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The economics of minority freezeouts: Evidence from the courtroom

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ABSTRACT

We analyze minority freezeout offers in a legal environment where minority stockholders can reject the offer and ask the court to value their nontendered stock. This regulatory setting allows us to observe the disciplining effect of legal enforcement on stockholder behavior. We find that minority stockholders reject about one out of ten freezeout offers, and that rejection is more likely when the bidder has controlled the firm for quite some time before the offer. Rejected offers take on average around three years to be settled in court, and litigation costs are almost never paid by minority stockholders. The court mostly prices rejected offers above the offer price, particularly when the firm is private, when the bidder has controlled the firm for an extensive period before the offer, and when the case is large. These findings suggest that minority stockholders consider most freezeout offers commensurate with the level of legal stockholder protection as enforced by the courts. The majority stockholder tends to underestimate the legal protection of minority rights in settings where these rights are particularly vulnerable to exploitation. Nevertheless, minority stockholders who take their case to court often face years of waiting, and for a highly unpredictable litigation return.

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1. Introduction

A minority freezeout occurs when a firm's majority stockholder exercises the option to buy the minority stock at a price set by the majority. This right is granted by law when the majority obtains a certain minimum fraction of the equity, which varies between 50% and 95% across different countries.[1] The purpose of freezeout law is partly to protect the majority (the bidder) from a free-riding minority (Grossman & Hart, 1980), partly to protect the minority (the target) from a power-abusing majority (Bebchuk & Kahan, 2000). Hence, an important regulatory concern is whether freezeout law ensures efficiency for society and fairness for the two parties (Amihud, Kahan, & Sundaram, 2004; Maug, 2006). In particular, a key issue is how ex post enforcement of the law in court disciplines parties' behavior ex ante, that is, when the majority sets the freezeout price and the minority decides whether to accept or reject the offer. We provide novel empirical insight into this issue by being the first to observe in detail how the minority stockholder chooses between accepting and rejecting the freezeout offer and how the court values the minority shares in rejected offers.

We find that 11% of all freezeout offers are rejected by the minority and hence taken to court. Offer rejection is independent of the bid premium (the freezeout price relative to the stock price) and of firm size, but is much more common when the bidder has controlled the firm for at least one year before the offer. We call such freezeouts slow, as opposed to fast. Half the offers are rejected in slow freezeouts, as opposed to just one tenth when the freezeout is fast.

The median return from litigation in excess of the riskless rate is 6%. This litigation premium is also positive in roughly three of four cases. Hence, the offers taken to court mostly end up being valued well above the freezeout price. Consistent with our finding for the minority's propensity to reject, this tendency by the court to discipline the majority ex post is stronger when the freezeout is slow, although the relationship is statistically stronger for the accept/reject decision than for the court's enforcement decision in rejected offers. The court also makes higher valuations relative to the freezeout price when the firm is privately held rather than publicly listed.

These findings suggest that majority stockholders generally make freezeout offers that the minority regard as being commensurate with stockholder protection levels currently enforced by the courts. However, the majority tends to underestimate the legal protection of minority stockholder rights when these rights are particularly easy to violate through the majority's extraction of private

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[1] Judging from Maug (2006), (90)% is the typical threshold. For instance, Norway, Sweden, and the United Kingdom have 90%, and Germany has 95%. The US threshold is 50% for so-called freezeout mergers and 90% for so-called short-form mergers (Bates et al., 2006).

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benefits. These settings are characterized by the lack of a liquid market place for the firm's stock (private firm) and a long control period for the bidder before the freezeout offer is made (slow freezeout).

This evidence suggests that a well-functioning discipline of the majority's behavior at the offer stage of the freezeout process requires a well-functioning discipline by the court at the litigation stage. This seems particularly true when the majority is strongly tempted to abuse power. The firm's listing status (public/private) and the length of the bidder's control period before the bid (freezeout speed) are keys to identifying settings with high abuse potential.

These results also reflect that independent of stockholder protection levels in the court's legal enforcement, the majority and minority stockholders in our sample firms mostly have similar views on the potential outcome of a court case if the offer is rejected. As shown by Priest and Klein (1984), the majority's incentives to litigate are fewer the less the two parties disagree and the more certain they are about the outcome of a court case. Both characteristics reduce the difference between the offered freezeout price and the predicted valuation outcome in court.

Our evidence suggests that this difference in beliefs between the parties is smaller when the majority has just recently acquired control of the firm. A possible reason is that bidders who have controlled the firm a long time before the offer date may have reduced the stock's liquidity considerably because of the bidder's large, untraded share block. Such bidders may also be better positioned to time the offer date based on private information about the firm's intrinsic value (Bebchuk & Kahan, 2000). Both possibilities may make the court value the minority stock with less regard than usual for both the freezeout price and the stock price around the offer date. Consequently, slow freezeouts may leave more room for court discretion and produce more uncertainty for the parties about the court's valuation outcome. This increased uncertainty increases the incentives to take the case to court.

Unlike the extant literature (Dodd & Ruback, 1977; DeAngelo, & Rice, 1984; Holderness & Sheehan, 1988; Bates, Lemmon, & Linck, 2006), our paper studies a regulatory regime where the court explicitly values minority shares. We analyze minority freezeouts in Norway, where any minority stockholder has the right to reject the majority's offer (the freezeout price) and take the case to court. The court hears the two parties and delivers a verdict in terms of a value per minority share (the court price). The majority must pay the court price to the nontendering minority at the closure of the case.

Our basic sample is the population of all freezeout transactions in public and private firms valued by the court from when the freezeout law was passed by Parliament in 1976 to the end of the sample period in 2010. We first compare a subsample of these rejected offers with the offers that were accepted by the minority, that is, not taken to court. Specifically, we estimate the determinants of the decision to accept or reject the offer. Subsequently, we focus on the rejected offers by analyzing the economic consequences for the minority of turning down the known freezeout price and of instead receiving a claim to an uncertain court price at an uncertain future time. Since the majority's situation is the mirror image, our estimates also show the economics for the majority of using the courts to settle the conflict with a nontendering minority.

We find that the bidder's control in the firm before the freezeout is the most important determinant of the accept/reject outcome, while the firm's listing status plays this role for the court's valuation outcome in rejected offers. The median litigation premium of rejecting the freezeout price and waiting for the uncertain court price is 6%, being positive in about three quarters of the verdicts. Although this litigation premium varies widely from verdict to verdict, the premium reflects a risk about valuation outcomes which is unsystematic. Therefore, a positive premium represents abnormal returns from litigation, provided the minority stockholder is well diversified and not liquidity constrained.

The observed litigation premium shows that the majority systematically underestimates the value of the minority stock as implied by the extant enforcement of minority protection law. The evidence also suggests that most minority stockholders do not behave opportunistically by litigating excessively. If they had, the average litigation premium would not have been positive. This is a remarkable result, because we also find that minority stockholders very seldom pay their out-of-pocket litigation costs. Hence, minority stockholders seem to rationally take into account the potential court outcome when deciding on whether to accept.

We show that the court's disciplining behavior depends on several case characteristics. Strong ex post discipline reflected by high litigation returns is more frequent the more influential the bidder during the last year before the freezeout. As we mentioned for the accept/reject decision, this evidence is consistent with the notion that the longer the bidder has held a dominant position in the firm, the more the court suspects that the majority may exploit the situation at the minority's expense by making the freezeout at an artificially low price. This interpretation is supported by our finding that the court only benchmarks its valuation on the stock price when the freezeout is fast. Hence, the court price is close to the stock price at the freezeout date, producing low returns from litigation in fast freezeouts. This evidence suggests that when the market for the firm's equity is well-functioning, the court considers the stock price a fair valuation of the minority stock. However, possibly because of the small sample size and the high diversity across verdicts, the statistical significance of the relationship between the court price and the freezeout speed is generally weak.

The court's ex post discipline is more pronounced for private firms than for public firms. This finding supports the hypothesis that because private firms are less transparent and because their stock trades less frequently, the majority will be more tempted to exploit the situation by underpricing the offer. We also find that regardless of case characteristics, the majority is more sophisticated than for minority, who often do not present any quantitative valuations of their stock. A private firm and an unsophisticated minority may both reflect settings where minority stockholders have difficulty protecting their interests at the offer stage, and where the majority does not account for this situation when considering the potential outcome of a court case. On the other hand, the litigation premium tends to be higher the larger the case. This finding suggests that even though both the majority and the court may consider minority stockholder rights in general, the minority's ability to insist on these rights in court is greater the larger their aggregate claim.

Overall, this evidence on rejected offers shows that the court disciplines the majority ex post because the ex ante discipline (i.e. at the offer stage) is insufficient for most offers ending up in court. Nevertheless, litigation is not excessive. Finally, the court's ex post protection of the minority through a large valuation markup is strongest when the minority is particularly weak. This happens when the firm is private and, somewhat less consistently, when the firm has been controlled by the majority for a considerable period.

The existing literature uses data from the United States, where the courts do not value minority shares. Rather, the minority has a right to legal review of a privately negotiated freezeout process. This ex post monitoring by the court is supposed to ensure that the freezeout price does not unduly reflect any uneven power distribution between the parties. Because no court price exists in such a system, however, researchers have instead analyzed the overall freezeout surplus split. They do this by comparing the two parties' wealth increase at the offer announcement with their respective stakes in the jointly held firm.

These studies tend to find that the minority gets its proportional share of the freezeout surplus. Bates et al. (2006) conclude that private negotiations between majority and minority stockholders of public firms are disciplined quite well by the legal system, the parties' economic incentives, or both. We find the same result for most offers, which are indeed accepted and do not go to court. The same characteristic holds for the offers ending up in court unless they involve non-transparent firms or slow freezeouts. Taken together, these findings indicate that the court's ex ante discipline of the parties is strong whenever the freezeout setting involves competitive bidding for firm control in a liquid stock market just before the freezeout offer is made.

The rest of our paper is organized as follows. In Section 2 we describe the regulatory regime. In Section 3 we outline the data collection procedure and show basic sample characteristics. We analyze in Section 4 the decision to accept or reject the offer, and in Section 5 describe the valuation methods used in the courtroom and the actual valuation outcome in terms of how the court price relates to the freezeout price, the stock price at the offer, and the valuation in court made by the two parties. We estimate the returns from litigation and its determinants in Section 6, and summarize and conclude in Section 7.

2. The regulation of minority freezeouts

Norway has Scandinavian-type civil law, generally considered less protective of ownership rights than is common law. Nevertheless, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) find that Norway's legal regime provides greater protection of minority stockholders than does the legal regime of the average common law country.[2] The freezeout option was introduced in 1976 through a new corporate law that applies to all firms with limited liability.[3] The law states that a stockholder owning more than 90% of the firm's cash flow rights and voting rights (the majority) may buy out (freeze out; squeeze out) the remaining stockholders (the minority). The rule is symmetric, because any minority stockholder has the right to be bought out once a co-owner passes the 90% threshold. A majority who has decided to freeze out the minority must offer a freezeout price per minority share, and each minority stockholder must accept or reject the offer. Those who accept are paid the freezeout price in cash and cannot subsequently change their minds. Nontendering stockholders lose their ownership rights, since their legal status changes from owner to creditor at the offer announcement. The majority stockholder must deposit an amount equal to the freezeout price times the number of nontendered shares to an account which is protected from bankruptcy.[4]

Rejecting the freezeout offer is simultaneously a decision to take the case to court. The court's function is to hear the two parties in the courtroom, read the documents they submit, price the minority shares, and state a rationale for the verdict. Because the judicial system has three tiers, an initial verdict can be appealed twice.[5] If no party appeals, the case in settled. The minority receives the court price per share plus possible compensation for any out-of-pocket litigation costs and the opportunity cost of capital from the freezeout date to the verdict.

The law does not prescribe a particular valuation method, such as discounted cash flow or multiples of earnings. Neither does the law specify other basic valuation principles, such as how to account for the stock's liquidity, the private benefits consumed by the majority, the firm's restructuring potential, or what date the valuation should refer to. Nevertheless, certain valuation principles have been stated more often than others in the verdicts, and one regulatory amendment was made after the freezeout law was introduced. In particular, many verdicts refer to the following statement on valuation principles for minority stock: "The price should reflect the true value, which is the amount a buyer would pay for the firm's operations and assets, provided the buyer has complete and correct information about the firm's present condition and future potential" (Aarbakke, 1988). Moreover, a new corporate law from 1997 was interpreted as saying that the proper reference point for the valuation is the freezeout date.[6] This principle implies that events occurring after the freezeout date are irrelevant for the court's valuation.

The only Supreme Court verdict on freezeouts so far was made in 2003. The verdict states that a fair freezeout price should reflect the firm's underlying value, and should not be reduced by the costs of low liquidity, private benefits, or inefficient operations.[7] This verdict suggests that the court price is supposed to reflect both security benefits and private benefits. According to Sletten and Willumsen (2004), the Supreme Court verdict largely confirms the valuation practices of Norwegian courts. Our Section 5 documents that judging from the outcome of the legal process for rejected offers as measured by the court's valuation of minority stock, this regulatory regime still gives the court considerable discretion.

3. Data collection and sample characteristics

There is no comprehensive public register for freezeout offers taken to court. Hence, our data sources for rejected offers are: (i) a supposedly comprehensive listing of the population up to 2005 from a leading corporate law firm, (ii) a database at a public register (www.lovdata.no) covering every verdict in the sample period produced at the two upper tiers of the three court tiers,[8] (iii) a survey article of minority protection in Norwegian freezeout law (Krohn, 2000), and (iv) a law firm partner who has worked extensively with minority freezeout litigation over the last 12 years.

After having identified the population of cases from these sources, we contacted the courts at the lowest tier and asked for a paper copy of the verdicts. We hand collected and coded about 200 data items per case. Market prices for the public firms

[2] Based on an index of anti-director rights, La Porta et al. (1998) conclude that investor protection inherent in the commercial law is on average strongest in common law countries (like Argentina, India, the United Kingdom, and the United States) and weakest in countries with French-type civil law (like Belgium, France, Italy, and Mexico). German and Scandinavian civil law traditions fall in between. Based on seven shareholder right characteristics, Norway gets the highest score of the Scandinavian countries and the highest average score on the rule of law, including the maximum score on legal enforcement. Using a more accurate procedure for data collection and index construction, Spamann (2010) corrects and re-estimates the La Porta et al. index. He finds that the corrected index scores in 46 countries have a correlation coefficient of only 0.53 with the original estimates. Nevertheless, Norway's score is identical in the original and the corrected indexes, the score with the corrected index is practically equal to the average corrected score for common law countries, and all Scandinavian countries receive the same corrected score.

[3] The regulation is stated in Sections 4-25 of the corporate law for so-called ASA firms (public firms and some large private firms) and in Sections 4-26 of the corresponding law for so-called AS firms (all non-ASA firms with limited liability).

[4] Since this account is a separate legal entity, the deposited amount has no bankruptcy risk vis à vis the majority. Payout to minority stockholders is still uncertain, however, because it is determined by the court's valuation of minority shares. If the court price exceeds the freezeout price, the difference is exposed to the majority owner's bankruptcy risk.

[5] The Supreme Court has professional judges. Courts at the two other tiers have one professional judge (the chair) and up to four lay judges appointed by the two parties. There are no formal requirements as to the background of the four lay judges. Each party proposes two of them and has the right to protest against the two other candidates.

[6] Sections 4-26/25, item 5.

[7] Rt 2003, p. 713 (Norway Seafoods).

[8] Norway has 1 supreme court, 6 courts at the intermediate tier, and 63 courts at the lowest tier.

Table 1
Minority freezeout cases brought to court.

Year	All firms	Public firms	Case size	Slow freezeout
1978	1	0	0.22	1
1979	0	0	–	0
1980	1	0	0.04	1
1981	0	0	–	0
1982	1	0	–	1
1983	0	0	–	0
1984	2	0	0.04	2
1985	0	0	–	0
1986	1	0	0.04	1
1987	1	0	0.27	1
1988	2	2	9.80	1
1989	0	0	–	0
1990	2	0	2.93	2
1991	6	3	11.16	3
1992	3	2	3.21	2
1993	7	4	8.83	6
1994	3	3	1.33	2
1995	3	1	2.19	1
1996	8	2	1.16	6
1997	6	4	2.44	3
1998	4	2	17.16	3
1999	2	1	0.72	1
2000	3	2	14.30	1
2001	2	1	37.41	2
2002	6	3	131.90	6
2003	4	3	83.04	0
2004	1	1	–	1
2005	5	4	93.86	1
2006	1	1	1.28	1
2007	1	1	6.81	1
2008	1	0	4.72	0
2009	2	0	14.35	0
2010	3	0	18.64	2
All	82	40	25.95	52

This table shows the number offreezeout cases taken to Norwegian courts yearly during the sample period (All firms), the number of these cases involving firms listed on the Oslo Stock Exchange (Public firms), the mean size per case as measured by the number of nontendered shares times the freezeout price in millions of NOK as of year end 2010 (Case size), and the number of cases where the stockholder making the offer held half the firm's equity or more at least one year before the offer was announced (Slow freezeout). The sample is the population of rejected freezeout offers in public and private firms with limited liability during the period 1978–2010.

were obtained from a computer-readable register at the Oslo Stock Exchange (www.ose.no).

Our sample period from 1978 to 2010 covers the population of minority freezeout cases handled by Norwegian courts over these 33 years. Table 1 shows that the sample includes 82 cases, and that about half of them (40) concern public firms.[9] There are typically twice as many cases per year in the second half of the sample period, and cases involving public firms are also twice as common in the second half.

The cases involve nontendered shares worth on average NOK 26 million at 2010 prices when valued at the freezeout price, varying between a minimum of 3 million and a maximum of 579 million (NOK 1 ≈ €0.13). Finally, the table shows that 63% of the stockholders making a freezeout offer had held at least half the firm's equity for at least one year before the offer was announced. These are the stockholders making the slow freezeouts. The remaining 37% are the stockholders making the fast freezeouts, where the controlling stake was held for less than one year.

Rejecting the freezeout offer triggers two costs. The first is the cost of waiting, driven by the time taken to reach final verdict. The second is the illiquidity cost. From offer rejection to verdict, minority stockholders have an illiquid creditor claim to an uncertain future cash flow at an uncertain future date.

Panel A of Table 2 shows characteristics of the period from when the freezeout offer expires until the verdict. It takes on average 2.7 years from offer rejection until minority cash-out. About 0.8 years elapse until the rejected case enters the court system, where it spends another 1.9 years on average.[10] The cross-sectional duration is quite heterogeneous, however, varying between 10 years for the longest case and 6 months for the shortest.

According to panel B, the out-of-pocket costs of a court case are on average NOK 1.6 million[11] More importantly, the right-hand section of panel B shows that the minority practically never covers the majority's direct litigation costs, and only covers its own costs in 21% of the cases. Even these latter cases almost always represent settings where the minority is either not represented by a lawyer or does not submit a claim for reimbursement. In contrast, the majority covers its own costs and the court's costs almost without exception. Finally, the majority covers the minority's costs in 61% of the cases.

Despite this very strong tendency for the majority to cover the minority's out-of-pocket costs, the nontendering minority stockholders may suffer from a free-rider problem. There may be personal, non-reimbursable costs involved in taking the initiative, coordinating with other minority owners, and finding legal advisers. Such costs make it tempting to wait for others to do the job, particularly when most minority stockholders are small retail investors.[12]

The only way we could collect reliable data for accepted offers was by limiting ourselves to public firms and to the period 1999–2010. Since a freezeout in a public firm always triggers subsequent delisting, we started with all going-private transactions in this period as specified by the Oslo Stock Exchange. We mostly used two Internet sources (www.newsweb.no and www.netfonds.no) to find which firms were delisted because of a freezeout rather than other reasons, the freezeout date, the offer price, and the ownership structure on the freezeout date.

There were 229 delistings in the sample period, and 140 involve freezeout offers that were accepted by the minority. We found the date and the freezeout price for 124 of the 140. Table 3 compares key characteristics of accepted and rejected offers involving public firms. Panel A shows that the number of freezeouts average 12 yearly, representing 5% of the population of public firms. Acceptance is much more common than rejection, representing 89% vs. 11% of all offers, respectively. Thus, applying the Priest and Klein (1984) logic to the accept/reject rates, most freezeout offers are priced in a way that reflects only immaterial differences in bidder and target expectations about the potential outcome of a court case.

Panel B documents that the speed of the freezeout differs significantly between accepted and rejected offers. Whereas 50% of the slow freezeouts are rejected, only 6% of the fast ones are. Notice also that slow freezeouts are much less common than fast ones, representing only 10% of all offers. This pattern suggests that although most freezeout offers are accepted, the distribution of power between the firm's stockholders before the offer date strongly influences the minority stockholders' decision to accept

[9] Eleven cases were appealed once and one case was appealed twice. Hence, 70 of the 82 court cases in the table concern unique firms.

[10] The mean duration from offer expiration to verdict is 1.6 years for cases that are not appealed, and 3.8 years for appealed cases. The difference of 2.2 years reflects the extra time spent at the appeal stage.

[11] This average is 6% of the average case size from Table 1, while the ratio varies between 0.4% and 829% across the sample. Hence, the direct cost in the latter case, which was fully carried by the majority, is more than eight times the amount the majority offered the nontendering minority at the freezeout.

[12] We find evidence that the minority is more active the larger the amount at stake. For instance, the correlation coefficient is 0.94 between the direct costs for the minority and the size of the case.

Table 2
The duration and the direct cost of minority freezeout cases.

A. Duration

Period	Mean	Std.	Median	Min.	Max.	*n*
1. From offer to verdict	1008	587	900	190	3643	78
2. From offer to court entry	296	452	142	3	3202	75
3. From court entry to verdict	692	470	578	73	2412	75

B. Costs

Party	Mean	Std.	Median	% of cases where the costs are paid by			
				Court (%)	Majority (%)	Minority (%)	Unknown (%)
Court	0.09	0.04	0.09	1	88	2	9
Majority	0.24	0.13	0.27	1	89	1	9
Minority	1.30	2.69	0.43	2	61	21	16
All	1.63	2.66	0.47				

Panel A shows the number of days elapsed from the expiration of the freezeout offer period through court entry to final verdict. Panel B shows the direct costs of litigation for the court, the majority, and the minority, and also how these costs are redistributed among the three. Costs are in millions of NOK as of year end 2010. The sample is the population of rejected freezeout offers handled by Norwegian courts during the period 1978–2010.

or reject. Hence, rejected offers are not a random sample from the population of all offers.

Panel C shows that accept and reject outcomes do not differ noticeably in terms of how much the freezeout price exceeds the stock price the day before the offer. This bid premium is 3.31% on average, while the median is 0.82%. The tendency to accept the offer is apparently stronger when the firm is large, because the average firm size is 80% higher for accepted offers. The distribution is highly skewed, however, and the medians do not differ significantly from each other.

Summarizing, the lack of incentives for collective action and the often long time span we have documented from offer rejection to court verdict may discourage the minority from litigating. Instead, it may encourage acceptance of a freezeout price lower

Table 3
Characteristics of accepted and rejected freezeout offers.

A. Number

Sample	Number per year		Relative frequency, %		*n*
	Mean	Median	Mean	Median	
All	11.58	10.50			139
Accepted	10.33	10.33	89.21	93.33	124
Rejected	1.25	0.50	10.79	6.67	15
Difference	9.08	9.83	78.42	86.67	109
(*p*-Value)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)

B. Number by freezeout speed

Offer outcome	Freezeout speed		*n*
	Slow	Fast	
All	14	125	139
Accepted	7	117	124
Rejected	7	8	15
% rejected	50%	6%	
Difference		44%	
(*p*-Value)		(0.00)	
% of all freezeouts	10%	90%	
Difference		−80%	
(*p*-Value)		(0.00)	

C. Bid premium and firm size

Sample	Bid premium, %		Firm size, mill. NOK		Average *n*
	Mean	Median	Mean	Median	
All	3.31	0.82	2875	1188	150
Accepted	2.52	0.95	3257	1336	108
Rejected	5.63	0.00	1801	646	37
Difference	−3.11	0.95	1456	690	
(*p*-Value)	(0.55)	(0.23)	(0.03)	(0.60)	

This table compares characteristics of accepted and rejected freezeout offers for firms listed on Oslo Stock Exchange. The bid premium is the freezeout offer price minus the stock price the day before the announcement divided by the stock price the day before the announcement. Firm size is the market value of the firm's equity in millions of NOK as of year end 2010. We classify a freezeout as slow if the stock holder making the offer held half the firm's equity or more at least one year before the offer was announced. If not, the freezeout is classified as fast. The sample period is 1999–2010 in panels A and B. In panel C, the sample period is 1999–2010 for accepted offers and 1978–2010 for rejected offers.

than that reflected by the court's extant valuation practice. The high accept/reject ratio in the sample supports this argument. On the other hand, our finding that minority stockholders seldom pay their out-of-pocket litigation costs may trigger excessive litigation. Moreover, about one out of ten offers is rejected, and certain bidder properties seem to influence what the minority decides. In the next section we analyze the accept/reject decision more formally and comprehensively, while in Sections 5 and 6 we focus on offer rejections and also explore whether the court's ex post discipline through the verdict accounts for any tendency by the minority to behave opportunistically.

4. The decision to accept or reject

As suggested by the data in Table 3, certain characteristics of the freezeout offer matter for whether every minority stockholder decides to accept it. According to the logic of Priest and Klein (1984), the key offer characteristics are those that indicate whether the court would consider the offer price fair in a trial. The stronger the minority's belief that the court would consider the price unfair under the existing enforcement of freezeout law, the higher the likelihood that the minority will reject the offer in order to have their shares valued by the court.

The natural benchmark for evaluating offer fairness is the stock price when the offer is made. If the pricing of the stock is competitive and if there are no private benefits of control, the equilibrium stock price is the best estimate of the present value of the firm's future cash flow per share for any stockholder regardless of ownership stake. This means the stock price, which represents the security benefits, reflects the firm's full equity value. The stronger the majority stockholder's control rights, however, the larger the potential private benefits enjoyed by the majority alone. Such private benefits include access to privileged information which may enable the majority to depress the stock price and time the freezeout event at the minority's expense. Therefore, the equilibrium stock price in imperfect markets may not reflect the firm's full equity value, which is the sum of security benefits and private benefits (Tirole, 2006).

If the court thinks the majority consumes unfair private benefits by offering a low freezeout price, it will set a price in the verdict to compensate the minority for its loss. A rational majority internalizes this potential ex post discipline, offering a freezeout price ex ante that is sufficiently above the stock price to ensure minority acceptance. However, if the majority underestimates the potential court price while the minority does not, the offer will be rejected, and the court will discipline the majority ex post through the verdict.

We use the bid premium as the basic indicator of whether the freezeout price reflects the full value. A dummy variable, which is unity for a slow freezeout and zero otherwise, is our proxy for potential private benefits obtained through the freezeout. Finally, we use the firm's equity market values an additional proxy for potential private benefits. Because larger firms are generally more transparent because of closer analyst coverage, the potential for the majority to acquire and use privileged information will be smaller the larger the firm. Unless minority and majority stockholders have completely rational expectations about court outcomes, we expect the likelihood of offer rejection to be higher the lower the bid premium, the smaller the firm, and the slower the freezeout.

We estimate this relationship with a logit model, where the dependent variable is 1 if the offer is rejected and 0 if it is accepted. Table 4 presents the findings, where the time period covers 1999–2010 for accepted offers and 1978–2010 for rejected offers. The synchronous period in the right part of the table is 1999–2010 for both accepted and rejected offers.

Table 4
Determinants of the decision to accept or reject a minority freezeout offer.

Offer characteristic	Full time period					Synchronous time period				
	A	B	C	D	E	A	B	C	D	E
Slow freezeout	2.29 (0.00)	2.28 (0.00)	2.36 (0.00)	2.41 (0.00)	2.48 (0.00)	2.48 (0.00)	2.87 (0.01)	2.53 (0.00)	3.20 (0.00)	3.53 (0.00)
Bid premium	0.00 (0.81)	−0.02 (0.46)	−0.17 (0.06)	−0.07 (0.25)	−0.33 (0.02)	−0.04 (0.18)	−0.35 (0.00)	−0.21 (0.15)	−0.30 (0.00)	−0.31 (0.11)
Firm size	−1.19 (0.22)	−0.21 (0.16)	0.15 (0.11)	−0.35 (0.11)	−0.34 (0.20)	0.18 (0.52)	0.29 (0.41)	0.27 (0.44)	−0.17 (0.60)	−0.02 (0.96)
n	131	131	131	105	83	111	111	111	93	72
χ^2	22.57	23.15	26.26	19.79	19.58	14.44	15.34	15.79	24.93	16.39
Prob > χ^2	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Pseudo R^2	0.15	0.15	0.17	0.17	0.20	0.17	0.18	0.19	0.31	0.27

The logit models used in this table estimate the propensity to reject a freezeout offer as a function of the speed of the freezeout, the bid premium, and firm size. The dependent variable is 1 if the offer is rejected and 0 if accepted. Slow freeze out is 1 if the stockholder making the offer held half the firm's equity or more at least one year before the offer was announced. If not, the variable is zero. The bid premium is the freezeout offer price minus the stock price the day before the announcement divided by the stock price the day before the announcement. Firm size is the market value of the firm's equity in millions of NOK as of year end 2010. Model A uses unmodified observations, B winsorizes the bid premium and firm size at their ±5% tails, C winsorizes them at their ±10% tails, D censors them at their ±5% tails, and E censors the two variables at their ±10% tails. The p-values are in parentheses. The full time period covers 1999–2010 for accepted offers and 1978–2010 for rejected offers. The synchronous time period is 1999–2010 for both accepted and rejected offers. All sample firms are listed on the Oslo Stock Exchange.

According to model A, which uses unmodified (raw) values for the variables, the accept/reject decision is not significantly related to the bid premium or to the firm's size. This result suggests that these bid characteristics do not produce material disagreement between the majority and the minority about potential court outcomes. In contrast, the accept/reject decision depends on the speed of the freezeout, because a slow freezeout significantly increases the likelihood that minority stockholders will reject. This effect is strong, because the odds ratio for reject/accept increases by a factor of ten ($e^{2.29}$) in the full time period and by twelve in the synchronous time period if the bidder has controlled the firm for more than one year rather than less.

To check for robustness, we account for potential outlier effects in models B–E, where we alternatively winsorize and censor at the 5% and 10% tails for the bid premium and firm size. As shown, the importance of freezeout speed and the irrelevance of firm size both persist across the models. The relationship between offer rejection and the bid premium tends to become significantly negative as the tails are trimmed or deleted. However, the effect is small compared to the effect of freezeout speed.[13]

This finding of a positive relationship between the tendency to reject the offer and the bidder's control for extended periods before the offer suggests that the majority and the minority disagree on potential court outcomes in these settings. The minority stockholders seem to think that bidders with a long prior control period may try to exploit the minority by setting a freezeout price that does not account for a likely court outcome. In the rest of the paper, we analyze whether the court shares this view.

5. Valuation

We first document the valuation methods used by the two parties and by the court in rejected freezeout offers, paying greatest attention to the court. Subsequently, we consider the valuation outcomes by showing how the court price relates to several other valuations, and to the freezeout price in particular.

According to panel A of Table 5, the court most often prices the minority shares by the substance method. This approach estimates the value of the firm as the sum of observed market values for its individual assets (Benninga & Sarig, 1997). Discounted cash flow is the second most important method for the court, whereas the stock price plays this role for the majority.[14] In contrast, using no method whatsoever is a quite frequent choice for the minority (21%), and using qualitative arguments is the second most common approach when a method is used (17%). Thus, the minority is generally less professional than the majority and the court in terms of economic analysis, using no method or qualitative methods in close to 40% of the cases.

Panel B highlights the subsample of public firms and shows how the stock price is used as the main method for pricing minority shares.[15] As we discussed in Section 4, the stock price may be a better proxy for the fair value when the bidder has held a dominant position for a short rather than long period before the freezeout. The table shows that the court shares this view by applying the stock price as the primary valuation tool when the freezeout is fast. In contrast, minority stockholders practically never benchmark their valuation using the stock price regardless of freezeout speed.[16]

Table 5
Valuation methods.

A. Main method used

Method	Court	Majority	Minority
Substance	33%	26%	13%
Discounted cash flow	30%	16%	28%
Stock price	13%	32%	2%
Multiples	10%	5%	6%
Qualitative	6%	6%	17%
Several	5%	13%	12%
No method	2%	2%	21%
n	82	82	82

B. Stock price as the main method used for public firms

Valuator	Slow freezeout	Fast freezeout	*n*
Court	0%	100%	5
Majority	36%	64%	14
Minority	100%	0%	1
n	6	14	20

This table shows the propensity to use different valuation methods by the court, the majority stockholder, and the minority stock holders when valuing minority stock in the court room. The substance method estimates firm value as the sum of observed market values of the firm's individual as sets, and the discounted cash flow method discounts each future year's expected cash flow by a cost of capital. The multiples method estimates firm value as the product of a valuation multiple and some firm characteristic, such as the product of the price/earnings multiple for the industry and the firm's forecasted operating earnings for the next year. The stock price is the price per share of the firm's equity at the announcement of the freezeout offer. We classify a freezeout as slow if the stockholder making the offer held half the firm's equity or more at least one year before the offer was announced. If not, the freezeout is called fast. The sample is the population of rejected freezeout offers handled by Norwegian courts from 1978 to 2010.

The outcome of the valuation process is summarized in Table 6, which reports six different ratios between alternative valuation pairs. Panel A shows distributional properties for the sample as a whole, while panel B reports the median and mean valuation ratios under a slow and fast freezeout process, respectively.

The valuation ratios in panel A show that the typical (median) majority owner of a public firm offers a freezeout price that equals the current stock price. When the two parties meet in court, the minority argues that the stock is worth twice as much as the majority's offer. The typical court verdict values the stock at 26% above the freezeout price, 11% above the stock price on the freezeout offer date, 16% above the majority's valuation in court, and 28% below the minority's valuation.[17]

Panel B shows that the conditional valuation outcomes often differ from the unconditional outcomes in panel A. For instance, the median court price is only 12% above the freezeout price when the freezeout is fast, but 36% above when it is slow. Notice also that the minority feels much more expropriated in a slow freezeout, as the median minority claim is 115% above the majority claim in a slow freezeout as opposed to 53% in a fast freezeout. Finally,

[13] To account for potential time effects, we also estimate an OLS model, with time dummies, for the full time period. The results, available upon request, are consistent with those reported in Table 4.

[14] Since the stock price approach is seldom feasible for private firms, the frequency of this method is higher (38%) in the subsample of public firms.

[15] This means we ignore the four cases from panel A where the stock price is used as the main method for valuing private firms. Only the majority uses the stock price in these four cases.

[16] This is not surprising, because we will show shortly that the majority typically offers a freezeout price that equals the stock price at the freezeout. Since minority stockholders are in court because they have rejected this offer, it does not make sense to base their valuation arguments on the stock price. The fact that minority stockholders benchmark their claim on the stock price in a slow freezeout case is puzzling and is possibly another indication that the minority tends to be the least sophisticated party in court.

[17] The valuation ratios are generally closer to one when the firm is public. For instance, the ratio of minority claim to majority claim has a median of 1.40 in public firms and 2.35 in private firms. Similarly, the corresponding median court price to freezeout price ratios are 1.16 and 1.30, respectively. Thus, there are generally stronger valuation conflicts between the parties when the firm is private.

Table 6
Valuation outcomes.

A. Distributional properties of the valuation ratios

Ratio	Median	Mean	Std.	Max.	Min.	% with ratio of 1 or higher	*n*
1. Freezeout price/stock price at freezeout	1.00	1.02	0.46	3.00	0.22	75%	55
2. Minority claim/majority claim	1.99	4.19	10.34	64.38	1.00	100%	40
3. Court price/freezeout price	1.26	1.60	1.23	8.00	0.00	87%	78
4. Court price/stock price at freezeout	1.11	1.41	1.01	7.11	0.48	79%	56
5. Court price/majority claim	1.16	1.77	3.48	30.00	0.60	94%	69
6. Court price/minority claim	0.72	0.70	0.21	1.02	0.04	7%	42

B. Median valuation ratios by majority power

Ratio	Median					Mean				
	All	Slow freezeout	Fast freezeout	Difference	(*p*-Value)	All	Slow freezeout	Fast freezeout	Difference	(*p*-Value)
1. Freezeout price/stock price at freezeout	1.00	1.00	1.00	0.00	(0.39)	1.02	1.03	1.01	0.02	(0.88)
2. Minority claim/majority claim	1.99	2.15	1.53	0.63	(0.05)	4.19	5.67	1.97	3.70	(0.18)
3. Court price/freezeout price	1.26	1.36	1.12	0.25	(0.01)	1.60	1.81	1.25	0.56	(0.02)
4. Court price/stock price at freezeout	1.11	1.16	1.10	0.06	(0.28)	1.41	1.59	1.16	0.43	(0.07)
5. Court price/majority claim	1.16	1.21	1.13	0.08	(0.26)	1.77	2.08	1.28	0.80	(0.25)
6. Court price/minority claim	0.72	0.65	0.74	−0.09	(0.57)	0.70	0.68	0.73	−0.05	(0.39)

This table shows descriptive statistics for the relationship between alternative valuations of the minority stock. The freezeout price is the offer given by the majority during the freezeout period, the majority (minority) claim is the value of the minority stock as presented by the majority (minority) stockholders in court, and the court price is the value of the minority stock as specified in the verdict. We classify a freezeout as slow if the stockholder making the offer held half the firm's equity or more at least one year before the offer was announced. If not, the freezeout is called fast. The sample is the population of rejected freezeout offers handled by Norwegian courts during the period 1978–2010.

the median freezeout price to stock price ratio is independent of long-term majority control before the freezeout. This relationship reflects that the majority owner does not consider the potentially negative stock price effect of his private benefits when making the freezeout offer.

This evidence documents that the valuation outcome in court depends strongly on the control setting prior to the freezeout. Furthermore, the table illustrates that valuation outcomes vary for other reasons as well. For instance, panel A shows that the court price to freezeout price ratio has a minimum of 0 (the minority gets nothing) and a maximum of 8 (the minority gets seven times more than initially offered). Moreover, the standard deviation is three quarters of the mean. Fig. 1 shows the full frequency distribution of the court price to freezeout price ratio, which has about half its mass between 0.8 and 1.2. The ratio is below 1 in 13% of the cases, and the right tail reflects some very high ratios.

Summarizing, this section documents large differences between the parties regarding both valuation models and valuation outcomes. First, minority shareholders use formal methods less often than do the majority and the court. Second, the valuation outcomes vary considerably, both across the three parties and from case to case for a given party. Most majority owners of public firms offer a freezeout price that equals the stock price on the offer date. The court values the minority's shares closer to the freezeout price and to the stock price on the offer date whenever reasons exist to trust the informativeness of the stock price. This valuation happens when the bidder has not held a dominant position in the firm for an extended period before the freezeout offer. These are also the cases where the minority feels the least expropriated.

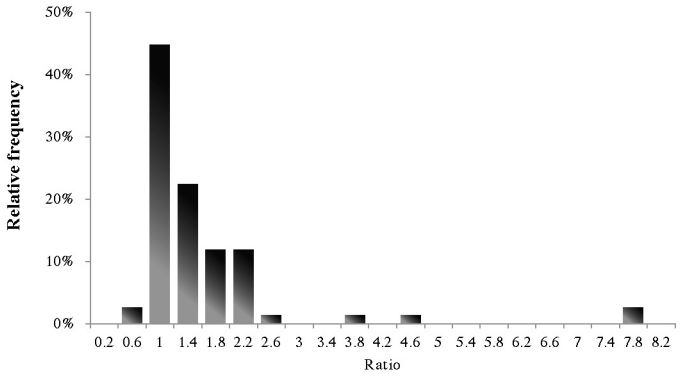

Fig. 1. The court price to freezeout price ratio. This figure shows the frequency distribution of the ratio between the court price (i.e. the value perminority share as set by the court) and the freeze outprice (i.e. the value per minority share offered by the majority at the freezeout announcement). The sample is the population of rejected freeze outoffers handled by Norwegian courts from 1978 to 2010.

6. The court's disciplining behavior in rejected offers

The raw litigation return is the internal rate of return from first investing (i.e. not receiving) the freezeout price on the offer date and later paying the out-of-pocket litigation costs, and finally receiving the court price plus possibly interest and out-of-pocket litigation costs when the verdict is reached.[18] The litigation premium equals the raw litigation return minus the riskless rate over the investment period. The more positive (negative) the difference between the raw litigation return and the relevant benchmark return, the more the court disciplines the majority (minority) ex post. In this section we estimate the return from litigation and relate this return to four potential determinants: (i) the firm's listing status (public/private), (ii) the control rights of the bidder during the last year before the freezeout (slow/fast freezeout), (iii) the timing of the case relative to a regulatory shift (before/after 1997), and (iv) the size of the case (large/medium/small).

Panel A of Table 7 shows distributional properties of the returns, which are reported in real terms. The median litigation premium is 6% while the mean is 46%, although a few extreme outliers strongly drive this latter figure. For instance, ignoring the three highest and

[18] Our data sources do not tell at what time minority stockholders pay their bills for legal advice. Therefore, we assume that payment occurs at the verdict. Moreover, since the majority reimburses the minority for these bills in practically every case (see Table 2), we assume that the minority's cash outflow to legal advisors and its cash inflow from the majority net each other out at the verdict. This assumption will generally overestimate the returns from litigation because the minority's true cash outflow may occur before the inflow.

Table 7
Returns from litigation.

A. Unconditional litigation returns

Return measure	Median	Mean	Std.	Min.	Max.	% positive	*n*
Raw litigation returns	0.13	0.54	2.16	−0.53	14.83	91%	77
Litigation premium	0.06	0.46	2.16	−0.67	14.77	74%	77

B. Median and mean litigation premium by potential determinants

	All	Listing status		Freezeout speed		Regulation		Case size		
		Public	Private	Slow	Fast	Before 1997	After 1997	Large	Medium	Small
Median	0.06	0.04	0.09	0.07	0.04	0.06	0.07	0.07	0.06	0.03
Difference (*p*-value)		−0.05 (0.17)		0.03 (0.34)		−0.01 (0.65)			0.03 (0.40)	
Mean	0.46	0.07	0.86	0.70	0.07	0.41	0.53	0.15	0.08	1.43
Difference (*p*-value)		−0.79 (0.12)		0.63 (0.11)		−0.12 (0.81)			−1.28 (0.18)	
Mean with ±5% winzorized litigation premium	0.14	0.09	0.19	0.17	0.09	0.13	0.14	0.15	0.09	0.14
Difference (*p*-value)		−0.10 (0.06)		0.08 (0.10)		−0.01 (0.85)			0.01 (0.89)	
n	77	38	38	48	28	40	36	18	36	19

This table shows distributional properties of the real (inflation-adjusted) returns from litigation. The raw litigation. returns are measured as the annualized internal rate of return from investing the freezeout price when the offer period expires and receiving the court price plus potential accrued interest and direct litigation costs at the settlement date as determined by the court. The litigation premium is the difference between the raw litigation returns and the risk free rate from the expiration of the freezeout offer to these settlement date. We classify a freezeout as slow if the stockholder making the offer held half the firm's equity or more at least one year before the offer was announced. If not, the freezeout is called fast. Case size is the number of nontendered shares times the freezeout price in millions of NOK as of year end 2010. The sample is the population of rejected freezeout offers handled by Norwegian courts from 1978 to 2010.

the three lowest raw returns leaves the median litigation premium unchanged at 6%, but reduces the mean from 46% to 11% and lowers the standard deviation from 216% to 18%. Nevertheless, a mean litigation premium of 11% in the censored sample is almost twice the mean market risk premium at the Oslo Stock Exchange over this period (Bøhren & Michalsen, 2012, p. 89).

The uncertainty about the litigation outcome in court is unsystematic and hence diversifiable at low costs. Therefore, the relevant benchmark return is the riskless rate for a well-diversified minority stockholder who is not constrained by the claim's low liquidity.[19] This logic implies that a positive litigation premium represents positive excess returns from litigation compared to the returns from accepting the freezeout offer. According to Table 7, such positive excess returns are observed in three out of four cases. This evidence is consistent with the notion that most cases taken to court represent freezeouts where the minority thinks the bidder has underpriced the offer relative to the court's view on fair freezeout pricing. The threat of subsequent litigation is insufficient to discipline the bidder at the freezeout offer stage, and the additional discipline occurs ex post in the courtroom.

Focusing on the litigation premium in panel B and considering first the medians in the first line, there are several interesting differences between the subsamples. The returns from litigation granted by the court are higher when the firm is private, when the bidder is particularly influential at least for a year before the freezeout, when the aggregate minority claim is large, and when the case was handled after the regulatory shift in 1997.[20] The difference in medians across the four potential determinants varies from a maximum of five percentage units (listing status) to one (regulation).

The *p*-values show that these differences are not statistically different from zero at conventional levels. This is also true for the difference in means at the middle of the panel, although the *p*-values for listing status and freezeout speed are smaller than for the medians. This lack of significance is not surprising, given the small size of the sample (77), and particularly of the subsamples, which varies between 18 and 48 observations. In order to not lose sample size, but still dampen the effect of large outliers on means and p-values, we winsorize the three highest and the three lowest observations for the litigation premium and recalculate means and *p*-values at the bottom of the table. The mean risk premium moves much closer to the median, and the *p*-values for listing status and freezeout speed drop to 6% and 10%, respectively.

We regress the litigation premium on its potential determinants in Table 8.[21] Model I uses the unmodified data set, whereas models II–V winsorize (II–III) or censor (IV–V) the distribution of litigation premia at its 5% or 10% tails. For instance, winsorizing the right 5% tail means reducing the litigation premia of 1477%, 1202%, and 171% to the fourth highest premium in the sample, which is 87%. Censoring means deleting these cases from the sample.[22]

In model I, which uses the unmodified data set, no relationship is statistically different from zero at conventional levels. The limited sample size and the fat right tail of the litigation premium distribution partially explain this result. There are just 73 observations, and the standard deviation of the litigation premium is almost five times the mean according to Table 7. Reassuringly, Table 8 shows that restraining the outliers by modifying them (models II–III) or deleting them (models IV–V) reduces the *p*-value considerably for every variable except regulation.[23] The private firm effect has a *p*-value in the 3–7% range across the four models, the size effect is highly significant in three of them, and the slow freezeout has a *p*-value around 15% under 10% winsorizing or censoring. Notice also that we have analyzed the whole population of rejected offers

[19] Minority stockholders may have chosen to remain undiversified, and the illiquid claim on the court price may be costly to trade. Thus, one may argue that the relevant benchmark return is above the riskless rate. Nevertheless, it is hard to imagine that the cost of these imperfections would wipe out a litigation premium that is almost twice the risk premium of the market portfolio.

[20] A new corporate law that year reduced uncertainty about the proper reference point for the valuation. However, it is not clear what this specification implies for the verdict and hence for the litigation premium.

[21] The estimated relationships are very similar when we use raw litigation returns instead of the litigation premium as the dependent variable.

[22] There is no serious multicollinearity in the data set. The strongest correlation is between case size and private firm, where the correlation coefficient is −0.45.

[23] Since the only Supreme Court verdict so far was delivered in 2003, we also estimate the models in Table 8 with a dummy variable for the 2003 regulatory event rather than the 1997 event. There is no noticeable effect on any coefficient estimate, and the 2003 dummy is insignificant.

Table 8
Determinants of the litigation premium.

Independent variable	Model				
	I	II	III	IV	V
Constant	0.57 (0.24)	0.18 (0.00)	0.16 (0.00)	0.16 (0.00)	0.14 (0.00)
Private firm	0.32 (0.59)	0.11 (0.07)	0.09 (0.03)	0.10 (0.04)	0.07 (0.05)
Slow freezeout	0.29 (0.63)	0.07 (0.26)	0.06 (0.16)	0.05 (0.31)	0.05 (0.13)
After 1997	0.61 (0.30)	0.01 (0.85)	−0.01 (0.79)	−0.03 (0.49)	−0.05 (0.12)
Case size	−0.19 (0.15)	0.02 (0.23)	0.02 (0.02)	0.03 (0.01)	0.03 (0.00)
n	73	73	73	69	63
F	1.31	1.66	2.77	2.27	3.68
Prob > F	(0.28)	(0.17)	(0.03)	(0.07)	(0.01)
Adjusted R^2	0.02	0.04	0.09	0.07	0.15

This table shows the estimates of five models that regress the litigation premium on potential determinants. The litigation premium is the raw returns from rejecting the freezeout offer minus the risk free rate over the period from offer expiration to the court's verdict. Private firm is a dummy variable which is 1 if the firm is not listed and 0 otherwise. Slow freezeout is a dummy variable which equals 1 if the stockholder making the offer held half the firm's equity or more at least one year before the offer was announced. If not (fast freezeout), the variable is 0. Case size is the log of the product of nontendered shares and the freezeout price in millions of NOK as of year end 2010. After 1997 is a dummy variable which equals 1 if the verdict was made after 1997 and 0 otherwise. Model I uses unmodified observations, II winsorizes the litigation premium at the ±5% tails, III winsorizes at the ±10% tails, IV censors at the ±5% tails, while V censors the litigation premium at the ±10% tails. The p-values are in parentheses. The sample is the population of rejected freezeout offers handled by Norwegian courts during the period 1978–2010.

rather than just a sample. This broad approach means we may validly generalize from the sample to the population of rejected freezeout offers in this period based on differences in sample means alone. Moreover, the role of freezeout speed in the court is consistent with what we found in Section 4 for the determinants of the accept/reject decision, although the effect of freezeout speed is more convincing in the accept/reject decision.

The estimated coefficients show that returns from litigation tend to be higher when the firm is private, when the bidder has been dominant for an extended period before the freezeout, and when the case is large. These relationships are generally in line with the univariate descriptive statistics from Table 7. The results suggest the court thinks the bidder sets the freezeout price particularly low relative to the fair value when there is no organized market for the stock (private firm). This evidence is consistent with the notion that the lack of a reliable market price reduces the ex ante legal discipline of the bidder's freezeout decision. Similarly, the positive return effect of a slow freezeout supports the argument that a dominant owner over a long period can more easily depress the security benefits of owning the stock before the freezeout, time the freezeout based on privileged information, and hence reap private benefits at the minority's expense.[24] Finally, the positive relationship between litigation premium and case size may suggest that the minority's opportunity to have their voice heard in court is greater when they have a high aggregate claim on the bidder.

The combination of a private firm and a slow freezeout reflects the setting in our sample where the ex post protection of minority stockholder rights is particularly strong in terms of high compensation granted by the court. This is also the setting where the majority does the poorest job in taking into account the actual legal enforcement when deciding the freezeout price.

Notice finally that $\bar{R}^2$ in Table 8 is low in every model, ranging between 2% and 15%. This low $\bar{R}^2$ reflects that although the four determinants in our model have aggregate explanatory power concerning the court outcome, most of the cross-sectional variation in litigation returns is driven either by genuine randomness in the court's valuation process or, more likely, by determinants used systematically by the court, but ignored by our model. Thus, rejecting a freezeout offer with characteristics that tend to trigger minority-friendly verdicts according to our model will still involve a court case with highly unpredictable outcomes.

[24] Using a threshold of two years rather than one produces the same result.

7. Summary and conclusions

Global empirical evidence suggests that the legal protection of minority stockholder rights matters for corporate finance, corporate governance, and for overall welfare in society. In particular, stronger minority protection generally goes along with lower private benefits (Dyck & Zingales, 2004), higher dividend payout (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000), more takeover activity (Rossi and Volpin, 2004), higher valuation multiples (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2002), lower ownership concentration (La Porta et al., 1998), and larger capital markets (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1997).[25] This paper analyzes in detail the court's disciplining effect on minority freezeouts. We study a regulatory regime that grants every minority stockholder the right to reject the offered freezeout price and to instead ask the court to value the nontendered minority stock. The outcome of this process is either an accepted offer by all minority stockholders or a legal verdict for rejected offers in terms of a court price. The price of a minority share as stated in the verdict is what the majority must pay the minority per untendered share when the court case is closed.

We first analyze the determinants of the accept/reject decision in all minority freezeout offers in public firms from 1999 to 2010. The evidence shows that almost 90% of the offers are accepted, and that the accept/reject decision is independent of the difference between the freezeout price and the stock price on the offer date. This result suggests that most majority stockholders offer a freezeout price that the minority thinks is consistent with the price that the court would set were the minority to litigate. In contrast, we find that the likelihood of offer rejection is much higher if the bidder has controlled the firm for an extensive period before the freezeout. This finding suggests that the minority suspects the majority tries to extract private benefits at the minority's expense. Such offers may come from majority stockholders who do not rationally set a freezeout price that reflects the court's expected valuation of a rejected offer.

[25] Spamann (2010) challenges several of these findings by relating some of these characteristics to a corrected and re-estimated version of the La Porta et al. index for minority stockholder protection. For instance, Spamann finds that the inverse relationship between minority investor rights and ownership concentration is not upheld under the corrected index. This evidence suggests that the methodology used and the conclusions reached in the early stage of law and finance research need more careful scrutiny.

In the second step of our study, we analyze how all rejected offers in public and private firms are valued by Norwegian courts from when the freezeout law was introduced in 1976 to the end of 2010. We document the duration, costs, and valuation methods used in the legal process. Moreover, we estimate the minority stockholders' return from rejecting the known freezeout price and instead receiving a claim on the uncertain court price at an uncertain future time. The higher this return from litigation, the more the court disciplines the majority ex post, that is, after the freezeout offer

We find that offer rejection involves unusually high and unusually risky returns. Because minority stockholders can eliminate this risk by diversifying, however, a litigation return above the riskless rate represents profitable litigation for well-diversified minority stockholders who are not liquidity constrained. Because we observe such a positive litigation premium in three out of four cases, we infer that rejected offers are mostly considered underpriced by the court. This is particularly true when the bidder has held a dominant position in the firm for quite some time before the freezeout, and when the minority has unusual difficulty in estimating their share's true value. Finally, we observe that even though minority stockholders rarely pay their out-of-pocket litigation costs, they seldom abuse their right to ex post legal protection by suing opportunistically.

Overall, our evidence shows that most majority stockholders making freezeout offers and most minority stockholders responding to these offers rationally anticipate the extant level of freezeout law enforcement. Hence, the court's ex post discipline reduces inefficient litigation by disciplining the parties ex ante. The notable exception concerns cases in which the freezeout involves a high likelihood that the majority tries to extract private benefits through the freezeout.

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