

Internet Appendix for “Anticipating the 2007-2008 Financial Crisis: Who Knew What and When Did They Know It?”

This internet appendix has two sections. In the first section we provide data sources and variable descriptions. In the second section we provide additional results that supplement the analysis in “Anticipating the 2007-2008 Financial Crisis: Who Knew What and When Did They Know It?”

IA1. Data Sources and Variable Descriptions

Our study combines data from several sources. We obtain data on quarterly institutional holdings from the TFN 13F database. We obtain analyst recommendations from the IBES database. Insider trading data come from the TFN Insider database. Book values of common equity and common stock dividends are from Compustat. The SIC code, price, return, shares outstanding, and volume information are from the CRSP monthly database.

Our sample includes only common stocks (CRSP share codes 10 or 11) for the period from Jan. 2006 through Dec. 2008. Following the definition from the SEC Emergency Order of Sept. 18, 2008, we identify financial firms as those with the following SIC codes: 6000, 6011, 6020-22, 6025, 6030, 6035-36, 6111, 6140, 6144, 6200, 6210-11, 6231, 6282, 6305, 6310-11, 6320-21, 6324, 6330-31, 6350-51, 6360-61, 6712, and 6719. In addition to the SEC definition of financial firms, we also consider three alternative definitions to identify firms most affected by the Great Recession. In tables A1 through A8 we examine a sample of firms that received funds from the Troubled Asset Relief Program (TARP). We obtain the list of TARP firms from ProPublica’s website (<http://projects.propublica.org/bailout/list>). In tables A9 through A12 we examine a sample of banks, which we identify following Flannery, Kwan, and Nimalendran (2004), as firms with SIC codes between 6021 and 6025 or between 6710 and 6712. Finally, in tables A13 through A16 we

examine a broader sample of financial firms which includes all firms with SIC codes between 6000 and 6999. The variables used throughout this appendix are:

- IO: Institutional ownership, fraction of shares outstanding held by institutional investors, from the TFN 13F database and CRSP.
- Δ IO: Change in institutional ownership between two consecutive quarters.
- REC: Consensus analyst recommendation of all analysts following a firm, based on the most recent recommendation issued by an analyst in prior 12 months, from the IBES.
- Δ REC: Change in consensus analyst recommendation between 2 consecutive months.
- NIT: Ratio of net insider dollar purchases (dollar purchases minus dollar sales) over previous 6 months divided by the firm's market capitalization, from TFN Insider database and the CRSP. We include only trades by the firm's management (role code = CEO, CFO, CO, CB, P, D, VP and O) and exclude option-related trades.
- FIN: Indicator variable that takes a value of 1 if a firm is classified as a financial firm based on the SEC Emergency Order of Sept. 18, 2008.
- TARP: Indicator variable that takes a value of 1 if a firm has received TARP funds, and 0 if a nonfinancial firm has not received TARP funds.
- SIZE: Market capitalization, calculated as share price times shares outstanding, from the CRSP.
- AGE: Firm age, the number of months since first return appears in the CRSP.
- DP: Dividend yield, calculated as the ratio of common dividends divided by share price, from Compustat and the CRSP. Winsorized at the 99th percentile.

- BM: Book-to-market ratio, calculated using book value of equity for the fiscal year ended in year $t-1$, divided by market capitalization as of Dec. 31 of year $t-1$, from Compustat and the CRSP. BM is winsorized at the 1st and 99th percentiles.
- PRC: End of month share price from CRSP.
- TURN: Average monthly share turnover (monthly share trading volume divided by total shares outstanding) over the preceding 3 months, from the CRSP.
- VOL: Return volatility, standard deviation of monthly returns over the previous 24 months, from the CRSP.
- SP500: Indicator variable that equals 1 if a firm belongs to S&P 500 Index, from CRSP.
- RET _{$t-3,t$} : Cumulative return over the past 3 months, from CRSP.
- RET _{$t-12,t-3$} : Cumulative return between month $t-12$ and month $t-3$, from the CRSP.
- RET _{$t-30,t-6$} : Cumulative return between month $t-30$ and month $t-6$, from the CRSP.
- CRISIS: Indicator variable that equals 1 for the period from Jan. 2006 to Dec. 2008, and equals 0 for period from Jan. 2001 to Dec. 2003.
- BANK: Indicator variable that equals 1 if a firm has SIC code between 6021 and 6025 or between 6710 and 6712, and equals 0 if SIC code is smaller than 6000 or larger than 6999.

IA2. Supplemental Tables

Table A1 presents institutional ownership and changes in institutional ownership for TARP and non-TARP firms. Table A2 presents a difference-in-differences analysis for institutional ownership. Table A3 examines average consensus analyst recommendations for TARP and non-TARP firms. Table A4 presents a difference-in-differences analysis for average

consensus analyst recommendations. Table A5 examines the changes in analyst recommendations for TARP and non-TARP firms. Table A6 presents average analyst price target returns for financial and nonfinancial firms. Table A7 examines insider trading for TARP and non-TARP firms. Table A8 presents the cross-sectional regressions of insider trading for TARP and non-TARP firms. Table A9 presents institutional ownership and changes in institutional ownership for banks and nonbank, nonfinancial firms. Table A10 examines average consensus analyst recommendations for banks and nonbank, nonfinancial firms. Table A11 presents the changes in analyst recommendations for banks and nonbank, nonfinancial firms. Table A12 examines insider trading for banks and nonbank, nonfinancial firms. Table A13 presents institutional ownership and changes in institutional ownership for a broader definition of financial and nonfinancial firms. Table A14 examines average consensus analyst recommendations for a broader definition of financial and nonfinancial firms. Table A15 presents the changes in analyst recommendations for a broader definition of financial and nonfinancial firms. Table A16 examines insider trading for a broader definition of financial and nonfinancial firms.

Table A1
Institutional Ownership and Changes in Institutional Ownership for TARP and non-TARP Firms

Table A1 presents the average quarterly institutional ownership (IO) and quarterly changes in institutional ownership (Δ IO) for the period from 2006 to 2008. Panel A reports the average IO for TARP and non-TARP firms as well as the difference in average IO between TARP and non-TARP firms. Panel B reports the average Δ IO for TARP and non-TARP firms as well as the difference in average Δ IO between TARP and non-TARP firms. The variable DIFF^{CUM} is the difference in average cumulative Δ IO between TARP and non-TARP firms. Data sources and detailed variable definitions are described in Section IA1. TARP firms are those that received funds from the U.S. government's Troubled Asset Relief Program. Non-TARP firms are nonfinancial firms that did not receive funds from the U.S. government's Troubled Asset Relief Program. We exclude two firms with share price above \$1,000 from the analysis. The variables IO and Δ IO are expressed as percentages. The numbers in parentheses are t -statistics for differences in means, assuming equal variances.

<i>Panel A – Institutional Ownership</i>				
Date	TARP	Non-TARP	DIFF	(t -stat.)
Mar-06	33.41	59.86	-26.45	(-11.77)
Jun-06	33.90	60.80	-26.89	(-12.16)
Sep-06	34.62	61.70	-27.08	(-12.16)
Dec-06	35.18	62.87	-27.70	(-12.45)
Mar-07	34.86	63.53	-28.67	(-13.16)
Jun-07	35.83	65.17	-29.34	(-13.30)
Sep-07	37.41	66.58	-29.17	(-12.90)
Dec-07	36.31	65.19	-28.89	(-13.40)
Mar-08	35.99	64.30	-28.31	(-13.03)
Jun-08	37.50	65.15	-27.65	(-12.81)
Sep-08	37.82	64.70	-26.88	(-12.54)
Dec-08	34.82	61.88	-27.06	(-12.86)

Panel B – Changes in Institutional Ownership

Date	TARP	Non-TARP	DIFF	(<i>t</i> -stat.)	DIFF ^{CUM}	(<i>t</i> -stat.)
Mar-06	1.17	1.59	-0.42	(-0.82)	-0.42	(-0.82)
Jun-06	0.72	0.84	-0.11	(-0.21)	-0.54	(-0.77)
Sep-06	0.99	1.19	-0.21	(-0.46)	-0.77	(-0.93)
Dec-06	1.19	1.67	-0.47	(-0.95)	-1.39	(-1.57)
Mar-07	0.26	0.75	-0.49	(-0.96)	-1.94	(-2.00)
Jun-07	1.23	1.99	-0.76	(-1.65)	-2.80	(-2.70)
Sep-07	2.23	1.70	0.53	(0.96)	-2.31	(-2.06)
Dec-07	-1.02	-1.64	0.62	(1.03)	-1.96	(-1.75)
Mar-08	0.33	0.07	0.26	(0.53)	-1.60	(-1.32)
Jun-08	1.95	0.60	1.35	(2.44)	-0.26	(-0.21)
Sep-08	0.38	0.03	0.35	(0.74)	-0.10	(-0.08)
Dec-08	-2.42	-3.01	0.59	(0.94)	0.51	(0.39)

Table A2
Institutional Ownership Differences-in-Differences Analysis

Table A2 presents results from the following pooled regression:

$$IO_{i,t} = \beta_0 + \beta_1 FIN_{i,t} + \beta_2 FIN_{i,t} * CRISIS_t + \beta_3 CRISIS_t + \beta_4 Controls_{i,t} + e_{i,t}$$

We estimate this regression for all institutions and for the following subgroups of institutions: short-term institutions, hedge funds, and top-performing institutions. The variable IO is quarterly institutional ownership, FIN is an indicator variable for financial firms, CRISIS is an indicator variable that equals 1 for the period from Jan. 2006 to Dec. 2008, and equals 0 for the period from Jan. 2001 to Dec. 2003. The set of control variables includes SIZE, AGE, DP, BM, PRC, TURN, VOL, SP500, $RET_{t-3,t}$, $RET_{t-12,t-3}$, and the interactions of each of these variables with the crisis indicator variable. SIZE is market capitalization, BM is the book-to-market ratio, $RET_{t-3,t}$ is the prior 3-month return, $RET_{t-12,t-3}$ is the cumulative return between month t-12 to month t-3, TURN is share turnover, VOL is return volatility, AGE is firm age, DP is dividend yield, PRC is share price, and SP500 is an indicator variable for S&P 500 membership. Data sources and detailed variable definitions are described in Section IA1. All variables except IO, $RET_{t-3,t}$, $RET_{t-12,t-3}$, FIN, CRISIS, and SP500 are expressed in natural logarithms. Our sample includes only common stocks (those with a share code of 10 or 11 in the CRSP). Two firms with stock price above \$1,000 are excluded from the analysis. Two firms, with stock price above \$1,000 are excluded from the analysis. Coefficients on all variables are expressed as percentages. Numbers in parentheses are *t*-statistics.

	<i>All Institutions</i>		<i>Short-term Institutions</i>		<i>Hedge Funds</i>		<i>Top-performing Institutions</i>	
	Model1	Model2	Model1	Model2	Model1	Model2	Model1	Model2
Intercept	45.61 (251.73)	-137.40 (-78.53)	24.39 (227.31)	-62.78 (-55.98)	2.54 (121.10)	-6.66 (-25.42)	10.27 (175.49)	-24.37 (-35.10)
FIN	-17.96 (-40.06)	-15.70 (-48.47)	-11.54 (-49.97)	-9.13 (-42.59)	-1.59 (-47.55)	-1.66 (-31.95)	-3.78 (-30.45)	-3.00 (-21.86)
CRISIS	17.76 (69.28)	23.83 (8.92)	6.77 (42.76)	32.84 (19.52)	1.48 (44.93)	5.36 (13.71)	2.43 (26.87)	14.51 (14.01)
FIN*CRISIS	-6.42 (-9.76)	-4.34 (-9.13)	-3.80 (-11.37)	-2.11 (-6.71)	-0.42 (-7.39)	-0.35 (-4.39)	-2.58 (-14.26)	-2.88 (-14.23)
CONTROLS	NO	YES	NO	YES	NO	YES	NO	YES
Adjusted R ²	13.23%	61.63%	9.54%	52.00%	5.77%	12.49%	12.49%	12.49%

Table A3

Analyst Recommendations for TARP and non-TARP Firms

Table A3 presents the average consensus analyst recommendation (REC) and cross-sectional regressions of analyst recommendations for the period from Jan. 2006 to Dec. 2008. Panel A reports the average consensus analyst recommendation for TARP and non-TARP firms as well as the difference in average consensus analyst recommendations between TARP and non-TARP firms. TARP firms are those that received funds from the U.S. government's Troubled Asset Relief Program. Non-TARP firms are nonfinancial firms that did not receive funds from the U.S. government's Troubled Asset Relief Program. Numbers in parentheses are *t*-statistics for differences in means assuming equal variances. Panel B reports the Fama-MacBeth (1973) coefficients from the following cross-sectional regression:

$$REC_{i,t} = \beta_0 + \beta_1 TARP_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 BM_{i,t} + \beta_4 RET_{i,t-3,t} + \beta_5 RET_{i,t-12,t-3} + e_{i,t},$$

Where TARP is an indicator variable for firms that received TARP funds, SIZE is market capitalization, BM is the book-to-market ratio, $RET_{t-3,t}$ is the prior 3-month return, $RET_{t-12,t-3}$ is the cumulative return between month $t-12$ to month $t-3$. Data sources and detailed variable definitions are described in Section IA1. The variables BM and SIZE are expressed in natural logarithms. Our sample includes only common stocks (those with a share code of 10 or 11 in the CRSP). Two firms with stock price above \$1,000 are excluded from the analysis. We report the average coefficients across all months from Jan. 2006 to Dec. 2008. The *t*-statistics are based on Fama-MacBeth (1973) with a Newey-West (1986) adjustment for autocorrelation up to 12 lags.

<i>Panel A - Average Analyst Recommendations</i>				
Date	TARP	Non-TARP	Diff	(t-stat)
Jan-06	3.41	3.64	-0.24	(-6.13)
Feb-06	3.41	3.64	-0.22	(-5.82)
Mar-06	3.42	3.63	-0.21	(-5.49)
Apr-06	3.40	3.62	-0.22	(-5.53)
May-06	3.45	3.64	-0.19	(-4.94)
Jun-06	3.47	3.67	-0.20	(-5.03)
Jul-06	3.47	3.68	-0.21	(-5.60)
Aug-06	3.44	3.67	-0.23	(-6.19)
Sep-06	3.37	3.65	-0.28	(-7.41)
Oct-06	3.30	3.60	-0.30	(-7.96)
Nov-06	3.26	3.57	-0.31	(-8.21)
Dec-06	3.28	3.56	-0.28	(-7.48)
Jan-07	3.30	3.53	-0.22	(-5.85)
Feb-07	3.30	3.53	-0.23	(-6.03)
Mar-07	3.33	3.55	-0.22	(-5.90)
Apr-07	3.34	3.54	-0.20	(-5.27)
May-07	3.34	3.54	-0.20	(-5.37)
Jun-07	3.36	3.54	-0.18	(-4.91)
Jul-07	3.41	3.55	-0.14	(-3.64)
Aug-07	3.40	3.59	-0.19	(-4.97)
Sep-07	3.39	3.59	-0.20	(-5.30)
Oct-07	3.38	3.60	-0.22	(-5.63)
Nov-07	3.38	3.62	-0.24	(-6.27)
Dec-07	3.29	3.64	-0.34	(-8.98)
Jan-08	3.25	3.67	-0.42	(-11.12)
Feb-08	3.17	3.66	-0.49	(-12.88)
Mar-08	3.15	3.65	-0.50	(-13.16)
Apr-08	3.14	3.63	-0.49	(-12.94)
May-08	3.20	3.62	-0.42	(-11.04)
Jun-08	3.24	3.61	-0.37	(-9.81)
Jul-08	3.23	3.62	-0.39	(-10.33)
Aug-08	3.21	3.60	-0.39	(-10.26)
Sep-08	3.05	3.58	-0.53	(-14.99)
Oct-08	3.20	3.59	-0.39	(-11.13)
Nov-08	3.20	3.59	-0.39	(-11.10)
Dec-08	3.19	3.55	-0.36	(-10.01)

<i>Panel B - Regressions of Analyst Recommendations</i>					
Intercept	TARP	SIZE	BM	RET _{t-3,t}	RET _{t-12,t-3}
4.21	-0.22	-0.02	-0.39	0.21	0.21
(59.92)	(-7.79)	(-6.81)	(-7.56)	(19.06)	(8.48)

Table A4
Analyst Recommendations Differences-in-Differences Analysis

Table A4 presents results of the following pooled regressions:

$$REC_{i,t} = \beta_0 + \beta_1 FIN_{i,t} + \beta_2 FIN_{i,t} * CRISIS_t + \beta_3 CRISIS_t + \beta_4 Controls_{i,t} + e_{i,t}$$

$$REC_{i,t} = \beta_0 + \beta_1 TARP_{i,t} + \beta_2 TARP_{i,t} * CRISIS_t + \beta_3 CRISIS_t + \beta_4 Controls_{i,t} + e_{i,t}$$

Where REC is consensus analyst recommendation, FIN is an indicator variable for financial firms, TARP is an indicator variable for firms that received TARP funds, CRISIS is an indicator variable that equals 1 for the period from Jan. 2006 to Dec. 2008, and equals 0 for the period from Jan. 2001 to Dec. 2003. The set of control variables includes SIZE, BM, $RET_{t-3,t}$, $RET_{t-12,t-3}$, and the interactions of each of these variables with the CRISIS indicator variable. The variable SIZE is market capitalization, BM is book-to-market ratio, $RET_{t-3,t}$ is the prior 3-month return, $RET_{t-12,t-3}$ is the cumulative return between month t-12 to month t-3. Data sources and detailed variable definitions are described in Section IA1. The variables BM and SIZE are expressed in natural logarithms. Our sample includes only common stocks (those with a share code of 10 or 11 in the CRSP). Two firms with stock price above \$1,000 are excluded from the analysis. Coefficients on all variables are in percent. Numbers in parentheses are *t*-statistics.

	<i>Financial vs Nonfinancial</i>			<i>TARP vs Non-TARP</i>	
	Model1	Model2		Model1	Model2
Intercept	3.67 (1880.90)	3.85 (176.40)	Intercept	3.67 (1874.08)	3.84 (167.71)
FIN	-0.11 (-19.74)	-0.12 (-21.75)	TARP	-0.08 (-8.86)	-0.12 (-12.57)
CRISIS	-0.07 (-24.74)	0.29 (9.42)	CRISIS	-0.06 (-24.12)	0.32 (9.99)
FIN*CRISIS	-0.15 (-19.54)	-0.07 (-9.74)	TARP*CRISIS	-0.21 (-17.10)	-0.11 (-8.84)
CONTROLS	NO	YES	CONTROLS	NO	YES
Adjusted R ²	0.60%	2.81%	Adjusted R ²	0.39%	2.72%

Table A5
Changes in Analyst Recommendations for TARP and non-TARP Firms

Table A5 presents the average change in analyst recommendations (ΔREC) and cross-sectional regressions of changes in analyst recommendations for the period from Jan. 2006 to Dec. 2008. Panel A reports the average ΔREC for TARP and non-TARP firms, as well as the difference in average ΔREC between TARP and non-TARP firms. DIFF^{CUM} is the difference in average cumulative ΔREC between TARP and non-TARP firms. The numbers in parentheses are t -statistics for differences in means, assuming equal variances. Panel B reports Fama-Macbeth coefficients from the following cross-sectional regression:

$$\Delta\text{REC}_{i,t,t+1} = \beta_0 + \beta_1 \text{TARP}_{i,t} + \beta_2 \text{SIZE}_{i,t} + \beta_3 \text{BM}_{i,t} + \beta_4 \text{RET}_{i,t-3,t} + \beta_5 \text{RET}_{i,t-12,t-3} + e_{i,t},$$

where TARP is an indicator variable for firms that received TARP funds, SIZE is market capitalization, BM is the book-to-market ratio, $\text{RET}_{t-3,t}$ is the prior 3-month return, $\text{RET}_{t-12,t-3}$ is the cumulative return between month $t-12$ and month $t-3$. Data sources and detailed variable definitions are described in Section IA1. The variables BM and SIZE are expressed in natural logarithms. Our sample includes only common stocks (those with a share code of 10 or 11 in the CRSP). Two firms with stock price above \$1,000 are excluded from the analysis. We report the average coefficients across all months from Jan. 2006 to Dec. 2008. The t -statistics are based on Fama-MacBeth (1973) with a Newey-West (1986) adjustment for autocorrelation up to 12 lags.

<i>Panel A- Average Changes in Analyst Recommendations</i>				
Date	TARP	NT	Diff (t-stat)	Diff ^{cum} (t-stat)
Jan-06	0.09	-0.08	0.17 (1.00)	0.17 (1.00)
Feb-06	0.02	0.00	0.02 (0.39)	0.10 (1.09)
Mar-06	-0.04	-0.01	-0.03 (-0.72)	0.05 (0.56)
Apr-06	-0.05	-0.01	-0.04 (-1.00)	0.01 (0.16)
May-06	0.05	0.03	0.02 (0.64)	0.03 (0.46)
Jun-06	0.00	0.03	-0.03 (-1.46)	-0.01(-0.24)
Jul-06	-0.01	0.02	-0.03 (-1.26)	-0.04 (-0.85)
Aug-06	-0.02	0.00	-0.01 (-0.72)	-0.06 (-1.20)
Sep-06	-0.03	-0.02	-0.01 (-0.94)	-0.07 (-1.54)
Oct-06	-0.08	-0.04	-0.05 (-2.61)	-0.11 (-2.61)
Nov-06	-0.03	-0.02	-0.01 (-0.64)	-0.11 (-2.84)
Dec-06	0.00	-0.01	0.01 (1.34)	-0.10 (-2.64)
Jan-07	0.02	0.00	0.02 (1.51)	-0.07 (-1.91)
Feb-07	0.02	0.01	0.01 (0.95)	-0.07 (-1.80)
Mar-07	0.02	0.02	0.00 (0.03)	-0.05 (-1.37)
Apr-07	0.03	-0.01	0.04 (2.65)	-0.02 (-0.48)
May-07	0.01	0.00	0.01 (0.48)	-0.02 (-0.59)
Jun-07	0.02	0.00	0.01 (0.99)	0.00 (0.13)
Jul-07	0.03	0.00	0.03 (2.13)	0.07 (1.80)
Aug-07	0.00	0.03	-0.04 (-2.20)	0.02 (0.60)
Sep-07	-0.01	-0.01	-0.01 (-0.82)	0.01 (0.30)
Oct-07	-0.05	-0.02	-0.03 (-2.06)	0.01 (0.31)
Nov-07	-0.01	0.01	-0.01 (-0.96)	0.01 (0.16)
Dec-07	-0.06	0.00	-0.06 (-5.21)	-0.06 (-1.53)
Jan-08	-0.04	0.01	-0.05 (-3.05)	-0.12 (-2.88)
Feb-08	-0.06	-0.01	-0.06 (-4.15)	-0.20 (-4.98)
Mar-08	-0.01	0.00	-0.01 (-0.58)	-0.22 (-5.32)
Apr-08	0.01	-0.02	0.02 (1.55)	-0.20 (-4.76)
May-08	0.02	-0.01	0.03 (2.14)	-0.18 (-4.33)
Jun-08	0.03	0.00	0.03 (2.63)	-0.13 (-3.12)
Jul-08	-0.03	0.00	-0.03 (-2.00)	-0.16 (-3.78)
Aug-08	-0.01	-0.01	0.00 (-0.26)	-0.13 (-3.11)
Sep-08	-0.13	-0.01	-0.12 (-8.19)	-0.25 (-6.00)
Oct-08	0.14	0.01	0.13 (7.19)	-0.12 (-3.13)
Nov-08	0.00	-0.01	0.01 (0.62)	-0.09 (-2.43)
Dec-08	-0.02	-0.03	0.01 (0.69)	-0.06 (-1.40)

<i>Panel B - Regressions of Changes in Analyst Recommendations</i>					
Intercept	TARP	SIZE	BM	RET _{t-3,t}	RET _{t-12,t-3}
-4.40	-0.09	0.19	-0.30	-0.54	0.33
(-3.04)	(-0.15)	(2.84)	(-0.38)	(-0.57)	(0.58)

Table A6

One-Year Price Target Returns

Table A6 presents the average analyst price target return (TGT) and cross-sectional regressions of analyst price target returns for the period from Jan. 2006 to Dec. 2008. TGT is the percentage difference between the one-year target price and the closing price of the stock on the day when the price target is issued. Panel A reports the average TGT for financial (TARP) and nonfinancial (non-TARP) firms as well as the difference in average TGT between financial (TARP) and nonfinancial (non-TARP) firms. Numbers in parentheses are *t*-statistics for differences in means, assuming equal variances. Panel B reports the Fama-MacBeth (1973) coefficients from the following cross-sectional regression:

$$TGT_{i,t} = \beta_0 + \beta_1 FIN_{i,t} (or\ TARP_{i,t}) + \beta_2 SIZE_{i,t} + \beta_3 BM_{i,t} + \beta_4 RET_{i,t-3,t} + \beta_5 RET_{i,t-12,t-3} + e_{i,t},$$

where FIN is an indicator variable for financial firms, TARP is an indicator variable for firms that received TARP funds, SIZE is market capitalization, BM is the book-to-market ratio, $RET_{t-3,t}$ is the prior 3-month return, $RET_{t-12,t-3}$ is the cumulative return between month $t-12$ and month $t-3$. Data sources and detailed variable definitions are described in Section IA1. The variables BM and SIZE are expressed in natural logarithms. Our sample includes only common stocks (those with a share code of 10 or 11 in the CRSP). Two firms with stock price above \$1,000 are excluded from the analysis. We report the average coefficients across all months from Jan. 2006 to Dec. 2008. The *t*-statistics are based on Fama-MacBeth (1973) with a Newey-West (1986) adjustment for autocorrelation up to 12 lags.

<i>Panel A – Average One-year Price Target Returns</i>								
Date	<i>Financial vs Nonfinancial Firms</i>				<i>TARP vs Non-TARP Firms</i>			
	FIN	Non-FIN	Difference	(t-stat)	TARP	Non-TARP	Difference	(t-stat)
Jan-06	0.07	0.15	-0.08	(-10.68)	0.07	0.15	-0.08	(-7.49)
Feb-06	0.08	0.16	-0.08	(-7.34)	0.08	0.16	-0.07	(-3.63)
Mar-06	0.05	0.16	-0.11	(-8.34)	0.05	0.16	-0.11	(-5.67)
Apr-06	0.07	0.15	-0.08	(-10.71)	0.07	0.15	-0.08	(-6.86)
May-06	0.09	0.19	-0.09	(-6.68)	0.07	0.19	-0.11	(-4.63)
Jun-06	0.11	0.20	-0.09	(-6.75)	0.10	0.20	-0.10	(-4.88)
Jul-06	0.09	0.23	-0.14	(-13.44)	0.08	0.23	-0.14	(-9.30)
Aug-06	0.07	0.22	-0.15	(-9.23)	0.05	0.22	-0.16	(-6.46)
Sep-06	0.07	0.18	-0.11	(-7.14)	0.06	0.18	-0.13	(-5.35)
Oct-06	0.06	0.15	-0.09	(-10.88)	0.06	0.15	-0.09	(-7.49)
Nov-06	0.04	0.16	-0.12	(-8.25)	-0.06	0.16	-0.22	(-8.53)
Dec-06	0.08	0.16	-0.08	(-6.20)	0.06	0.16	-0.10	(-4.82)
Jan-07	0.07	0.15	-0.07	(-9.87)	0.07	0.15	-0.08	(-7.53)
Feb-07	0.08	0.15	-0.07	(-6.21)	0.08	0.15	-0.08	(-3.64)
Mar-07	0.09	0.18	-0.09	(-6.07)	0.05	0.18	-0.12	(-4.83)
Apr-07	0.09	0.14	-0.05	(-6.18)	0.08	0.14	-0.05	(-4.93)
May-07	0.07	0.15	-0.08	(-6.81)	0.02	0.15	-0.14	(-6.34)
Jun-07	0.09	0.16	-0.07	(-5.09)	0.10	0.16	-0.06	(-2.69)
Jul-07	0.13	0.16	-0.02	(-3.12)	0.14	0.16	-0.02	(-1.84)
Aug-07	0.15	0.22	-0.07	(-4.74)	0.09	0.22	-0.13	(-5.65)
Sep-07	0.13	0.20	-0.07	(-5.10)	0.12	0.20	-0.08	(-3.72)
Oct-07	0.12	0.17	-0.05	(-5.82)	0.10	0.17	-0.07	(-6.41)
Nov-07	0.15	0.23	-0.08	(-4.65)	0.11	0.23	-0.12	(-4.89)
Dec-07	0.11	0.21	-0.11	(-7.10)	0.07	0.21	-0.14	(-6.99)
Jan-08	0.13	0.26	-0.13	(-12.44)	0.10	0.26	-0.17	(-11.64)
Feb-08	0.12	0.26	-0.14	(-8.29)	0.04	0.26	-0.22	(-7.54)
Mar-08	0.17	0.32	-0.15	(-6.35)	0.04	0.33	-0.28	(-7.36)
Apr-08	0.10	0.22	-0.12	(-10.05)	0.07	0.22	-0.15	(-9.11)
May-08	0.12	0.23	-0.11	(-5.15)	0.02	0.23	-0.22	(-6.18)
Jun-08	0.13	0.22	-0.09	(-5.34)	0.12	0.22	-0.09	(-4.26)
Jul-08	0.16	0.25	-0.10	(-8.06)	0.10	0.25	-0.16	(-9.89)
Aug-08	0.12	0.27	-0.15	(-6.81)	-0.02	0.27	-0.28	(-8.13)
Sep-08	0.13	0.30	-0.18	(-8.68)	0.06	0.31	-0.25	(-8.97)
Oct-08	0.22	0.42	-0.20	(-10.35)	0.15	0.42	-0.27	(-9.49)
Nov-08	0.36	0.52	-0.15	(-3.65)	0.26	0.52	-0.26	(-3.94)
Dec-08	0.20	0.38	-0.17	(-5.05)	0.18	0.38	-0.20	(-4.58)

<i>Panel B - Determinants of Price Target Returns</i>					
<i>Financial Firms</i>					
Intercept	FIN	SIZE	BM	RET _{t-3,t}	RET _{t-12,t-3}
0.98	-0.07	-0.03	-0.13	-0.20	0.02
(6.19)	(-12.69)	(-5.14)	(-10.81)	(-4.05)	(2.04)
<i>TARP Firms</i>					
Intercept	TARP	SIZE	BM	RET _{t-3,t}	RET _{t-12,t-3}
1.04	-0.09	-0.04	-0.14	-0.20	0.02
(6.35)	(-9.06)	(-5.32)	(-11.75)	(-3.94)	(1.99)

Table A7
Insider Trading for TARP and non-TARP Firms

Table A7 presents the average Insider trading for the period from 2006 to 2008. We include only trades by the firm's management (TFN role code = CEO, CFO, CO, CB, P, D, VP and O) and exclude option-related trades. The variable NIT is the ratio of net insider dollar purchases (dollar purchases minus dollar sales) over previous 6 months divided by the firm's market capitalization. Data sources and detailed variable definitions are described in Section IA1. This table reports the average NIT for TARP and non-TARP firms as well as the difference in average NIT between TARP and non-TARP firms. Numbers in parentheses are the Student's *t*-statistic for differences in means assuming equal variances.

Date	TARP	Non-TARP	Difference	(<i>t</i> -stat)
Jun-06	-0.05	-0.12	0.07	(1.23)
Dec-06	-0.05	-0.11	0.06	(1.06)
Jun-07	-0.02	-0.14	0.11	(2.10)
Dec-07	0.07	-0.06	0.13	(3.20)
Jun-08	0.05	-0.03	0.08	(2.02)
Dec-08	0.03	-0.01	0.05	(0.90)

Table A8
Cross-Sectional Regressions of Insider Trading for TARP and non-TARP Firms

Table A8 estimates the following cross-sectional regression:

$$NIT_{i,t-6,t} = \beta_0 + \beta_1 TARP_{i,t-6} + \beta_2 SIZE_{i,t-6} + \beta_3 BM_{i,t-6} + \beta_4 RET_{i,t-30,t-6} + e_{i,t},$$

where NIT is the ratio of net insider dollar purchases (dollar purchases minus dollar sales) over previous 6 months divided by the firm's market capitalization. TARP is an indicator variable for firms that received TARP funds, SIZE is market capitalization, BM is the book-to-market ratio, $RET_{t-30,t-6}$ is the cumulative return from month t-30 through month t-6. Data sources and detailed variable definitions are described in Section IA1. The variables BM and SIZE are expressed in natural logarithms. Our sample includes only common stocks (those with a share code of 10 or 11 in the CRSP). Two firms with stock price above \$1,000 are excluded from the analysis. Numbers in parentheses are *t*-statistics.

Date	Intercept	TARP	$RET_{t-30,t-6}$	SIZE	BM	Adjusted R ²
Jun-06	-0.41 (-2.52)	0.06 (1.04)	-0.08 (-5.57)	0.01 (1.73)	0.13 (1.83)	1.53%
Dec-06	-0.18 (-1.25)	0.06 (1.13)	-0.03 (-2.56)	0.00 (0.48)	0.05 (0.82)	0.24%
Jun-07	-0.30 (-2.11)	0.09 (1.84)	-0.07 (-5.04)	0.01 (1.33)	0.03 (0.47)	1.19%
Dec-07	0.00 (-0.03)	0.09 (2.34)	-0.08 (-6.13)	0.00 (-0.52)	0.09 (1.70)	2.25%
Jun-08	0.11 (1.00)	0.05 (1.39)	-0.05 (-3.49)	-0.01 (-1.20)	0.00 (-0.11)	0.67%
Dec-08	0.37 (2.48)	0.02 (0.50)	-0.02 (-1.06)	-0.02 (-2.93)	0.06 (1.02)	0.62%

Table A9
Institutional Ownership and Changes in Institutional Ownership for Banks and nonbank, nonfinancial Firms

Table A9 presents the average quarterly institutional ownership (IO) and quarterly changes in institutional ownership (Δ IO) for the period from 2006 to 2008. Panel A reports the average IO for banks and nonbank, nonfinancial firms as well as the difference in average IO between banks and nonbank, nonfinancial firms. Panel B reports the average Δ IO for banks and nonbank, nonfinancial firms as well as the difference in average Δ IO between banks and nonbank, nonfinancial firms. DIFF^{CUM} is the difference in average cumulative Δ IO between banks and nonbank, nonfinancial firms. Data sources and detailed variable definitions are described in Section IA1. Following Flannery, Kwan, and Nimalendran (2004) we define banks as firms with SIC codes between 6021 and 6025 or between 6710 and 6712. We exclude two firms with share price above \$1,000 from the analysis. IO and Δ IO are expressed as percentages. Numbers in parentheses are t -statistics for differences in means, assuming equal variances.

<i>Panel A – Institutional Ownership</i>				
Date	BANK	Nonbank	Difference	(t -stat)
Mar-06	26.99	60.13	-33.15	(-13.51)
Jun-06	27.27	61.08	-33.81	(-13.99)
Sep-06	27.35	61.99	-34.64	(-14.57)
Dec-06	27.40	63.22	-35.82	(-15.18)
Mar-07	27.34	63.85	-36.51	(-16.12)
Jun-07	27.66	65.49	-37.83	(-16.50)
Sep-07	28.01	66.91	-38.90	(-16.64)
Dec-07	27.88	65.51	-37.63	(-16.67)
Mar-08	27.09	64.72	-37.62	(-16.74)
Jun-08	29.14	65.54	-36.40	(-16.29)
Sep-08	30.00	65.06	-35.06	(-15.82)
Dec-08	27.68	62.24	-34.57	(-15.58)

Panel B – Changes in Institutional Ownership

Date	BANK	Nonbank	DIFF	(<i>t</i> -stat)	DIFF ^{CUM}	(<i>t</i> -stat)
Mar-06	0.43	1.60	-1.17	(-2.06)	-1.17	(-2.06)
Jun-06	0.50	0.82	-0.31	(-0.52)	-1.46	(-1.85)
Sep-06	0.90	1.17	-0.27	(-0.57)	-1.93	(-2.14)
Dec-06	1.04	1.69	-0.65	(-1.18)	-2.78	(-2.85)
Mar-07	0.54	0.75	-0.21	(-0.38)	-3.11	(-3.00)
Jun-07	0.47	2.02	-1.55	(-3.15)	-4.81	(-4.42)
Sep-07	1.67	1.76	-0.09	(-0.16)	-4.77	(-4.00)
Dec-07	-0.40	-1.65	1.25	(1.96)	-3.62	(-3.04)
Mar-08	0.47	0.13	0.35	(0.67)	-3.06	(-2.38)
Jun-08	1.91	0.62	1.29	(2.19)	-2.03	(-1.54)
Sep-08	0.61	-0.01	0.62	(1.31)	-1.42	(-1.06)
Dec-08	-2.24	-3.01	0.78	(1.17)	-0.48	(-0.34)

Table A10**Analyst Recommendations for Banks and nonbank, nonfinancial Firms**

Table A10 presents the average consensus analyst recommendations (REC) and cross-sectional regressions of analyst recommendations for the period from Jan. 2006 to Dec. 2008. Panel A reports the average consensus analyst recommendation for banks and nonbank, nonfinancial firms as well as the difference in average consensus analyst recommendations between banks and nonbank, nonfinancial firms. Following Flannery, Kwan, and Nimalendran (2004) we define banks as firms with SIC codes between 6021 and 6025 or between 6710 and 6712. Numbers in parentheses are t -statistics for differences in means, assuming equal variances. Panel B reports the Fama-MacBeth (1973) coefficients from the following cross-sectional regression:

$$REC_{i,t} = \beta_0 + \beta_1 BANK_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 BM_{i,t} + \beta_4 RET_{i,t-3,t} + \beta_5 RET_{i,t-12,t-3} + e_{i,t},$$

where BANK is an indicator variable for banks, SIZE is market capitalization, BM is the book-to-market ratio, $RET_{t-3,t}$ is the prior 3-month return, $RET_{t-12,t-3}$ is the cumulative return between month $t-12$ to month $t-3$. Data sources and detailed variable definitions are described in Section IA1. The variables BM and SIZE are expressed in natural logarithms. Our sample includes only common stocks (those with a share code of 10 or 11 in the CRSP). Two firms with stock price above \$1,000 are excluded from the analysis. We report the average coefficients across all months from Jan. 2006 to Dec. 2008. The t -statistics are based on Fama-MacBeth (1973) with a Newey-West (1986) adjustment for autocorrelation up to 12 lags.

<i>Panel A - Average Analyst Recommendations</i>				
Date	BANK	Nonbank	Diff	(t-stat)
Jan-06	3.35	3.65	-0.30	(-6.84)
Feb-06	3.35	3.64	-0.29	(-6.57)
Mar-06	3.37	3.64	-0.27	(-6.12)
Apr-06	3.35	3.62	-0.27	(-6.10)
May-06	3.37	3.64	-0.27	(-6.03)
Jun-06	3.36	3.67	-0.31	(-7.06)
Jul-06	3.37	3.68	-0.31	(-7.16)
Aug-06	3.32	3.67	-0.36	(-8.20)
Sep-06	3.28	3.66	-0.38	(-8.67)
Oct-06	3.25	3.60	-0.35	(-7.93)
Nov-06	3.27	3.57	-0.30	(-6.84)
Dec-06	3.30	3.56	-0.26	(-5.99)
Jan-07	3.32	3.53	-0.21	(-4.73)
Feb-07	3.33	3.54	-0.20	(-4.54)
Mar-07	3.35	3.56	-0.21	(-4.75)
Apr-07	3.35	3.55	-0.20	(-4.48)
May-07	3.35	3.55	-0.20	(-4.57)
Jun-07	3.35	3.55	-0.20	(-4.55)
Jul-07	3.36	3.55	-0.20	(-4.46)
Aug-07	3.37	3.59	-0.23	(-5.18)
Sep-07	3.36	3.59	-0.23	(-5.45)
Oct-07	3.34	3.60	-0.26	(-5.97)
Nov-07	3.34	3.63	-0.29	(-6.57)
Dec-07	3.24	3.64	-0.40	(-9.18)
Jan-08	3.24	3.67	-0.44	(-10.1)
Feb-08	3.15	3.66	-0.51	(-12.00)
Mar-08	3.13	3.65	-0.53	(-12.13)
Apr-08	3.17	3.64	-0.47	(-10.95)
May-08	3.22	3.62	-0.40	(-9.44)
Jun-08	3.26	3.62	-0.36	(-8.58)
Jul-08	3.24	3.62	-0.38	(-9.01)
Aug-08	3.21	3.61	-0.39	(-9.37)
Sep-08	3.13	3.58	-0.46	(-11.4)
Oct-08	3.26	3.59	-0.34	(-8.44)
Nov-08	3.25	3.59	-0.34	(-8.41)
Dec-08	3.24	3.55	-0.31	(-7.25)

<i>Panel B - Regressions of Analyst Recommendations</i>					
Intercept	BANK	SIZE	BM	RET _{t-3,t}	RET _{t-12,t-3}
4.27	-0.23	-0.02	-0.40	0.21	0.21
(53.73)	(-10.95)	(-6.59)	(-7.57)	(21.26)	(9.26)

Table A11**Changes in Analyst Recommendations for Banks and nonbank, nonfinancial Firms**

Table A5 presents the average change in analyst recommendations (ΔREC) and cross-sectional regressions of changes in analyst recommendations for the period from Jan. 2006 to Dec. 2008. Panel A reports the average ΔREC for banks and nonbank, nonfinancial firms, as well as the difference in average ΔREC between banks and nonbank, nonfinancial firms. DIFF^{CUM} is the difference in average cumulative ΔREC between banks and nonbank, nonfinancial firms. Following Flannery, Kwan, and Nimalendran (2004) we define banks as firms with SIC codes between 6021 and 6025 or between 6710 and 6712. Numbers in parentheses are t -statistics for differences in means, assuming equal variances. Panel B reports Fama-Macbeth coefficients from the following cross-sectional regression:

$$\Delta\text{REC}_{i,t,t+1} = \beta_0 + \beta_1\text{BANK}_{i,t} + \beta_2\text{SIZE}_{i,t} + \beta_3\text{BM}_{i,t} + \beta_4\text{RET}_{i,t-3,t} + \beta_5\text{RET}_{i,t-12,t-3} + e_{i,t},$$

where BANK is an indicator variable for banks, SIZE is market capitalization, BM is the book-to-market ratio, $\text{RET}_{t-3,t}$ is the prior 3-month return, $\text{RET}_{t-12,t-3}$ is the cumulative return between month $t-12$ and month $t-3$. Data sources and detailed variable definitions are described in Section IA1. The variables BM and SIZE are expressed in natural logarithms. Our sample includes only common stocks (those with a share code of 10 or 11 in the CRSP). Two firms with stock price above \$1,000 are excluded from the analysis. We report the average coefficients across all months from Jan. 2006 to Dec. 2008. The t -statistics are based on Fama-MacBeth (1973) with a Newey-West (1986) adjustment for autocorrelation up to 12 lags.

<i>Panel A- Average Changes in Analyst Recommendations</i>						
Date	BANK	Nonbank	Diff	(t-stat)	Diff ^{CUM}	(t-stat)
Jan-06	-0.12	-0.08	-0.04	(-0.20)	-0.04	(-0.20)
Feb-06	-0.02	0.00	-0.02	(-0.27)	-0.06	(-0.57)
Mar-06	-0.04	-0.01	-0.04	(-0.73)	-0.08	(-0.87)
Apr-06	-0.03	-0.01	-0.02	(-0.45)	-0.06	(-0.77)
May-06	-0.01	0.03	-0.04	(-1.12)	-0.09	(-1.24)
Jun-06	-0.04	0.03	-0.07	(-2.79)	-0.15	(-2.46)
Jul-06	-0.02	0.02	-0.04	(-1.55)	-0.17	(-2.91)
Aug-06	-0.04	0.00	-0.03	(-1.61)	-0.18	(-3.48)
Sep-06	-0.03	-0.02	-0.01	(-0.69)	-0.18	(-3.64)
Oct-06	-0.05	-0.04	-0.01	(-0.47)	-0.17	(-3.50)
Nov-06	0.01	-0.02	0.03	(1.64)	-0.12	(-2.75)
Dec-06	0.00	-0.01	0.01	(0.69)	-0.13	(-3.02)
Jan-07	0.03	0.00	0.03	(1.90)	-0.08	(-1.80)
Feb-07	0.02	0.01	0.02	(0.93)	-0.07	(-1.52)
Mar-07	0.01	0.02	0.00	(-0.16)	-0.05	(-1.19)
Apr-07	0.04	-0.01	0.05	(2.77)	0.00	(-0.10)
May-07	0.00	0.00	0.00	(-0.31)	-0.03	(-0.81)
Jun-07	0.01	0.00	0.01	(0.52)	0.01	(0.24)
Jul-07	0.01	0.00	0.01	(0.46)	0.03	(0.78)
Aug-07	-0.01	0.03	-0.04	(-2.01)	0.01	(0.26)
Sep-07	-0.02	-0.01	-0.02	(-1.21)	-0.01	(-0.19)
Oct-07	-0.05	-0.02	-0.04	(-2.02)	-0.01	(-0.22)
Nov-07	0.01	0.01	0.00	(-0.23)	-0.02	(-0.39)
Dec-07	-0.06	0.00	-0.06	(-4.84)	-0.08	(-1.65)
Jan-08	0.00	0.01	-0.01	(-0.75)	-0.10	(-2.19)
Feb-08	-0.06	-0.01	-0.06	(-3.65)	-0.18	(-3.92)
Mar-08	0.00	0.00	0.00	(-0.14)	-0.18	(-3.98)
Apr-08	0.04	-0.02	0.05	(3.33)	-0.16	(-3.27)
May-08	0.00	-0.01	0.02	(1.03)	-0.15	(-3.16)
Jun-08	0.04	0.00	0.04	(3.26)	-0.09	(-2.00)
Jul-08	-0.03	0.00	-0.03	(-1.97)	-0.13	(-2.83)
Aug-08	-0.02	-0.01	-0.01	(-0.37)	-0.12	(-2.49)
Sep-08	-0.09	-0.01	-0.08	(-4.99)	-0.22	(-4.81)
Oct-08	0.10	0.01	0.09	(4.64)	-0.13	(-2.97)
Nov-08	0.00	-0.01	0.01	(0.49)	-0.11	(-2.41)
Dec-08	-0.01	-0.03	0.02	(1.21)	-0.08	(-1.67)

<i>Panel B - Regressions of Changes in Analyst Recommendations</i>					
Intercept	BANK	SIZE	BM	RET _{t-3,t}	RET _{t-12,t-3}
-4.85	-0.77	0.21	-0.39	-0.64	0.40
(-4.11)	(-1.21)	(3.88)	(-0.46)	(-0.66)	(0.71)

Table A12
Insider Trading for Banks and nonbank, nonfinancial Firms

Table A12 presents the average insider trading for the period from 2006 to 2008. We include only trades by the firm's management (TFN rolecode = CEO, CFO, CO, CB, P, D, VP and O) and exclude option-related trades. The variable NIT is the ratio of net insider dollar purchases (dollar purchases minus dollar sales) over previous 6 months divided by the firm's market capitalization. Data sources and detailed variable definitions are described in Section IA1. This table reports the average NIT for banks and nonbank, nonfinancial firms as well as the difference in average NIT between banks and nonbank, nonfinancial firms. Numbers in parentheses are the Student's *t*-statistic for differences in means, assuming equal variances.

Date	BANK	Nonbank	Difference	(<i>t</i> -stat)
Jun-06	-0.01	-0.12	0.11	(2.16)
Dec-06	-0.03	-0.11	0.07	(1.44)
Jun-07	-0.01	-0.14	0.13	(2.75)
Dec-07	0.12	-0.07	0.19	(5.04)
Jun-08	0.11	-0.04	0.14	(4.46)
Dec-08	0.15	-0.02	0.16	(3.41)

Table A13**Institutional Ownership and Changes in Institutional Ownership for Broader Definition of Financial and nonfinancial Firms**

Table A13 presents the average quarterly institutional ownership (IO) and quarterly changes in institutional ownership (Δ IO) for the period from 2006 to 2008. Panel A reports the average IO for financial and nonfinancial firms, as well as the difference in average IO between financial and nonfinancial firms. Panel B reports the average Δ IO for financial and nonfinancial firms, as well as the difference in average Δ IO between financial and nonfinancial firms. DIFF^{CUM} is the difference in average cumulative Δ IO between financial and nonfinancial firms. Data sources and detailed variable definitions are described in Section IA1. Financial firms are those with SIC codes between 6000 and 6999. We exclude two firms with share price above \$1,000 from the analysis. IO and Δ IO are expressed as percentages. Numbers in parentheses are t -statistics for differences in means, assuming equal variances.

<i>Panel A – Institutional Ownership</i>				
Date	FIN	Non-FIN	Difference	(t -stat)
Mar-06	37.72	60.13	-22.41	(-17.37)
Jun-06	38.30	61.08	-22.78	(-17.75)
Sep-06	39.03	61.99	-22.96	(-17.76)
Dec-06	40.18	63.22	-23.04	(-17.59)
Mar-07	40.16	63.85	-23.70	(-18.35)
Jun-07	41.16	65.49	-24.34	(-18.58)
Sep-07	42.36	66.91	-24.55	(-18.09)
Dec-07	41.98	65.51	-23.53	(-17.92)
Mar-08	40.74	64.72	-23.98	(-18.25)
Jun-08	41.58	65.54	-23.96	(-18.18)
Sep-08	41.58	65.06	-23.48	(-17.91)
Dec-08	39.17	62.24	-23.07	(-17.64)

Panel B – Changes in Institutional Ownership

Date	FIN	Non-FIN	Diff	(<i>t</i> -stat)	Diff ^{CUM}	(<i>t</i> -stat)
Mar-06	1.10	1.60	-0.5	(-1.76)	-0.50	(-1.76)
Jun-06	0.60	0.82	-0.21	(-0.71)	-0.71	(-1.79)
Sep-06	0.84	1.17	-0.33	(-1.32)	-1.11	(-2.40)
Dec-06	1.33	1.69	-0.36	(-1.23)	-1.46	(-2.89)
Mar-07	0.21	0.75	-0.54	(-1.79)	-2.10	(-3.80)
Jun-07	1.02	2.02	-1.00	(-3.71)	-3.19	(-5.36)
Sep-07	1.63	1.76	-0.13	(-0.38)	-3.02	(-4.59)
Dec-07	-0.73	-1.65	0.93	(2.61)	-2.15	(-3.22)
Mar-08	-0.28	0.13	-0.40	(-1.36)	-2.46	(-3.45)
Jun-08	0.58	0.62	-0.04	(-0.13)	-2.63	(-3.52)
Sep-08	0.22	-0.01	0.22	(0.79)	-2.36	(-3.07)
Dec-08	-2.07	-3.01	0.95	(2.43)	-1.27	(-1.57)

Table A14**Analyst Recommendations for Broader Definition of Financial and Nonfinancial Firms**

Table A14 presents the average consensus analyst recommendations (REC) and cross-sectional regressions of analyst recommendations for the period from Jan. 2006 to Dec. 2008. Panel A reports the average consensus analyst recommendations for financial and nonfinancial firms as well as the difference in average consensus analyst recommendations between financial and nonfinancial firms. Financial firms are those with SIC codes between 6000 and 6999. Numbers in parentheses are *t*-statistics for differences in means, assuming equal variances. Panel B reports the Fama-MacBeth (1973) coefficients from the following cross-sectional regression:

$$REC_{i,t} = \beta_0 + \beta_1 FIN_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 BM_{i,t} + \beta_4 RET_{i,t-3,t} + \beta_5 RET_{i,t-12,t-3} + e_{i,t},$$

where *FIN* is an indicator variable for financial firms, *SIZE* is market capitalization, *BM* is the book-to-market ratio, $RET_{t-3,t}$ is the prior 3-month return, $RET_{t-12,t-3}$ is the cumulative return between month *t*-12 to month *t*-3. Data sources and detailed variable definitions are described in Section IA1. The variables *BM* and *SIZE* are expressed in natural logarithms. Our sample includes only common stocks (those with a share code of 10 or 11 in the CRSP). Two firms with stock price above \$1,000 are excluded from the analysis. We report the average coefficients across all months from Jan. 2006 to Dec. 2008. The *t*-statistics are based on Fama-MacBeth (1973) with a Newey-West (1986) adjustment for autocorrelation up to 12 lags.

<i>Panel A - Average Analyst Recommendations</i>				
Date	FIN	Non-FIN	Diff	(<i>t</i> -stat)
Jan-06	3.38	3.65	-0.26	(-11.35)
Feb-06	3.39	3.64	-0.25	(-10.70)
Mar-06	3.40	3.64	-0.24	(-10.22)
Apr-06	3.39	3.62	-0.23	(-9.85)
May-06	3.43	3.64	-0.21	(-9.07)
Jun-06	3.46	3.67	-0.21	(-8.99)
Jul-06	3.45	3.68	-0.23	(-10.09)
Aug-06	3.44	3.67	-0.24	(-10.44)
Sep-06	3.40	3.66	-0.26	(-11.31)
Oct-06	3.33	3.60	-0.28	(-12.15)
Nov-06	3.32	3.57	-0.25	(-11.24)
Dec-06	3.32	3.56	-0.24	(-10.69)
Jan-07	3.32	3.53	-0.21	(-9.13)
Feb-07	3.33	3.54	-0.21	(-8.68)
Mar-07	3.35	3.56	-0.21	(-9.06)
Apr-07	3.34	3.55	-0.21	(-9.01)
May-07	3.33	3.55	-0.21	(-9.36)
Jun-07	3.34	3.55	-0.21	(-9.05)
Jul-07	3.40	3.55	-0.15	(-6.71)
Aug-07	3.41	3.59	-0.18	(-8.02)
Sep-07	3.42	3.59	-0.17	(-7.59)
Oct-07	3.42	3.60	-0.18	(-7.67)
Nov-07	3.42	3.63	-0.21	(-8.82)
Dec-07	3.39	3.64	-0.25	(-10.91)
Jan-08	3.38	3.67	-0.29	(-12.93)
Feb-08	3.34	3.66	-0.33	(-14.44)
Mar-08	3.31	3.65	-0.34	(-14.81)
Apr-08	3.30	3.64	-0.34	(-14.72)
May-08	3.31	3.62	-0.31	(-13.71)
Jun-08	3.33	3.62	-0.29	(-12.69)
Jul-08	3.32	3.62	-0.31	(-13.59)
Aug-08	3.29	3.61	-0.31	(-13.61)
Sep-08	3.21	3.58	-0.37	(-16.71)
Oct-08	3.28	3.59	-0.31	(-14.19)
Nov-08	3.28	3.59	-0.31	(-13.92)
Dec-08	3.28	3.55	-0.28	(-11.92)

<i>Panel B - Determinants of Analyst Recommendations</i>					
Intercept	FIN	SIZE	BM	RET _{t-3,t}	RET _{t-12,t-3}
4.19	-0.19	-0.02	-0.38	0.20	0.20
(53.96)	(-13.71)	(-5.86)	(-7.90)	(15.07)	(8.08)

Table A15**Changes in Analyst Recommendations for Broader Definition of Financial and nonfinancial Firms**

Table A15 presents the average changes in analyst recommendation (ΔREC) and cross-sectional regressions of changes in analyst recommendations for the period from Jan. 2006 to Dec. 2008. Panel A reports the average ΔREC for financial and nonfinancial firms, as well as the difference in average ΔREC between financial and nonfinancial firms. DIFF^{CUM} is the difference in average cumulative ΔREC between financial and nonfinancial firms. Financial firms are those with SIC codes between 6000 and 6999. Numbers in parentheses are t -statistics for differences in means, assuming equal variances. Panel B reports Fama-Macbeth coefficients from the following cross-sectional regression:

$$\Delta\text{REC}_{i,t,t+1} = \beta_0 + \beta_1\text{FIN}_{i,t} + \beta_2\text{SIZE}_{i,t} + \beta_3\text{BM}_{i,t} + \beta_4\text{RET}_{i,t-3,t} + \beta_5\text{RET}_{i,t-12,t-3} + e_{i,t},$$

where FIN is an indicator variable for financial firms, SIZE is market capitalization, BM is the book-to-market ratio, $\text{RET}_{t-3,t}$ is the prior 3-month return, $\text{RET}_{t-12,t-3}$ is the cumulative return between month $t-12$ and month $t-3$. Data sources and detailed variable definitions are described in Section IA1. The variables BM and SIZE are expressed in natural logarithms. Our sample includes only common stocks (those with a share code of 10 or 11 in the CRSP). Two firms with stock price above \$1,000 are excluded from the analysis. We report the average coefficients across all months from Jan. 2006 to Dec. 2008. The t -statistics are based on Fama-MacBeth (1973) with a Newey-West (1986) adjustment for autocorrelation up to 12 lags.

<i>Panel A- Average Changes in Analyst Recommendations</i>						
Date	FIN	Non-FIN	Diff	(t-stat)	Diff ^{CUM}	(t-stat)
Jan-06	-0.10	-0.08	-0.02	(-0.21)	-0.02	(-0.21)
Feb-06	0.01	0.00	0.01	(0.14)	-0.02	(-0.36)
Mar-06	-0.01	-0.01	0.00	(-0.12)	-0.02	(-0.30)
Apr-06	-0.01	-0.01	0.00	(0.13)	0.00	(-0.05)
May-06	0.06	0.03	0.03	(1.98)	0.04	(1.13)
Jun-06	0.02	0.03	-0.01	(-0.65)	0.01	(0.31)
Jul-06	-0.02	0.02	-0.04	(-2.41)	-0.01	(-0.49)
Aug-06	-0.02	0.00	-0.02	(-1.23)	-0.03	(-1.12)
Sep-06	-0.03	-0.02	-0.01	(-1.69)	-0.04	(-1.70)
Oct-06	-0.09	-0.04	-0.05	(-4.59)	-0.09	(-3.51)
Nov-06	0.00	-0.02	0.02	(2.18)	-0.06	(-2.37)
Dec-06	-0.02	-0.01	-0.01	(-0.46)	-0.06	(-2.63)
Jan-07	0.01	0.00	0.01	(1.35)	-0.04	(-1.71)
Feb-07	0.01	0.01	0.00	(0.81)	-0.03	(-1.52)
Mar-07	0.01	0.02	-0.01	(-1.05)	-0.03	(-1.39)
Apr-07	0.00	-0.01	0.01	(1.00)	-0.03	(-1.13)
May-07	0.00	0.00	0.00	(0.16)	-0.05	(-2.21)
Jun-07	0.01	0.00	0.01	(1.56)	-0.03	(-1.34)
Jul-07	0.03	0.00	0.03	(3.04)	0.00	(-0.03)
Aug-07	0.00	0.03	-0.03	(-3.03)	-0.03	(-1.24)
Sep-07	-0.02	-0.01	-0.01	(-0.11)	-0.03	(-1.46)
Oct-07	-0.03	-0.01	-0.02	(-1.83)	-0.03	(-1.06)
Nov-07	-0.01	0.01	-0.02	(-2.20)	-0.04	(-1.45)
Dec-07	-0.04	0.00	-0.04	(-5.40)	-0.07	(-2.81)
Jan-08	-0.02	0.01	-0.03	(-3.46)	-0.09	(-3.54)
Feb-08	-0.04	-0.01	-0.03	(-3.89)	-0.12	(-4.85)
Mar-08	-0.01	0.00	-0.01	(-1.32)	-0.13	(-5.51)
Apr-08	0.00	-0.01	0.01	(1.48)	-0.12	(-4.74)
May-08	-0.01	-0.02	0.01	(0.67)	-0.11	(-4.43)
Jun-08	0.01	0.00	0.01	(1.77)	-0.09	(-3.56)
Jul-08	-0.02	0.00	-0.02	(-2.70)	-0.11	(-4.54)
Aug-08	-0.02	-0.01	-0.01	(-1.06)	-0.11	(-4.25)
Sep-08	-0.06	-0.01	-0.05	(-5.14)	-0.17	(-6.41)
Oct-08	0.06	0.01	0.05	(4.23)	-0.12	(-4.92)
Nov-08	0.00	-0.01	0.01	(0.84)	-0.10	(-3.88)
Dec-08	-0.02	-0.03	0.01	(1.27)	-0.07	(-2.67)

<i>Panel B - Determinants of Changes in Analyst Recommendations</i>					
Intercept	FIN	SIZE	BM	RET _{t-3,t}	RET _{t-12,t-3}
-4.88	-0.43	0.22	-0.68	-0.47	0.51
(-3.60)	(-1.54)	(3.60)	(-0.59)	(-0.49)	(1.04)

Table A16
Insider Trading for Broader Definition of Financial and nonfinancial Firms

Table A16 presents the average Insider trading for the period from 2006 to 2008. We include only trades by the firm's management (TFN rolecode = CEO, CFO, CO, CB, P, D, VP and O) and exclude option-related trades. NIT is the ratio of net insider dollar purchases (dollar purchases minus dollar sales) over previous 6 months divided by the firm's market capitalization. Data sources and detailed variable definitions are described in Section IA1. This table reports the average NIT for financial and nonfinancial firms as well as the difference in average NIT between financial and nonfinancial firms. Numbers in parentheses are the Student's *t*-statistic for differences in means, assuming equal variances.

Date	FIN	Non-FIN	Difference	(<i>t</i> -stat)
Jun-06	-0.04%	-0.13%	0.09%	(2.77)
Dec-06	-0.06%	-0.11%	0.05%	(1.54)
Jun-07	-0.04%	-0.14%	0.10%	(3.63)
Dec-07	0.05%	-0.07%	0.12%	(5.31)
Jun-08	0.07%	-0.04%	0.11%	(5.19)
Dec-08	0.04%	-0.02%	0.06%	(1.93)