

The Fewer the Merrier?

The Effect of Shareholders' Vote Turnout on Firm Performance

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ABSTRACT

This paper investigates whether shareholder voting improves firm performance. I analyse shareholders' vote turnout at annual shareholders' meetings, before and after a court decision affecting shareholders' voting behaviour. This provides a clean causal estimate that deals with the endogeneity of the ownership structure, vote turnout, and firm performance. Preliminary results indicate that lower shareholders' vote turnout leads to significantly lower operational efficiency. Moreover, firms with low vote turnout and low firm performance in the past have a higher probability of attracting new blockholders at a higher cost.

JEL classification: D72, D82, G39, K22.

Key words: Voting Behaviour, Asymmetric Information, Corporate Governance, Corporation Law.

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“The growth of corporations, the dispersion of shareholders, the manifest impossibility to attend meetings, have made the right to vote, in reality, a right to delegate the voting power to someone else [...]” - Adolf A. Berle & Gardiner, *The Modern Corporation & Private Property*, p. 129 (rev. ed. 1967).

Does shareholders’ vote turnout improve firm performance? Shareholders’ vote turnout is defined as the voting rights present at the annual shareholders’ meeting (AGM) divided by the voting share capital. On the one hand, the traditional discussion of this question is based on the “one share-one vote” rule, which is central for the voting process. Theoretical work predicts that deviation from the one share-one vote rule reduces shareholder value (e.g. Grossman and Hart (1988) and Harris and Raviv (1988)). Firm performance increases when all shareholders have the same voting rights. Or stated differently, cash flow rights and voting rights are equal. On the other hand shareholders’ vote turnout is closely linked to the ownership structure of the firm. While there is consent in the literature that the relationship between ownership and firm performance is concave, it is still unclear what the *causal* effect between the ownership structure, the voting process, and firm performance is. Concentrated ownership might be beneficial to firm performance, because large shareholders are more efficient in consuming firm information at lower cost¹. However, concentration of control might spur the conflict between large blockholders and minority shareholders. The use of private benefits is widely documented in the literature². This controversial debate can be extended to the influence of shareholders’ vote turnout on firm performance.

This paper’s contribution is to show that a sharp decrease in shareholders’ vote turnout, caused by an exogenous shock, led to a significant decrease in firm performance. From a normative point of view shareholders’ vote turnout is a crucial determinant of firm performance³. Moreover, a large string of the literature has analysed the importance of single proposal outcomes on shareholder value⁴. Besides Christoffersen, Geczy, Musto, and Reed (2007) show there exists an active market of vote trading through equity loans. If the cost of unbundling and trading votes is sufficiently low, then shareholders choose the ratios they vote in, which might deviate from one share-one vote. Therefore, a direct economic link might exist between shareholders’ vote turnout and firm performance - when vote turnout is low and only few informed investors vote, firm performance decreases.

Using a sample of 1,051 shareholder meetings during the period between 2006 and 2014, I find strong support for the hypothesis that shareholders’ non-voting on annual shareholders’ meetings lead to lower firm performance. More specifically, firms with lower vote turnout performed significantly worse after the exogenous shock on shareholders’ vote turnout had occurred. This result holds for various model specifications with different standard errors and control variables.

Intuitively the results show that the less share capital is *voted* on a meeting, the more voting power informed shareholders have. Making an informed decision and vote becomes increasingly complex and

¹ Shleifer and Vishny (1986) and Grossman and Hart (1980) build the theoretical foundation of this argument.

² Burkart, Gromb, and Panunzi (1997) emphasize that concentrated ownership might lead to over-monitoring and private benefits of control, which ultimately lowers firm performance.

³ Easterbrook and Fischel (1983) provide several arguments why shareholder voting matters.

⁴ E.g. Cuñat, Gine, and Guadalupe (2012) analyse close-call proposals and show that adopting one governance proposal increases shareholder value by 2.8%.

investors have to bear significantly higher cost. Hence, lower shareholders' vote turnout can shift the voting power towards a minority of more informed shareholders who have private benefits from voting. This argument is related to the theoretical model of Arawatari (2009), which shows that voter turnout in political elections decreases with increases in the degree of informatization. In his model, the fall in voter turnout makes an individual with a higher level of human capital becomes the median voter. However, the better educated individuals reduce income redistribution, which implies a fall in income equality. Therefore, not only the vote turnout of political elections should have an effect on performance measures such as GDP per capita, but also the vote turnout of corporate elections on firm performance measures.

From an economical perspective I find reasonable coefficient magnitudes. Firms with low shareholders' vote turnout experience on average a drop of 0.113 points in log Tobin's Q compared to a mean value for all firms in the sample of 0.90. In addition, buy-and-hold returns are within a range of -0.60 and 1.20, while the exogenous reduction in turnout reduces the buy-and-hold returns of the treatment firms by 0.22. [Put later key results here]

Furthermore, I conduct several robustness checks. First, besides screening changes in the law, I conducted a placebo test to rule out potential confounding events. The results of the placebo test are consistent with the conjecture that the post-shock drop in shareholders' vote turnout was truly due to the surprising court decision. While firms which issued bearer shares do not suffer from a turnout drop, firms which issued registered shares try to actively increase vote turnout by contacting investors. Thus, these placebo tests back up my interpretation that the court decision causally reduced vote turnout.

I contribute to several strands of the literature. First, theoretical papers have analysed the effect of one share-one vote (Grossman and Hart, 1988; Harris and Raviv, 1988), vote mechanisms (Maug and Rydqvist, 2008), empty voting (Brav and Mathews, 2011; Eso, Hansen, and White, 2014), and shareholder proposals (Levit and Malenko, 2011). Second, from an empirical perspective academics provided evidence for the effect of one share-one vote (Adams and Ferreira, 2007), whether corporate voting does add value (Brickley, Lease, and Smith, 1988), empty voting and the importance of record dates (Young, Millar, and Glezen, 1993; Christoffersen et al., 2007), shareholder proposals (Bethel and Gillan, 2002; Cuñat et al., 2012), institutional investors (Agrawal, 2012), and proxy voting advice (Alexander, Chen, Seppi, and Spatt, 2010). While these papers merely analysed the specific ingredients of the corporate voting process, this paper identifies the causal relationship between shareholders' vote turnout and firm performance. The analysis in this paper is closely related to the effect of empty voting⁵ and the importance of the record date, but the paper provides a new unique perspective - shareholders' vote turnout.

Moreover, this paper contributes to the ongoing debate on the effectiveness of the different corporate governance channels. These channels are classified into exit, voice and loyalty channels based on the work of Hirschman (1970). Edmans, Levit, and Reilly (2014) prefer to model the exit channel for three reasons. First, exit is the main governance channel used by institutional investors as documented in a survey of blockholders (McCahery, Sautner, and Starks, 2010). Second, holding multiple stock in several firms should

⁵ "Empty voting" describes the decoupling of the right to vote at a shareholders' meeting from beneficial ownership of the shares on the meeting date, see Young et al. (1993).

reduce the single stake in a firm. Finally, exit has asset pricing implications. These arguments provide critical motivation for this paper. First, if shareholders prefer the exit channel over the voice channel, vote turnout should have little to no effect on firm value. Second, even though multiple blockholders hold multiple small stakes in a firm they can still exert sufficient voting power when shareholders' vote turnout is low. Third, voting on single proposals has also asset pricing implications (Cuñat et al., 2012). Therefore, the contribution of this paper is to extend our knowledge of the voice channel, and testing its degree of complementarity to the exit channel.

The remainder of the paper is organized as follows. Section I derives the hypotheses from the literature. Section II explains the exogenous shock in detail, while section III elaborates on the methodological approach, identification, and fulfilment of assumptions. Section IV describes the data and section V present the empirical results of the causal effect between shareholders' vote turnout and firm performance. Finally, section VI concludes.

I. Motivation: Why shareholders' vote turnout does matter

This section discusses a theoretical framework explaining why shareholders' vote turnout may have an effect on firm performance. The economic motivation arises due to the decreasing levels of vote turnout on annual shareholders' meetings. As a consequence, shareholders who actually vote, have increasing voting power, mainly large institutional blockholders⁶. In order to understand the possible sources of causality, I first analyse the effect of firm performance on shareholders' vote turnout and then, most importantly, estimate the effect of shareholders' vote turnout on firm performance.

More specific, I follow a two step analysis. In the first step, I look at the correlation between firm performance and shareholders' vote turnout. While the voting literature has analysed the paradox of not voting in depth⁷, the objective of this paper is not to provide explanations for why shareholders abstain from voting, but to analyse the effect of shareholders' lack of voting on firm performance. This research question entails a feedback relationship. Last years performance might correlate with this years turnout, which correlates with next years firm performance. Consequently, I analyse the determinants of shareholders' vote turnout in order to use these determinants as control variables in a second step, when testing the effect on firm performance. Therefore, hypothesis 1 summarizes the effect of firm performance on shareholders' vote turnout.

Hypothesis 1 (Determinants of Turnout):

Past firm performance is negatively correlated with shareholders' vote turnout at the annual shareholders' meeting (H1).

⁶ Average shareholders' vote turnout is as low as 60% in my sample, providing sufficient voting power to shareholders who actually vote.

⁷ See Feddersen and Pesendorfer (1996) for further reference.

This hypothesis is predicted by the rational voting literature. Assuming that shareholders make rational decision to vote or not to vote, a rational shareholder would stay either passive if past firm performance was sufficiently high or become more active by raising his voice when past firm performance was unsatisfactorily low. The rational voter assumption is widely used in the literature, e.g. see Dhillon and Rossetto (2015), and is justified by the cost of voting and the free-rider problem that arises when an individual's vote is not pivotal. This implies that shareholders should either (1) abstain from voting when past firm performance was high and should (2) not abstain from voting when past firm performance was low. Moreover, from a fully rational perspective shareholders should abstain from voting when firm performance was high, but some blockholders are too large not to vote. As an example, large family owners would send a negative signal to the market if they do not vote. This explains why (3) some shareholders vote even though firm performance is high. However, we should not observe low vote turnout when past firm performance was unsatisfactorily low (4). These shareholders could either take the "Wall Street Walk" and sell their shares prior to the meeting (exit theories) or engage in shareholder activism (voice theories)⁸, because free-riding is becoming less efficient if every shareholder is free-riding (Grossman and Hart, 1980).

The analysis of these four voting patterns provides the theoretical framework in as much shareholders' vote turnout may then have an effect on (future) firm performance. Therefore, hypothesis 2 summarizes the effect of shareholders' vote turnout on firm performance.

Hypothesis 2 (Effect of Turnout):

Past shareholders' vote turnout is positively correlated with (future) firm performance (H2).

This hypothesis is predicted by the theory of shareholder preferences. On the one hand, ideally all shareholders benefit when votes move from the less informed to the more informed shareholders, i.e. when information asymmetries between shareholders exist (Christoffersen et al., 2007). In this case, shareholders' vote turnout should not have no implications on (future) firm performance, because shareholders' annual meeting is already voted in the best way for all shareholders. This argument is supported by the existence of an efficient equity loan market, which hosts a market for shareholder votes. On the other hand, if shareholders do not share the same preferences, some shareholders would receive private benefits from voting while others do not. These shareholders would even pay for acquiring more votes or prefer shareholder meetings with low turnout, because their voting power is significantly larger. In this case, shareholders' vote turnout should be positively correlated with (future) firm performance. Moreover, firms with unsatisfactorily low performance in the past, but an active shareholder base can turn around firm performance in post-meeting years, because shareholders have sufficient means to induce changes, e.g. behind-the-scenes activism or public proxy fights. This leads to hypothesis 3.

Hypothesis 3 (New Blockholder):

Firms with low firm performance in the past and low shareholders' vote turnout have a higher probability of attracting new blockholders at higher discounts (H3).

⁸ See McCahery et al. (2010) for a study on the complementarity of channels.

Since shareholder preferences may deviate from managers preferences, managers prefer high shareholders' vote turnout on annual shareholders' meetings and want to attract large blockholders. Since new blockholders are aware of previous exit strategies of prior shareholders, new blockholders would demand a significant discount, potentially diluting positions of existing shareholders if new equity is issued. Consequently, costly recapitalisation is conducted in order to attract blockholders, who are more favourable towards management.

II. The exogenous shock on shareholders' vote turnout

This section discusses the exogenous shock that broke the endogenous relationship between past firm performance and shareholders' vote turnout. In short, investors (wrongly) thought they were faced with two mutually exclusive options: (1) voting on a stock and not being able to trade the stock, or (2) being able to trade the stock and to abstain from voting. More specifically, identification of the causal relationship comes from a court decision of the Cologne Higher Regional Court. The Cologne Higher Regional Court decided that a custodian must not vote his shares in line with § 28 WpHG (German Securities Trade Act) if his stake has not been disclosed to the German regulatory authority BaFin according to §§ 21 ff. WpHG. Due to this court decision foreign institutional investors refrained from voting on German shareholder meetings as a pre-emptive measure to mitigate the risk of costly failed trade settlement.⁹ The risk of costly failed trade settlement occurs, because global custodian banks tag German firms, which issued registered shares, with a 'soft blocking' tag. 'Soft blocking' means that custodian banks require vote cancellation and de-registration in order to settle shares where a vote instruction has already been lodged. However, custodian banks do not only want to protect their custodians, but they also have little interest to disclose their pooled custodian holdings when they pass any of the thresholds of vote ownership mentioned in the German Securities Trade Act (WpHG) as mandated by the Cologne Higher Regional Court. Since custodian banks are not the beneficial owners of shares, they register each individual beneficial owner who wanted to vote at an upcoming annual shareholders' meeting resulting in the before mentioned 'soft blocking' rule. Figure 1 provides an overview for an exemplary annual general meeting (AGM).

[Insert Figure 1 here]

For German firms with registered shares the company asks investors for share registration in their share register. Custodians then start registering these shares until the "technical record date" has passed. It is important to note that the German law does not explicitly state a record date, however the here described registration process implies that the 7th day before the annual shareholders' meeting is considered a "technical record date". Effectively, trade settlement is delayed by 10 minutes, however most institutional investors do not want to bear the financial risk of immobile shares and abstain from voting. Therefore, the Cologne Higher Regional Court decision is an exogenous shock on the vote turnout at annual shareholders'

⁹ See the public letter from Michelle Edkins, Chairman of the ICGN Board of Governors, to Dieter Bernhard, Head of Direct Securities Services Germany at Deutsche Bank, concerning the soft blocking in the German market: <http://goo.gl/xxiKhe>.

meetings starting with the 2013 meeting season for German public firms with registered shares.

III. Empirical Strategy

A. *Endogeneity Problems*

The aim of the paper is to analyse the effect of the different levels of vote turnout on firm value. To establish the objective I estimate a difference-in-difference regression. In a perfect experiment I would take a set of firms, reduce shareholders' vote turnout and measure firm value. I would then rewind time, take the same set of firms, measure their firm value once again and would finally compare the results across the two scenarios. Every non-perfect experiment would suffer from threats to the internal validity such as non-observable and omitted variables. The closest feasible experiment in this setting is an exogenous shock on shareholders' vote turnout. The Cologne Higher Regional Court Decision from the 6th of July 2012 serves this purpose. First, the resulting soft-blocking in the trading system was a huge surprise for market participants, especially for foreign institutional investors. Second, the court decision was not a response to pre-existing differences between listed firms with registered shares and firms with bearer shares (Ashenfelter and Card, 1985). Third, the exogenous shock occurred, because the parties in the dispute had not the intention to change the registration requirements for all shareholders collectively. If the court decision had never been passed, I would have expected to observe firms with registered shares not showing a sudden decrease in shareholders' vote turnout. Finally, even though firms are not choosing registered or bearer shares purely randomly, the purpose of introducing registered shares is not to increase shareholders' vote turnout, but to increase demand for the stock itself. Therefore, the classification into treatment and control groups is as close to random as we can achieve within the setting of the annual shareholders' meeting. Nevertheless, all regressions control for firm size, shareholder structure, and age of the firm.

B. *Identification*

A standard approach in the literature which exploits exogenous shocks from changes in the economical and political environment is the difference-in-difference setting introduced by Card (1990). The cross-sectional estimator avoids common trends while the time-series estimator avoids omitted cross-sectional differences. However, the difference-in-difference (DD) approach requires that the parallel trends assumption is fulfilled, i.e. the trend in shareholders' vote turnout for firms with registered and bearer shares during the pre-treatment era is similar. Figure 2 shows the expected drop of shareholders' vote turnout during the annual shareholders' meeting season immediately following the court decision. Firms show a similar trend in shareholders' vote turnout during the pre-treatment era. After the court decision in 2012 the turnout rates for firms with registered shares drops significantly, because foreign institutional investors feared the risk of costly failed trade settlement. Even though a final federal court decision is

still pending, some institutional investors understood the problem derived from the Cologne Higher Regional court decision and voted on annual shareholders' meetings in 2014. This explains the reversal in the shareholders' vote turnout trend emphasizing the exogenous nature of the court decision. Therefore, the graphical analysis provides a first indication that the parallel trends assumption of the DD estimation seems to be satisfied (Leary, 2009). Moreover, a t-test for the difference in pre-event time trends between firm issuing bearer and registered shares is turning insignificant after 2009. The t-statistics are 4.61, 2.25, 2.32, 1.29 and -0.95, respectively, for the years 2007 to 2012.

[Insert Figure 2 here]

C. *Difference-in-difference setup*

To establish whether shareholders' vote turnout has a causal effect on firm value, I estimate a difference-in-difference model:

$$\text{Firm Performance}_{i,t+1} = \alpha + \beta_1 \text{Registered Shares}_i + \beta_2 \text{After Court Decision}_t + \beta_3 \text{DD}_{i,t} + X_{i,t} + \varepsilon_{i,t}$$

where i denotes the firm, and t the time period, here years. *Registered Shares* is a dummy variable equal to one if the firm has issued registered shares and is equal to zero if the firm has issued bearer shares. These options are mutually exclusive and a firm has to choose one of the two share classes. *After Court Decision* is a dummy variable equal to one from 2013 till 2014 and equal to zero for the years preceding the court decision. The independent variable of interest is the interaction between these two dummy variables, *DD*. It measures the change in shareholders' vote turnout for firms with registered shares and firms with bearer shares following the court decision.

The final model specification is a population averaged GEE model. The null hypothesis of the hausman test cannot be rejected (p-value: 0.450), hence I have no indication in favour of a fixed effects model. Consequently, I follow Moulton (1986, 1990) who highlights that errors are correlated within clusters and suggests to cluster at the level of an aggregated regressor, because shareholders' vote turnout is correlated within firms over time. Since the number of firms in my setting approaches infinity ($G \rightarrow \infty$), I cluster at the firm-level (Bertrand, Duflo, and Mullainathan, 2004). Furthermore, in order to correct for potential autocorrelation induced by the difference-in-difference method, I compute bias-corrected AR(1) coefficients (Hansen, 2007; Brewer, Crossley, and Joyce, 2013). These AR coefficients are bootstrapped with 1000 replications. Therefore, the intuition behind this model specification is to identify the effect of registered shares on firm performance. Moreover, in repeated cross-sections I do not want that the composition of the sample changes between periods, hence I exclude companies that switch from bearer to registered shares during the pre-treatment or post-treatment period.

For robustness, I also test a fixed effects model, which includes time fixed effects controlling for changes in firm performance and firm-fixed effects controlling for any time-invariant heterogeneity at the firm-level. Additionally, I also test a specification with the interaction of industry and year fixed effects. This

controls for the cross-sectional, across-firm serial, and within the firm over time correlation. The table below summarizes the empirical design for firm performance:

	Before Court Decision	After Court Decision	Difference
Registered Shares	$\gamma_{\text{Before}}^{\text{Treatment}}$	$\gamma_{\text{After}}^{\text{Treatment}}$	$\Delta\text{Treatment}$
Bearer Shares	$\gamma_{\text{Before}}^{\text{Control}}$	$\gamma_{\text{After}}^{\text{Control}}$	$\Delta\text{Control}$
	Average Treatment Effect:		$\Delta\text{Treatment} - \Delta\text{Control}$

D. Placebo Tests

One of the main assumptions of the difference-in-difference setting is that a different sub-population of the sample in which the treatment effect is expected not to be observed would not show a significant change in firm performance. Therefore, I run several placebo regressions in which the court decision occurs at years different from the actual occurrence in 2012. More specific, in my setting the treatment group consists of firms which issued registered shares compared to firms which issued bearer shares. If I observe the same treatment effect in one of the placebo groups as in my actual estimation sample, I would infer that the court decision is unlikely to have caused the drop in shareholders' vote turnout for firms which issued registered shares. The results in table XI confirm my conjecture that the court decision caused the change in firm performance.

Figure 1. Stylized timeline of the meeting registration: For German firms with registered shares the company asks investors for share registration in their share register. Custodians then start to register these shares with the company until the “technical record date” has passed. It is important to note that the German law does not explicitly state a record date, however the here described registration process implies that the 7th day before the annual shareholders’ meeting is considered a “technical record date”.

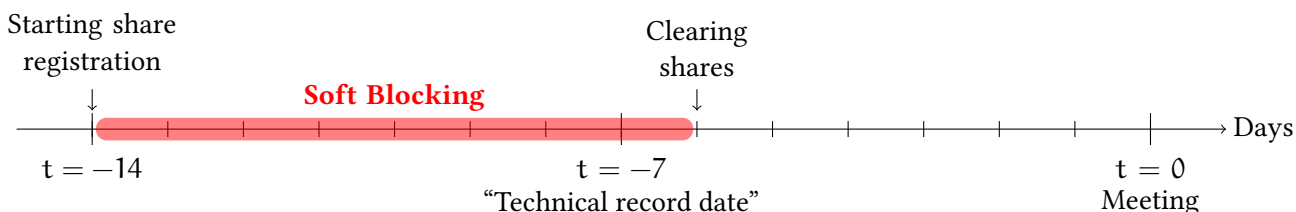


Figure 2. Parallel trends assumption: The plots represent the time-series average in shareholders’ vote turnout for the treatment and control firms, i.e. firms with registered shares and bearer shares, around the vote turnout shock event in the sample. Firms switching from one share type to the other over the sample period have been removed. The figure shows that firms with registered shares experienced a significant drop in shareholders’ vote turnout after the court decision.

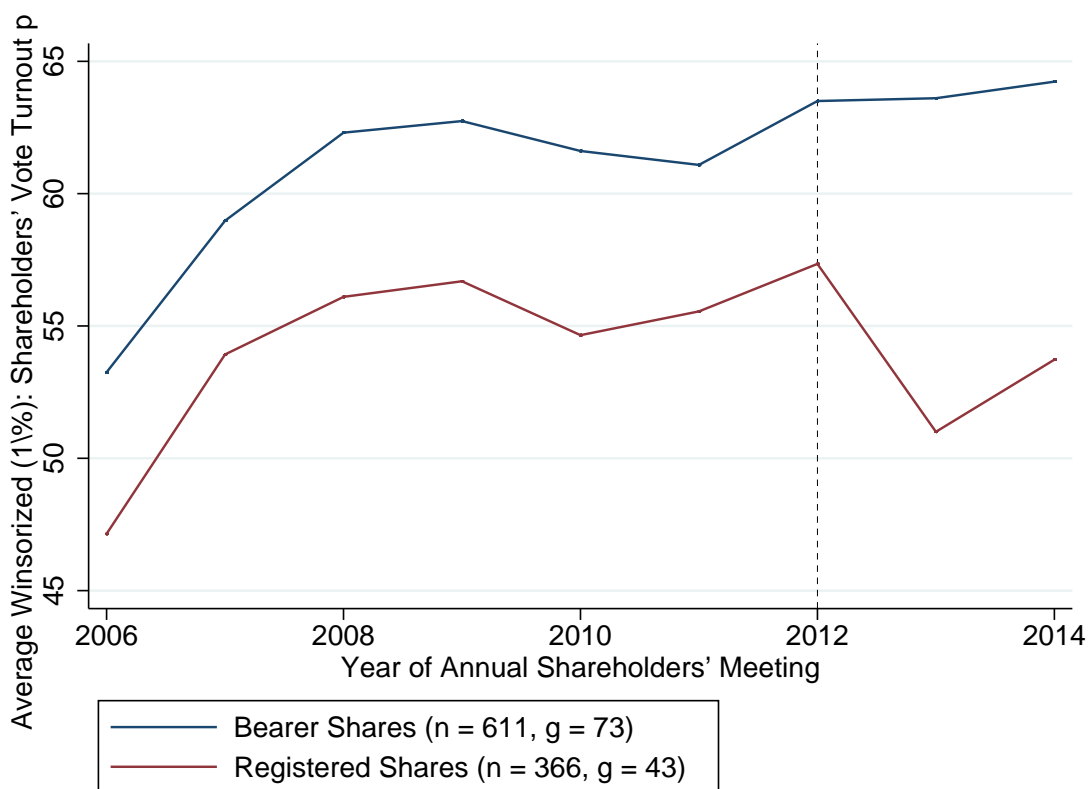


Table XI. Difference-in-Difference Placebo Regression: The dependent variable is shareholders' vote turnout in percentage points. The treatment group are registered shares compared to the control group of bearer shares. The after-treatment dummy is a placebo 'After Court Decision' dummy and switches to one after the Cologne Higher Regional Court decision in the respective year. In parentheses are standard errors. Following the line of argumentation in section III.B, I use the PA model. ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Dep: Vote Turnout	2009 β / SE	2010 β / SE	2011 β / SE	2012 β / SE	2013 β / SE
Registered Shares	-6.971** (2.726)	-8.587*** (2.890)	-7.611*** (2.704)	-5.842** (2.677)	-8.446*** (2.720)
Placebo: 2009	1.177 (0.818)				
Placebo: 2009 * RS	-2.266** (1.101)				
Placebo: 2010		-0.575 (0.962)			
Placebo: 2010 * RS		0.780 (1.701)			
Placebo: 2011			3.252*** (0.735)		
Placebo: 2011 * RS			-1.467 (1.296)		
Placebo: 2012				1.457* (0.763)	
Placebo: 2012 * RS				-6.914*** (1.835)	
Placebo: 2013					0.410 (2.712)
Placebo: 2013 * RS					4.134 (3.667)
Observations	1051	1051	1051	1051	1051
χ ²	12.596	9.399	37.099	20.681	11.566
p-value	0.006	0.024	0.000	0.000	0.009

* p < 0.1, ** p < 0.05, *** p < 0.01. Standard errors in parentheses.