The Carrot and the Stick: Bank Bailouts and the Disciplining Role of Board Appointments

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Online Appendix

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In this appendix we present additional institutional details and results omitted from the main text for brevity. Appendix A1 proves Proposition 1 in the main text (see Section II.A). Appendix A2 describes the various recapitalization programs included in TARP, and provides a detailed summary of the provisions of the CPP in *Table A1*. Appendix A3 has a list of all the appointments made by Treasury for each bank, with dates and director names. When available, the table also reports the committees the directors were part of at the time of the appointments.

Appendix A4 has additional empirical results. *Figure A1* is a bar chart of the funds invested by Treasury in the banks participating in the CPP in million dollars. Each bar's width is $0.1 million. For clarity, we truncate the distribution at $50 million. *Figure A2* plots the average of NPLs/Loans, ROA, and ROE, with corresponding 95% confidence intervals, for banks that have missed four, five, and six missed payments. *Figures A3* and *A4* plot the average change in missed payments against the missed payments at the beginning of the quarter. The first bar chart uses a "placebo sample." We first identify all the non-CPP banks that issued preferred shares during the time span of our analysis. We then count a "missed payment" if the bank still has outstanding preferred shares but does not make any payments on such shares. This sample includes 76 banks, 68 of which miss at least a payment. *Figure A5* plots the distribution of the year-quarters in which each bank has reached five missed dividend payments for the first time.

Figure A6 plots a quadratic fit of the relationship between the number of missed payments and the change in missed payments for banks with a number of missed payments between 1 and 5 (on the left) and between 6 and 11 (on the right). This relationship is displayed for several subsamples, where banks are sorted according to NPLs/Loans, ROA, and ROE.

Figure A7 shows OLS coefficients and corresponding 95% confidence intervals obtained after regressing the leverage ratio, the risk-based capital ratio, and the tier 1 capital ratio on dummies corresponding to the number of missed dividend payments.

Figure A8 presents event-study evidence on the effect board appointments made by Treasury on the risk-based capital ratio, the tier 1 capital ratio, and the logarithm of CEO compensation (see Sections IV.A, IV.B, and IV.C for details).

Table A3 presents regressions where the dependent variables are the consensus earnings forecasts (columns 1 and 2) and the consensus buy/sell recommendations (columns 3 and 4). The consensus values are measured using either the average (columns 1 and 3) or the median (columns 2 and 4) of the earnings forecasts/recommendations and are obtained from the IBES "summary" file. We select the last value available in the calendar year preceding the board appointment. Earnings forecasts are scaled by the stock price five days prior to the consensus forecast date. To avoid the influence of extreme observations, we exclude banks with stock price below one dollar. Buy/sell recommendations are measured on a 1 (strong sell) to 5 (strong buy) scale. The Treated dummy is a dummy equal to one if the bank receives an appointment by Treasury. All the regressions control for match fixed effect, meaning that we include a dummy for each treated bank – control bank combination.

In *Table A4*, we show results along the lines of those presented in Section IV.B (*Table 7*), using different procedures to select the control group for the banks eventually subject to a director appointment. In Panel A, we employ exactly the same matching procedure described in Section IV.A but now use as potential control banks the entire universe of regulated financial institutions in SNL. As a result, the number of banks we are able to match increases, and our sample size ranges between 462 and 475, depending on the availability of the dependent variable. The results are quantitatively and qualitatively similar to those presented in the main text.

In Panel B, for every bank receiving an appointment by Treasury, the control group is restricted only to institutions that are also eligible for director appointments. This approach has the advantage of being the most conservative one. However, it also dramatically reduces the pool of potential control banks and, as a result, the statistical power of the tests. To increase the sample size, we include only size among the continuous variables we match on, increase the maximum difference in the propensity scores to 0.05, and consider a maximum of 6 banks as potential controls. Despite the substantial drop in sample size, which now ranges between 240 and 261 observations, we find that the coefficients in Columns 1, 2, and 3, where we analyze the effects on NPLs/loans, ROA, and ROE, are statistically significant and similar in magnitude to those found in the baseline tests. The effect on abnormal accruals (column 6) ceases to be statistically significant, even though the coefficient on the Post × Treated terms remain negative and economically large in magnitude.

In *Table A5* we restrict the set of potential control banks to those that had at some point been part of the CPP, as in the baseline analysis described in Section IV.B. However, we match not only on the four variables discussed in the main text (size, leverage, loans-to-deposits ratio, and the listed dummy) but also on the level of the outcome variable measured in the year prior to the director appointment. *Table A5* shows that results remain statistically significant and economically similar to those presented in *Table 7*. In the last two rows we also show the differences in the means of the outcome variables (again, measured in the year prior to the director appointment) with corresponding standard errors. All the differences are now not only insignificant but also economically small, with the exception of Column 3 (where the dependent variable is ROE). Hence, the effect of director appointments on performance is unlikely to be driven by mean reversion.

Figure A9 and *Table A6* present evidence on the stock market reaction to Treasury's director appointments. *Figure A9* plots buy-and-hold market-adjusted returns for 1, 2,..., 12 months following the appointment month, computed using the market model. *Table A6* presents regressions where the dependent variable is the bank's stock return at different horizons. In columns 1 through 4, the dependent variable is the cumulative abnormal return over a three-day window surrounding the announcement of the appointment of a director by the Treasury through an 8-K filing. In columns 5 through 8, the dependent variable is the 12-month buy-and-hold return, measured starting from the month following the appointment. The regressor of interest is a "treated" dummy equal to 1 for banks receiving a director appointment. The sample includes 19 banks at the intersection between the sample of 58 banks identified through the matching procedure described in Section IV.A of the main text and the Center for Research in Security Prices (CRSP) database. We could not obtain 8-K filings for two banks; thus, the regressions in columns 1 through 4 only have 17 observations. All the regressions control for "match" fixed effects, i.e., a vector of dummies corresponding to each treated bank – matched bank combination. When indicated, control variables include the logarithm of market capitalization, the book to market ratio, and the lagged 12-month buy-and-hold return. Stock returns are adjusted using the market model in columns 1, 3, 5, and 7 and in the other columns using the Fama-French 3-factor model. We compute factor loadings using up to 36 monthly stock return observations prior to the appointment month. The factors have been downloaded from Kenneth French's website[1].

In *Figure A10* and *Table A7* we examine the market reaction to the director appointment threat. We take advantage of the fact that prior to the first director appointments there was arguably still some uncertainty regarding whether Treasury would ultimately exercise its right[2]. This uncertainty was resolved with the

1. See `https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html`.

2. Indeed, we learned from conversations with Treasury officials that the director appointment covenant was introduced just to follow industry standards, but only when the first banks became eligible that they realized that they had to develop a selection procedure essentially from scratch.

announcement of the first appointments: On July 19, 2011, Treasury made three appointments on the boards of two banks, Royal Bancshares of Pennsylvania and First Banks[3]. We hypothesize that this announcement was perceived by investors as a credible signal that Treasury was committed to exercise its right, and that further appointments would follow.

We then divide CPP banks in two groups. As shown in Section III.A, banks with no missed payments are very likely to keep making the required payments, so they face a low probability of appointment. Conversely, once a bank starts missing payments, the likelihood of missing further payments, and of receiving a Treasury appointment, goes up. Hence, in our simple design the "treated" banks are those that have missed at least one payment. The control banks are in the CPP but have yet to miss any dividend payments. We also exclude from the treated group the two banks receiving the actual appointments, to isolate the effect of the *prospect* of a future appointment to its actual occurrence. (As discussed above, banks subject to actual appointments are included in the analysis of *Table A6*.) Our final sample include 94 banks, 23 of which had missed at least one payment.

Figure A10 shows daily stock returns for the two groups of banks in the five days surrounding the announcement, adjusted using the market model. While we do not find an immediate reaction on the day of the announcement, there is a noticeable spike of over 3 percent the following day, consistent with investors attaching a positive value to the prospect of an announcement[4]. In *Table A7* we run a more formal analysis where we regress the three-day abnormal return on a dummy equal to one if the bank had missed at least one payment prior to the announcement. In columns 1 and 2, we find that these banks outperform the control group by 3.7–3.8%, independent of whether we adjust returns using the market model or the Fama-French three-factor model. In columns 3 and 4 we add the same control variables used in Section IV.A. The coefficients drop slightly, to 2.9–3.1%, but remain significant at the 10% level.

3. More precisely, the two banks made the appointments on July 15 and July 13, respectively, but they disclosed them on July 19 through 8-K filings; on the the same date, Treasury made a press release concerning the appointments.

4. The time stamp of the banks' 8-Ks show that their releases had occurred in the afternoon, at approximately 2pm. We do not have a time stamp for the press release of Treasury, but we searched for articles mentioning the appointments on Factiva and Factset and found that all were released at approximately 7pm or later. This also helps explain why the market reaction is observed only the day after the appointments.

Appendix A1 Proof of Proposition 1

Let V_n the value function of a bank with n missed payments. Clearly, for $n \geq N^*$ the bank manager has no incentive to pay dividends, nor she can enjoy the private benefit; hence, $e_n^* = V_n^* = 0$ for all $n \geq N^*$. Now consider the problem of a manager that has missed $N^* - 1$ dividend payments. The value function can be written as:

$$V_{N^*-1} = e\beta(V_{N^*-1} + B) - k\frac{e^2}{2} \tag{A1}$$

The first-order condition implies:

$$\frac{\partial V_{N^*-1}}{\partial e} = 0 \Leftrightarrow e = \frac{\beta(V_{N^*-1} + B)}{k} \tag{A2}$$

By plugging expression (A2) into (A1), we obtain:

$$V_{N^*-1}^* = \frac{k - \sqrt{k}\sqrt{k - 4\beta^2 B}}{2\beta^2} - B \tag{A3}$$

and

$$e_{N^*-1}^* = \frac{k - \sqrt{k}\sqrt{k - 4\beta^2 B}}{2k\beta}. \tag{A4}$$

This value is a positive real number, as ensured by the assumption that $k > 4\beta^2 B$, and is lower than 1, as ensured by the assumption that $k > \beta B/(1-\beta)$. Equation (A1) also has a second root that, under the assumption that $k > \beta B/(1-\beta)$, implies that $e_{N^*-1}^* > 1$. Hence, the only economically sensible value for $e_{N^*-1}^*$ is the one in equation (A4).

Now consider a generic period $n < N^* - 1$. The value function can be written as:

$$V_n = B + e\beta V_n + (1-e)\beta V_{n+1}^* - k\frac{e^2}{2} \tag{A5}$$

The first-order conditions implies:

$$\frac{\partial V_n}{\partial e} = 0 \Leftrightarrow e = \frac{\beta(V_n - V_{n+1}^*)}{k} \tag{A6}$$

Plugging (A6) into (A5), and after some algebra, we obtain:

$$V_n^* = V_{n+1}^* + \frac{k - \sqrt{k}\sqrt{2V_{n+1}^*(1-\beta)\beta^2 + k - 2\beta^2 B}}{\beta^2} \tag{A7}$$

Notice that $V_{n+1}^* \geq 0$. To see that, notice that the manager could simply set $e^* = 0$ forever and achieve 0 utility. This observation, together with the assumption that $k > 4\beta^2 B$, ensures that the rightmost term under the square root is positive and, hence, the solution is well defined.

Also, notice that $V_{n+1}^* < B/(1-\beta)$. To see that, notice that $V_{n+1}^* = B/(1-\beta)$ is the value function of a manager that obtains the private benefit in every period with probability 1 but has an effort cost equal to 0, which is not achievable. Simple algebra shows that this upper bound on V_{n+1}^* implies that the ratio in equation (A7) is strictly positive, which further implies that $V_n^* > V_{n+1}^*$. Hence, V_n^* is decreasing in n.

We can plug expression (A7) into equation (A6) and find:

$$e_n^* = \frac{k - \sqrt{k}\sqrt{2V_{n+1}^*(1-\beta)\beta^2 + k - 2\beta^2 B}}{k\beta} \tag{A8}$$

The $B/(1-\beta)$ upper bound for V_{n+1}^* ensures that $e_n^* > 0$. Moreover, simple algebra shows that the assumption that $k > \beta B/(1-\beta)$ guarantees that $e_n^* < 1$. As before, the alternative root of equation (A7) implies a value for e_n^* greater than 1 and can thus be discarded.

e_n^* is decreasing in V_{n+1}^*, which is, in turn, decreasing in n. Hence, e_n^* is increasing in n. The probability that the bank with n missed payments will miss the next payment is given by $1 - e_n^*$. Thus, this probability is decreasing in n. ■

The values of e_n^* for $n < N^* - 1$ in *Figure 1* can be obtained starting from expression (A1), plugging it into expression (A7) to obtain the value of e_n^* from equation (A8), and so on for every n, recursively up until $n = 1$.

Appendix A2 Bank Recapitalization in the Troubled Asset Relief Program

After the financial crisis, the U.S. Treasury set up a series of recapitalization and stabilization programs for the U.S. economy under the Troubled Asset Relief Program (TARP). Within TARP, the programs that focused on recapitalizing banks were: the Capital Purchase Program (CPP), the Community Development Capital Initiative (CDCI), the Targeted Investment Program (TIP), and the Capital Assistance Program (CAP)[5].

TIP only funded Citigroup and Bank of America with a total of $40 billion in December 2008, which they paid back in 2009. The CDCI, on the other hand, focused on small institutions and funded banks with a total of only $570 million starting in 2010. The CPP was by far the largest and had a volume of around $205 billion, funding a total of 707 banks[5]. No funds were distributed under the CAP (see Calomiris and Khan (2015)). *Table A1* presents a schematic summary of the provision of the CPP, using additional information from the Term Sheets available at the Treasury's website[6].

5. See "Quarterly Report to Congress" from the Office of the Special Inspector General for the Troubled Assets Relief Program, October 26, 2010.
6. See:
`https://home.treasury.gov/data/troubled-assets-relief-program/bank-investment-programs/cap/related-resources`

Table A1
Capital Purchase Program Summary

Table A1 summarizes the provisions of the Capital Purchase Program.

Type of Security	**Preferred shares**	**Preferred shares**	**Subordinated debt**
Payment Type	Cumulative	Non-Cumulative	Cumulative
Bank Type	Bank holding company, savings and loan holding company, mutual holding company subsidiary	Insured depository institution that is not controlled by a company	S-Corporation, Mutual holding Company, Mutual bank
Funding Amount	Up to 3% of total risk-weighted assets, but maximum amount $25 billion		
Dividend Rate	5% (after 5 years 9%)	5% (after 5 years 9%)	7.7% (after 5 years 9%)
Participants	569	86	52
Missed payment rules:			
1 Missed Payment	Common dividend payments prohibited until...		
	...all missed preferred dividends have been paid back	...current preferred dividend paid	...all missed interest payments have been paid back
3 Missed Payments	Enhanced monitoring by Treasury[b]		
5 Missed Payments	Treasury can *ask* for an observer to attend board meetings		
6 Missed Payments	Right to appoint of up to two board directors by Treasury until...		
	...all missed preferred dividends have been paid back	...four consecutive preferred dividends have been made	...all missed interest payments have been paid back
Compensation restrictions	golden parachutes restricted, bonus claw-backs requested, compensation tax deductibility capped at $500,000 (After February 2009, retention awards and bonuses prohibited, incentive compensation restricted[a], executive compensation capped at $500,000)		
Repayment	Until 3 years of participation only through issuance of new equity (After February 2009, restriction removed[a])		

[a] These provisions were implemented by the American Recovery and Reinvestment Act, which changed the provisions of the program retrospectively.
[b] These rules have been announced after the start of the program (see "Quarterly Report to Congress" from the Office of the Special Inspector General for the Troubled Assets Relief Program, October 26, 2010).

Appendix A3 Director Appointment Events

Table A2
Dates of U.S. Treasury's Appointments and Directors' Names

Table A2 lists appointment dates and names of directors appointed by the U.S. Treasury pursuant to missing six or more payments on CPP shares. The committee the director sat in the year of the appointment according to the proxy statement of the bank is shown in parenthesis after the name: Audit (A), Asset/Liability (A/L), Corporate Governance (CG), Compliance (CO), Compensation (CP), Loans (L), Risk (R), Funds Management (FM), and no information (n/a). The column Left? indicates when a director left the board, where "No" indicates the director was reported to be on the board at least one year after the exit from the CPP and "Yes" indicates that the director left the board before or within one year from the exit . We leave the cell blank whenever a bank leaves the program through a merger or a bankruptcy proceeding. The four banks at the bottom of the table are excluded from the analysis presented in Sections IV.B and IV.III.

Bank Name	Date 1st Appointment	1st Director	Left?	Date 2st Appointment	2st Director	Left?
Royal Bancshares of Pennsylvania, Inc.	2011–07–19	Gerard M. Thomchick (CP)	No	2011–09–30	Wayne Huey, Jr.,	No
Centrue Financial Corporation	2011–09–21	Richard "Chan" Peterson	No	2012–04–25	Dennis Battles	No
Citizens Republic Bancorp, Inc.	2011–09–21	William M. Fenimore, Jr. (R)		2011–10–05	Madeleine L. Champion (A)	
PremierWest Bancorp	2011–12–20	Mary Carryer (A, FM)		2012–03–14	Bruce Currier (A, FM)	
First Security Group	2012–02–09	Robert Lane (A, CO, A/L, L)	No	2012–03–22	William Grant (A, CO, CP, CG)	No
Intervest Bancshares Corporation	2012–03–23	Susan Roth Katzke	No	2012–10–24	C. Wayne Crowell	No
Bridgeview Bancorp, Inc.	2012–04–19	James Kane (n/a)	No			
First Trust Corporation	2012–06–12	Randall Howard (n/a)	No	2012–08–06	Paul O'Connor (n/a)	No
Blue Valley Ban Corp	2012–09–12	James Gegg	No			
Citizens Bancshares Co.	2012–09–12	James Gegg	No			
Old Second Bancorp, Inc.	2012–11–8	Duane Suits (A)	No			
Northern States Financial Corporation	2012–12–14	P. David Kuhl (A)	Yes			
Not in Sample						
First Banks, Inc.	2011–07–19	John S. Poelker (A)	No	2011–07–19	Guy Rounsaville, Jr. (CP)	No
Anchor Bancorp	2011–10–03	Duane Morse (A)	Yes	2011–10–03	Leonard Rush (A)	Yes
Rogers Bancshares, Inc.	2012–01–09	Larry Mingledorff (n/a)				
Central Bancorp, Inc.	2014–02–06	Larry Mingledorff (n/a)		2014–02–06	Paul Clabuesch (n/a)	

Appendix A4 Additional Results

Figure A1
Distribution of Funds Invested in the CPP Program

Figure A1 plots the distribution of funds invested (in $million) in the CPP program for each bank. The distribution is truncated at $50 million, and each bar's width is $0.1 million.

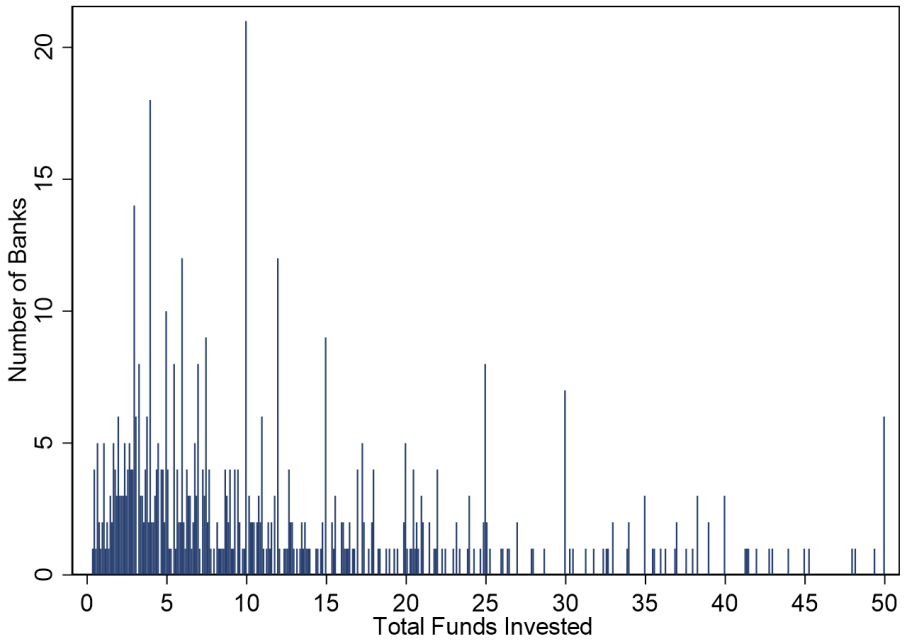
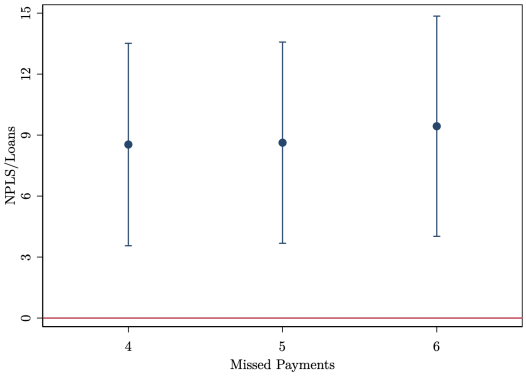


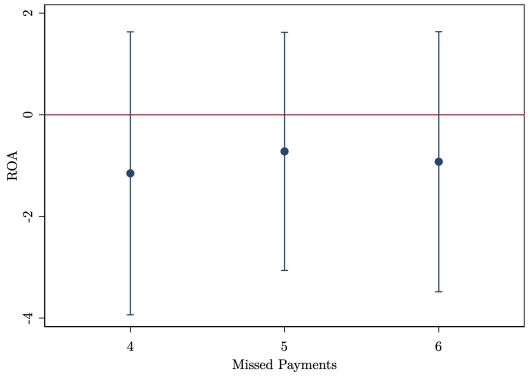
Figure A2
Bank Characteristics conditional on Missed Payments

Figure A2 plots the average of NPLs/Loans, ROA, and ROE, with corresponding 95% confidence intervals, for banks that have missed four, five, and six missed payments. NPLs/Loans represents nonaccrual and restructured loans as a percent of total loans and leases. ROA represents net income over average total assets in percentage points. ROE represents net income over average total equity in percentage points.

Panel A. NPLs/Loans



Panel B. ROA



Panel C. ROE

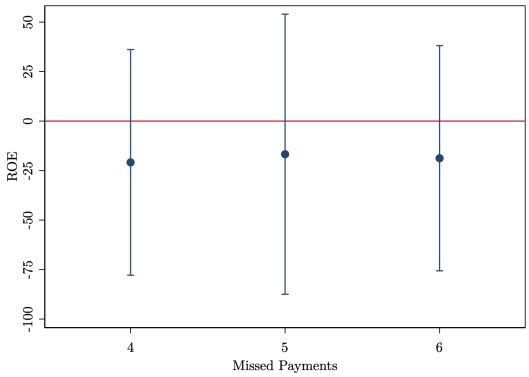


Figure A3
Conditional Distribution of Changes in Missed Dividend Payments (Placebo Sample)

Figure A3 shows the average quarter-to-quarter change in the number of missed dividend payments for the 68 banks with 1, 2, ..., 10, and more than 10 missed dividend payments at the end of the previous quarter that were not in the CPP and had nonzero preferred shares outstanding. Observations for banks having 0 missed payments at the end of the previous quarter are excluded. The time coverage goes from May 2009 to October 2019.

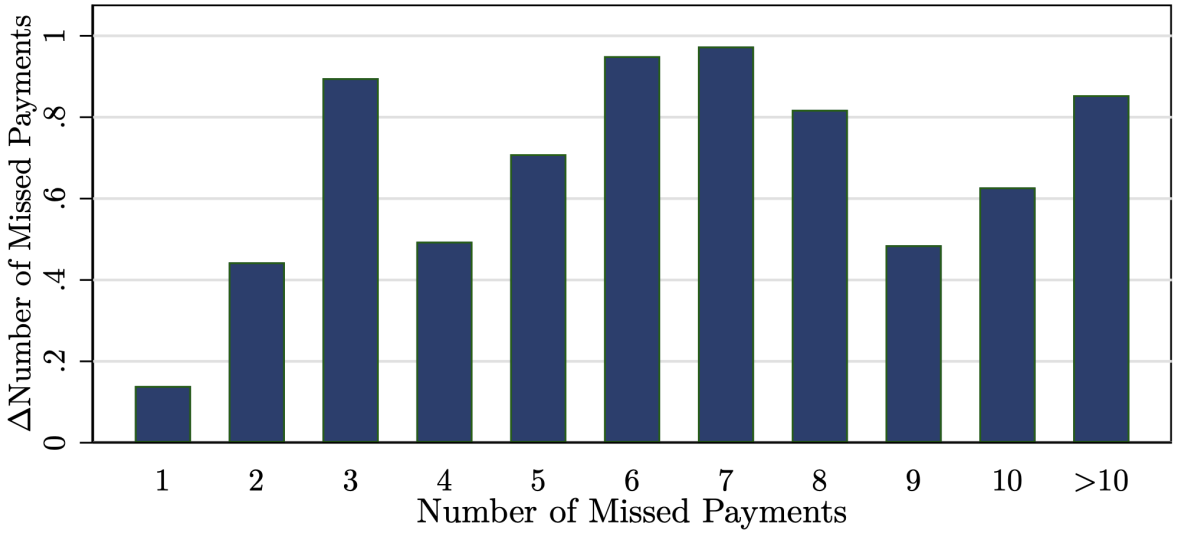


Figure A4
Conditional Distribution of Changes in Missed Dividend Payments

Figure A4 shows the average quarter-to-quarter change in the number of missed dividend payments for the 195 banks with 1, 2, ..., 10, and more than 10 missed dividend payments at the end of the previous quarter. Observations for banks having 0 missed payments at the end of the previous quarter are excluded. The time coverage goes from May 2009 to October 2019.

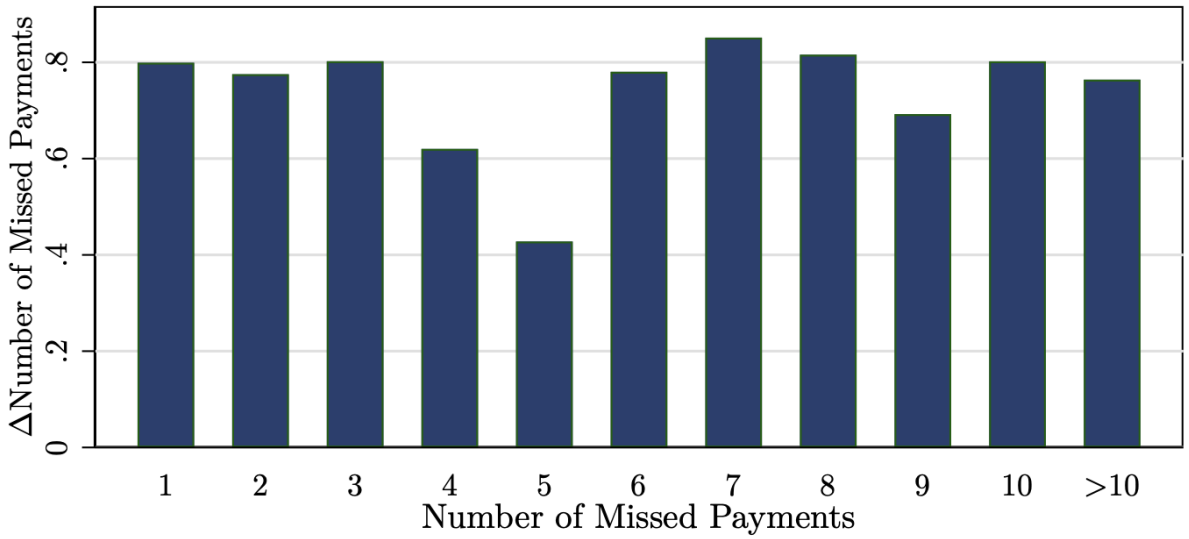


Figure A5
Timing of Missed Dividend Payments

Figure A5 plots the distribution of year-quarters in which each bank has reached five missed dividend payments for the first time.

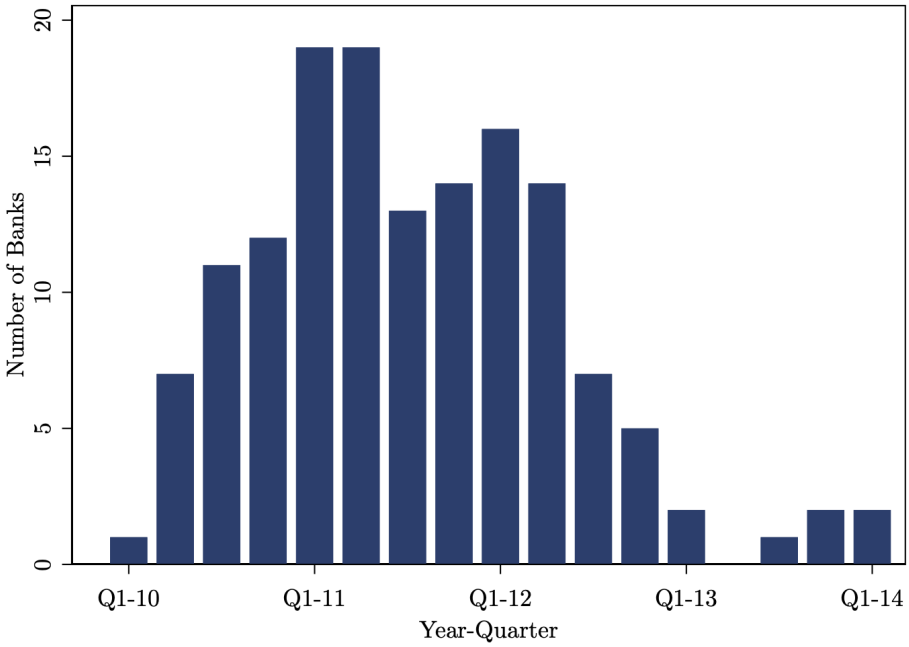
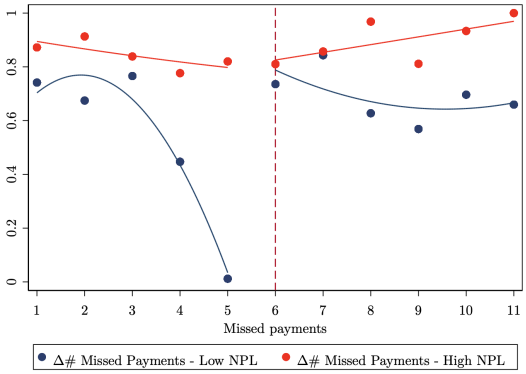


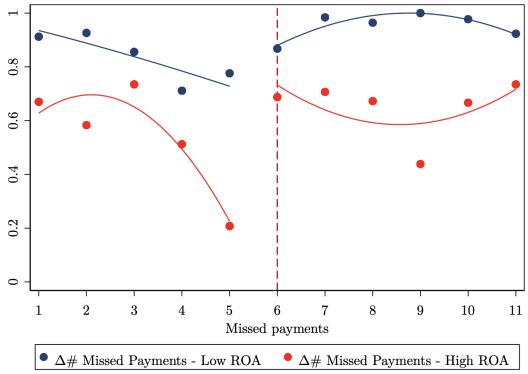
Figure A6
Polynomial Fits: Cross-Sectional Heterogeneity

Figure A6 plots the quarter-to-quarter change in the number of missed dividend payments against the lagged number of missed payments. The sample consists of 572 banks, and the time coverage goes from May 2009 to October 2019. In each panel, banks are sorted in two groups, depending on whether they have NPLs/Loans ratio (Panel A), ROA (Panel B), or ROE (Panel C) below or above the sample median in the previous quarter. For each panel and subgroups, the lines fit quadratic relationships between the number of missed payments and the change in missed payments, for banks with a number of missed payments between 1 and 5 (on the left) and between 6 and 11 (on the right). Markers and polynomial fits are in blue for the "Low" subsample and in red for the "High" subsample. NPLs/Loans represents nonaccrual and restructured loans as a percent of total loans and leases. ROA represents net income over average total assets in percentage points. ROE represents net income over average total equity in percentage points.

Panel A. Sorting by NPLs/Loans



Panel B. Sorting by ROA



Panel C. Sorting by ROE

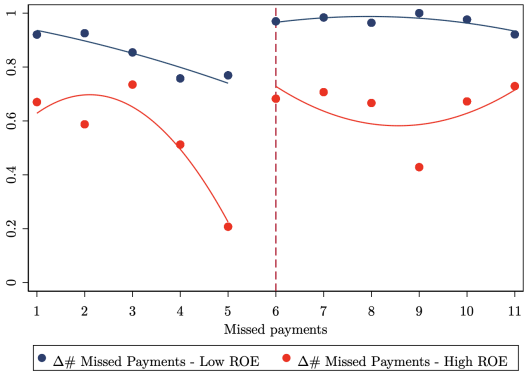
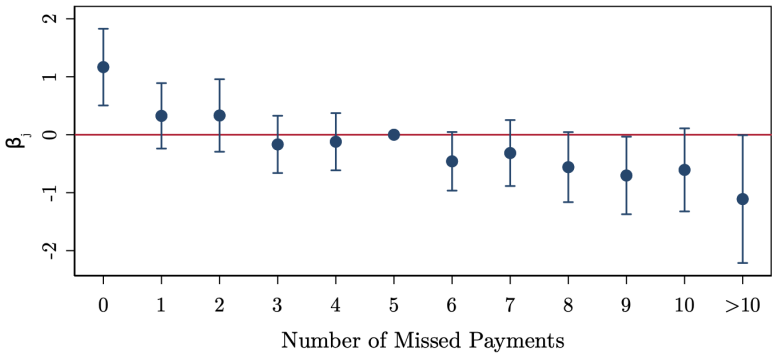


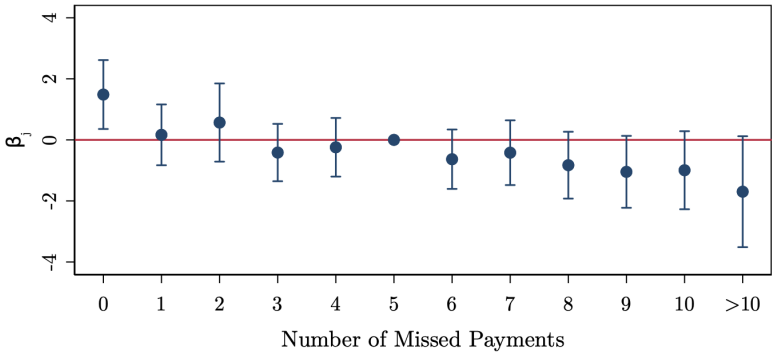
Figure A7
Capital Ratios and Missed Dividend Payments

Figure A7 shows OLS coefficients and corresponding 95% confidence intervals obtained after regressing the leverage ratio (Panel A), the risk-based capital ratio (Panel B), and the tier 1 capital ratio (Panel C) on dummies corresponding to the number of missed dividend payments. The value corresponding to the number j on the $x-$axis represents the coefficient β_j estimated on a dummy equal to 1 if the bank has j outstanding missed dividend payments. The coefficient corresponding to $j = 5$ is omitted. Banks with more than 10 missed dividend payments are binned together, and the coefficient on the corresponding dummy is the rightmost one. Standard errors are clustered at the bank level.

Panel A. Leverage Ratio



Panel B. Risk-Based Capital Ratio



Panel C. Tier 1 Capital Ratio

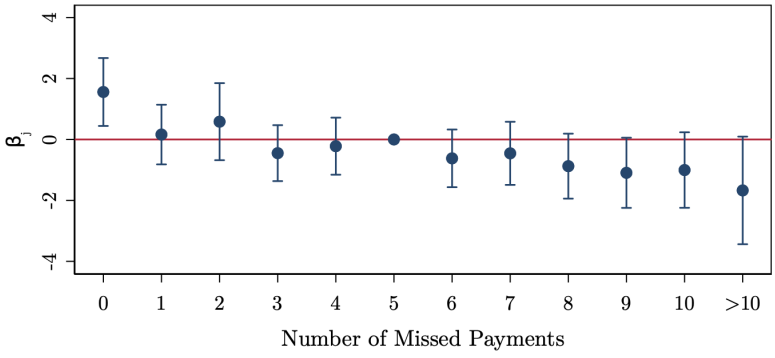
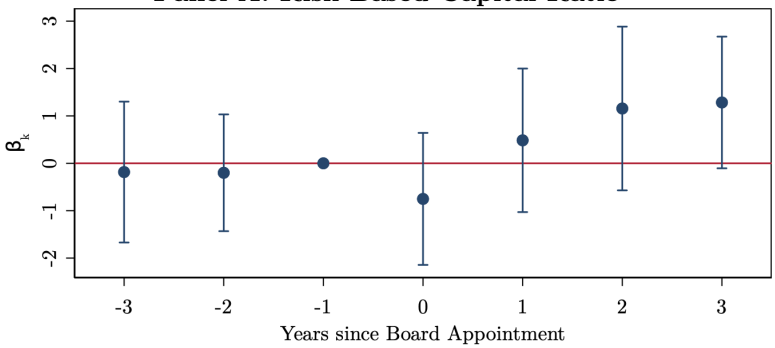


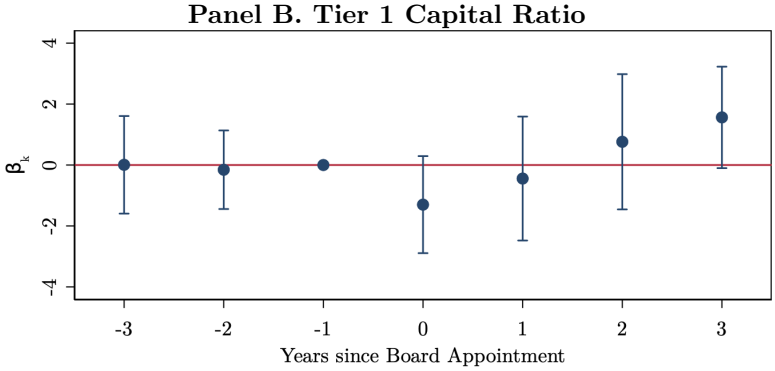
Figure A8
Event-Study Evidence: Risk-Based and Tier 1 Capital Ratios and CEO Compensation

Panels A and B of Figure A8 present coefficients with corresponding 95% confidence intervals from event-study regressions. A bank is "treated" if, at any point in time, it had a Treasury-appointed director. Every treated bank is matched with up to 4 control banks, matched on Log(revenues), leverage ratio, loans-to-deposits ratio, and a listed dummy. The dependent variable is regressed on firm fixed effects, a vector of dummies corresponding to the difference k between the event-year and the year of the observation, and the interaction of this vector with a "treated" dummy. The plots report the coefficients β_k on these interaction terms. Standard errors are clustered at the bank-level. The dependent variables are the risk-based capital ratio (Panel A), the tier 1 capital ratio (Panel B), and the logarithm of CEO compensation (Panel C). The risk-based capital ratio is defined as total regulatory capital as a percent of risk-adjusted assets. Tier 1 Capital Ratio represents core capital (Tier 1) as a percent of risk-adjusted assets.

Panel A. Risk-Based Capital Ratio



Panel B. Tier 1 Capital Ratio



Panel C. Log(Compensation)

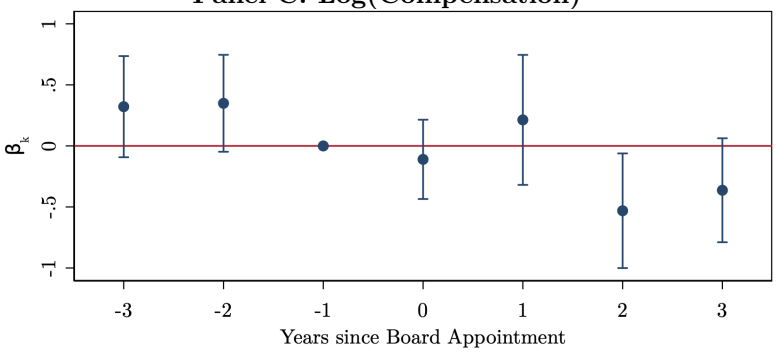


Table A3
Analyst Forecasts and Recommendations

Table A3 presents regressions where the dependent variables are consensus analyst earnings forecasts (columns 1 and 2) and buy/sell recommendations (columns 3 and 4). In columns 1 and 3 the consensus is measured using the mean forecast or recommendation; in columns 2 and 4 it is measured using the median value. Earnings forecasts are scaled by the stock price five days prior to the consensus forecast date. Buy/sell recommendations are measured on a 1 (strong sell) to 5 (strong buy) scale. The Treated dummy is a dummy equal to one if the bank receives an appointment by Treasury. All the regressions include match fixed effects. Heteroscedasticity-consistent standard errors are reported in parentheses.

Dependent Variable:	Earnings Forecast		Recommendation	
	Mean	Median	Mean	Median
	(1)	(2)	(3)	(4)
Treated	-0.258	-0.258	0.281	0.143
	(0.262)	(0.262)	(0.523)	(0.726)
Observations	14	14	12	12
R^2	0.848	0.852	0.853	0.560
Match FE	X	X	X	X

Table A4
Difference-in-Differences Results: Alternative Samples

Table A4 presents difference-in-differences regressions where the dependent variable is indicated on the top of each column. Treated is a dummy equal to 1 if a bank had a Treasury-appointed director, and 0 otherwise. Every treated bank is matched with up to 4 control banks. In Panel A, banks are matched based on Log(revenues), leverage ratio, loans-to-deposits ratio, and a listed dummy. In Panel B, they are matched based on Log(revenues), a listed dummy, and a dummy equal to 1 if the funding amount provided by Treasury was higher than $25 million. Panel A includes all the regulated institutions in the SNL database; Panel B includes only banks eligible for a director appointment. For treated banks, Post is a dummy equal to 1 in the year of the director appointment and in the following years. For control banks, it is a dummy equal to 1 after the matched treated bank has received a director appointment and 0 afterwards. NPLs/loans is defined as nonaccrual and restructured loans as a percentage of total loans and leases. ROA is defined as net income over average total assets in percentage points. ROE is net income over average total equity in percentage points. Risk-based capital ratio is defined as total regulatory capital as a percentage of risk-adjusted assets. Tier 1 capital ratio is core capital (Tier 1) as a percent of risk-adjusted assets. Abnormal accruals are abnormal loss provisions and are computed following Beatty, Ke and Petroni (2002). All the regressions include year and bank fixed effects. Standard errors, in parentheses, are clustered at the bank level.

Panel A. Full Sample

Dependent Variable:	NPLs/Loans	ROA	ROE	Risk-Based C.R.	Tier 1 C.R.	Abnormal Accruals
	(1)	(2)	(3)	(4)	(5)	(6)
Post × Treated	-3.098	1.642	17.622	-0.419	-0.922	-0.769
	(0.555)	(0.337)	(5.162)	(0.721)	(0.754)	(0.193)
Post	0.289	-0.322	-1.875	-0.567	-0.289	-0.081
	(0.686)	(0.352)	(4.850)	(0.560)	(0.544)	(0.239)
Observations	476	475	473	476	476	463
R^2	0.714	0.512	0.437	0.636	0.647	0.442
Year FE	X	X	X	X	X	X
Firm FE	X	X	X	X	X	X

Panel B. Only Eligible Banks

Dependent Variable:	NPLs/Loans	ROA	ROE	Risk-Based C.R.	Tier 1 C.R.	Abnormal Accruals
	(1)	(2)	(3)	(4)	(5)	(6)
Post × Treated	-4.614	0.988	12.073	-0.192	-0.603	-0.350
	(0.919)	(0.333)	(4.934)	(0.909)	(0.958)	(0.217)
Post	4.182	-0.370	-12.540	-0.295	0.030	-0.489
	(1.483)	(0.898)	(13.663)	(0.756)	(0.877)	(0.459)
Observations	261	261	261	261	261	240
R^2	0.735	0.497	0.436	0.692	0.689	0.396
Year FE	X	X	X	X	X	X
Firm FE	X	X	X	X	X	X

Table A5
Difference-in-Differences Results: Matching on Outcomes

Table A5 presents difference-in-differences regressions where the dependent variable is indicated on the top of each column. Treated is a dummy equal to 1 if a bank had a Treasury-appointed director, and 0 otherwise. Every treated bank is matched with up to 4 control banks, matched on Log(revenues), leverage ratio, loans-to-deposits ratio, and a listed dummy. In addition, banks are also matched based on the value of the outcome variable (indicated at the top of each column) in the year prior to the event. For treated banks, Post is a dummy equal to 1 in the year of the director appointment and in the following years. For control banks, it is a dummy equal to 1 in the year in which the matched treated bank has received a director appointment and in the following years. NPLs/loans is defined as nonaccrual and restructured loans as a percentage of total loans and leases. ROA is defined as net income over average total assets in percentage points. ROE is net income over average total equity in percentage points. Risk-based capital ratio is defined as total regulatory capital as a percentage of risk-adjusted assets. Tier 1 capital ratio is core capital (Tier 1) as a percentage of risk-adjusted assets. Abnormal accruals are defined as abnormal loss provisions and are computed following Beatty, Ke and Petroni (2002). All the regressions include year and firm fixed effects. The last two rows report average differences, with standard errors in parentheses, of the mean of the outcome variables for treated and control banks, measured in the years prior to the events. Standard errors, in parentheses, are clustered at the bank level.

Dependent Variable:	NPLs/Loans	ROA	ROE	Risk-Based C.R.	Tier 1 C.R.	Abnormal Accruals
	(1)	(2)	(3)	(4)	(5)	(6)
Post × Treated	-3.732	1.477	16.508	0.086	-0.395	-0.515
	(0.686)	(0.400)	(4.345)	(0.706)	(0.782)	(0.196)
Post	1.032	-0.621	-2.522	0.111	0.663	-0.029
	(0.577)	(0.420)	(3.910)	(0.510)	(0.438)	(0.206)
Observations	319	394	366	391	372	349
R^2	0.732	0.503	0.500	0.647	0.624	0.474
Year FE	X	X	X	X	X	X
Firm FE	X	X	X	X	X	X
ΔDep. Var.	1.987	-0.462	-13.914	-1.009	-0.941	0.180
S.E.	(1.232)	(0.420)	(6.113)	(0.885)	(1.040)	(0.191)

Figure A9
Long-Run Returns

Figure A9 plots buy-and-hold 1, 2,...,12-month market-adjusted returns (i.e., net of the risk-free rate) for treated and control banks, where "treated" banks are those receiving a board appointment.

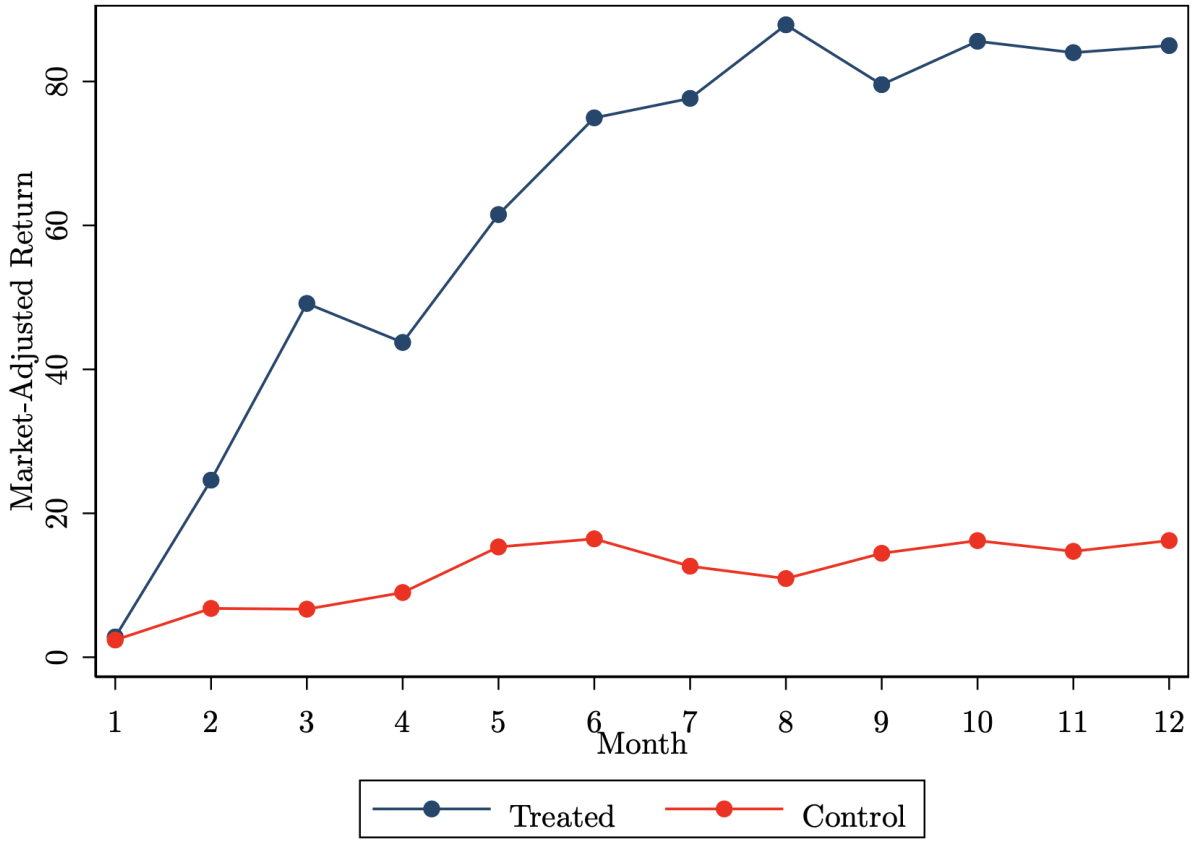


Table A6
Stock Market Response: Short and Long Run

Table A6 presents regressions where the dependent variables are stock returns at different horizons. In columns 1 through 4, the dependent variable is the cumulative abnormal return over a three-day window surrounding the announcement of the appointment of a director by Treasury through an 8-K filing. In columns 5 through 8, the dependent variable is the 12-month buy-and-hold return, measured starting from the month following the appointment. In columns 1, 3, 5, and 7, stock returns are adjusted using the market model and in the other columns using the Fama-French 3-factor model. When indicated, control variables include the logarithm of market capitalization, the book to market ratio, and the lagged 12-month buy-and-hold return. All the regressions include match fixed effects. Heteroscedasticity-consistent standard errors are reported in parentheses.

Window:	(Day -1, Day +1)				(Month +1, Month +12)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treated	1.976	2.469	1.576	1.158	85.319	90.548	78.930	80.238
	(2.731)	(3.012)	(3.639)	(3.365)	(26.653)	(26.667)	(31.290)	(32.769)
Log(Capitalization)			0.634	0.317			-2.288	-2.424
			(0.663)	(0.597)			(4.044)	(4.152)
Book to Market			0.049	0.051			0.271	0.378
			(0.044)	(0.038)			(0.333)	(0.322)
$\text{Return}_{t-12,t-1}$			-0.033	-0.042			0.612	0.585
			(0.049)	(0.056)			(0.534)	(0.497)
Observations	17	17	17	17	19	19	19	19
R^2	0.303	0.357	0.544	0.615	0.708	0.736	0.781	0.812
Match FE	X	X	X	X	X	X	X	X
Return Adjustment	MM	FF	MM	FF	MM	FF	MM	FF

Figure A10
Announcement of the First Director Appointments:
Stock Market Reaction

Figure A10 plots the average daily stock return for firms that, at the time of the first announcement of the Treasury director appointments, had missed no dividend payments (in red) or had missed at least one payment (in blue). Returns are adjusted using the market model.

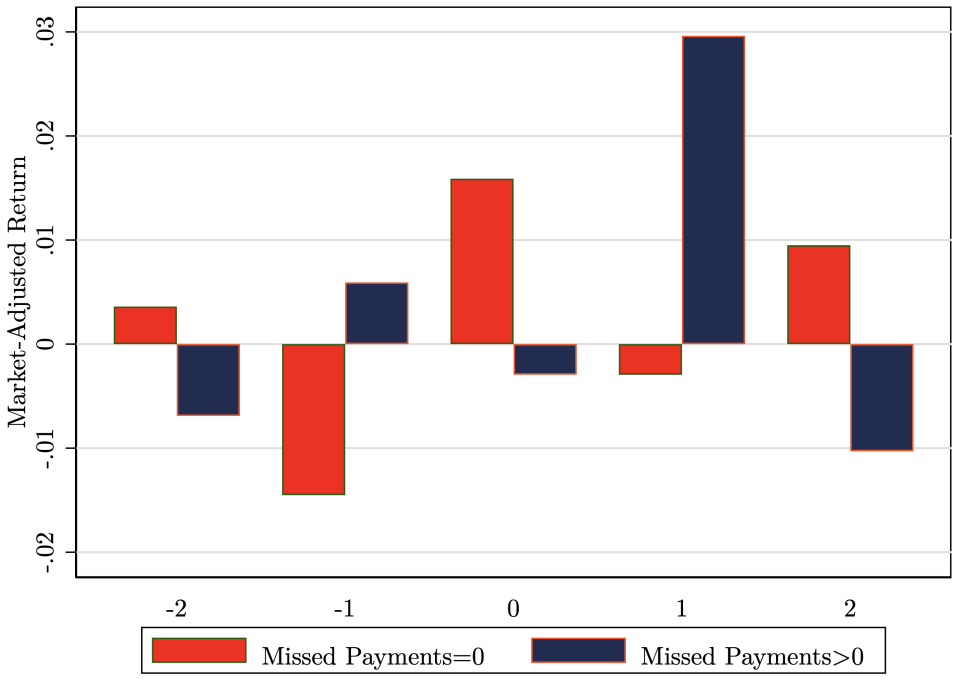


Table A7
Announcement of the First Director Appointments: Stock Market Reaction

Table A7 presents regressions where the dependent variable is the (-1,+1)-day stock market return computed over the announcement of the first director appointments made by Treasury. In columns 1 and 3 returns are adjusted using the market model. In columns 2 and 4 they are adjusted using the Fama-French 3-factor model. Columns 3 and 4 also include the following control variables: Log(revenues), leverage ratio, ROA, NPLs/Loans, and risk-based capital ratio. Log(revenues) is the logarithm of the sum of net interest income, noninterest income, and gains on sales of securities. Leverage ratio is defined as tier 1 capital as a percentage of adjusted average assets. ROA is net income over average total assets in percentage points. NPLs/Loans is defined as nonaccrual and restructured loans as a percentage of total loans and leases. Risk-based capital ratio is total regulatory capital as a percentage of risk-adjusted assets. Tier 1 capital ratio is core capital (Tier 1) as a percentage of risk-adjusted assets. Standard errors, in parentheses, are robust to heteroskedasticity.

	(1)	(2)	(3)	(4)
Missed Payments> 0	0.037	0.035	0.028	0.030
	(0.015)	(0.015)	(0.016)	(0.017)
Observations	95	95	95	95
R^2	0.127	0.112	0.232	0.215
Return Adjustment	MM	FF	MM	FF
Controls			X	X

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