we add to the reduced form regression for bid likelihood an exclusion restriction that identifies a firm year with California incorporation. Our rationale is that while having a California incorporation is believed to make a firm relatively more vulnerable to a bid, most reincorporation activity took place many years before it could have plausibly anticipated aspects of the bids, including management resistance, in our sample (see Catan and Kahan, 2016).

Without using the instruments, we find a positive but statistically insignificant relationship between the GIM index and the likelihood of management resistance. Strongly supported by tests of instrument validity and endogeneity, the relationship becomes statistically significant and economically meaningful, however, once we instrument for the GIM index. Specifically, the effect of adding one more antitakeover provision to the GIM index is expected to increase the likelihood of management resistance within a range of 4.0-5.5 percentage points, as compared to the unconditional rate for our sample of 17.4 percent.[3] That the true relationship is steeper in gradient than the biased one indicates that the GIM index is reversely, negatively related to the likelihood of management resistance because unobservable factors and measurement error have little effect on the true relationship. This is possible because shareholder voting to remove antitakeover provisions plausibly anticipates aspects of bids, like management resistance (see Cuñat, Giné, and Guadalupe, 2017). Also, it could be more effective for firms that are unable to outright deter a bid (see Karpoff et al, 2017). With strong sources of

[3] The unconditional rate is much higher in comparison to other studies of management resistance (such as Schwert, 2000; Bates and Becher, 2017). The main reason for this is that the GIM index data tracks larger firms. Our smaller but still sizeable dataset, which at the limit covers the period 1993-2012, therefore indicates that management resistance matters more for larger firms.

variation for the GIM index that are plausibly exogenous to the likelihood of management resistance, the pre-determined effect of the GIM index suggests that it is managerial entrenchment that actually causes managers to resist a bid. To state it the other way, that the causal relationship is positive, and not negative, suggests that management resistance is not used to compensate for a lower GIM index being less sufficient on its own to elicit or bargain for a higher quality offer.

We confirm the findings of Karpoff et al (2017), but also find evidence, from the bid lambda, to suggest that the deterrent effect of a higher GIM index is decreasing in the cost of acquiring information about the firm. In the event of failing to deter a bid, therefore, the likelihood of management resistance is increasing in the GIM index, no matter the cost of acquiring information about the target firm. The causal relationship is also traceable in the reduced form and robust to using an additive or binary/threshold-based GIM index, and rolling or fixed instruments. However, we find that the relationship depends on the subset of antitakeover provisions that excludes the six provisions – including classified board, super-majority amendment, and poison pill – in the Bebchuk, Cohen, and Ferrell (2009) index (hereafter the BCF index). We confirm the findings of Karpoff et al (2017) that an index of the other sixteen antitakeover provisions – including fair price amendment – (hereafter the KSW index) also matters for bid deterrence. The deterrent effect of a higher BCF index, however, is unrelated to the cost of acquiring information about the firm, which supports the claim of Bebchuk et al (2009) that their index quantifies the extent to which a firm's antitakeover provisions have an especially potent deterrent effect.

However, whereas the managerial entrenchment hypothesis does not depend on the initial premium the same cannot be said of the price improvement hypothesis. To account for this in assessing whether price improvement actually causes management to resist a bid, we therefore jointly instrument for the initial premium in a way similar to Baker, Pan, and Wurgler (2012), by relating the target firm's pre-bid price to its 52 week high price to construct a pseudo premium before a long run-up period and, thus, independent of the bid announcement return, and

controlling for contemporaneous firm-specific information, and the bid lambda as a proxy for the cost of acquiring information about the target firm, in the IV regression. Without using the instrument, we find a negative, statistically significant and economically meaningful relationship between the initial premium and the likelihood of management resistance, as is expected for the price improvement hypothesis. Strongly supported again by tests of instrument validity and endogeneity, the relationship becomes statistically insignificant, however, once we introduce the source of variation for the initial premium that is also plausibly exogenous to the likelihood of management resistance. This suggests that even though Dimopoulos and Sacchetto (2014) and Bates and Becher (2017) find that management resistance leads to price improvement it is unlikely to be price improvement that actually causes managers to resist a bid.[4] Also, the instruments for the GIM index do not co-determine the initial premium to a statistically significant extent, which suggests that there is unlikely to be a causal relationship that runs from the GIM index to the initial premium.[5]

Ex-post, the outcomes for shareholders seem to reflect that, based on the direct, ex-ante tests that we conduct, it is managerial entrenchment and not price improvement that actually causes management to resist a bid. Specifically, to a statistically significant and economically meaningful extent, a bid that faces resistance from managers is associated with a smaller wealth effect, lower likelihood that a higher quality offer will be realized, and lower likelihood that management will commit to closing out the deal with a target termination fee. This is after controlling for the main variables that we use elsewhere in the analysis, including the GIM index.

[4] Dimopoulos and Sacchetto (2014) use a structural estimate for management resistance, irrespective of whether managers are observed to resist a bid. They find, however, that whether managers are observed to resist a bid matters greatly for increasing the structural estimate for the degree of management resistance.

[5] Cain, McKeon, and Solomon (2017) and Cuñat et al (2017) find negative and positive effects, respectively, for a causal relationship between a firm's takeover vulnerability and the premium in the event of a bid. There are, however, differences in approach. Cain et al capture a firm's takeover vulnerability using staggered takeover laws, whereas Cuñat et al do so following decisions by shareholders of whether to rescind an antitakeover provision. Also, Cain et al use the premium reflected in the market's evaluation of the wealth effect of a bid, whereas, like us, Cuñat et al use the actual premium offered by the bidder.

Our study makes contributions to two main strands of the takeover literature. First, a body of work examines whether it is stockholders' interests or managerial self-interest that makes it more likely that management will resist a bid. Walkling and Long (1984) and Cotter and Zenner (1994) find that management resistance is more likely when managerial wealth is expected to be more adversely affected by a bid. While this suggests a managerial self-interest motive, our evidence comes from a direct, ex-ante test in that a higher GIM index is an indication that management is already relatively entrenched. Bates and Becher (2017) find no relationship between a classified board and the likelihood of management resistance. Our evidence, however, suggests that the decision by management to resist a bid depends on the extent of the target firm's antitakeover provisions. Unlike all of these studies, our evidence is also causal.[6] Jennings and Mazzeo (1993) and Bates and Becher (2017) find that management resistance is more likely in response to a lower quality offer. While this suggests a price improvement motive, our evidence comes from relying on an exogenous source of variation that is specific to the initial premium (unlike Jennings and Mazzeo who share it with other suspect endogenous variables in their simultaneous equations framework) and then using this to instrument for the initial premium (unlike Bates and Becher who use it to generate, and base their conclusions on only, the unexplained part of the initial premium).

Second, an extensive body of work examines antitakeover provisions, with much of it of late in the actual context of a bid. While Straska and Waller (2014) provide a comprehensive review of the many sub-strands of this work, two recent studies are especially closely related to ours in that the evidence for the effects of antitakeover provisions is causal. Karpoff et al (2017) use an IV regression framework to examine whether a higher GIM index is more likely to deter a

[6] Cain et al (2017) examine the incremental effects of staggered takeover laws on the likelihood of management resistance. They find that few of these exogenous events, which they use to construct a measure of a firm's takeover vulnerability and find to be highly, negatively correlated with the GIM index, effect the likelihood of management resistance. For those laws that do, there is a mixture of support for our substitutability and managerial entrenchment hypotheses for the relationship between the GIM index and the likelihood of management resistance. The use of takeover laws, specifically, for the purpose of explaining a firm's takeover vulnerability and associated managerial behavior is, however, a topic of much recent contention (see Catan and Kahan, 2016; Karpoff and Wittry, 2018).

bid. In contrast, Cuñat et al (2017) use a regression discontinuity design to examine whether a firm is more vulnerable to a bid following a close decision by shareholders to rescind an antitakeover provision.[7] Whereas these studies agree that antitakeover provisions have a deterrent effect, ours is also interested in the effects of antitakeover provisions that are insufficient to deter a bid outright. This is because, whereas outright deterrence is more about the discretion of a potential bidder, in the event of a firm becoming the target of a takeover attempt it is largely at management's discretion as to whether, and by what means, to resist the bid.[8] Ours is therefore the first study to treat the GIM index as a suspect endogenous variable for simultaneously explaining outright bid deterrence and the likelihood of management resistance in the event of a bid. This is important because, as our findings suggest, the deterrent effect of a higher GIM index is likely to be decreasing in the cost of acquiring information about the firm.

The rest of the paper is organized as follows. Section 2 discusses the sample, motivates the variables, and examines the relationship between management resistance and bid outcomes for shareholders. Section 3 examines the causal relationship between the GIM index and the likelihood of management resistance. This covers the effects of instrumenting for the GIM index, the effects of censoring firm years absent a bid, and all of these effects in reduced form. Section 4 examines the robustness and other considerations of the findings in Section 3. This covers rolling versus fixed instruments for the GIM index, an additive versus threshold-based measure for the GIM index, a BCF versus KSW index, and a 2012 versus 2009 endpoint for the study. Section 5 simultaneously examines the causal relationship between the initial premium and the likelihood of management resistance. Section 6 concludes.

2. Sample, variables, and resistance and bid outcomes

[7] Bach and Metzger (2017), however, highlight a potential problem with using a regression discontinuity design in the specific context of close shareholder voting outcomes.

[8] Our study of the effects of the GIM index on managerial discretion in the event of a bid complements similar work on bidders by Masulis, Wang, and Xie (2007) and Harford, Humphery-Jenner, and Powell (2012). These studies find evidence, but not causal evidence, to suggest that a higher GIM index is associated with entrenched management making poorer bid decisions.

2.1. Sample

Our main purpose in this study is to examine the relationship between the GIM index and resistance, in the actual event of a bid, and whether this relationship is causal in running to resistance, even after accounting for the effect of censoring firm years absent a bid. To make it possible to infer causality, we construct instruments for the GIM index similar to those used by Karpoff et al (2017) in finding that a higher GIM index is more likely to deter a bid. Therefore, as with their study, upon which our analysis builds, a data requirement for each and every component of the GIM index places the sample of bids and firm years at the intersection of the RiskMetrics dataset for the GIM index, Securities Data Company (SDC) database for bids, and Center for Research in Security Prices/Compustat Merged database for firms.

However, unlike Karpoff et al (2017), we opt to exclude dual class, financial, and utility stocks from all firm years included in both the construction of the GIM instruments and analysis. Although these stocks represent only a small minority of firm years, shares with unequal voting rights have the potential to deter a bid independent of any effect from a higher GIM index, and the relationship between the GIM index and bid deterrence could also be different for financial and utility stocks because regulators tend to wield more power in these particular industries. We define a dual class stock as a stock with two classes of share that have overlapping start and end dates in a given firm year, and seek to ensure that where a stock's industry affiliation has also changed over time this history is also accurately reflected in the sample of firm years. Industry indicators are included in all parts of the analysis.

Moreover, because we extend the analysis to resistance in the actual event of a bid, the sample of bids is assembled in a somewhat different way to that by Karpoff et al (2017). Instead, we largely follow Bates and Becher (2017) in merging bids, for the same target, separated by no more than one year and then also including failed bids. However, we exclude management buyouts, whereas they do not, because, although infrequent in comparison to third-party bids, a management buyout has the potential to deter, or resist, a bid from a third party independent of any effect from a higher GIM index. Also, while Bates and Becher (2017) resort to a partial

recoding of resistance because of concerns about the way in which SDC defines such bids, we use primary (news) sources, from Factiva, to cleanly search each and every bid for any evidence of resistance. The actions taken by management to resist a bid, post-announcement, range from publicly rejecting a deal (not always reported in the news sources) to deploying a full-blown defensive strategy of any type described by Ruback (1987).

We present the sample of bids and firm years in Table 1. Since the RiskMetrics dataset starts from 1990, beginning the sample in 1993 ensures that the GIM instruments are constructed at least three firm years before any bid. We end the sample in 2012, which means that because RiskMetrics stopped collecting data for each and every component of the GIM index after 2006 it is necessary to forward fill the data for firm years beyond, and out to as far as 2011 in the case of the actual GIM index. This end fill is longer than any standard forward fill between data collection points for the GIM index. However, like Karpoff et al (2017), we also consider whether the results from the main part of the analysis depend on the length of the end fill. The full sample, for 1993-2012, is comprised of 995 bids, of which 173 face resistance, and 21,375 firm years. These numbers reduce only slightly once we take variable requirements into account.

Overall, 17.4 percent of the bids face resistance. This total percentage is much higher than that reported by Bates and Becher (2017) for a largely overlapping sample period. We attribute this difference to a combination of factors. First, their sample is not restricted to targets included in the RiskMetrics dataset. This dataset tracks larger firms and, as results by Schwert (2000) and Bates and Becher (2017) show, a larger target is significantly more likely to resist a bid. Second, a bid for a smaller target is likely to attract relatively sparse news coverage. Third, Bates and Becher (2017) do not search each and every bid for any evidence of resistance.

Also overall, a bid occurs in 4.7 percent of the firm years. In spite of the differences in sample construction, this total percentage and the time trends for bids and firm years are similar to those reported by Karpoff et al (2017). Interestingly, years in which a bid occurs for a higher percentage of firms, particularly during the merger waves of 1997-2000 and 2005-2007, tend to be years in which a smaller percentage of bids face resistance. We therefore include year

indicators in all parts of the analysis. Also, in only two of the last five years of the twenty year sample period does the percentage of bids that face resistance drop below the total rate, indicating that resistance is far from being an insignificant feature of more recent bids (a fact similarly highlighted by Cain et al, 2017).

For certain, however, wider samples of bids in terms of target size, such as those used by Schwert (2000) and Bates and Becher (2017), understate the real importance of resistance in positioning the analysis more away from larger firms for which resistance undoubtedly matters the most. We next discuss any implications for variables related to resistance and bid deterrence.

2.2. Variables

Our analysis incorporates three groups of variables. First, there are variables for bid outcomes that could be related to resistance. Second, there are variables for initial features of a bid that could be related to resistance. Third, there are variables for the GIM index and other features of a firm that could be related to not only resistance in the event of a bid, but also outright bid deterrence. Descriptive statistics and difference in means are presented in Table 2 for all of the main variables partitioned by two dummy variables that overarch the analysis: one identifying a bid that faces resistance; the other identifying a firm year in which a bid occurs and hence is not outright deterred. Definitions for all of the variables included at some stage in the analysis are presented at the end of the paper.

We measure the market's assessment of the wealth effect from a bid using announcement, post-announcement, and post-bid returns. No matter the abnormal return, resistance is seemingly associated with a much smaller wealth effect. At this precursory stage, these statistically significant differences in mean returns are inconsistent with results in Huang and Walkling (1987) and Schwert (2000) that show no clear-cut relationship between resistance and the wealth effect of a bid. Again, this contrast could be because our analysis is positioned more on larger firms for which resistance matters the most.

As for what the bidder is prepared to pay to close out a deal, Bates and Becher (2017) find that resistance is more likely to result in an increased premium for an initially lower quality bid.

However, our univariate results suggest that the final premium is no higher in the face of resistance. That the final premium is also no lower could matter just the same because, consistent with results in Walkling (1985) and Bates and Becher (2017), resistance is associated with a much lower rate of completion and hence realization of the final premium. Moreover, because resistance is also associated with far less commitment from management to close out a deal in agreeing to otherwise pay a termination fee. Indeed, Officer (2003) finds that a target termination fee is generally a beneficial arrangement for shareholders.

Our univariate results suggest that resistance is related to not only bid outcomes, but also initial features of a bid. To begin with, resistance is associated with a much lower initial premium. Although this result is consistent with what Jennings and Mazzeo (1993) find, they also treat the initial premium as a suspect endogenous variable. In Section 5, we motivate use of the variable, pre-bid price to high price, as a strong source of variation for the initial premium (see Baker et al, 2012) that is also plausibly exogenous to resistance. However, the statistically insignificant difference in means for this instrumental variable suggests that there is no indirect trace of a causal relationship running from the initial premium to resistance. That is, on the basis of the initial premium, resistance may not be motivated by price improvement. However, resistance is associated much more with an all cash bid, which is consistent with what Bates and Becher (2017) find in reverse for any stock bid. Malmendier et al (2016) suggest management is more likely to infer a signal from a cash bid that the bidder believes the target is undervalued. Therefore, to this extent only does a price improvement motive for resistance gain convincing support from the univariate results for the initial features of a bid.

A precursory look at the remaining relationships in Table 2 suggests that, in the event of a bid, resistance is also related to the GIM index and other features of a firm, but that so too is outright bid deterrence. Yet, there are some notable contrasts between the separate partitions for resistance and bid deterrence, not least for the GIM index and firm size.

Resistance is seemingly associated with a much higher GIM index, whereas for bid deterrence the difference in means for this variable is statistically insignificant. However, Karpoff

et al (2017) treat the GIM index as a suspect endogenous variable in the context of bid deterrence. In Section 3.1, we motivate use of the two variables, peers GIM instrument and HQ GIM instrument, as strong sources of variation for the GIM index that are also plausibly exogenous to not only bid deterrence, as Karpoff et al (2017) contend, but also resistance. The statistically significant differences in the means for these two instrumental variables suggest that there is an indirect trace of a positive causal relationship running from the GIM index to not only bid deterrence, consistent with what Karpoff et al (2017) find, but also resistance. That is, on the basis of the GIM index, resistance may be motivated by management entrenchment. Resistance is seemingly not a substitute for pre-bid antitakeover defenses by possibly affording management more bargaining power for price improvement.

The univariate relationships for the other features of a firm suggest that these variables are related more to bid deterrence than resistance. This observation is also apparent from comparing results for similar groups of variables in Schwert (2000) and Karpoff et al (2017) for resistance and bid deterrence, respectively. Indeed, Schwert (2000) concludes that the dominant effect on resistance comes from a larger target being more likely to resist a bid. Our univariate results suggest that bid deterrence is associated much more with larger firms, consistent with what Karpoff et al (2017) and numerous other studies find. However, for resistance the difference in means for firm size is statistically insignificant. Given that the firms in our sample are relatively large in being restricted to those included in the RiskMetrics dataset for the GIM index, the latter result, even though the largest firms are censored, could be another sign that our analysis is positioned more on larger firms for which resistance matters the most.

For certain, to reliably examine the relationships between the features of a firm, including the GIM index, and resistance will necessitate accounting for the effect of censoring firm years absent a bid.

2.3. Resistance and bid outcomes

The univariate results discussed in the previous subsection suggest that bid outcomes, variously defined, are substantially worse for target stockholders in the face of management

resistance. However, the univariate results additionally reveal that other variables (including the target's GIM index), also conceivably correlated with these bid outcomes, differ significantly in the presence of target management resistance. In this subsection, we therefore examine the relationship between bid outcomes and target management resistance after having controlled for these omitted variables. These multivariate results are presented in Table 3. For each of the bid outcomes, the multivariate result for the relationship of interest is consistent with the corresponding univariate result.

The linear regression results in Column (1) of Table 3 reveal that the target's bid announcement return is statistically (at one percent significance level) lower by 9.3 percentage points in the face of management resistance. Given the targets' mean bid announcement returns presented in Table 2, this average marginal effect is also economically substantial. Moreover, the linear regression results in Columns (2) and (3) of Table 3 reveal that the target's lower return, in the face of management resistance, persists (with similar statistical significance and economic magnitude) through to the post-announcement and post-bid periods, respectively.

Whilst the linear regression results in Column (4) of Table 3 reveal that the final premium is no different statistically (based on a 10 percent significance level) in the face of bid resistance, the probit regression results in Column (5), which are after having controlled for this premium, reveal that a bid is 30.1 percentage points less likely to be completed in the face of target management resistance. Given the mean relative frequencies of a completed bid presented in Table 2, this average marginal effect is not only statistically significant (at the one percent level), but also economically substantial. Moreover, the probit regression results in Column (6) of Table 3, which are after having controlled for the initial premium, reveal that a bid is 34.8 percentage points less likely to have a termination fee at some stage on the target's side in the face of management resistance. Again, given the mean relative frequencies of a termination fee on the target's side, this average marginal effect is not only statistically significant (at the one percent level), but also economically substantial.

3. The GIM index and resistance

The multivariate results discussed in the previous section do not align well with the empirical assessment of Bates and Becher (2017) that bid resistance is essentially motivated by serving target shareholders' interests and has little, or nothing, to do with arising from a position of management entrenchment. In this section, we therefore use a variety of multivariate frameworks to examine the relationship between bid resistance and the target's GIM index, as a means to conduct direct, ex-ante tests of a price improvement versus managerial entrenchment motive for management resistance.

3.1. Effect of instrumenting the GIM index

First, the ordinary linear probability regression results in Column (1) of Table 4 reveal that the likelihood of bid resistance is positively, but not statistically (based on a 10 percent significance level), related to the target's GIM index. There are several possible explanations to account for why it is that this multivariate result for the relationship of interest is statistically at odds with the corresponding univariate result discussed in Section 2.

One explanation is that other variables that differ significantly in the presence of bid resistance are also conceivably correlated with the target's GIM index. In particular, and consistent with the corresponding univariate results, target management resistance is statistically (at one percent significance level) more likely for a bid with a lower initial premium and for an all cash initial offer. To the extent that a lower initial premium signals a lower quality bid (see Jennings and Mazzeo, 1993; Bates and Becher, 2017) and an all cash initial offer signals an undervalued target (see Malmendier, Opp, and Saidi, 2016), these associations provide potential support for the price improvement hypothesis to explain management resistance.[9] Moreover, should the initial premium and an all cash initial offer be negatively and positively correlated, respectively, with the target's GIM index, and to a sufficient extent, then no longer omitting the average marginal effects for these other variables might account for why it is that

[9] In Section 5, we attempt to address the question of whether or not a lower initial premium actually causes target management resistance to be more likely.

the relationship between bid resistance and the target's GIM index, whilst still positive, is no longer statistically significant. These correlations would be of particular concern were we to find evidence to suggest that bid resistance and more pre-existing defenses, in the form of a higher GIM index, are substitute mechanisms that possibly afford target management more bargaining power for price improvement.

Another explanation is that neither the multivariate result nor the corresponding univariate result correctly captures the relationship between bid resistance and the target's GIM index. This concern arises from the possibility of reverse causality in that the target's GIM index might not be sufficiently pre-determined with respect to the likelihood of bid resistance. Management might have recently added defenses (see Karpoff et al, 2017) to, or been forced to shed defenses (see Cuñat et al, 2017) from, the target's GIM index to pre-empt, or signal, a more likely response in the event of a bid. It also arises from the possibility that unobservable factors that differ significantly in the presence of bid resistance are also conceivably correlated with the target's GIM index. The hidden effects of unobservable factors might be from information that is only in the hands of one bidder, and management, and that can be used to quantify the full extent to which a bid undervalues the target (see Fishman, 1988). Lastly, this concern also arises from the possibility that the additive nature of the GIM index measures with error the true effect of the extent of the target firms' antitakeover provisions.

In an attempt to address these endogeneity concerns, we therefore next examine the relationship between bid resistance and the target's GIM index after having instrumented for the suspect endogenous variable, using the target's peers and HQ GIM indexes as instrumental variables. The first and second stages that comprise these IV linear probability regression results are presented in Columns (2) and (3), respectively, of Table 4.

The first stage results, after having regressed the target's GIM index on the two instrumental variables and the other variables included in the second stage, reveal that both of the instrumental variables have a strong, positive association with the target's GIM index. Specifically, raising the target's peers and HQ GIM indexes by one point each (which equates to

all firms in the respective instrument cohort having an extra defense from the GIM index arsenal) is predicted to be reflected in the target's GIM index being higher by 0.60 and 0.28 points, respectively. Given the targets' mean GIM indexes presented in Table 2, these average marginal effects are not only statistically significant (at the one and five percent levels for the target's peers and HQ GIM indexes, respectively), but also economically substantial.

That any firm's current GIM index is plausibly determined by the defenses that either peer or HQ proximate, but not same industry, firms chose to deploy many years in the past (see Karpoff et al, 2017) is thus a proposition that also garners support after having only selected firms that are on the receiving end of a bid. In fact, our estimate of the average marginal effect for the target's peers GIM index is substantially larger than that of Karpoff et al (2017). One possible explanation for this difference is that, at this stage in the study, we are censoring firm years that are absent a bid.[10] However, our estimate of the average marginal effect for the target's HQ GIM index is in close alignment to that of Karpoff et al (2017). Another possible explanation is that, unlike Karpoff et al (2017), we have opted to exclude dual class, financial, and utility stocks at both the level of the firm and respective instrument cohort.

Irrespective, the F-statistic for gauging the strength of the target's peers and HQ GIM indexes in the first stage is 38.3, and thus substantially in excess of the recommended minimum level of 10 (see Angrist and Pischke, 2009, p. 213) for the instrumental variables in isolation from the other variables. Moreover, after having included more than one instrumental variable in the first stage, we confidently fail to reject the null hypothesis (for a chi^2 test of over-identification, based on a 10 percent significance level) that the two simultaneous sources of variation for the target's GIM index are sufficiently exogenous as to not result in the IV linear probability regression being over-identified.

The average marginal effects for the target's peers and HQ GIM indexes are after having netted off the average marginal effects for the other variables included in the second stage.

[10] In the next subsection, we attempt to address concerns that pertain to the potential for sample selection bias.

However, apart from a larger sized target and a target with lower ROA each being predicted to have a higher GIM index, none of these other variables have an average marginal effect that is statistically significant (to at least the 10 percent level). Interestingly, whilst the initial premium and an all cash initial offer seemingly turn out to be positively and negatively correlated, respectively, with the target's GIM index, these correlations are sufficiently weak as to alleviate our earlier concern about these other variables.

For the two instrumental variables to also have validity in the second stage of the IV linear probability regression, the target's peers and HQ GIM indexes should plausibly effect bid resistance only by way of being exogenous sources of variation for the target's GIM index. Karpoff et al (2017) vigorously contend that any firm's current likelihood of being on the receiving end of a bid cannot have plausibly been anticipated by the defenses that either peer or HQ proximate, but not same industry, firms chose to deploy many years in the past. However, we have no cause to doubt that this reasoning does not also apply to the firm's likely management response in the actual event of a bid.

The second stage results, after having regressed bid resistance on the target's instrumented GIM index and the other variables included in the ordinary linear probability regression, reveal that raising the target's instrumented GIM index by one point (which equates to the target having an extra defense from the GIM index arsenal) is predicted to make bid resistance 5.9 percentage points more likely. Given the total percentage of resisted bids presented in Table 1, this average marginal effect is not only statistically significant (at the one percent level), but also economically substantial. Moreover, we cannot fail to accept the null hypothesis (for a chi^2 test of endogeneity, based on a 1 percent significance level) that the target's GIM index is sufficiently exogenous with respect to bid resistance.

By way of comparison with the corresponding average marginal effect in the ordinary linear probability regression, these results suggest that the target's GIM index is reversely, negatively related to the likelihood of management resistance because in subsequent sections we specifically find that unobservable factors and measurement error have little effect on the true

relationship. Cuñat et al (2017) suggest that shareholder voting to remove antitakeover provisions plausibly anticipates aspects of bids, like management resistance. Also, the findings of Karpoff et al (2017) suggest that this could be more effective for firms that are unable to outright deter a bid. With strong sources of variation for the GIM index that are plausibly exogenous to the likelihood of management resistance, the pre-determined effect of the GIM index suggests that it is managerial entrenchment that actually causes managers to resist a bid.

Therefore, whilst a higher GIM index has a greater likelihood of deterring a bid in the first place (see Karpoff et al, 2017), a higher GIM index would also seem to exacerbate the likelihood of management resistance in the actual event of a bid. If so, this finding suggests that bid resistance arises from a position of management entrenchment, and does not substitute for a lower GIM index by possibly affording target management more bargaining power for price improvement. Given the plausibility for the target's instrumented GIM index being sufficiently pre-determined with respect to the likelihood of bid resistance, we go as far as to suggest that a higher GIM index actually causes bid resistance to be more likely. That is, to the extent that a higher GIM index is a direct, ex-ante proxy for management entrenchment, bid resistance is likely motivated by target management entrenchment.

The average marginal effects of the other variables included in the ordinary linear probability regression (including the initial premium and an all cash initial offer) are essentially unchanged in terms of both statistical significance and economic magnitude. This observation is perhaps not surprising in light of the fact that hardly any of these other variables (including the initial premium and an all cash initial offer) have average marginal effects that are statistically significant in the first stage of the IV linear probability regression.

However, average marginal effects estimated using ordinary and IV linear probability regressions might not be reliable when generated in the context of a dichotomous dependent variable, like the presence of target management resistance. With this concern in mind, in Columns (4), (5), and (6) of Table 4, we present average marginal effects estimated using probit regressions that are otherwise equivalent to the linear probability regressions in Columns (1),

(2), and (3), respectively. The ordinary and IV probit regressions generate average marginal effects that are in close alignment to those estimated using the corresponding linear probability regressions. Moreover, the conclusions that we draw from both of the probit regressions are the same as those that we draw from the linear probability regressions, including from a chi[2] test of endogeneity in the case of the IV probit regression.[11]

3.2. Effect of censoring firm years absent a bid

Although the average marginal effect of the instrumented GIM index is plausibly unhindered by reverse causality, there remains the concern that the effect on resistance is biased as a result of censoring firm years absent a bid. Three conditions must be met for sample selection bias to potentially matter in this context.[12] First, a higher, instrumented GIM index must be more likely to deter a bid. Karpoff et al (2017) provide evidence that validates this condition. Second, unobservable factors that make a bid more likely must also make resistance more or less likely. In particular, valuable information in the hands of only one bidder might lead to a larger share of any takeover gains, and hence make it more likely that a bid will proceed. However, in response, resistance might be more likely as management attempts to reduce this information advantage in order to attract competing bidders, or strengthen its bargaining position. Fishman (1988) theorizes that such a scenario is more likely the greater is the cost of acquiring information about the target firm. Third, the joint effect of unobservable factors must be correlated with the instrumented GIM index.

We initially set out to replicate the results of Karpoff et al (2017). However, whereas they use an IV linear probability regression, we use an IV probit regression for this purpose because the joint effect of unobservable factors (bid lambda) is more reliably estimated using a regression intended for use with a dichotomous dependent variable. The results, for an unbalanced panel of firm years, are presented in Columns (1) and (2) of Table 5 and in all respects are in fairly close

[11] Tests of the first stage strength of instrumental variables and of over-identification are not possible for an IV probit regression. Hence our decision to initially favor linear probability regressions.

[12] See Certo, Busenbark, Woo, and Semadeni (2016) for an extensive discussion of how the conditions apply to other takeover contexts.

alignment to those of Karpoff et al (2017). In failing to accept the null hypothesis that the GIM index is sufficiently exogenous with respect to deterring a bid, we next confront the challenge posed by having a proven endogenous variable in both stages of the analysis.

As a solution to this problem (suggested by Wooldridge, 2010, pp. 809-813), we re-estimate the IV probit regression in reduced form, generate the bid lambda, and include it as an additional exogenous variable in the IV linear probability regression for predicting resistance. This way, the same two instrumental variables (peers GIM index and HQ GIM index), and all other variables not conditional on a bid (size through to industry concentration, and year and industry indicators), are included in both stages. To meet the need for an exclusion restriction, we add only to the reduced form regression a dummy variable identifying a firm year with California incorporation. Because of a long history of adversity to takeover defenses by legislators in the State, having a California incorporation is believed to make a firm relatively more susceptible to a bid (see Catan and Kahan, 2016; Amihud, Schmid, and Solomon, 2017), a belief that is strongly borne out by the reduced form results in Column (3) of Table 5. At the same time, and as also pointed out by Catan and Kahan (2016), most reincorporation activity, including out of California, took place at the height of State antitakeover enactments in the mid to late 1980s, and hence many years before it could have plausibly been influenced by aspects of the bids in our sample.[13] Furthermore, we bootstrap standard errors in the final, IV linear probability, regression because of manual adding of the bid lambda.[14]

Even with the addition of an exclusion restriction, the results from the reduced form regression are consistent with those for the IV probit regression, and the reduced form results of Karpoff et al (2017). The results provide further evidence that, with exogenous sources of variation, a higher GIM index is more likely to deter a bid. Moreover, even with the inclusion of

[13] Amihud et al (2017) use California incorporation as one of several instrumental variables for predicting a staggered, or classified, board, one of the components of the GIM index. They find that being incorporated in California makes it significantly less likely for a firm to have adopted a staggered board.

[14] Using conventional, robust standard errors (as in the previous subsection) does not substantially alter the results. Standard errors are clustered at the level of the firm in the reduced form regression and non-clustered in the final regression (again, consistent with treatment in the previous subsection).

the bid lambda, the results for the IV linear probability regression for predicting resistance, in Columns (4) and (5) of Table 5, closely accord with those discussed in the previous subsection. In the second stage in Column (5), the average marginal effect for the bid lambda is positive and statistically significant, which might, as Fishman (1988) theorizes, be because valuable information in the hands of only one bidder, and management, makes it more likely that a bid will proceed and face resistance. If so, this private information needs to be especially valuable, made possible if it is more costly to acquire information about the firm, for a bid not to otherwise be deterred by an especially high GIM index. This positive correlation between the bid lambda and GIM index is clearly evident in the first stage in Column (4). However, the effect in the second stage is relatively insubstantial, as is shown by the size and statistical significance of the average marginal effect for the instrumented GIM index being smaller than before, but not to a great degree. Therefore, in the event of failing to outright deter a bid, the likelihood of management resistance is increasing in the GIM index no matter the cost of acquiring information about the target firm. That is, even after accounting for the effect of censoring firm years absent a bid, the inference we draw from an interpretation of the GIM index effect is that the dominant motive for resistance is management entrenchment and not pursuit of a better outcome for shareholders.

Interestingly, the first stage effects for the two instrumental variables, even having netted off the effect for bid lambda, are only slightly weaker than those in the IV probit regression for predicting a bid. This effectively rules out censoring of firm years absent a bid as one of two possible explanations, given in the previous subsection, to account for a larger effect for the peers GIM instrument (only) in comparison to that in Karpoff et al (2017). Of the other variables in both first stages, only firm size matters consistently for the GIM index, with the two variables being positively correlated. Moreover, in the respective second stages, a larger firm is more likely to deter a bid, but not more, or less, likely to resist in the event of a bid. In contrast, both Schwert (2000) and Bates and Becher (2017) show a result suggesting that larger firms are more likely to resist a bid. However, both of these studies neither reveal how censoring firm years absent a bid affects the result, nor, perhaps more importantly, account for complementarity between firm size

and the GIM index.[15] Our results suggest that, with exogenous sources of variation independent of firm size, only the instrumented GIM index matters for predicting resistance.

As in the previous subsection, changing only the form of the final regression from IV linear probability to IV probit, in Columns (6) and (7) of Table 5, does not substantially alter the results pertaining to the effect of censoring firm years absent a bid.

3.3. Effect in the reduced form

Instrumental variables should not plausibly affect the outcome variable other than by way of being exogenous sources of variation for the suspect endogenous variable. However, in the event of both failing to rule out endogeneity and finding a strong relationship between the outcome variable and instrumented variable, Angrist and Pischke (2009, p. 213) suggest that it would be out of the ordinary were a trace of this direct relationship not to be discernible in the reduced (indirect) form. That is, by regressing the outcome variable (resistance) on the instrumental variables (peers and HQ GIM instruments) and all of the other variables, except for the instrumented variable (GIM index) included in the IV regression for predicting the outcome variable.

The reduced form results for the IV regressions discussed in the previous two subsections are presented in Table 6. In Column (1), the linear probability results evidence a trace of the positive relationship between resistance and the instrumented GIM index through both of the GIM instruments. Moreover, this indirect effect is statistically significant (at the one percent level) for the peers GIM instrument. This instrumental variable was previously shown to be the stronger of the two sources of exogenous variation for the GIM index, even though the effect for the HQ GIM instrument was also shown to be statistically significant, and the possibility of over-

[15] Bates and Becher (2017) account for the effect of a classified board, only one of 24 components comprising the GIM index, but, unlike Bates, Becher, and Lemmon (2008) and Amihud et al (2017) in contexts other than for predicting resistance, do not treat a classified board as a suspect endogenous variable. Of course, the downside of requiring data for the GIM index is that our sample of bids is smaller than that of both Schwert (2000) and Bates and Becher (2017). However, apart from firm size, the effects of the other variables in predicting resistance are generally consistent with those shown in these and other studies. Furthermore, a smaller sample of bids makes it manageable for us to use primary (news) sources to cleanly search each and every bid for any evidence of resistance, something that Schwert (2000) does not do at all and Bates and Becher (2017) only do partially.

identification was categorically ruled out. A similar trace of the direct relationship between resistance and the instrumented GIM index is also evident in the reduced form results in Column (2). Here, the fact that the indirect effect is only slightly weaker than that in Column (1) is consistent with the IV linear probability results after including the bid lambda as an additional variable for predicting resistance.

In Columns (3) and (4), the parallel, reduced form results for the IV probit regressions also provide further evidence that, with exogenous sources of variation, a higher GIM index is more likely to lead to resistance.

4. The GIM index and resistance: Robustness and other considerations

The results in the preceding section seemingly provide strong evidence in support of a positive causal relationship running from the GIM index to resistance. However, it is possible that the causal relationship depends on a specific (1) construct for the GIM instruments, (2) measure for the GIM index, (3) subset of components from the GIM index, and (4) endpoint chosen for the analysis, relative to when RiskMetrics stopped collecting data for each and every component of the GIM index.

4.1. Rolling vs fixed GIM instruments

We construct the GIM instruments in such a way that both roll forward each firm year from many firm years in the past. However, to increase the plausibility of both being sufficiently pre-determined (exogenous) with respect to a future bid, Karpoff et al (2017) also propose fixing the peers and HQ GIM instruments from the earliest available firm year, which typically equates to 1990 for GIM index data from RiskMetrics.

We therefore repeat the preceding analysis using fixed, instead of rolling, GIM instruments. The results, presented in Table 7, provide evidence in further support of a positive causal relationship running from the GIM index to resistance in so far as the causal relationship does not depend on a specific construct for the GIM instruments. Moreover, using fixed GIM instruments does not substantially alter results from the analysis to follow, for which we continue

to use rolling instruments. Most of the other results from using fixed instruments are presented in Tables A1-A4 of the Appendix.

4.2. Additive vs binary GIM index

Summing across the 24 components of the GIM index to produce a continuous measure could be problematic for several reasons. First, if certain components of the GIM index are more potent than the rest (see Bebchuk et al, 2009, and the next subsection) then the need arises for a, perhaps, just as arbitrary substitute for equal weights in the summation. Second, a GIM index above a certain (so-called 'dictatorship') threshold could be just as potent as one higher up in the distribution (see Gompers et al, 2003). Third, these measurement issues could be particularly problematic when relying on exogenous sources of variation for an additive GIM index (see Karpoff et al, 2017).

We therefore repeat the preceding analysis using a binary, instead of additive, GIM index. Following Masulis et al (2007) and Harford et al (2012), GIM dictatorship is a dummy variable identifying a firm year with an additive GIM index above the median for all firms in that year. For GIM dictatorship, we substitute the IV regressions used previously for otherwise identical bi-probit regressions. However, here, the bid lambda is unchanged from that generated previously in reduced form, using rolling or fixed GIM instruments. The results, presented in Table 8, provide evidence in further support of a positive causal relationship running from the GIM index to resistance in so far as the causal relationship also does not depend on a specific measure for the GIM index. However, the positive correlation between the bid lambda and GIM index is evidently weaker for the binary measure. This suggests that a threshold based on the median GIM index in a given year is insufficient for detecting that the outright, deterrent effect of a higher GIM index is likely to be decreasing in the cost of acquiring information about a firm.

4.3. BCF vs KSW index

Bebchuk et al (2009) argue that 6 components (including classified board, supermajority amendment, and poison pill, but excluding fair price amendment) from the GIM index are more potent than the rest as to warrant a sub-index (BCF index). However, Karpoff et al (2017) find

that, when instrumented, a higher BCF index and a higher sub-index comprised of the other 16 components (KSW index) are both more likely to deter a bid, although the effect of adding one more component to the BCF index is greater than when doing so for the KSW index.

We therefore repeat the preceding analysis after substituting the BCF and KSW indexes, both independently and simultaneously, for the GIM index. Here, we construct separate sets of peers and HQ instruments corresponding to the BCF and KSW indexes, but in an identical way to those for the GIM index. The results, presented in Tables 9 (BCF index alone), 10 (KSW index alone), and 11 (BCF and KSW indexes together), and Tables A1-A3, respectively, of the Appendix, provide evidence in further support of a positive causal relationship running from the GIM index to resistance in so far as the causal relationship depends on a subset of components from the GIM index, specifically those represented by the KSW index. As previously, we infer from the results that, in general, more valuable information in the hands of only one bidder, and management, (a higher bid lambda) makes it more likely a bid will proceed and face resistance. However, here, a higher BCF (KSW) index is seemingly more likely to deter a bid no matter how (the less) valuable is this private information. If so, when predicting resistance in the event of a bid, more diminished variation in the BCF index might account for the weaker exogenous sources of variation for this particular sub-index, and hence an unreliable test of endogeneity, as compared to when predicting a bid.

While there might not be to be a causal relationship between the BCF index and the likelihood of management resistance, both sub-indices matter for outright, bid deterrence (consistent with the findings of Karpoff et al, 2017), and the deterrent effect of a higher, BCF index is unrelated to the cost of acquiring information about a firm. These findings therefore support the claim by Bebchuk et al (2009) that their index quantifies the extent to which a firm's antitakeover provisions have an especially potent, deterrent effect. It makes no difference whether the GIM index is replaced with the sub-indices separately or jointly.

Interestingly, should our decision to exclude dual class, financial, and utility stocks more likely explain the larger first stage IV effect for the peers GIM instrument in comparison to that in

Karpoff et al (2017) then this difference seemingly matters only for the subset of components from the GIM index represented by the KSW index. Moreover, the first stage IV effect for the peers KSW instrument also pre-determines the BCF index, whereas no such co-determination of exogenous sources of variation is evident for the KSW index.

4.4. 2012 vs 2009 endpoint

RiskMetrics stopped collecting data for each and every component of the GIM index after 2006.[16] However, similar to some of the analysis of Karpoff et al (2017), we forward fill the latest available data for the GIM index to reduce the omission of many later bids. This strategy should have little effect on the GIM instruments, which either roll forward from many firm years in the past or are fixed from the earliest available data. However, when it comes to the actual GIM index, data filling to as far forward as a 2011 firm year, for a 2012 bid, is potentially problematic in so far as being distanced from a typical maximum forward fill of two firm years for gaps between firm years while the data was still being collected.

We therefore repeat the preceding analysis after enforcing a forward fill of the data for the GIM index to no further than a 2008 firm year, for a 2009 bid. The results, not presented for reasons of brevity (but available upon request), provide evidence in further support of a positive causal relationship running from the GIM index to resistance in so far as the causal relationship does not depend on the endpoint chosen for the analysis. Furthermore, the first stage IV effects for both of the GIM instruments are similar in magnitude to those discussed previously for the 2012 endpoint.

5. Initial premium and resistance

Finding further evidence in support of a positive causal relationship running from the GIM index to resistance strengthens the earlier suggestion that from the perspective of the GIM index

[16] Of the two sub-indexes, these stoppages affect the KSW index, but not the BCF index. Like Karpoff et al (2017), we opt not to update the data for the BCF index beyond the point at which RiskMetrics stopped updating the data for the GIM and KSW indexes. Moreover, the BCF index was previously found to be prone to more diminished variation, and hence weaker exogenous sources of variation, when predicting resistance in the event of a bid.

at least the dominant motive for resistance is management entrenchment, and not pursuit of a better outcome for shareholders. That is, in general and independent of the initial premium, a higher GIM index does not substitute for resistance by possibly affording management more bargaining power for price improvement. However, it is also evident throughout the preceding analysis that, independent of the GIM index, resistance is more likely to be associated with a bid offering a lower initial premium. Therefore, our intention in the final part of the analysis is to reconcile this seemingly conflicting evidence in support of the price improvement hypothesis for explaining resistance. The foregoing analysis, the results from which are presented in Table 12 (and Table A4 of the Appendix), rests on relaxing the implicit assumptions in the preceding analysis that the initial premium is exogenous to resistance and the initial premium and the GIM index are not co-determined.

To begin with, it is hard to find convincing support, beyond that in Jennings and Mazzeo (1993), for the price improvement hypothesis when predicting resistance using the observed initial premium (see Walkling and Long, 1984; Cotter and Zenner, 1994; Bates and Becher, 2017). However, Bates and Becher (2017) contend that the unexplained or abnormal part of the observed initial premium represents a better proxy for the perceived quality of a bid. They find support for the price improvement hypothesis only after substituting this measure for the observed initial premium. We therefore first examine the relationship between the abnormal initial premium and resistance using an IV linear probability regression for predicting resistance that is otherwise identical to those before with rolling GIM instruments. To generate an abnormal initial premium we regress the observed initial premium on all of the variables in the first stage of the IV regression in Column (2) and extract the residual. Also including the GIM instruments and bid lambda (from before) ensures that any endogenous co-determination and sample selection bias are dealt with in the same way in the standalone regression in Column (1) for the observed initial premium. Consistent also with treatment in the IV regression we bootstrap standard errors because of manual adding of the bid lambda.

To meet the need for an exclusion restriction we follow Bates and Becher (2017) in adding the variable, pre-bid price to high price (previously described in Section 2.2), only to the regression for the observed premium. Baker et al (2012) argue that this nominal ratio of past prices is a plausible benchmark for the observed initial premium. However, this variable is also likely to be a source of variation for the observed initial premium that is plausibly exogenous to resistance.[17] This is because, given the significant effect for resistance on the bid announcement return in Section 2.3, the market is unlikely to have anticipated, and hence already priced in, the effect of resistance. Also, given that we net off the effects for the firm-specific stock return, GIM instruments, and bid lambda, it is less conceivable that the nominal ratio of past prices is correlated to a problematic degree with unobservable factors also related to resistance. Like Baker et al (2012) and Bates and Becher (2017), it is also evident from our results that all other things equal a higher 52 week high price is statistically matched by a higher observed initial premium. Interestingly, however, the results for the GIM instruments reveal no significant trace of a direct causal relationship running from the GIM index to the observed initial premium. This finding stands in contrast to the opposing positive causal relationships found by Cain et al (2017) following greater protection from State antitakeover laws and Cuñat et al (2017) following removal of a defense from the corporate charter.

The results for the second stage of the IV regression in Column (3) show that like the observed initial premium before the abnormal initial premium is statistically negatively correlated with resistance. That is, resistance is significantly more likely to be associated with not only a bid offering a lower observed initial premium, but also the perception of an abnormally lower quality bid. While this result could therefore possibly provide further support for the price improvement hypothesis for explaining resistance (as suggested by Bates and Becher, 2017), the result also reveals that the unexplained part of the observed initial premium is an unobservable factor that hinders a reliable understanding of the relationship between the observed initial

[17] Baker et al (2012) go on to use this variable as an instrument for the observed premium in a regression for the bidder's announcement return.

premium and resistance. Moreover, a statistically significant effect for the abnormal initial premium is also evident in the second stage of another IV regression in Column (5), the only difference being that the observed and abnormal initial premiums are included simultaneously instead of as substitutes. That the abnormal initial premium is statistically significant even after netting off the effect for the observed initial premium strengthens the need to treat the observed initial premium as another suspect endogenous variable.

We therefore next instrument for the observed initial premium using the same Baker et al (2012) variable, pre-bid price to high price, which in the prior non-instrumented context served only as an exclusion restriction. The results for the second stage of this again otherwise identical IV regression in Column (7) provide strong statistical support against there being a negative, or any, causal relationship running from the observed initial premium to resistance, including those from the tests of instrument validity and the need for an exogenous source of variation for the observed initial premium.[18] Furthermore, there is no significant co-determination from the instruments in the first stages for the observed initial premium and GIM index in Columns (1) and (6) respectively. That is, no matter the direction, there is no trace of a direct causal relationship between the GIM index and observed initial premium. Lastly, the reduced form results in Column (8) for the same IV regression accord with the main results in revealing no statistical trace of a direct causal relationship running from the observed initial premium to resistance. This reduced form result is consistent with the corresponding univariate result in Section 2.2.

Hence, in the instrumented context of this analysis, we infer that resistance is not, in general, caused by the perception of a lower quality bid. Although there is extant evidence that resistance can lead to price improvement for a lower quality bid (see Dimopoulos and Sacchetto,

[18] This result is at odds with that of Jennings and Mazzeo (1993) for an earlier sample of bids. Using either a single regression or simultaneous regressions, they find a significant negative relationship between the observed initial premium and resistance. However, the only variable that Jennings and Mazzeo (1993) include in the simultaneous regression for the observed initial premium, number of analysts following the target, is also included in the simultaneous regression for predicting resistance. Moreover, this variable is insignificant for the observed initial premium, but significant for predicting resistance.

2014; Bates and Becher, 2017), our findings suggest that price improvement is unlikely to be the dominant motive for resistance. That is, a greater potential for price improvement is unlikely to cause managers to resist a bid. Instead, undiminished evidence throughout the analysis in this section of a positive causal relationship running from the GIM index to resistance makes it hard to challenge a management entrenchment motive.

6. Conclusion

In this study, we examine whether there is a causal relationship that runs from the GIM index to the likelihood of management resistance. With an exogenous source of variation for the GIM index, we reason that this is possible, either because a higher GIM index is a more powerful substitute for management resistance for the purpose of eliciting or bargaining for a higher quality offer (negative relationship), or because a higher GIM index is a manifestation of managers that are already relatively entrenched and, thus, more inclined to abuse management resistance for the purpose of reinforcing this position (positive relationship). Using an IV regression and sources of variation for the GIM index that have strong validity and are plausibly exogenous to the likelihood of management resistance, we find robust support for the notion that managerial entrenchment causes managers to resist a bid, rather than that the motive for management resistance is to compensate for a lower GIM index.

As a more head-on test of the latter, price improvement motive, we jointly examine whether there is a causal relationship that runs from the initial premium to the likelihood of management resistance. With a source of variation for the initial premium that also has strong validity and is plausibly exogenous to the likelihood of management resistance, our findings suggest that a lower quality offer does not cause managers to resist a bid. Our conclusions from a direct, ex-ante analysis of the hypothesized motives for management resistance seem to be borne out by an indirect, ex-post analysis, in which the wealth effect for shareholders and completion rate for a higher quality offer are evidently worse for a bid that faces resistance from managers.

We specifically extend the work of Karpoff et al (2017) by treating the GIM index as a suspect endogenous variable for jointly explaining outright bid deterrence and the likelihood of management resistance in the event of a bid. This rounding off has relevance because, as our findings suggest, the greater is the cost of acquiring information about a firm, the weaker is the deterrent effect of a higher GIM index. Moreover, in the event of a firm becoming the target of a takeover attempt it is largely at management's discretion as to whether, and by what means, to resist the bid. In contrast, outright bid deterrence is more about the discretion of a potential bidder.

Our study is the first to establish beyond reasonable doubt whether it is price improvement or managerial entrenchment that actually causes management to resist a bid. With significant, potentially conflicting stakes for shareholders (less willing to accept a lower quality offer) and managers (unwilling to accept a higher quality offer at the expense their jobs), and a sizable dataset with many control variables from which it is clearly evident that management resistance matters more for larger firms, the evidence that we present in this paper is likely to be of interest to corporate legislators in considering imposing limits on managerial discretion in response to the threat of a takeover.

Main, variable definitions

Variable	Definition
Resistance	Indicator for management resistance, which is equal to one for a bid that faces any form of management resistance, as disclosed in news sources in the Factiva database, and to zero otherwise. This is either in the form of a public rejection, or in the form of a post-offer defense, such as those – targeted repurchase, standstill agreement, litigation, asset restructuring, or liability restructuring – that Ruback (1987) describes.
Bid	Indicator for a bid, which is equal to one for a firm year with a bid in the Securities Data Company (SDC) Platinum database, and to zero otherwise. Bids are dropped that are not an attempt to acquire in excess of fifty percent of a firm's outstanding, common stock, bids are also dropped when made by management, and bids for the same firm are combined when separated by up to 260, trading days.
Announcement return	Wealth effect for shareholders through to bid announcement, which (having combined bids for the same firm when separated by up to 260, trading days) is the target firm's stock return for the 42, trading days before bid announcement (run-up period), and through to bid announcement, net of the stock return for a value-weighted index of all firms in the Center for Research in Security Prices/Compustat Merged (CCM) database.
Post-announcement return	Wealth effect for shareholders through to post-announcement, which does the same as the announcement return, but through to the trading day after bid announcement.
Post-bid return	Wealth effect for shareholders through to post-bid, which does the same as the announcement return, but through to either the trading day after bid completion, or up to 260, trading days after non-completion (during which period there are no further bids for the same firm).
Final premium	Actual premium offered by the final bidder, which (having combined bids for the same firm when separated by up to 260, trading days) is the final, offer price in the SDC Platinum database, over the target firm's stock price (adjusted for any splits, etc.), in the CCM database, before the run-up period, minus one.
Completed	Indicator for bid completion, which (having combined bids for the same firm when separated by up to 260, trading days) is equal to one for a bid that is finally in the SDC Platinum database as having been completed, and to zero otherwise.
Termination fee	Indicator for management commitment to closing out a bid with a termination fee, which (having combined bids for the same firm when separated by up to 260, trading days) is equal to one for a bid that at any stage in the SDC Platinum database has a target firm, termination fee, and to zero otherwise.
GIM index	Gompers, Ishii, and Metrick (2003) (GIM) index for the extent of a firm's antitakeover provisions, which, with a lag of one year, adds one for each antitakeover provision that a firm has out of twenty-four – including staggered/classified board, supermajority amendment, fair price amendment, and poison pill – from RiskMetrics. The RiskMetrics dataset is available for 1990-2006, and the data is forward filled during intervals between biannual, or triannual, updates, and after it ends.

Variable	Definition
Peers, GIM index (rolling)	Pseudo, GIM index for same-age (peer) firms, which adds proportions for the extent to which a cohort of at least three firms has each of the twenty-four, antitakeover provisions of the GIM index, and which rolls forward each year with a lag of at least three years. Cohort firms, which exclude the focus firm, and firms with a historic, two-digit, Standard Industrial Classification (SIC) code that is the same as that of the focus firm, have a start year in the CCM database, after having combined start years earlier than 1951, that is the same as that of the focus firm. This pseudo, GIM index is constructed in a similar way to that described by Karpoff, Schonlau, and Wehrly (2017).
HQ, GIM index (rolling)	Pseudo, GIM index for headquarters-proximate (HQ) firms, which does the same as the peers, GIM index (rolling), but for cohort firms that have a Zone Improvement Plan code in the CCM database for which the latitude and longitude co-ordinates locate their headquarters within a 100 mile, same State, radius of that of the focus firm. This pseudo, GIM index is constructed in a similar way to that also described by Karpoff et al (2017).
Initial premium	Actual premium offered by the initial bidder, which does the same as the final premium, but with the initial, offer price, in the SDC Platinum database, as the numerator.
Pre-bid price to high price	Pseudo, initial premium, which is the target firm's stock price (adjusted for any splits, etc.), in the CCM database, before the run-up period over the target firm's highest, stock price for up to 260, trading days before the run-up period, minus one. This pseudo, initial premium is constructed in a similar way to that described by Baker, Pan, and Wurgler (2012).
All cash	Indicator for an all, cash bid, which (having combined bids for the same firm when separated by up to 260, trading days) is equal to one for a bid that is initially in the SDC Platinum database as offering only cash, and to zero otherwise.
Size	Size of a firm's assets, which, with a lag of one year, is the book value of a firm's total assets, in the CCM database, denoted in millions of real, 2012, US dollars.
Leverage	Leverage of a firm's capital, which, with a lag of one year, is the book value of a firm's long-term debt, in the CCM database, over the book value of its total assets.
Market-to-book	Market-to-book ratio for a firm's assets, which, with a lag of one year, is the market value of a firm's total assets (before the run-up period when this spills over into the preceding year), in the CCM database, over the book value of its total assets.
Tangibility	Tangibility of a firm's assets, which, with a lag of one year, is the book value of a firm's property, plant, and equipment, before depreciation, in the CCM database, over the book value of its total assets.
Liquidity	Liquidity of a firm's assets, which, with a lag of one year, is the book value of a firm's working capital, in the CCM database, over the book value of its total assets.
Sales growth	Growth of a firm's sales, which, with a lag of one year, is the proportionate change in a firm's annual sales in the CCM database.
ROA	Return on a firm's assets (ROA), which, with a lag of one year, is a firm's operating income, before depreciation, in the CCM database, over the book value of its total assets.
Stock return	Return on a firm's stock, which, with a lag of one year, is a firm's stock return for up to 260, trading days (before the run-up period when this spills over into the preceding year), net of the return for a value-weighted index of all firms in the CCM database.

Variable	Definition
Industry concentration	Concentration of a firm's industry, which, with a lag of one year, adds squared proportions for the extent to which each of at least three firms, with a historic, two-digit, SIC code that is the same as that of the focus firm, and the focus firm, share an industry's annual sales.

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Tables

Table 1
Sample

This table describes the sample. Main, variable definitions are provided at the end of the paper. The sample is comprised of firm years for which the twenty-four, antitakeover provisions of the Gompers, Ishii, and Metrick (2003) (GIM) index are available from RiskMetrics, and to an extent that these can roll forward each year with a lag of at least three years for constructing the pseudo, GIM indices for same-age (peer) firms and headquarters-proximate (HQ) firms. The RiskMetrics dataset is available for 1990-2006, and the data is forward filled during intervals between biannual, or triannual, updates, and after it ends. Firms are dropped that are not in the Center for Research in Security Prices/Compustat Merged (CCM) database. Firm years for 1990-2012 are dropped that have two, or more, classes of common stock in the CCM database, as are those that have a historic, two-digit, Standard Industrial Classification code for either a financial industry (including real-estate), or a regulated utility industry. The final, unbalanced panel of firm years for 1993-2012, with a lag of one year for the other variables (including the actual, GIM index) that are not conditional on a bid, is merged with bids in the Securities Data Company Platinum database. Bids are dropped that are not an attempt to acquire in excess of fifty percent of a firm's outstanding, common stock, bids are also dropped when made by management, and bids for the same firm are combined when separated by up to 260, trading days. Column (1) is the annual number of bids that face management resistance, Column (2) is the annual number of bids, and Column (3) is the annual percentage of bids that face management resistance. Column (4) is the annual number of firms, and Column (5) is the annual percentage of firms that are the target of a bid.

	(1)	(2)	(3)	(4)	(5)
Year	**Resistance #**	**Bids #**	**Resistance %**	**Firms #**	**Target firms %**
1993	3	9	33.3	753	1.2
1994	5	22	22.7	854	2.6
1995	10	33	30.3	845	3.9
1996	10	36	27.8	899	4.0
1997	10	50	20.0	876	5.7
1998	6	55	10.9	873	6.3
1999	15	103	14.6	1,192	8.6
2000	9	88	10.2	1,068	8.2
2001	4	43	9.3	1,052	4.1
2002	3	17	17.7	1,008	1.7
2003	4	30	13.3	1,264	2.4
2004	10	43	23.3	1,243	3.5
2005	15	79	19.0	1,344	5.9
2006	11	72	15.3	1,278	5.6
2007	11	93	11.8	1,304	7.1
2008	19	52	36.5	1,203	4.3
2009	5	41	12.2	1,134	3.6
2010	7	38	18.4	1,099	3.5
2011	10	44	22.7	1,064	4.1
2012	6	47	12.8	1,022	4.6
Total	173	995	17.4	21,375	4.7

Table 2
Main variables

This table presents descriptive statistics for the main variables. Main, variable definitions are provided at the end of the paper, and the sample of bids and firm years is described in Table 1. Panel A is for the sample of bids, which is split between bids that do and do not face management resistance. Columns (1) and (3) are variable means for the resistance and no resistance subgroups, respectively, and Columns (2) and (4) are variable, standard deviations for the resistance and no resistance subgroups, respectively. Column (1) also indicates whether the difference between the variable means for the resistance and no resistance subgroups is statistically significant. The variables begin with those for bid outcomes for shareholders, which are the wealth effect (stock return) through to bid announcement, the wealth effect through to post-announcement, the wealth effect through to post-bid, the actual premium offered by the final bidder, the indicator for bid completion, and the indicator for management commitment to closing out a bid with a termination fee. These variables are followed by those for the extent of the target firm's antitakeover provisions, both in actual form (GIM index), and in the instrumental-variable (IV) form of the pseudo, GIM indices for same-age (peer) firms and headquarters-proximate (HQ) firms, which roll forward each year with a lag of at least three years. These variables are followed by those for bid structure, which are the actual premium offered by the initial bidder, both in actual form, and in the IV form of the pseudo one, pre-bid price to high price, and the indicator for an all, cash bid. The variables end with those that are not conditional on a bid. Panel B is for the sample of firm years, which is split between firm years with and without a bid. Columns (6) and (8) are variable means for the bid and no bid subgroups, respectively, and Columns (7) and (9) are variable, standard deviations for the bid and no bid subgroups, respectively. Column (6) also indicates whether the difference between the variable means for the bid and no bid subgroups is statistically significant. The variables are those in Panel A that are not conditional on a bid. ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	Panel A					Panel B				
	Resistance		No resistance			Bid		No bid		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Variable	Mean	Std dev.	Mean	Std dev.	Obs	Mean	Std dev.	Mean	Std dev.	Obs
Announcement return	0.130***	0.252	0.220	0.249	995					
Post-announcement return	0.195***	0.224	0.256	0.244	995					
Post-bid return	0.181***	0.549	0.270	0.319	985					
Final premium	0.479	0.369	0.442	0.373	995					
Completed	0.642***		0.946		995					
Termination fee	0.503***		0.876		995					
GIM index	9.376**	2.436	8.878	2.635	995	8.965	2.607	9.037	2.687	21,375
Peers, GIM index (rolling)	9.115***	1.100	8.787	1.079	992	8.844***	1.089	9.020	1.103	21,249
HQ, GIM index (rolling)	9.082*	0.926	8.927	0.945	976	8.954***	0.943	9.064	0.919	21,053
Initial premium	0.341***	0.304	0.438	0.371	995					
Pre-bid price to high price	-0.244	0.203	-0.245	0.202	995					
All cash	0.566***		0.454		995					
Size	3,237.3	6,350.0	2,548.8	6,254.3	993	2,668.8***	6,273.3	5,791.8	24,009.3	21,361
Leverage	0.198	0.162	0.184	0.179	992	0.187	0.176	0.179	0.157	21,358
Market-to-book	1.539***	0.795	1.780	0.979	987	1.738***	0.954	1.943	1.374	21,340
Tangibility	0.589**	0.356	0.522	0.395	980	0.533	0.389	0.553	0.374	21,242

Table 2 (continued)
Main variables

	Panel A					Panel B				
	Resistance		No resistance			Bid		No bid		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Variable	**Mean**	**Std dev.**	**Mean**	**Std dev.**	**Obs**	**Mean**	**Std dev.**	**Mean**	**Std dev.**	**Obs**
Liquidity	0.196**	0.187	0.236	0.211	993	0.229	0.207	0.225	0.201	21,361
Sales growth	0.023	0.164	0.161	2.282	993	0.137**	2.076	0.085	0.659	21,333
ROA	0.109	0.099	0.115	0.159	983	0.114***	0.150	0.134	0.109	21,296
Stock return	-0.114	0.445	-0.116	0.450	995	-0.115***	0.448	-0.024	0.429	21,358
Industry concentration	0.094	0.069	0.095	0.075	994	0.095***	0.074	0.107	0.093	21,364

Table 3

Relationship between management resistance and bid outcomes for shareholders

This table presents average, marginal effects for the relationship between management resistance and bid outcomes for shareholders. Main, variable definitions are provided at the end of the paper, and the sample of bids is described in Table 1. Column (1) is a linear regression for the wealth effect (stock return) through to bid announcement on the indicator for management resistance, the extent of the target firm's antitakeover provisions (GIM index), the indicator for an all, cash bid, and other variables (including year indicators and industry indicators). Columns (2), (3), and (4) do the same as Column (1), but for the wealth effect through to post-announcement, the wealth effect through to post-bid, and the actual premium offered by the final bidder, respectively. Column (5) is a probit regression for the likelihood of bid completion on the indicator for management resistance, the GIM index, the actual premium offered by the final bidder, the indicator for an all, cash bid, and the other variables. Column (6) does the same as Column (5), but for the likelihood of management commitment to closing out a bid with a termination fee, and with the actual premium offered by the initial bidder, instead of with that offered by the final bidder. Robust, standard errors are shown in brackets underneath the marginal effects. ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	Linear				Probit	
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Announcement return	Post-announcement return	Post-bid return	Final premium	Completed	Termination fee
Resistance	-0.0929***	-0.0642***	-0.0888**	0.0471	-0.3006***	-0.3476***
	(0.0217)	(0.0198)	(0.0436)	(0.0317)	(0.0363)	(0.0396)
GIM index	-0.0021	0.0013	0.0028	0.0015	-0.0030	-0.0025
	(0.0031)	(0.0030)	(0.0047)	(0.0045)	(0.0034)	(0.0043)
Initial premium						0.1663***
						(0.0360)
Final premium					0.1813***	
					(0.0311)	
All cash	0.0387**	0.0447***	-0.0013	-0.0249	-0.0232	-0.0065
	(0.0170)	(0.0166)	(0.0267)	(0.0265)	(0.0187)	(0.0242)
ln[Size]	-0.0084	-0.0124*	-0.0104	-0.0182	-0.0083	0.0163*
	(0.0071)	(0.0072)	(0.0101)	(0.0112)	(0.0070)	(0.0097)
Leverage	0.1383**	0.1520***	0.0384	0.1396*	-0.0712	0.0545
	(0.0536)	(0.0493)	(0.0958)	(0.0752)	(0.0556)	(0.0777)
Market-to-book	-0.0130	-0.0168	-0.0126	-0.0154	0.0160	0.0171
	(0.0116)	(0.0113)	(0.0132)	(0.0155)	(0.0138)	(0.0166)
Tangibility	-0.0649**	-0.0654**	-0.0103	-0.0970***	0.0556**	0.0176
	(0.0271)	(0.0254)	(0.0431)	(0.0374)	(0.0272)	(0.0330)
Liquidity	-0.0840	-0.0401	-0.0014	-0.0696	0.0221	0.0133
	(0.0600)	(0.0610)	(0.0804)	(0.0892)	(0.0493)	(0.0670)

Table 3 (continued)
Relationship between management resistance and bid outcomes for shareholders

	Linear				Probit	
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	**Announcement return**	**Post-announcement return**	**Post-bid return**	**Final premium**	**Completed**	**Termination fee**
Sales growth	-0.0099***	-0.0115***	-0.0120***	-0.0087***	0.0019	0.0042
	(0.0011)	(0.0011)	(0.0015)	(0.0016)	(0.0019)	(0.0031)
ROA	0.1758	0.1364	0.2445	0.0521	-0.0104	0.0777
	(0.1391)	(0.1279)	(0.1855)	(0.1754)	(0.0791)	(0.1064)
Stock return	-0.0676**	-0.0571**	-0.0676*	-0.1321***	0.0047	0.0174
	(0.0272)	(0.0275)	(0.0373)	(0.0456)	(0.0235)	(0.0297)
Industry concentration	-0.1156	-0.0908	-0.1718	-0.0632	0.0437	-0.5143***
	(0.0962)	(0.0912)	(0.1406)	(0.1617)	(0.1324)	(0.1495)
Constant	0.3131***	0.3421***	0.3178***	0.6152***	0.8942***	0.8121***
	(0.0720)	(0.0723)	(0.0896)	(0.1111)	(0.0087)	(0.0113)
Year indicators	Yes	Yes	Yes	Yes	Yes	Yes
Industry indicators	Yes	Yes	Yes	Yes	Yes	Yes
F	21.3***	25.6***	19.9***	5.1***		
Chi^2					134.3***	139.8***
R^2 %	6.4	6.0	2.4	4.7		
Pseudo R^2 %					23.5	15.7
Obs	975	975	967	975	975	975

Table 4

Causal relationship between the extent of the target firm's antitakeover provisions (GIM index) and the likelihood of management resistance: effects of instrumenting for the GIM index

This table presents average, marginal effects for the causal relationship between the extent of the target firm's antitakeover provisions (GIM index) and the likelihood of management resistance. Main, variable definitions are provided at the end of the paper, and the sample of bids is described in Table 1. Column (1) is a linear probability regression for the likelihood of management resistance on the GIM index (non-causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, and other variables (including year indicators and industry indicators). Columns (2) and (3) are the first and second stages, respectively, of an instrumental-variables (IV), linear probability regression (using two-stage least-squares estimation) for the likelihood of management resistance on the GIM index (direct, causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, and the other variables. The instruments for the GIM index in the first stage, only, are the pseudo, GIM indices for same-age (peer) firms and headquarters-proximate (HQ) firms, which roll forward each year with a lag of at least three years. Column (4) does the same as Column (1), but for a probit regression. Columns (5) and (6) do the same as Columns (2) and (3), respectively, but for an IV, probit regression (using maximum-likelihood estimation). Robust, standard errors are shown in brackets underneath the marginal effects. ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	Linear prob.	**IV, linear prob.**		**Probit**	**IV, probit**	
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Variables	**Resistance**	**GIM index**	**Resistance**	**Resistance**	**GIM index**	**Resistance**
GIM index	0.0062		0.0585***	0.0065		0.0554***
	(0.0046)		(0.0192)	(0.0045)		(0.0179)
Peers, GIM index (rolling)		0.5958***			0.5944***	
		(0.0743)			(0.0731)	
HQ, GIM index (rolling)		0.2778**			0.2812***	
		(0.1090)			(0.1061)	
Initial premium	-0.0961***	0.0791	-0.0939***	-0.1052***	0.0791	-0.1004***
	(0.0308)	(0.2061)	(0.0323)	(0.0359)	(0.2046)	(0.0360)
All cash	0.0797***	-0.0757	0.0881***	0.0803***	-0.0755	0.0847***
	(0.0258)	(0.1613)	(0.0272)	(0.0256)	(0.1602)	(0.0255)
ln[Size]	0.0176	0.3261***	-0.0054	0.0171*	0.3264***	0.0118
	(0.0109)	(0.0650)	(0.0136)	(0.0102)	(0.0645)	(0.0116)
Leverage	0.0224	0.7007	-0.0362	0.0334	0.6997	0.0125
	(0.0742)	(0.4972)	(0.0793)	(0.0749)	(0.4938)	(0.0756)
Market-to-book	-0.0266*	-0.0780	-0.0160	-0.0328	-0.0777	-0.0241
	(0.0136)	(0.0901)	(0.0147)	(0.0213)	(0.0894)	(0.0195)
Tangibility	0.0510	-0.1117	0.0476	0.0409	-0.1119	0.0308
	(0.0337)	(0.2337)	(0.0356)	(0.0314)	(0.2320)	(0.0316)

Table 4 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions (GIM index) and the likelihood of management resistance: effects of instrumenting for the GIM index

	Linear prob.	IV, linear prob.		Probit	IV, probit	
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	**Resistance**	**GIM index**	**Resistance**	**Resistance**	**GIM index**	**Resistance**
Liquidity	-0.0561	-0.5020	-0.0285	-0.0661	-0.5017	-0.0694
	(0.0683)	(0.4543)	(0.0735)	(0.0685)	(0.4512)	(0.0685)
Sales growth	-0.0029*	-0.0083	-0.0017	-0.1019**	-0.0082	-0.1072**
	(0.0016)	(0.0104)	(0.0017)	(0.0511)	(0.0103)	(0.0530)
ROA	-0.1462	-1.4634**	-0.1041	-0.0838	-1.4680**	-0.1264
	(0.1086)	(0.6825)	(0.1140)	(0.1118)	(0.6773)	(0.1109)
Stock return	0.0059	0.2404	-0.0069	0.0148	0.2404	0.0151
	(0.0304)	(0.1971)	(0.0323)	(0.0319)	(0.1958)	(0.0323)
Industry concentration	-0.2028	-1.4295	-0.0815	-0.2111	-1.4295	-0.1531
	(0.1613)	(1.1285)	(0.1745)	(0.1795)	(1.1206)	(0.1793)
Constant	0.0669	-0.4913	-0.2843*	0.1743***	-0.5106	0.1707***
	(0.0995)	(1.2062)	(0.1631)	(0.0119)	(1.1922)	(0.0219)
Year indicators	Yes	Yes	Yes	Yes	Yes	Yes
Industry indicators	Yes	Yes	Yes	Yes	Yes	Yes
F	4.7***					
Chi^2			57.7***	41.3***		77.4***
R^2 %	4.0					
Pseudo R^2 %				5.0		
F (first stage, GIM index)			38.3***			
R^2 % (first stage, GIM index)			7.8			
Chi^2 (over-identification)			0.1			
Chi^2 (endogeneity)			8.6***			8.5***
Obs	975		954	975		954

Table 5

Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: effects of censoring firm years absent a bid

This table presents average, marginal effects for the causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance. Main, variable definitions are provided at the end of the paper, and the sample of bids and firm years is described in Table 1. Columns (1) and (2) are the first and second stages, respectively, of an instrumental-variables (IV), probit regression (using maximum-likelihood estimation) for the likelihood of a bid on the extent of a firm's antitakeover provisions (GIM index), and other variables (including year indicators and industry indicators) that are not conditional on a bid. The instruments for the GIM index in the first stage, only, are the pseudo, GIM indices for same-age (peer) firms and headquarters-proximate (HQ) firms, which roll forward each year with a lag of at least three years. Column (3) does the same as Columns (1) and (2), but in reduced form, by probit regressing the likelihood of a bid on the rolling instruments, only, for the GIM index, and the other variables that are not conditional on a bid, but with the addition of an exclusion restriction, California incorporation, which, with a lag of one year, is equal to one for a firm that is incorporated in California in the Center for Research in Security Prices/Compustat Merged database, and to zero otherwise. Columns (4) and (5) are the first and second stages, respectively, of an IV, linear probability regression (using two-stage least-squares estimation) for the likelihood of management resistance on the GIM index (direct, causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (3). The instruments for the GIM index in the first stage, only, are the same as the rolling ones in Column (3). The other variables that are not conditional on a bid are the same as those in Column (3). Columns (6) and (7) do the same as Columns (4) and (5), respectively, but for an IV, probit regression (using maximum-likelihood estimation). Standard errors are shown in brackets underneath the marginal effects. These are firm clustered, robust in Columns (1), (2), and (3), and bootstrapped in Columns (4), (5), (6), and (7). ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	IV, probit		**Probit**	**IV, linear prob.**		**IV, probit**	
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Variables	**GIM index**	**Bid**	**Bid**	**GIM index**	**Resistance**	**GIM index**	**Resistance**
GIM index		-0.0081***			0.0480**		0.0465**
		(0.0024)			(0.0209)		(0.0195)
Peers, GIM index (rolling)	0.5706***		-0.0033**	0.5641***		0.5651***	
	(0.0527)		(0.0014)	(0.0753)		(0.0740)	
HQ, GIM index (rolling)	0.3198***		-0.0044***	0.2351**		0.2320**	
	(0.0607)		(0.0016)	(0.1110)		(0.1096)	
Initial premium				0.0616	-0.0957***	0.0615	-0.1071***
				(0.2063)	(0.0314)	(0.2048)	(0.0347)
All cash				-0.0758	0.0875***	-0.0759	0.0848***
				(0.1608)	(0.0266)	(0.1596)	(0.0252)
ln[Size]	0.1335***	-0.0105***	-0.0104***	0.2336***	-0.0157	0.2332***	-0.0061
	(0.0475)	(0.0012)	(0.0012)	(0.0781)	(0.0131)	(0.0774)	(0.0117)
Leverage	0.5312	0.0189*	0.0215**	0.9522*	0.0083	0.9538*	0.0635
	(0.3251)	(0.0102)	(0.0102)	(0.5125)	(0.0813)	(0.5089)	(0.0773)

Table 5 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: effects of censoring firm years absent a bid

	IV, probit		Probit	IV, linear prob.		IV, probit	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	**GIM index**	**Bid**	**Bid**	**GIM index**	**Resistance**	**GIM index**	**Resistance**
Market-to-book	-0.0832**	-0.0079***	-0.0080***	-0.1229	-0.0233	-0.1233	-0.0309
	(0.0341)	(0.0018)	(0.0017)	(0.0924)	(0.0154)	(0.0916)	(0.0195)
Tangibility	0.1808	-0.0053	-0.0051	-0.1473	0.0408	-0.1471	0.0249
	(0.1633)	(0.0045)	(0.0044)	(0.2339)	(0.0351)	(0.2321)	(0.0316)
Liquidity	-0.8410***	-0.0297***	-0.0328***	-0.7617	-0.0729	-0.7627*	-0.1203*
	(0.2951)	(0.0092)	(0.0089)	(0.4642)	(0.0757)	(0.4609)	(0.0713)
Sales growth	-0.0323**	0.0017	0.0017	-0.0002	-0.0005	-0.0003	-0.0922*
	(0.0157)	(0.0012)	(0.0012)	(0.0107)	(0.0017)	(0.0106)	(0.0515)
ROA	0.0813	-0.0178	-0.0154	-1.4058**	-0.1157	-1.4014**	-0.1338
	(0.3770)	(0.0151)	(0.0153)	(0.6797)	(0.1110)	(0.6748)	(0.1070)
Stock return	0.1882***	-0.0034	-0.0030	0.1189	-0.0228	0.1185	-0.0094
	(0.0451)	(0.0035)	(0.0035)	(0.2039)	(0.0325)	(0.2026)	(0.0325)
Industry concentration	-1.0931*	-0.0562***	-0.0588***	-1.8970*	-0.1676	-1.8983*	-0.2560
	(0.5868)	(0.0200)	(0.0192)	(1.1406)	(0.1736)	(1.1327)	(0.1829)
California incorporation			0.0396***				
			(0.0121)				
Bid lambda				0.9662**	0.1467*	0.9688**	0.1857**
				(0.4790)	(0.0795)	(0.4756)	(0.0729)
Constant	0.3344	0.0460***	0.0460***	-0.9989	-0.3870**	-0.9818	0.1707***
	(0.7539)	(0.0025)	(0.0014)	(1.2239)	(0.1615)	(1.2189)	(0.0211)
Year indicators	Yes		Yes	Yes		Yes	
Industry indicators	Yes		Yes	Yes		Yes	
Chi^2	355.5***		365.2***	66.2***		77.1***	
Pseudo R^2 %			4.9				
F (first stage, GIM index)				31.5***			
R^2 % (first stage, GIM index)				6.4			
Chi^2 (over-identification)				0.0			
Chi^2 (endogeneity)	15.4***			4.8**		5.0**	
Obs	20,717		20,717	954		954	

Table 6

Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: effects in reduced form

This table presents average, marginal effects for the causal relationship between the extent of the target firm's antitakeover provisions (GIM index) and the likelihood of management resistance. Main, variable definitions are provided at the end of the paper, and the sample of bids and firm years is described in Table 1. Column (1) does the same as Columns (2) and (3) of Table 4, but in reduced form, by linear probability regressing the likelihood of management resistance on the rolling instruments, only, for the GIM index (indirect, causal relationship), and the other variables. Column (2) does the same as Columns (4) and (5) of Table 5, but in reduced form, by linear probability regressing the likelihood of management resistance on the rolling instruments, only, for the GIM index (indirect, causal relationship), the other variables, and the lambda for the effects of censoring firm years absent a bid. Column (3) does the same as Columns (5) and (6) of Table 4, but in reduced form, by probit regressing the likelihood of management resistance on the rolling instruments, only, for the GIM index (indirect, causal relationship), and the other variables. Column (4) does the same as Columns (6) and (7) of Table 5, but in reduced form, by probit regressing the likelihood of management resistance on the rolling instruments, only, for the GIM index (indirect, causal relationship), the other variables, and the lambda for the effects of censoring firm years absent a bid. Standard errors are shown in brackets underneath the marginal effects. These are robust in Columns (1) and (3), and bootstrapped in Columns (2) and (4). ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	Linear prob.		**Probit**	
	(1)	**(2)**	**(3)**	**(4)**
Variables	**Resistance**	**Resistance**	**Resistance**	**Resistance**
Peers, GIM index (rolling)	0.0333***	0.0269**	0.0323***	0.0269**
	(0.0116)	(0.0119)	(0.0110)	(0.0113)
HQ, GIM index (rolling)	0.0201	0.0116	0.0170	0.0091
	(0.0135)	(0.0139)	(0.0132)	(0.0135)
Initial premium	-0.0892***	-0.0927***	-0.0996***	-0.1068***
	(0.0310)	(0.0305)	(0.0360)	(0.0346)
All cash	0.0839***	0.0839***	0.0841***	0.0842***
	(0.0259)	(0.0257)	(0.0255)	(0.0252)
ln[Size]	0.0140	-0.0045	0.0132	-0.0055
	(0.0108)	(0.0120)	(0.0101)	(0.0113)
Leverage	0.0036	0.0538	0.0147	0.0671
	(0.0734)	(0.0745)	(0.0745)	(0.0747)
Market-to-book	-0.0202	-0.0292**	-0.0241	-0.0314*
	(0.0131)	(0.0138)	(0.0192)	(0.0190)
Tangibility	0.0408	0.0337	0.0304	0.0247
	(0.0336)	(0.0337)	(0.0317)	(0.0317)
Liquidity	-0.0575	-0.1093	-0.0710	-0.1229*
	(0.0686)	(0.0701)	(0.0680)	(0.0693)
Sales growth	-0.0021	-0.0005	-0.1065**	-0.0920*
	(0.0016)	(0.0017)	(0.0528)	(0.0514)
ROA	-0.1950*	-0.1835*	-0.1360	-0.1378
	(0.1130)	(0.1109)	(0.1139)	(0.1097)
Stock return	0.0072	-0.0171	0.0159	-0.0091
	(0.0301)	(0.0316)	(0.0320)	(0.0326)
Industry concentration	-0.1651	-0.2584	-0.1550	-0.2584
	(0.1621)	(0.1603)	(0.1770)	(0.1786)
Bid lambda		0.1928***		0.1892***
		(0.0711)		(0.0681)
Constant	-0.3353*	-0.4366**	0.1708***	0.1708***
	(0.1745)	(0.1773)	(0.0119)	(0.0118)
Year indicators	Yes	Yes	Yes	Yes
Industry indicators	Yes	Yes	Yes	Yes

Table 6 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: effects in reduced form

	Linear prob.		Probit	
	(1)	(2)	(3)	(4)
Variables	**Resistance**	**Resistance**	**Resistance**	**Resistance**
F	5.0***	5.2***		
Chi^2			53.5***	59.4***
R^2 %	4.9	5.6		
Pseudo R^2 %			6.1	6.9
Obs	954	954	954	954

Table 7

Causal relationship between the extent of the target firm's antitakeover provisions (GIM index) and the likelihood of management resistance: fixed instruments for the GIM index

This table presents average, marginal effects for the causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance. Main, variable definitions are provided at the end of the paper, and the sample of bids and firm years is described in Table 1. Columns (1) and (2) are the first and second stages, respectively, of an instrumental-variables (IV), probit regression (using maximum-likelihood estimation) for the likelihood of a bid on the extent of a firm's antitakeover provisions (GIM index), and other variables (including year indicators and industry indicators) that are not conditional on a bid. The instruments for the GIM index in the first stage, only, are the pseudo, GIM indices for same-age (peer) firms and headquarters-proximate (HQ) firms, which are fixed each year from an original lag of three years, instead of rolling forward each year with a lag of at least three years. Column (3) does the same as Columns (1) and (2), but in reduced form, by probit regressing the likelihood of a bid on the fixed instruments, only, for the GIM index, and the other variables that are not conditional on a bid, but with the addition of an exclusion restriction, California incorporation, which, with a lag of one year, is equal to one for a firm that is incorporated in California in the Center for Research in Security Prices/Compustat Merged database, and to zero otherwise. Columns (4) and (5) are the first and second stages, respectively, of an IV, linear probability regression (using two-stage least-squares estimation) for the likelihood of management resistance on the GIM index (direct, causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (3). The instruments for the GIM index in the first stage, only, are the same as the fixed ones in Column (3). The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (3). Column (6) does the same as Columns (4) and (5), but in reduced form, by linear probability regressing the likelihood of management resistance on the fixed instruments, only, for the GIM index (indirect, causal relationship), the other variables, and the lambda for the effects of censoring firm years absent a bid. Columns (7) and (8) do the same as Columns (4) and (5), respectively, but for an IV, probit regression (using maximum-likelihood estimation). Column (9) does the same as Column (6), but for a probit regression. Standard errors are shown in brackets underneath the marginal effects. These are firm clustered, robust in Columns (1), (2), and (3), and bootstrapped in Columns (4), (5), (6), (7), (8), and (9). ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	IV, probit		Probit	IV, linear prob.		Linear prob.	IV, probit		Probit
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	**GIM index**	**Bid**	**Bid**	**GIM index**	**Resistance**	**Resistance**	**GIM index**	**Resistance**	**Resistance**
GIM index		-0.0073***			0.0421**			0.0402**	
		(0.0022)			(0.0190)			(0.0180)	
Peers, GIM index (fixed)	0.6740***		-0.0040***	0.6380***		0.0248*	0.6355***		0.0241**
	(0.0590)		(0.0015)	(0.0831)		(0.0128)	(0.0827)		(0.0122)
HQ, GIM index (fixed)	0.3915***		-0.0038**	0.3151***		0.0190	0.3215***		0.0170
	(0.0682)		(0.0018)	(0.1023)		(0.0156)	(0.0996)		(0.0155)
Initial premium				0.0777	-0.0956***	-0.0920***	0.0781	-0.1060***	-0.1050***
				(0.2071)	(0.0311)	(0.0305)	(0.2056)	(0.0346)	(0.0346)
All cash				-0.0857	0.0871***	0.0837***	-0.0854	0.0840***	0.0836***
				(0.1601)	(0.0264)	(0.0257)	(0.1589)	(0.0252)	(0.0252)

Table 7 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions (GIM index) and the likelihood of management resistance: fixed instruments for the GIM index

	IV, probit		Probit	IV, linear prob.		Linear prob.	IV, probit		Probit
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	**GIM index**	**Bid**	**Bid**	**GIM index**	**Resistance**	**Resistance**	**GIM index**	**Resistance**	**Resistance**
ln[Size]	0.1033**	-0.0104***	-0.0102***	0.2245***	-0.0141	-0.0041	0.2252***	-0.0060	-0.0047
	(0.0480)	(0.0012)	(0.0012)	(0.0768)	(0.0129)	(0.0120)	(0.0762)	(0.0117)	(0.0113)
Leverage	0.5224	0.0190*	0.0213**	0.9198*	0.0141	0.0501	0.9166*	0.0628	0.0635
	(0.3239)	(0.0102)	(0.0102)	(0.5090)	(0.0802)	(0.0746)	(0.5054)	(0.0773)	(0.0748)
Market-to-book	-0.0711**	-0.0079***	-0.0080***	-0.1138	-0.0246	-0.0290**	-0.1134	-0.0300	-0.0297
	(0.0337)	(0.0018)	(0.0017)	(0.0916)	(0.0150)	(0.0140)	(0.0909)	(0.0198)	(0.0194)
Tangibility	0.1357	-0.0050	-0.0050	-0.2111	0.0410	0.0321	-0.2111	0.0241	0.0237
	(0.1631)	(0.0045)	(0.0044)	(0.2304)	(0.0347)	(0.0338)	(0.2287)	(0.0317)	(0.0318)
Liquidity	-0.8501***	-0.0295***	-0.0324***	-0.8393*	-0.0782	-0.1117	-0.8373*	-0.1226*	-0.1234*
	(0.2921)	(0.0091)	(0.0089)	(0.4637)	(0.0745)	(0.0699)	(0.4602)	(0.0712)	(0.0693)
Sales growth	-0.0225	0.0016	0.0016	0.0056	-0.0006	-0.0003	0.0057	-0.0945*	-0.0935*
	(0.0137)	(0.0012)	(0.0012)	(0.0105)	(0.0017)	(0.0017)	(0.0104)	(0.0519)	(0.0518)
ROA	0.0236	-0.0175	-0.0167	-1.5325**	-0.1198	-0.1899*	-1.5388**	-0.1344	-0.1449
	(0.3753)	(0.0151)	(0.0152)	(0.6677)	(0.1099)	(0.1095)	(0.6623)	(0.1070)	(0.1095)
Stock return	0.1706***	-0.0034	-0.0030	0.1618	-0.0217	-0.0144	0.1624	-0.0076	-0.0069
	(0.0447)	(0.0035)	(0.0035)	(0.2043)	(0.0321)	(0.0316)	(0.2029)	(0.0325)	(0.0325)
Industry concentration	-1.1059*	-0.0563***	-0.0590***	-1.8876*	-0.1809	-0.2598	-1.8870*	-0.2548	-0.2582
	(0.5854)	(0.0199)	(0.0192)	(1.1098)	(0.1705)	(0.1597)	(1.1014)	(0.1822)	(0.1777)
California incorporation			0.0397***						
			(0.0121)						
Bid lambda				0.9528**	0.1539*	0.1909***	0.9493**	0.1875**	0.1877***
				(0.4720)	(0.0788)	(0.0712)	(0.4682)	(0.0736)	(0.0684)
Constant	-1.0611	0.0460***	0.0460***	-2.2232*	-0.3561**	-0.4805***	-2.2573**	0.1708***	0.1708***
	(0.8272)	(0.0022)	(0.0014)	(1.1648)	(0.1511)	(0.1825)	(1.1489)	(0.0187)	(0.0118)
Year indicators	Yes		Yes	Yes		Yes	Yes		Yes
Industry indicators	Yes		Yes	Yes		Yes	Yes		Yes
F						5.1***			
Chi^2	352.8***		364.5***	65.7***			70.8***		58.3***

Table 7 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions (GIM index) and the likelihood of management resistance: fixed instruments for the GIM index

	IV, probit		Probit	IV, linear prob.		Linear prob.	IV, probit		Probit
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	**GIM index**	**Bid**	**Bid**	**GIM index**	**Resistance**	**Resistance**	**GIM index**	**Resistance**	**Resistance**
R^2 %						5.6			
Pseudo R^2 %			4.9						6.8
F (first stage, GIM index)				37.1***					
R^2 % (first stage, GIM index)				7.3					
Chi^2 (over-identification)				0.2					
Chi^2 (endogeneity)	15.7***			4.3**			4.1**		
Obs	20,717		20,717	954		954	954		954

Table 8

Causal relationship between the extent of the target firm's antitakeover provisions (GIM index) and the likelihood of management resistance: threshold-based measure for the GIM index

This table presents average, marginal effects for the causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance. Main, variable definitions are provided at the end of the paper, and the sample of bids and firm years is described in Table 1. The additive measure for the extent of a firm's antitakeover provisions (GIM index) is replaced with a threshold-based measure, GIM dictatorship, which is equal to one for a firm that has a GIM index in excess of the median, GIM index for all firms that are in the same year as the focus firm, and to zero otherwise. Column (1) is a probit regression for the likelihood of management resistance on GIM dictatorship (non-causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, and other variables (including year indicators and industry indicators) that are not conditional on a bid. Columns (2) and (3) are the first and second stages, respectively, of a recursive, bivariate (bi-)probit regression for the likelihood of a bid on GIM dictatorship, and the other variables that are not conditional on a bid. The instruments for GIM dictatorship (exclusion restrictions) in the first stage, only, are the pseudo, GIM indices for same-age (peer) firms and headquarters-proximate (HQ) firms, which roll forward each year with a lag of at least three years. Columns (4) and (5) are the first and second stages, respectively, of a recursive, bi-probit regression for the likelihood of management resistance on GIM dictatorship (direct, causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (3) of Table 5. The instruments for GIM dictatorship (exclusion restrictions) in the first stage, only, are the same as the rolling instruments for the GIM index in Column (3) of Table 5. The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (3) of Table 5. Columns (6) and (7) do the same as Columns (2) and (3), respectively, but with pseudo, GIM indices for peer firms and HQ firms that are fixed each year from an original lag of three years. Columns (8) and (9) are the first and second stages, respectively, of a recursive, bi-probit regression for the likelihood of management resistance on GIM dictatorship (direct, causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (3) of Table 7. The instruments for GIM dictatorship (exclusion restrictions) in the first stage, only, are the same as the fixed instruments for the GIM index in Column (3) of Table 7. The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (3) of Table 7. Standard errors are shown in brackets underneath the marginal effects. These are robust in Column (1), firm clustered, robust in Columns (2), (3), (6), and (7), and bootstrapped in Columns (4), (5), (8), and (9). ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	Probit	Recursive, bi-probit		Recursive, bi-probit		Recursive, bi-probit		Recursive, bi-probit	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	Resistance	GIM dictatorship	Bid	GIM dictatorship	Resistance	GIM dictatorship	Bid	GIM dictatorship	Resistance
GIM dictatorship	0.0383		-0.0497***		0.2601***		-0.0447***		0.2242**
	(0.0246)		(0.0144)		(0.0932)		(0.0128)		(0.0899)
Peers, GIM index (rolling)		0.0885***		0.0944***					
		(0.0090)		(0.0135)					
HQ, GIM index (rolling)		0.0515***		0.0442**					
		(0.0108)		(0.0176)					
Peers, GIM index (fixed)						0.1024***		0.1005***	
						(0.0099)		(0.0150)	

Table 8 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions (GIM index) and the likelihood of management resistance: threshold-based measure for the GIM index

	Probit	Recursive, bi-probit		Recursive, bi-probit		Recursive, bi-probit		Recursive, bi-probit	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	Resistance	GIM dictatorship	Bid	GIM dictatorship	Resistance	GIM dictatorship	Bid	GIM dictatorship	Resistance
HQ, GIM index (fixed)						0.0586***		0.0513***	
						(0.0120)		(0.0185)	
Initial premium	-0.1064***			0.0212	-0.1081***			0.0223	-0.1085***
	(0.0357)			(0.0417)	(0.0337)			(0.0419)	(0.0338)
All cash	0.0795***			0.0002	0.0817***			-0.0013	0.0823***
	(0.0256)			(0.0320)	(0.0254)			(0.0322)	(0.0255)
ln[Size]	0.0174*	0.0168**	-0.0105***	0.0380**	-0.0147	0.0122	-0.0106***	0.0365**	-0.0134
	(0.0101)	(0.0083)	(0.0014)	(0.0151)	(0.0115)	(0.0084)	(0.0014)	(0.0151)	(0.0116)
Leverage	0.0336	0.1046*	0.0271**	0.1227	0.0350	0.1044*	0.0264**	0.1159	0.0408
	(0.0749)	(0.0576)	(0.0123)	(0.0996)	(0.0761)	(0.0573)	(0.0119)	(0.0998)	(0.0763)
Market-to-book	-0.0331	-0.0115	-0.0095***	-0.0014	-0.0307	-0.0097	-0.0092***	-0.0005	-0.0306
	(0.0213)	(0.0076)	(0.0021)	(0.0176)	(0.0188)	(0.0075)	(0.0021)	(0.0176)	(0.0192)
Tangibility	0.0387	0.0362	-0.0036	0.0298	0.0158	0.0303	-0.0039	0.0231	0.0185
	(0.0314)	(0.0295)	(0.0052)	(0.0429)	(0.0320)	(0.0294)	(0.0051)	(0.0430)	(0.0320)
Liquidity	-0.0693	-0.1517***	-0.0427***	-0.0453	-0.1095	-0.1536***	-0.0411***	-0.0595	-0.1128
	(0.0685)	(0.0558)	(0.0112)	(0.0930)	(0.0691)	(0.0554)	(0.0107)	(0.0937)	(0.0693)
Sales growth	-0.1021**	-0.0148	0.0015	-0.0080	-0.0858*	-0.0114	0.0016	-0.0068	-0.0904*
	(0.0509)	(0.0144)	(0.0014)	(0.0079)	(0.0490)	(0.0121)	(0.0014)	(0.0070)	(0.0501)
ROA	-0.0850	0.0244	-0.0188	-0.2029	-0.0904	0.0172	-0.0190	-0.2036	-0.0918
	(0.1119)	(0.0835)	(0.0175)	(0.1387)	(0.1036)	(0.0822)	(0.0171)	(0.1388)	(0.1048)
Stock return	0.0147	0.0245***	-0.0022	0.0391	-0.0182	0.0218**	-0.0025	0.0461	-0.0170
	(0.0320)	(0.0088)	(0.0039)	(0.0396)	(0.0321)	(0.0087)	(0.0038)	(0.0394)	(0.0322)
Industry concentration	-0.2185	-0.1358	-0.0714***	0.0441	-0.2582	-0.1369	-0.0698***	0.0302	-0.2647
	(0.1778)	(0.1048)	(0.0230)	(0.2038)	(0.1719)	(0.1044)	(0.0224)	(0.2029)	(0.1732)
Bid lambda				0.0521	0.1753***			0.0491	0.1832***
				(0.0891)	(0.0669)			(0.0895)	(0.0673)
Constant	0.1743***	0.4217***	0.0564***	0.4160***	0.2106***	0.4217***	0.0546***	0.4162***	0.2009***
	(0.0119)	(0.0109)	(0.0056)	(0.0151)	(0.0288)	(0.0108)	(0.0047)	(0.0151)	(0.0259)

Table 8 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions (GIM index) and the likelihood of management resistance: threshold-based measure for the GIM index

	Probit	Recursive, bi-probit		Recursive, bi-probit		Recursive, bi-probit		Recursive, bi-probit	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	Resistance	GIM dictatorship	Bid	GIM dictatorship	Resistance	GIM dictatorship	Bid	GIM dictatorship	Resistance
Year indicators	Yes	Yes		Yes		Yes		Yes	
Industry indicators	Yes	Yes		Yes		Yes		Yes	
Chi^2	41.7***	712.4***		225.9***		698.8***		207.2***	
Pseudo R^2 %	5.1								
Chi^2 (endogeneity)		15.6***		6.0**		15.6***		4.9**	
Obs	975	20,717		954		20,717		954	

Table 9

Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Bebchuk, Cohen, and Ferrell (2009) index

This table presents average, marginal effects for the causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance. Main, variable definitions are provided at the end of the paper, and the sample of bids and firm years is described in Table 1. The Gompers, Ishii, and Metrick (2003) (GIM) index for the extent of a firm's antitakeover provisions is replaced with a Bebchuk, Cohen, and Ferrell (2009) (BCF) index, which adds one for each antitakeover provision that a firm has out of a subset of six – including staggered/classified board, supermajority amendment, and poison pill, but excluding fair price amendment – from the GIM index. Column (1) is a linear probability regression for the likelihood of management resistance on the BCF index (non-causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, and other variables (including year indicators and industry indicators) that are not conditional on a bid. Columns (2) and (3) are the first and second stages, respectively, of an instrumental-variables (IV), probit regression (using maximum-likelihood estimation) for the likelihood of a bid on the BCF index, and the other variables that are not conditional on a bid. The instruments for the BCF index in the first stage, only, are pseudo, BCF indices for same-age (peer) firms and headquarters-proximate (HQ) firms, which are constructed for the subset of six, antitakeover provisions of the BCF index in otherwise the same way as those for the GIM index, and which roll forward each year with a lag of at least three years. Column (4) does the same as Columns (2) and (3), but in reduced form, by probit regressing the likelihood of a bid on the rolling instruments, only, for the BCF index, and the other variables that are not conditional on a bid, but with the addition of an exclusion restriction, California incorporation, which, with a lag of one year, is equal to one for a firm that is incorporated in California in the Center for Research in Security Prices/Compustat Merged database, and to zero otherwise. Columns (5) and (6) are the first and second stages, respectively, of an IV, linear probability regression (using two-stage least-squares estimation) for the likelihood of management resistance on the BCF index (direct, causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (4). The instruments for the BCF index in the first stage, only, are the same as the rolling ones in Column (4). The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (4). Column (7) does the same as Columns (5) and (6), but in reduced form, by linear probability regressing the likelihood of management resistance on the rolling instruments, only, for the BCF index (indirect, causal relationship), the other variables, and the lambda for the effects of censoring firm years absent a bid. Standard errors are shown in brackets underneath the marginal effects. These are robust in Column (1), firm clustered, robust in Columns (2), (3), and (4), and bootstrapped in Columns (5), (6), and (7). ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	Linear prob.	**IV, probit**		**Probit**	**IV, linear prob.**		**Linear prob.**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Variables	**Resistance**	**BCF index**	**Bid**	**Bid**	**BCF index**	**Resistance**	**Resistance**
BCF index	0.0102		-0.0319**			0.0101	
	(0.0098)		(0.0131)			(0.0626)	
Peers, BCF index (rolling)		0.2864***		-0.0090**	0.2880***		0.0229
		(0.0705)		(0.0041)	(0.1060)		(0.0328)
HQ, BCF index (rolling)		0.2957***		-0.0083**	0.3952***		-0.0088
		(0.0621)		(0.0034)	(0.1065)		(0.0310)
Initial premium	-0.0976***				0.1844*	-0.0974***	-0.0961***
	(0.0309)				(0.1066)	(0.0316)	(0.0304)

Table 9 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Bebchuk, Cohen, and Ferrell (2009) index

	Linear prob.	IV, probit		Probit	IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	**Resistance**	**BCF index**	**Bid**	**Bid**	**BCF index**	**Resistance**	**Resistance**
All cash	0.0789***				0.0008	0.0851***	0.0836***
	(0.0259)				(0.0834)	(0.0257)	(0.0260)
ln[Size]	0.0195*	-0.0319	-0.0110***	-0.0108***	0.0534	-0.0038	-0.0037
	(0.0107)	(0.0232)	(0.0017)	(0.0012)	(0.0393)	(0.0118)	(0.0121)
Leverage	0.0209	0.3999**	0.0201*	0.0224**	0.5829**	0.0538	0.0610
	(0.0744)	(0.1639)	(0.0114)	(0.0102)	(0.2621)	(0.0859)	(0.0742)
Market-to-book	-0.0261*	-0.0757***	-0.0076***	-0.0079***	-0.1102***	-0.0307*	-0.0320**
	(0.0137)	(0.0179)	(0.0022)	(0.0017)	(0.0420)	(0.0178)	(0.0143)
Tangibility	0.0517	0.1130	-0.0060	-0.0057	-0.0438	0.0432	0.0428
	(0.0337)	(0.0833)	(0.0045)	(0.0044)	(0.1225)	(0.0337)	(0.0339)
Liquidity	-0.0565	-0.5383***	-0.0301***	-0.0331***	-0.2849	-0.1124	-0.1150
	(0.0684)	(0.1543)	(0.0115)	(0.0089)	(0.2344)	(0.0738)	(0.0705)
Sales growth	-0.0030*	0.0005	0.0017	0.0017	-0.0056	-0.0008	-0.0011
	(0.0016)	(0.0068)	(0.0012)	(0.0012)	(0.0059)	(0.0018)	(0.0018)
ROA	-0.1531	0.0830	-0.0162	-0.0160	-0.0580	-0.1524	-0.1465
	(0.1089)	(0.2027)	(0.0152)	(0.0153)	(0.3121)	(0.1069)	(0.1101)
Stock return	0.0069	0.1071***	-0.0038	-0.0033	0.0256	-0.0186	-0.0187
	(0.0303)	(0.0229)	(0.0035)	(0.0035)	(0.0985)	(0.0310)	(0.0314)
Industry concentration	-0.2108	-0.6635**	-0.0564**	-0.0598***	-0.2828	-0.2742*	-0.2750*
	(0.1609)	(0.2946)	(0.0221)	(0.0192)	(0.6584)	(0.1624)	(0.1606)
California incorporation				0.0415***			
				(0.0123)			
Bid lambda					0.0858	0.2078***	0.2068***
					(0.2418)	(0.0727)	(0.0713)
Constant	0.0867	1.3130***	0.0461***	0.0461***	0.4586	-0.1560	-0.1613
	(0.0953)	(0.2774)	(0.0079)	(0.0015)	(0.4624)	(0.1647)	(0.1507)
Year indicators	Yes	Yes		Yes	Yes		Yes
Industry indicators	Yes	Yes		Yes	Yes		Yes
F	4.6***						4.4***

Table 9 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Bebchuk, Cohen, and Ferrell (2009) index

	Linear prob.	IV, probit		Probit	IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	**Resistance**	**BCF index**	**Bid**	**Bid**	**BCF index**	**Resistance**	**Resistance**
Chi^2		411.4***		363.7***	60.5***		
R^2 %	3.9						4.7
Pseudo R^2 %				4.9			
F (first stage, BCF index)					10.7***		
R^2 % (first stage, BCF index)					2.4		
Chi^2 (over-identification)					0.5		
Chi^2 (endogeneity)		12.8***			0.0		
Obs	975	20,717		20,717	954		954

Table 10

Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Karpoff, Schonlau, and Wehrly (2017) index

This table presents average, marginal effects for the causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance. Main, variable definitions are provided at the end of the paper, and the sample of bids and firm years is described in Table 1. The Gompers, Ishii, and Metrick (2003) (GIM) index for the extent of a firm's antitakeover provisions is replaced with a Karpoff, Schonlau, and Wehrly (2017) (KSW) index, which is the GIM index minus a Bebchuk, Cohen, and Ferrell (2009) (BCF) index that adds one for each antitakeover provision that a firm has out of a subset of six – including staggered/classified board, supermajority amendment, and poison pill, but excluding fair price amendment – from the GIM index. Column (1) is a linear probability regression for the likelihood of management resistance on the KSW index (non-causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, and other variables (including year indicators and industry indicators) that are not conditional on a bid. Columns (2) and (3) are the first and second stages, respectively, of an instrumental-variables (IV), probit regression (using maximum-likelihood estimation) for the likelihood of a bid on the KSW index, and the other variables that are not conditional on a bid. The instruments for the KSW index in the first stage, only, are pseudo, KSW indices for same-age (peer) firms and headquarters-proximate (HQ) firms, which are those for the GIM index minus those constructed for the subset of six, antitakeover provisions of the BCF index in otherwise the same way as those for the GIM index, and which roll forward each year with a lag of at least three years. Column (4) does the same as Columns (2) and (3), but in reduced form, by probit regressing the likelihood of a bid on the rolling instruments, only, for the KSW index, and the other variables that are not conditional on a bid, but with the addition of an exclusion restriction, California incorporation, which, with a lag of one year, is equal to one for a firm that is incorporated in California in the Center for Research in Security Prices/Compustat Merged database, and to zero otherwise. Columns (5) and (6) are the first and second stages, respectively, of an IV, linear probability regression (using two-stage least-squares estimation) for the likelihood of management resistance on the KSW index (direct, causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (4). The instruments for the KSW index in the first stage, only, are the same as the rolling ones in Column (4). The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (4). Column (7) does the same as Columns (5) and (6), but in reduced form, by linear probability regressing the likelihood of management resistance on the rolling instruments, only, for the KSW index (indirect, causal relationship), the other variables, and the lambda for the effects of censoring firm years absent a bid. Standard errors are shown in brackets underneath the marginal effects. These are robust in Column (1), firm clustered, robust in Columns (2), (3), and (4), and bootstrapped in Columns (5), (6), and (7). ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	Linear prob.	**IV, probit**		**Probit**	**IV, linear prob.**		**Linear prob.**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Variables	**Resistance**	**KSW index**	**Bid**	**Bid**	**KSW index**	**Resistance**	**Resistance**
KSW index	0.0071		-0.0092***			0.0717***	
	(0.0064)		(0.0029)			(0.0260)	
Peers, KSW index (rolling)		0.5948***		-0.0041**	0.6090***		0.0412***
		(0.0492)		(0.0018)	(0.0705)		(0.0158)
HQ, KSW index (rolling)		0.3528***		-0.0051**	0.2079**		0.0228
		(0.0584)		(0.0023)	(0.0980)		(0.0185)
Initial premium	-0.0950***				-0.1122	-0.0855***	-0.0939***
	(0.0309)				(0.1511)	(0.0319)	(0.0305)

Table 10 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Karpoff, Schonlau, and Wehrly (2017) index

	Linear prob.	IV, probit		Probit	IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	**Resistance**	**KSW index**	**Bid**	**Bid**	**KSW index**	**Resistance**	**Resistance**
All cash	0.0802***				-0.0566	0.0917***	0.0882***
	(0.0258)				(0.1150)	(0.0268)	(0.0256)
ln[Size]	0.0177	0.1685***	-0.0103***	-0.0103***	0.1848***	-0.0194	-0.0054
	(0.0109)	(0.0335)	(0.0013)	(0.0012)	(0.0555)	(0.0135)	(0.0120)
Leverage	0.0259	0.1226	0.0190*	0.0211**	0.3501	0.0321	0.0550
	(0.0739)	(0.2245)	(0.0102)	(0.0102)	(0.3668)	(0.0790)	(0.0743)
Market-to-book	-0.0274**	-0.0134	-0.0078***	-0.0078***	-0.0100	-0.0294**	-0.0296**
	(0.0136)	(0.0241)	(0.0018)	(0.0017)	(0.0654)	(0.0147)	(0.0137)
Tangibility	0.0511	0.0785	-0.0053	-0.0053	-0.1077	0.0381	0.0301
	(0.0338)	(0.1111)	(0.0044)	(0.0044)	(0.1595)	(0.0357)	(0.0338)
Liquidity	-0.0577	-0.2940	-0.0302***	-0.0325***	-0.4689	-0.0768	-0.1089
	(0.0682)	(0.2108)	(0.0090)	(0.0089)	(0.3343)	(0.0752)	(0.0699)
Sales growth	-0.0030*	-0.0331**	0.0017	0.0017	0.0077	-0.0008	-0.0001
	(0.0016)	(0.0141)	(0.0012)	(0.0012)	(0.0076)	(0.0018)	(0.0017)
ROA	-0.1442	0.0162	-0.0195	-0.0178	-1.4199***	-0.0859	-0.1945*
	(0.1091)	(0.2613)	(0.0151)	(0.0153)	(0.4906)	(0.1159)	(0.1103)
Stock return	0.0062	0.0843***	-0.0033	-0.0031	0.1039	-0.0241	-0.0160
	(0.0304)	(0.0317)	(0.0035)	(0.0035)	(0.1449)	(0.0331)	(0.0317)
Industry concentration	-0.2029	-0.4349	-0.0574***	-0.0589***	-1.6138**	-0.1433	-0.2570
	(0.1614)	(0.4151)	(0.0199)	(0.0193)	(0.7066)	(0.1704)	(0.1604)
California incorporation				0.0413***			
				(0.0122)			
Bid lambda					0.8571**	0.1361*	0.1936***
					(0.3324)	(0.0780)	(0.0702)
Constant	0.0757	-0.7089	0.0460***	0.0460***	-1.3028	-0.3850**	-0.5123***
	(0.1004)	(0.5212)	(0.0020)	(0.0015)	(0.8439)	(0.1511)	(0.1742)
Year indicators	Yes	Yes		Yes	Yes		Yes
Industry indicators	Yes	Yes		Yes	Yes		Yes
F	4.5***						5.4***

Table 10 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Karpoff, Schonlau, and Wehrly (2017) index

	Linear prob.	IV, probit		Probit	IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	**Resistance**	**KSW index**	**Bid**	**Bid**	**KSW index**	**Resistance**	**Resistance**
Chi^2		346.3***		361.8***	64.6***		
R^2 %	3.9						6.0
Pseudo R^2 %				4.9			
F (first stage, KSW index)					42.2***		
R^2 % (first stage, KSW index)					8.2		
Chi^2 (over-identification)					0.2		
Chi^2 (endogeneity)		10.8***			8.0***		
Obs	975	20,717		20,717	954		954

Table 11

Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Bebchuk, Cohen, and Ferrell (2009) index and Karpoff, Schonlau, and Wehrly (2017) index jointly

This table presents average, marginal effects for the causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance. Main, variable definitions are provided at the end of the paper, and the sample of bids and firm years is described in Table 1. The Gompers, Ishii, and Metrick (2003) (GIM) index for the extent of a firm's antitakeover provisions is jointly replaced with a Bebchuk, Cohen, and Ferrell (2009) (BCF) index, which adds one for each antitakeover provision that a firm has out of a subset of six – including staggered/classified board, supermajority amendment, and poison pill, but excluding fair price amendment – from the GIM index, and a Karpoff, Schonlau, and Wehrly (2017) (KSW) index, which is the GIM index minus the BCF index. Column (1) is a linear probability regression for the likelihood of management resistance on the BCF index (non-causal relationship), the KSW index (non-causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, and other variables (including year indicators and industry indicators) that are not conditional on a bid. Columns (2) and (3) are the joint, first stages, and Column (4) is the second stage, of an instrumental-variables (IV), probit regression (using maximum-likelihood estimation) for the likelihood of a bid on the BCF index, the KSW index, and the other variables that are not conditional on a bid. The instruments for the BCF index in the joint, first stages, only, are pseudo, BCF indices for same-age (peer) firms and headquarters-proximate (HQ) firms, which are constructed for the subset of six, antitakeover provisions of the BCF index in otherwise the same way as those for the GIM index, and which roll forward each year with a lag of at least three years. The instruments for the KSW index in the joint, first stages, only, are pseudo, KSW indices for peer firms and HQ firms, which are those for the GIM index minus those for the BCF index, and which also roll forward each year with a lag of at least three years. Column (5) does the same as Columns (2), (3), and (4), but in reduced form, by probit regressing the likelihood of a bid on the rolling instruments, only, for the BCF index and KSW index, and the other variables that are not conditional on a bid, but with the addition of an exclusion restriction, California incorporation, which, with a lag of one year, is equal to one for a firm that is incorporated in California in the Center for Research in Security Prices/Compustat Merged database, and to zero otherwise. Columns (6) and (7) are the joint, first stages, and Column (8) is the second stage, of an IV, linear probability regression (using two-stage least-squares estimation) for the likelihood of management resistance on the BCF index (direct, causal relationship), the KSW index (direct, causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (5). The instruments for the BCF index and KSW index in the joint, first stages, only, are the same as the rolling ones in Column (5). The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (5). Column (9) does the same as Columns (6), (7), and (8), but in reduced form, by linear probability regressing the likelihood of management resistance on the rolling instruments, only, for the BCF index and KSW index (indirect, causal relationships), the other variables, and the lambda for the effects of censoring firm years absent a bid. Standard errors are shown in brackets underneath the marginal effects. These are robust in Column (1), firm clustered, robust in Columns (2), (3), (4), and (5), and bootstrapped in Columns (6), (7), (8), and (9). ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	Linear prob.		**IV, probit**		**Probit**	**IV, linear prob.**			**Linear prob.**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**
Variables	**Resistance**	**BCF index**	**KSW index**	**Bid**	**Bid**	**BCF index**	**KSW index**	**Resistance**	**Resistance**
BCF index	0.0077			-0.0222				-0.0361	
	(0.0105)			(0.0151)				(0.0712)	
Peers, BCF index (rolling)		0.1161	0.0966		-0.0054	0.1639	0.0558		-0.0319
		(0.0860)	(0.1274)		(0.0052)	(0.1238)	(0.1835)		(0.0390)

Table 11 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Bebchuk, Cohen, and Ferrell (2009) index and Karpoff, Schonlau, and Wehrly (2017) index jointly

	Linear prob.	IV, probit			Probit	IV, linear prob.			Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	**Resistance**	**BCF index**	**KSW index**	**Bid**	**Bid**	**BCF index**	**KSW index**	**Resistance**	**Resistance**
HQ, BCF index (rolling)		0.2912***	-0.0785		-0.0058	0.3929***	-0.2458		-0.0263
		(0.0669)	(0.1011)		(0.0037)	(0.1068)	(0.1624)		(0.0330)
KSW index	0.0053			-0.0035				0.0796***	
	(0.0070)			(0.0043)				(0.0291)	
Peers, KSW index (rolling)		0.1307***	0.5697***		-0.0026	0.1047*	0.5931***		0.0496***
		(0.0409)	(0.0596)		(0.0023)	(0.0585)	(0.0857)		(0.0190)
HQ, KSW index (rolling)		-0.0061	0.3742***		-0.0037	-0.0025	0.2650**		0.0271
		(0.0454)	(0.0630)		(0.0025)	(0.0741)	(0.1027)		(0.0199)
Initial premium	-0.0964***					0.1886*	-0.1338	-0.0790**	-0.0962***
	(0.0311)					(0.1066)	(0.1505)	(0.0347)	(0.0305)
All cash	0.0796***					0.0163	-0.0483	0.0942***	0.0931***
	(0.0260)					(0.0842)	(0.1174)	(0.0272)	(0.0258)
ln[Size]	0.0179*	-0.0476**	0.1685***	-0.0103***	-0.0105***	0.0453	0.1834***	-0.0191	-0.0057
	(0.0108)	(0.0242)	(0.0336)	(0.0023)	(0.0012)	(0.0397)	(0.0553)	(0.0137)	(0.0121)
Leverage	0.0216	0.4331***	0.1275	0.0184	0.0217**	0.5911**	0.3740	0.0520	0.0583
	(0.0744)	(0.1633)	(0.2244)	(0.0121)	(0.0102)	(0.2610)	(0.3691)	(0.0916)	(0.0748)
Market-to-book	-0.0264*	-0.0712***	-0.0147	-0.0077***	-0.0081***	-0.1112***	-0.0194	-0.0340*	-0.0313**
	(0.0137)	(0.0178)	(0.0240)	(0.0023)	(0.0017)	(0.0419)	(0.0658)	(0.0184)	(0.0142)
Tangibility	0.0511	0.0979	0.0800	-0.0053	-0.0052	-0.0661	-0.1011	0.0370	0.0299
	(0.0337)	(0.0834)	(0.1111)	(0.0045)	(0.0044)	(0.1224)	(0.1599)	(0.0364)	(0.0340)
Liquidity	-0.0559	-0.5500***	-0.3003	-0.0293**	-0.0329***	-0.2865	-0.4740	-0.0836	-0.1098
	(0.0684)	(0.1544)	(0.2117)	(0.0121)	(0.0089)	(0.2351)	(0.3378)	(0.0783)	(0.0701)
Sales growth	-0.0029*	0.0034	-0.0336**	0.0016	0.0017	-0.0037	0.0063	-0.0010	0.0000
	(0.0016)	(0.0066)	(0.0140)	(0.0012)	(0.0012)	(0.0058)	(0.0079)	(0.0019)	(0.0017)
ROA	-0.1474	0.0954	0.0392	-0.0176	-0.0150	-0.1013	-1.3371***	-0.0726	-0.1875*
	(0.1094)	(0.2045)	(0.2634)	(0.0152)	(0.0153)	(0.3175)	(0.4928)	(0.1235)	(0.1131)
Stock return	0.0060	0.1028***	0.0856***	-0.0035	-0.0030	0.0291	0.1053	-0.0232	-0.0144
	(0.0304)	(0.0229)	(0.0317)	(0.0036)	(0.0035)	(0.0983)	(0.1447)	(0.0334)	(0.0317)

Table 11 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Bebchuk, Cohen, and Ferrell (2009) index and Karpoff, Schonlau, and Wehrly (2017) index jointly

	Linear prob.	IV, probit			Probit	IV, linear prob.			Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	**Resistance**	**BCF index**	**KSW index**	**Bid**	**Bid**	**BCF index**	**KSW index**	**Resistance**	**Resistance**
Industry concentration	-0.2038	-0.7040**	-0.4312	-0.0553**	-0.0589***	-0.2765	-1.6202**	-0.1412	-0.2595
	(0.1617)	(0.2955)	(0.4139)	(0.0227)	(0.0192)	(0.6528)	(0.7109)	(0.1693)	(0.1616)
California incorporation					0.0395***				
					(0.0121)				
Bid lambda						0.0954	0.8636***	0.1318*	0.1948***
						(0.2427)	(0.3343)	(0.0771)	(0.0712)
Constant	0.0678	0.9439**	-0.7263	0.0460***	0.0460***	0.1138	-1.1456	-0.3420**	-0.4636***
	(0.1001)	(0.3813)	(0.5297)	(0.0069)	(0.0014)	(0.6172)	(0.8556)	(0.1694)	(0.1790)
Year indicators	Yes		Yes		Yes		Yes		Yes
Industry indicators	Yes		Yes		Yes		Yes		Yes
F	4.3***								4.7***
Chi^2			380.1***		365.9***		63.1***		
R^2 %	4.0								6.1
Pseudo R^2 %					4.9				
F (first stage, BCF index)							6.2***		
R^2 % (first stage, BCF index)							2.7		
F (first stage, KSW index)							22.0***		
R^2 % (first stage, KSW index)							8.5		
Chi^2 (over-identification)							0.8		
Chi^2 (endogeneity)			14.4***				8.8**		
Obs	975		20,717		20,717		954		954

Table 12

Causal relationship between the actual premium offered by the initial bidder and the likelihood of management resistance

This table presents average, marginal effects for the causal relationship between the actual premium offered by the initial bidder and the likelihood of management resistance. Main, variable definitions are provided at the end of the paper, and the sample of bids and firm years is described in Table 1. Column (1) is a linear regression for the actual premium offered by the initial bidder on the instruments, only, for the extent of the target firm's antitakeover provisions (GIM index), the indicator for an all, cash bid, other variables (including year indicators and industry indicators) that are not conditional on a bid, a lambda for the effects of censoring firm years absent a bid that is generated from Column (3) of Table 5, and an exclusion restriction, which is the pseudo, actual premium offered by the initial bidder, pre-bid price to high price. The instruments for the GIM index are the pseudo, GIM indices for same-age (peer) firms and headquarters-proximate (HQ) firms, and are the same as the ones in Column (3) of Table 5, which roll forward each year with a lag of at least three years. The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (3) of Table 5. Columns (2) and (3) are the first and second stages, respectively, of an instrumental-variables (IV), linear probability regression (using two-stage least-squares estimation) for the likelihood of management resistance on the GIM index (direct, causal relationship), a residual (abnormal part), only, for the actual premium offered by the initial bidder (non-causal relationship) that is generated from Column (1), the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (3) of Table 5. The instruments for the GIM index in the first stage, only, are the same as the rolling ones in Column (1), and the rolling ones in Column (3) of Table 5. The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (1), and those (including year indicators and industry indicators) in Column (3) of Table 5. Columns (4) and (5) do the same as Columns (2) and (3), respectively, but with the actual premium offered by the initial bidder (non-causal relationship) being jointly included with the residual. Columns (1) and (6) are the joint, first stages, and Column (7) is the second stage, of an IV, linear probability regression (using two-stage least-squares estimation) for the likelihood of management resistance on the GIM index (direct, causal relationship), the actual premium offered by the initial bidder (direct, causal relationship), the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (3) of Table 5. The instruments for the GIM index in the joint, first stages, only, are the same as the rolling ones in Column (3) of Table 5, and the instrument for the actual premium offered by the initial bidder in the joint, first stages, only, is the pseudo one, pre-bid price to high price. The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (3) of Table 5. Column (8) does the same as Columns (6) and (7), but in reduced form, by linear probability regressing the likelihood of management resistance on the rolling instruments, only, for the GIM index (indirect, causal relationship), the instrument, only, for the actual premium offered by the initial bidder (indirect, causal relationship), the other variables, and the lambda for the effects of censoring firm years absent a bid. Bootstrapped, standard errors are shown in brackets underneath the marginal effects. ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	Linear	**IV, linear prob.**		**IV, linear prob.**		**IV, linear prob.**		**Linear prob.**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Variables	**Initial premium**	**GIM index**	**Resistance**	**GIM index**	**Resistance**	**GIM index**	**Resistance**	**Resistance**
GIM index			0.0504**		0.0535**		0.0535**	
			(0.0209)		(0.0218)		(0.0223)	
Peers, GIM index (rolling)	0.0029	0.5633***		0.5521***		0.5495***		0.0293**
	(0.0105)	(0.0750)		(0.0756)		(0.0758)		(0.0120)
HQ, GIM index (rolling)	0.0035	0.2345**		0.2248**		0.2217**		0.0137
	(0.0124)	(0.1108)		(0.1109)		(0.1113)		(0.0142)

Table 12 (continued)
Causal relationship between the actual premium offered by the initial bidder and the likelihood of management resistance

	Linear	IV, linear prob.		IV, linear prob.		IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	**Initial premium**	**GIM index**	**Resistance**	**GIM index**	**Resistance**	**GIM index**	**Resistance**	**Resistance**
Initial premium				-0.8811	0.1205		0.1205	
				(0.6469)	(0.1136)		(0.1165)	
Pre-bid price to high price	-0.6758***					0.5954		-0.0499
	(0.0837)					(0.4373)		(0.0713)
Abnormal, initial premium		0.1652	-0.1194***	1.0463	-0.2404*			
		(0.2181)	(0.0345)	(0.6824)	(0.1230)			
All cash	-0.0177	-0.0777	0.0907***	-0.1052	0.0946***	-0.0896	0.0946***	0.0878***
	(0.0242)	(0.1605)	(0.0266)	(0.1625)	(0.0274)	(0.1610)	(0.0281)	(0.0260)
ln[Size]	-0.0113	0.2319***	-0.0136	0.2066**	-0.0110	0.2165***	-0.0110	-0.0005
	(0.0125)	(0.0777)	(0.0132)	(0.0817)	(0.0132)	(0.0794)	(0.0136)	(0.0122)
Leverage	0.1323*	0.9616*	-0.0086	1.0974**	-0.0298	0.9808*	-0.0298	0.0379
	(0.0699)	(0.5096)	(0.0814)	(0.5153)	(0.0832)	(0.5086)	(0.0862)	(0.0748)
Market-to-book	-0.0189	-0.1240	-0.0214	-0.1397	-0.0189	-0.1230	-0.0189	-0.0276**
	(0.0143)	(0.0925)	(0.0154)	(0.0928)	(0.0157)	(0.0912)	(0.0153)	(0.0135)
Tangibility	-0.0977***	-0.1533	0.0505	-0.2391	0.0627*	-0.1530	0.0627*	0.0427
	(0.0344)	(0.2313)	(0.0349)	(0.2400)	(0.0372)	(0.2321)	(0.0375)	(0.0332)
Liquidity	-0.0811	-0.7673*	-0.0625	-0.8470*	-0.0494	-0.7755*	-0.0494	-0.1002
	(0.0904)	(0.4636)	(0.0759)	(0.4667)	(0.0778)	(0.4615)	(0.0796)	(0.0703)
Sales growth	-0.0127***	-0.0008	0.0004	-0.0091	0.0015	0.0021	0.0015	0.0001
	(0.0018)	(0.0104)	(0.0017)	(0.0118)	(0.0019)	(0.0108)	(0.0020)	(0.0017)
ROA	0.2391	-1.4020**	-0.1175	-1.3478**	-0.1197	-1.5585**	-0.1197	-0.1761
	(0.1723)	(0.6806)	(0.1114)	(0.6818)	(0.1108)	(0.6919)	(0.1082)	(0.1093)
Stock return	0.0148	0.1111	-0.0110	-0.0010	0.0039	-0.0140	0.0039	0.0052
	(0.0501)	(0.2015)	(0.0322)	(0.2105)	(0.0342)	(0.2134)	(0.0359)	(0.0341)
Industry concentration	-0.0050	-1.9031*	-0.1536	-1.9908*	-0.1360	-1.9864*	-0.1360	-0.2422
	(0.1461)	(1.1384)	(0.1743)	(1.1451)	(0.1773)	(1.1487)	(0.1801)	(0.1599)
Bid lambda	-0.0360	0.9712**	0.1369*	1.0433**	0.1246	1.0750**	0.1246	0.1765**
	(0.0825)	(0.4778)	(0.0801)	(0.4838)	(0.0816)	(0.4880)	(0.0817)	(0.0708)

Table 12 (continued)
Causal relationship between the actual premium offered by the initial bidder and the likelihood of management resistance

	Linear	IV, linear prob.		IV, linear prob.		IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	**Initial premium**	**GIM index**	**Resistance**	**GIM index**	**Resistance**	**GIM index**	**Resistance**	**Resistance**
Constant	0.4121**	-0.9533	-0.4530***	-0.3000	-0.5361***	-0.6631	-0.5361***	-0.5297***
	(0.1768)	(1.2082)	(0.1581)	(1.3437)	(0.1884)	(1.2434)	(0.1928)	(0.1803)
Year indicators	Yes	Yes		Yes		Yes		Yes
Industry indicators	Yes	Yes		Yes		Yes		Yes
F	8.8***							4.4***
Chi^2		66.0***		65.8***		53.2***		
R^2 %	14.0							4.9
F (first stage, GIM index)		31.7***		29.6***		22.1***		
R^2 % (first stage, GIM index)		6.4		6.0		6.5		
F (first stage, Initial premium)						21.9***		
R^2 % (first stage, Initial premium)						10.1		
Chi^2 (over-identification)		0.0		0.0		0.0		
Chi^2 (endogeneity)		5.3**		5.6**		7.3**		
Obs	954	954		954		954		954

Appendix

Table A1
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Bebchuk, Cohen, and Ferrell (2009) index with fixed instruments

This table presents average, marginal effects for the causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance. Main, variable definitions are provided at the end of the paper, and the sample of bids and firm years is described in Table 1. The Gompers, Ishii, and Metrick (2003) (GIM) index for the extent of a firm's antitakeover provisions is replaced with a Bebchuk, Cohen, and Ferrell (2009) (BCF) index, which adds one for each antitakeover provision that a firm has out of a subset of six – including staggered/classified board, supermajority amendment, and poison pill, but excluding fair price amendment – from the GIM index. Columns (1) and (2) are the first and second stages, respectively, of an instrumental-variables (IV), probit regression (using maximum-likelihood estimation) for the likelihood of a bid on the BCF index, and other variables (including year indicators and industry indicators) that are not conditional on a bid. The instruments for the BCF index in the first stage, only, are pseudo, BCF indices for same-age (peer) firms and headquarters-proximate (HQ) firms, which are constructed for the subset of six, antitakeover provisions of the BCF index in otherwise the same way as those for the GIM index, and which are fixed each year from an original lag of three years, instead of rolling forward each year with a lag of at least three years. Column (3) does the same as Columns (1) and (2), but in reduced form, by probit regressing the likelihood of a bid on the fixed instruments, only, for the BCF index, and the other variables that are not conditional on a bid, but with the addition of an exclusion restriction, California incorporation, which, with a lag of one year, is equal to one for a firm that is incorporated in California in the Center for Research in Security Prices/Compustat Merged database, and to zero otherwise. Columns (4) and (5) are the first and second stages, respectively, of an IV, linear probability regression (using two-stage least-squares estimation) for the likelihood of management resistance on the BCF index (direct, causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (3). The instruments for the BCF index in the first stage, only, are the same as the fixed ones in Column (3). The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (3). Column (6) does the same as Columns (4) and (5), but in reduced form, by linear probability regressing the likelihood of management resistance on the fixed instruments, only, for the BCF index (indirect, causal relationship), the other variables, and the lambda for the effects of censoring firm years absent a bid. Standard errors are shown in brackets underneath the marginal effects. These are firm clustered, robust in Columns (1), (2), and (3), and bootstrapped in Columns (4), (5), and (6). ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	IV, probit		Probit	IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	**BCF index**	**Bid**	**Bid**	**BCF index**	**Resistance**	**Resistance**
BCF index		-0.0326**			-0.0034	
		(0.0133)			(0.0536)	
Peers, BCF index (fixed)	0.3706***		-0.0137***	0.4577***		0.0105
	(0.0912)		(0.0049)	(0.1283)		(0.0397)
HQ, BCF index (fixed)	0.3481***		-0.0080*	0.4935***		-0.0106
	(0.0747)		(0.0042)	(0.1150)		(0.0360)
Initial premium				0.1988*	-0.0955***	-0.0968***
				(0.1071)	(0.0314)	(0.0304)

Table A1 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Bebchuk, Cohen, and Ferrell (2009) index with fixed instruments

	IV, probit		Probit	IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	**BCF index**	**Bid**	**Bid**	**BCF index**	**Resistance**	**Resistance**
All cash				-0.0245	0.0852***	0.0846***
				(0.0835)	(0.0257)	(0.0261)
ln[Size]	-0.0368	-0.0108***	-0.0106***	0.0510	-0.0028	-0.0031
	(0.0234)	(0.0017)	(0.0012)	(0.0389)	(0.0119)	(0.0120)
Leverage	0.3995**	0.0202*	0.0222**	0.5238**	0.0600	0.0587
	(0.1637)	(0.0114)	(0.0102)	(0.2600)	(0.0835)	(0.0746)
Market-to-book	-0.0740***	-0.0077***	-0.0080***	-0.1059**	-0.0327**	-0.0322**
	(0.0178)	(0.0023)	(0.0017)	(0.0426)	(0.0166)	(0.0144)
Tangibility	0.1032	-0.0056	-0.0054	-0.0501	0.0433	0.0434
	(0.0837)	(0.0045)	(0.0044)	(0.1216)	(0.0339)	(0.0339)
Liquidity	-0.5378***	-0.0301***	-0.0329***	-0.2930	-0.1168	-0.1162*
	(0.1539)	(0.0116)	(0.0089)	(0.2325)	(0.0732)	(0.0704)
Sales growth	0.0025	0.0016	0.0017	-0.0035	-0.0009	-0.0010
	(0.0068)	(0.0012)	(0.0012)	(0.0056)	(0.0018)	(0.0018)
ROA	0.0768	-0.0156	-0.0160	-0.0680	-0.1506	-0.1489
	(0.2025)	(0.0151)	(0.0152)	(0.3076)	(0.1070)	(0.1087)
Stock return	0.1054***	-0.0037	-0.0032	0.0347	-0.0173	-0.0173
	(0.0229)	(0.0036)	(0.0035)	(0.0991)	(0.0310)	(0.0314)
Industry concentration	-0.6835**	-0.0557**	-0.0592***	-0.2393	-0.2760*	-0.2741*
	(0.2931)	(0.0221)	(0.0192)	(0.6498)	(0.1613)	(0.1607)
California incorporation			0.0409***			
			(0.0122)			
Bid lambda				0.0600	0.2080***	0.2066***
				(0.2375)	(0.0722)	(0.0716)
Constant	1.0449***	0.0461***	0.0461***	-0.0678	-0.1282	-0.1315
	(0.3125)	(0.0080)	(0.0015)	(0.4819)	(0.1495)	(0.1531)
Year indicators	Yes		Yes	Yes		Yes
Industry indicators	Yes		Yes	Yes		Yes
F						4.2***

Table A1 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Bebchuk, Cohen, and Ferrell (2009) index with fixed instruments

	IV, probit		Probit	IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	**BCF index**	**Bid**	**Bid**	**BCF index**	**Resistance**	**Resistance**
Chi^2	418.5***		367.0***	59.2***		
R^2 %						4.6
Pseudo R^2 %			4.9			
F (first stage, BCF index)				16.3***		
R^2 % (first stage, BCF index)				3.4		
Chi^2 (over-identification)				0.1		
Chi^2 (endogeneity)	13.1***			0.1		
Obs	20,717		20,717	954		954

Table A2

Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Karpoff, Schonlau, and Wehrly (2017) index with fixed instruments

This table presents average, marginal effects for the causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance. Main, variable definitions are provided at the end of the paper, and the sample of bids and firm years is described in Table 1. The Gompers, Ishii, and Metrick (2003) (GIM) index for the extent of a firm's antitakeover provisions is replaced with a Karpoff, Schonlau, and Wehrly (2017) (KSW) index, which is the GIM index minus a Bebchuk, Cohen, and Ferrell (2009) (BCF) index that adds one for each antitakeover provision that a firm has out of a subset of six – including staggered/classified board, supermajority amendment, and poison pill, but excluding fair price amendment – from the GIM index. Columns (1) and (2) are the first and second stages, respectively, of an instrumental-variables (IV), probit regression (using maximum-likelihood estimation) for the likelihood of a bid on the KSW index, and other variables (including year indicators and industry indicators) that are not conditional on a bid. The instruments for the KSW index in the first stage, only, are pseudo, KSW indices for same-age (peer) firms and headquarters-proximate (HQ) firms, which are those for the GIM index minus those constructed for the subset of six, antitakeover provisions of the BCF index in otherwise the same way as those for the GIM index, and which are fixed each year from an original lag of three years, instead of rolling forward each year with a lag of at least three years. Column (3) does the same as Columns (1) and (2), but in reduced form, by probit regressing the likelihood of a bid on the fixed instruments, only, for the KSW index, and the other variables that are not conditional on a bid, but with the addition of an exclusion restriction, California incorporation, which, with a lag of one year, is equal to one for a firm that is incorporated in California in the Center for Research in Security Prices/Compustat Merged database, and to zero otherwise. Columns (4) and (5) are the first and second stages, respectively, of an IV, linear probability regression (using two-stage least-squares estimation) for the likelihood of management resistance on the KSW index (direct, causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (3). The instruments for the KSW index in the first stage, only, are the same as the fixed ones in Column (3). The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (3). Column (6) does the same as Columns (4) and (5), but in reduced form, by linear probability regressing the likelihood of management resistance on the fixed instruments, only, for the KSW index (indirect, causal relationship), the other variables, and the lambda for the effects of censoring firm years absent a bid. Standard errors are shown in brackets underneath the marginal effects. These are firm clustered, robust in Columns (1), (2), and (3), and bootstrapped in Columns (4), (5), and (6). ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	IV, probit		Probit	IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	**KSW index**	**Bid**	**Bid**	**KSW index**	**Resistance**	**Resistance**
KSW index		-0.0082***			0.0666***	
		(0.0026)			(0.0243)	
Peers, KSW index (fixed)	0.6943***		-0.0047**	0.6771***		0.0393**
	(0.0521)		(0.0020)	(0.0756)		(0.0167)
HQ, KSW index (fixed)	0.4203***		-0.0043*	0.2571***		0.0350*
	(0.0650)		(0.0024)	(0.0971)		(0.0201)
Initial premium				-0.1059	-0.0861***	-0.0937***
				(0.1510)	(0.0316)	(0.0305)

Table A2 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Karpoff, Schonlau, and Wehrly (2017) index with fixed instruments

	IV, probit		Probit	IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	**KSW index**	**Bid**	**Bid**	**KSW index**	**Resistance**	**Resistance**
All cash				-0.0575	0.0912***	0.0886***
				(0.1142)	(0.0267)	(0.0256)
ln[Size]	0.1440***	-0.0102***	-0.0102***	0.1751***	-0.0182	-0.0052
	(0.0336)	(0.0013)	(0.0012)	(0.0548)	(0.0133)	(0.0120)
Leverage	0.1176	0.0191*	0.0210**	0.3884	0.0344	0.0550
	(0.2224)	(0.0101)	(0.0102)	(0.3668)	(0.0784)	(0.0743)
Market-to-book	-0.0044	-0.0078***	-0.0078***	-0.0062	-0.0298**	-0.0295**
	(0.0237)	(0.0017)	(0.0017)	(0.0643)	(0.0145)	(0.0139)
Tangibility	0.0470	-0.0052	-0.0052	-0.1637	0.0383	0.0273
	(0.1109)	(0.0044)	(0.0044)	(0.1577)	(0.0355)	(0.0340)
Liquidity	-0.3118	-0.0301***	-0.0322***	-0.5354	-0.0797	-0.1115
	(0.2091)	(0.0089)	(0.0089)	(0.3367)	(0.0745)	(0.0697)
Sales growth	-0.0265**	0.0016	0.0017	0.0092	-0.0008	0.0000
	(0.0121)	(0.0012)	(0.0012)	(0.0075)	(0.0018)	(0.0017)
ROA	-0.0118	-0.0194	-0.0186	-1.4680***	-0.0902	-0.2006*
	(0.2588)	(0.0151)	(0.0152)	(0.4835)	(0.1147)	(0.1094)
Stock return	0.0695**	-0.0033	-0.0031	0.1283	-0.0233	-0.0135
	(0.0313)	(0.0035)	(0.0035)	(0.1445)	(0.0328)	(0.0318)
Industry concentration	-0.4113	-0.0579***	-0.0593***	-1.6279**	-0.1537	-0.2622
	(0.4155)	(0.0199)	(0.0193)	(0.6877)	(0.1691)	(0.1601)
California incorporation			0.0415***			
			(0.0122)			
Bid lambda				0.8618***	0.1413*	0.1930***
				(0.3319)	(0.0778)	(0.0702)
Constant	-1.7008***	0.0460***	0.0460***	-1.9854**	-0.3675**	-0.5783***
	(0.5643)	(0.0019)	(0.0014)	(0.8452)	(0.1453)	(0.1783)
Year indicators	Yes		Yes	Yes		Yes
Industry indicators	Yes		Yes	Yes		Yes
F						5.4***

Table A2 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Karpoff, Schonlau, and Wehrly (2017) index with fixed instruments

	IV, probit		Probit	IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	**KSW index**	**Bid**	**Bid**	**KSW index**	**Resistance**	**Resistance**
Chi^2	343.7***		361.0***	64.5***		
R^2 %						6.0
Pseudo R^2 %			4.9			
F (first stage, KSW index)				47.2***		
R^2 % (first stage, KSW index)				9.1		
Chi^2 (over-identification)				0.8		
Chi^2 (endogeneity)	10.4***			7.8***		
Obs	20,717		20,717	954		954

Table A3

Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Bebchuk, Cohen, and Ferrell (2009) index and Karpoff, Schonlau, and Wehrly (2017) index jointly with fixed instruments

This table presents average, marginal effects for the causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance. Main, variable definitions are provided at the end of the paper, and the sample of bids and firm years is described in Table 1. The Gompers, Ishii, and Metrick (2003) (GIM) index for the extent of a firm's antitakeover provisions is jointly replaced with a Bebchuk, Cohen, and Ferrell (2009) (BCF) index, which adds one for each antitakeover provision that a firm has out of a subset of six – including staggered/classified board, supermajority amendment, and poison pill, but excluding fair price amendment – from the GIM index, and a Karpoff, Schonlau, and Wehrly (2017) (KSW) index, which is the GIM index minus the BCF index. Columns (1) and (2) are the joint, first stages, and Column (3) is the second stage, of an instrumental-variables (IV), probit regression (using maximum-likelihood estimation) for the likelihood of a bid on the BCF index, the KSW index, and other variables (including year indicators and industry indicators) that are not conditional on a bid. The instruments for the BCF index in the joint, first stages, only, are pseudo, BCF indices for same-age (peer) firms and headquarters-proximate (HQ) firms, which are constructed for the subset of six, antitakeover provisions of the BCF index in otherwise the same way as those for the GIM index, and which are fixed each year from an original lag of three years, instead of rolling forward each year with a lag of at least three years. The instruments for the KSW index in the joint, first stages, only, are pseudo, KSW indices for peer firms and HQ firms, which are those for the GIM index minus those for the BCF index, and which are also fixed each year from an original lag of three years, instead of rolling forward each year with a lag of at least three years. Column (4) does the same as Columns (1), (2), and (3), but in reduced form, by probit regressing the likelihood of a bid on the fixed instruments, only, for the BCF index and KSW index, and the other variables that are not conditional on a bid, but with the addition of an exclusion restriction, California incorporation, which, with a lag of one year, is equal to one for a firm that is incorporated in California in the Center for Research in Security Prices/Compustat Merged database, and to zero otherwise. Columns (5) and (6) are the joint, first stages, and Column (7) is the second stage, of an IV, linear probability regression (using two-stage least-squares estimation) for the likelihood of management resistance on the BCF index (direct, causal relationship), the KSW index (direct, causal relationship), the actual premium offered by the initial bidder, the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (4). The instruments for the BCF index and KSW index in the joint, first stages, only, are the same as the fixed ones in Column (4). The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (4). Column (8) does the same as Columns (5), (6), and (7), but in reduced form, by linear probability regressing the likelihood of management resistance on the fixed instruments, only, for the BCF index and KSW index (indirect, causal relationships), the other variables, and the lambda for the effects of censoring firm years absent a bid. Standard errors are shown in brackets underneath the marginal effects. These are firm clustered, robust in Columns (1), (2), (3), and (4), and bootstrapped in Columns (5), (6), (7), and (8). ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	IV, probit			Probit	IV, linear prob.			Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	**BCF index**	**KSW index**	**Bid**	**Bid**	**BCF index**	**KSW index**	**Resistance**	**Resistance**
BCF index			-0.0214				-0.0769	
			(0.0161)				(0.0645)	
Peers, BCF index (fixed)	0.1025	0.1514		-0.0104	0.3776**	0.0456		-0.0672
	(0.1157)	(0.1792)		(0.0067)	(0.1546)	(0.2305)		(0.0511)
HQ, BCF index (fixed)	0.3398***	-0.0579		-0.0057	0.4968***	-0.1317		-0.0330
	(0.0821)	(0.1161)		(0.0046)	(0.1201)	(0.1767)		(0.0375)

Table A3 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Bebchuk, Cohen, and Ferrell (2009) index and Karpoff, Schonlau, and Wehrly (2017) index jointly with fixed instruments

	IV, probit		Probit		IV, linear prob.			Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	**BCF index**	**KSW index**	**Bid**	**Bid**	**BCF index**	**KSW index**	**Resistance**	**Resistance**
KSW index			-0.0028				0.0841***	
			(0.0044)				(0.0286)	
Peers, KSW index (fixed)	0.1624***	0.6532***		-0.0018	0.0542	0.6615***		0.0573***
	(0.0463)	(0.0668)		(0.0026)	(0.0650)	(0.0970)		(0.0216)
HQ, KSW index (fixed)	-0.0006	0.4362***		-0.0029	-0.0041	0.2883***		0.0387*
	(0.0501)	(0.0704)		(0.0027)	(0.0702)	(0.1042)		(0.0214)
Initial premium					0.2010*	-0.1183	-0.0725**	-0.0970***
					(0.1070)	(0.1504)	(0.0348)	(0.0303)
All cash					-0.0163	-0.0530	0.0962***	0.0972***
					(0.0843)	(0.1181)	(0.0276)	(0.0261)
ln[Size]	-0.0561**	0.1462***	-0.0101***	-0.0104***	0.0466	0.1762***	-0.0175	-0.0056
	(0.0245)	(0.0337)	(0.0024)	(0.0012)	(0.0394)	(0.0549)	(0.0138)	(0.0121)
Leverage	0.4353***	0.1162	0.0185	0.0218**	0.5363**	0.3931	0.0747	0.0635
	(0.1636)	(0.2227)	(0.0122)	(0.0102)	(0.2601)	(0.3715)	(0.0908)	(0.0752)
Market-to-book	-0.0699***	-0.0043	-0.0077***	-0.0081***	-0.1068**	-0.0086	-0.0395**	-0.0319**
	(0.0177)	(0.0237)	(0.0024)	(0.0017)	(0.0425)	(0.0649)	(0.0176)	(0.0143)
Tangibility	0.0859	0.0484	-0.0051	-0.0050	-0.0633	-0.1584	0.0365	0.0259
	(0.0838)	(0.1110)	(0.0045)	(0.0044)	(0.1215)	(0.1585)	(0.0374)	(0.0343)
Liquidity	-0.5579***	-0.3105	-0.0291**	-0.0327***	-0.2971	-0.5396	-0.0930	-0.1118
	(0.1541)	(0.2093)	(0.0125)	(0.0089)	(0.2337)	(0.3381)	(0.0794)	(0.0701)
Sales growth	0.0059	-0.0269**	0.0016	0.0016	-0.0029	0.0089	-0.0013	0.0000
	(0.0068)	(0.0122)	(0.0012)	(0.0012)	(0.0056)	(0.0076)	(0.0019)	(0.0017)
ROA	0.0963	-0.0099	-0.0178	-0.0156	-0.0809	-1.4498***	-0.0615	-0.1920*
	(0.2039)	(0.2619)	(0.0152)	(0.0153)	(0.3096)	(0.4862)	(0.1248)	(0.1115)
Stock return	0.0995***	0.0703**	-0.0035	-0.0031	0.0359	0.1308	-0.0211	-0.0115
	(0.0228)	(0.0313)	(0.0036)	(0.0035)	(0.0992)	(0.1444)	(0.0339)	(0.0317)
Industry concentration	-0.7140**	-0.4088	-0.0555**	-0.0589***	-0.2359	-1.6390**	-0.1446	-0.2651
	(0.2955)	(0.4146)	(0.0232)	(0.0192)	(0.6472)	(0.6899)	(0.1709)	(0.1621)

Table A3 (continued)
Causal relationship between the extent of the target firm's antitakeover provisions and the likelihood of management resistance: Bebchuk, Cohen, and Ferrell (2009) index and Karpoff, Schonlau, and Wehrly (2017) index jointly with fixed instruments

	IV, probit			Probit		IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	**BCF index**	**KSW index**	**Bid**	**Bid**	**BCF index**	**KSW index**	**Resistance**	**Resistance**
California incorporation				0.0396***				
				(0.0121)				
Bid lambda					0.0655	0.8686***	0.1282	0.1925***
					(0.2385)	(0.3342)	(0.0782)	(0.0716)
Constant	0.6692	-1.7518***	0.0460***	0.0461***	-0.2016	-1.9105**	-0.2738*	-0.4917***
	(0.4177)	(0.5773)	(0.0071)	(0.0014)	(0.6017)	(0.8542)	(0.1595)	(0.1840)
Year indicators		Yes		Yes		Yes		Yes
Industry indicators		Yes		Yes		Yes		Yes
F								4.6***
Chi^2		375.8***		367.0***		59.2***		
R^2 %								6.2
Pseudo R^2 %				4.9				
F (first stage, BCF index)						8.2***		
R^2 % (first stage, BCF index)						3.4		
F (first stage, KSW index)						23.5***		
R^2 % (first stage, KSW index)						9.1		
Chi^2 (over-identification)						1.6		
Chi^2 (endogeneity)		13.8***				10.0***		
Obs		20,717		20,717		954		954

Table A4

Causal relationship between the actual premium offered by the initial bidder and the likelihood of management resistance: fixed instruments for the extent of the target firm's antitakeover provisions

This table presents average, marginal effects for the causal relationship between the actual premium offered by the initial bidder and the likelihood of management resistance. Main, variable definitions are provided at the end of the paper, and the sample of bids and firm years is described in Table 1. Column (1) is a linear regression for the actual premium offered by the initial bidder on the instruments, only, for the extent of the target firm's antitakeover provisions (GIM index), the indicator for an all, cash bid, other variables (including year indicators and industry indicators) that are not conditional on a bid, a lambda for the effects of censoring firm years absent a bid that is generated from Column (3) of Table 7, and an exclusion restriction, which is the pseudo, actual premium offered by the initial bidder, pre-bid price to high price. The instruments for the GIM index are the pseudo, GIM indices for same-age (peer) firms and headquarters-proximate (HQ) firms, and are the same as the ones in Column (3) of Table 7, which are fixed each year from an original lag of three years, instead of rolling forward each year with a lag of at least three years. The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (3) of Table 7. Columns (2) and (3) are the first and second stages, respectively, of an instrumental-variables (IV), linear probability regression (using two-stage least-squares estimation) for the likelihood of management resistance on the GIM index (direct, causal relationship), a residual (abnormal part), only, for the actual premium offered by the initial bidder (non-causal relationship) that is generated from Column (1), the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (3) of Table 7. The instruments for the GIM index in the first stage, only, are the same as the fixed ones in Column (1), and the fixed ones in Column (3) of Table 7. The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (1), and those (including year indicators and industry indicators) in Column (3) of Table 7. Columns (4) and (5) do the same as Columns (2) and (3), respectively, but with the actual premium offered by the initial bidder (non-causal relationship) being jointly included with the residual. Columns (1) and (6) are the joint, first stages, and Column (7) is the second stage, of an IV, linear probability regression (using two-stage least-squares estimation) for the likelihood of management resistance on the GIM index (direct, causal relationship), the actual premium offered by the initial bidder (direct, causal relationship), the indicator for an all, cash bid, other variables that are not conditional on a bid, and a lambda for the effects of censoring firm years absent a bid that is generated from Column (3) of Table 7. The instruments for the GIM index in the joint, first stages, only, are the same as the fixed ones in Column (3) of Table 7, and the instrument for the actual premium offered by the initial bidder in the joint, first stages, only, is the pseudo one, pre-bid price to high price. The other variables that are not conditional on a bid are the same as those (including year indicators and industry indicators) in Column (3) of Table 7. Column (8) does the same as Columns (6) and (7), but in reduced form, by linear probability regressing the likelihood of management resistance on the fixed instruments, only, for the GIM index (indirect, causal relationship), the instrument, only, for the actual premium offered by the initial bidder (indirect, causal relationship), the other variables, and the lambda for the effects of censoring firm years absent a bid. Bootstrapped, standard errors are shown in brackets underneath the marginal effects. ***, **, * denote statistical significance at the one, five, and ten percent levels, respectively.

	Linear	**IV, linear prob.**		**IV, linear prob.**		**IV, linear prob.**		**Linear prob.**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Variables	**Initial premium**	**GIM index**	**Resistance**	**GIM index**	**Resistance**	**GIM index**	**Resistance**	**Resistance**
GIM index			0.0447**		0.0475**		0.0475**	
			(0.0191)		(0.0197)		(0.0202)	
Peers, GIM index (fixed)	0.0042	0.6369***		0.6266***		0.6234***		0.0274**
	(0.0117)	(0.0828)		(0.0833)		(0.0836)		(0.0129)

Table A4 (continued)
Causal relationship between the actual premium offered by the initial bidder and the likelihood of management resistance: fixed instruments for the extent of the target firm's antitakeover provisions

	Linear	IV, linear prob.		IV, linear prob.		IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	**Initial premium**	**GIM index**	**Resistance**	**GIM index**	**Resistance**	**GIM index**	**Resistance**	**Resistance**
HQ, GIM index (fixed)	-0.0012	0.3137***		0.3003***		0.3012***		0.0219
	(0.0132)	(0.1024)		(0.1032)		(0.1030)		(0.0159)
Initial premium				-0.7570	0.1094		0.1094	
				(0.6386)	(0.1106)		(0.1135)	
Pre-bid price to high price	-0.6744***					0.5105		-0.0525
	(0.0840)					(0.4305)		(0.0711)
Abnormal, initial premium		0.1688	-0.1181***	0.9258	-0.2280*			
		(0.2192)	(0.0341)	(0.6752)	(0.1199)			
All cash	-0.0180	-0.0882	0.0902***	-0.1118	0.0938***	-0.0982	0.0938***	0.0876***
	(0.0242)	(0.1600)	(0.0264)	(0.1617)	(0.0271)	(0.1603)	(0.0277)	(0.0260)
ln[Size]	-0.0117	0.2223***	-0.0121	0.2006**	-0.0097	0.2094***	-0.0097	-0.0001
	(0.0125)	(0.0765)	(0.0129)	(0.0800)	(0.0130)	(0.0778)	(0.0134)	(0.0122)
Leverage	0.1342*	0.9320*	-0.0028	1.0509**	-0.0221	0.9493*	-0.0221	0.0338
	(0.0700)	(0.5056)	(0.0803)	(0.5112)	(0.0817)	(0.5049)	(0.0844)	(0.0748)
Market-to-book	-0.0192	-0.1152	-0.0226	-0.1290	-0.0203	-0.1144	-0.0203	-0.0274**
	(0.0143)	(0.0917)	(0.0150)	(0.0920)	(0.0152)	(0.0906)	(0.0148)	(0.0138)
Tangibility	-0.0975***	-0.2185	0.0507	-0.2909	0.0618*	-0.2171	0.0618*	0.0408
	(0.0344)	(0.2278)	(0.0346)	(0.2364)	(0.0367)	(0.2287)	(0.0369)	(0.0333)
Liquidity	-0.0825	-0.8463*	-0.0677	-0.9146*	-0.0558	-0.8522*	-0.0558	-0.1028
	(0.0902)	(0.4634)	(0.0747)	(0.4662)	(0.0763)	(0.4615)	(0.0780)	(0.0701)
Sales growth	-0.0128***	0.0048	0.0003	-0.0024	0.0013	0.0072	0.0013	0.0004
	(0.0018)	(0.0102)	(0.0017)	(0.0115)	(0.0019)	(0.0105)	(0.0020)	(0.0017)
ROA	0.2443	-1.5272**	-0.1215	-1.4758**	-0.1235	-1.6607**	-0.1235	-0.1825*
	(0.1712)	(0.6688)	(0.1101)	(0.6698)	(0.1096)	(0.6824)	(0.1069)	(0.1078)
Stock return	0.0144	0.1518	-0.0099	0.0547	0.0036	0.0438	0.0036	0.0085
	(0.0501)	(0.2013)	(0.0318)	(0.2099)	(0.0338)	(0.2126)	(0.0354)	(0.0342)
Industry concentration	-0.0054	-1.8953*	-0.1666	-1.9708*	-0.1505	-1.9668*	-0.1505	-0.2433
	(0.1461)	(1.1080)	(0.1711)	(1.1134)	(0.1736)	(1.1172)	(0.1758)	(0.1593)

Table A4 (continued)
Causal relationship between the actual premium offered by the initial bidder and the likelihood of management resistance: fixed instruments for the extent of the target firm's antitakeover provisions

	Linear	IV, linear prob.		IV, linear prob.		IV, linear prob.		Linear prob.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	Initial premium	GIM index	Resistance	GIM index	Resistance	GIM index	Resistance	Resistance
Bid lambda	-0.0346	0.9593**	0.1439*	1.0228**	0.1326*	1.0490**	0.1326*	0.1740**
	(0.0824)	(0.4711)	(0.0794)	(0.4758)	(0.0805)	(0.4790)	(0.0803)	(0.0710)
Constant	0.4422**	-2.1607*	-0.4226***	-1.5523	-0.4983***	-1.8871	-0.4983***	-0.5826***
	(0.1859)	(1.1524)	(0.1477)	(1.2798)	(0.1747)	(1.1820)	(0.1791)	(0.1852)
Year indicators	Yes	Yes		Yes		Yes		Yes
Industry indicators	Yes	Yes		Yes		Yes		Yes
F	8.7***							4.4***
Chi^2		65.8***		65.6***		53.1***		
R^2 %	14.0							4.8
F (first stage, GIM index)		37.2***		34.8***		25.3***		
R^2 % (first stage, GIM index)		7.3		6.9		7.4		
F (first stage, Initial premium)						21.5***		
R^2 % (first stage, Initial premium)						10.1		
Chi^2 (over-identification)		0.2		0.3		0.3		
Chi^2 (endogeneity)		4.8**		5.2**		7.0**		
Obs	954	954		954		954		954