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CAN BAILOUTS RESTORE INVESTOR CONFIDENCE?

THE ROLES OF GOVERNANCE AND GOVERNMENTS*

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A note to the discussant and conference organizers

We are currently hand-collecting data on stock returns to make the sample of bailouts larger. To run our regressions on the full sample, we need to calculate announcement returns for companies that received bailouts in 2009. It is not an easy task because CRSP tapes do not contain returns for year 2009 yet. The final sample will contain over 1,000 bailouts which (we hope) will make our results stronger. We are also hand-collecting data on lobbying expenses and only have very preliminary results. Finally we are hand-collecting data on campaign contributions to politicians in the United States and have discussed our intended methodology but do not have the results.

I. Introduction

The current economic crisis has raised fundamental questions about the efficiency of the modern financial system. The subprime crises and subsequent credit crunch have motivated governments and the International Monetary Fund to act in an effort to restore stability to the international financial system. By May 2009 more than 50 rescue packages were announced to aid thousands of corporations in 40 countries, primarily firms in the financial sector. The amount of funds ranged from the 52 billion US dollar bailout by the United Arab Emirates to the 700 billion bailout package in the U.S. The total amount of bailout guarantees across the world has exceeded 2 trillion US dollars (see Figures 1 and 2).

Figure 1: Bailout Amount (USD) Source: Grail Research (2009)

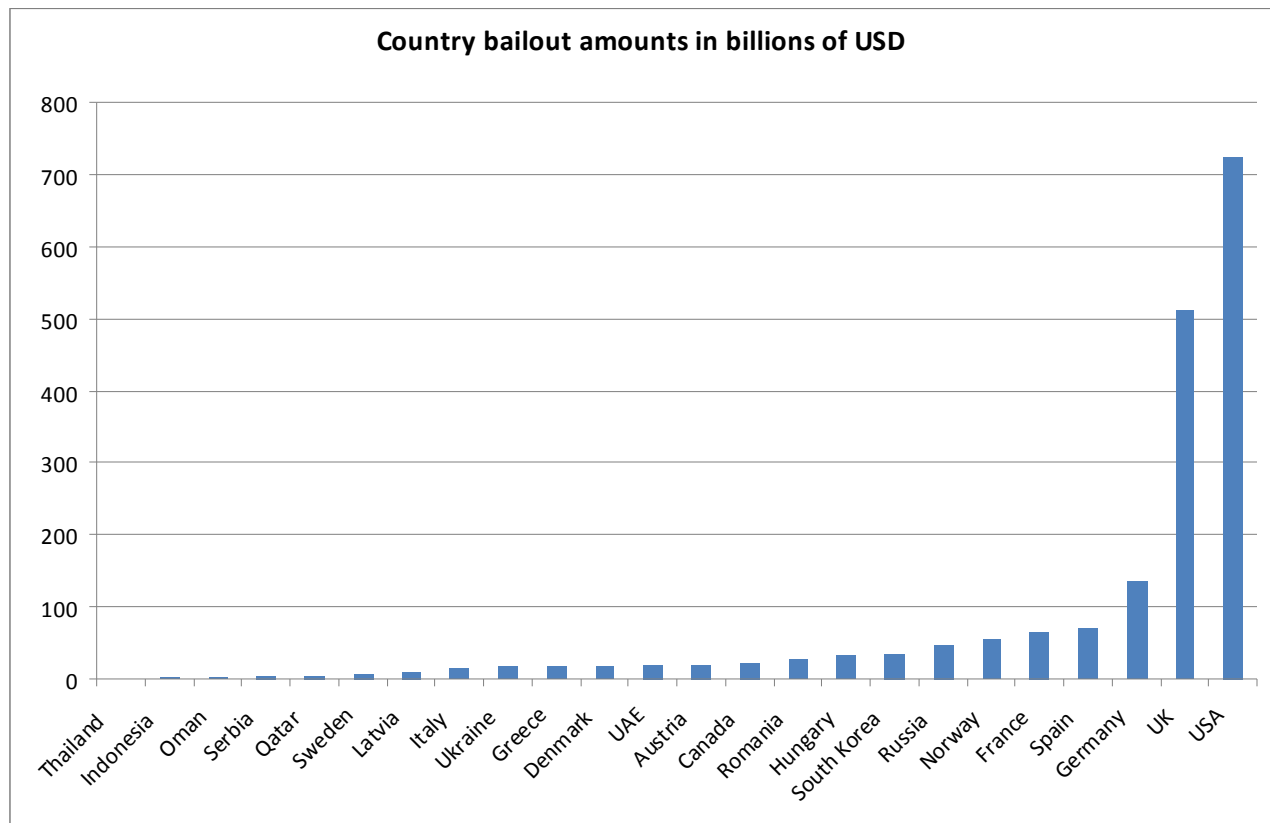
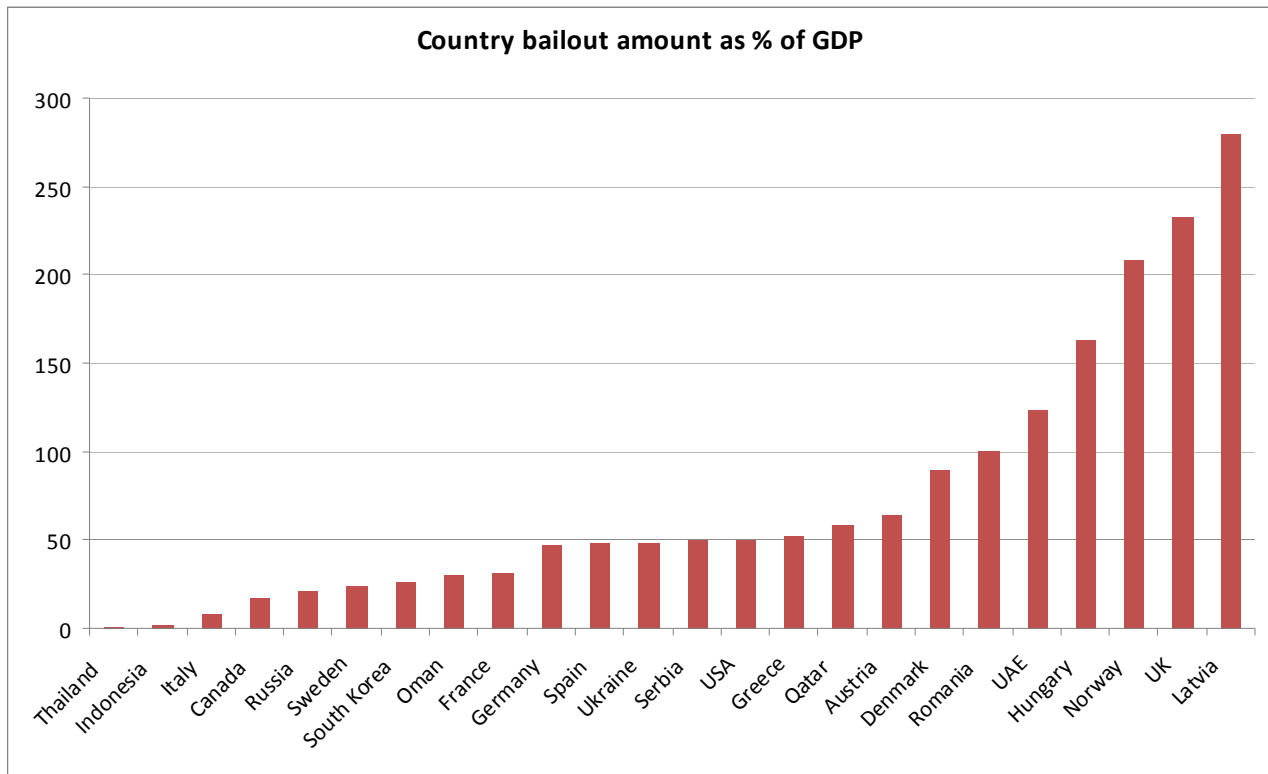


Figure 2: Bailout Amount (% GDP) Source: Grail Research (2009)



The purpose of the firm bailouts is to combat the worldwide economic crises. For example, the United States' Troubled Asset Relief Program (TARP) aims to address bank solvency and increase credit availability (Congressional Oversight Board (2009)). Significant questions have been raised about the use and efficiency of such bailouts, and we propose to empirically examine the perceived efficiency of these plans using a unique and complete sample of US and international firm level bailouts from the current financial crisis.

We hypothesize that firms with poorer governance practices will use bailout money less efficiently because of the increased likelihood that the bailout money would be misused/tunneled by firm insiders. Recent evidence of this can be seen in the AIG bonus scandal in the United States where 165 million dollars from the Troubled Asset Relief Plan (TARP) rescue package was distributed in bonuses to employees. Such bailout scandals and the related public outrage are

not limited to the United States, for example, public discontent with the use of French bailout money has led to worker protests over bonuses at GdF Suez (Vandore (2009)). Using a sample of US firms which received government bailout money during the current financial crisis we test our hypotheses by regressing announcement date abnormal returns on a proxy for corporate governance.

While many large firms have either been bailed out or nationalized, some large firms such as Lehman Brothers in the United States have not been rescued while other, smaller firms, such as OneUnited have been given bailout money.¹ Such anecdotal evidence suggests that political connections and lobbying have impacted the likelihood and magnitude of firm bailouts. We consider two different avenues that firms can take to affect the politics of a region: lobbying and political candidate contributions. Specifically, we test whether lobbying or campaign contributions to political candidates who serve on the United States Senate Committee on Banking, Housing, and Urban Affairs or United States House Committee on Financial Services impacted the likelihood or magnitude of a bailout. Using a database which tracks the amount that firms spend on lobbying and tracks campaign contributions to political candidates we test whether firm political connections may have impacted the bailout recipient selection process in the United States.

Finally, we conjecture that country specific institutional environment measured by corruption and the degree of autocracy will influence the likelihood of bailout fund misuse and that markets will react differently to bailout announcements in across countries and industries. Using a sample

¹ A less publicized instance of questionable bailouts is the \$12 million given to OneUnited Bank, a severely undercapitalized bank which was guaranteed funding through a provision added into the TARP bill by Rep. Barney Frank, the head of the United States House Committee on Financial Services. OneUnited Bank is based in Mr. Frank's home state of Massachusetts and was being questioned by its regulators for its executive compensation practices which included the purchase of Porsche for executive use (Paletta and Enrich (2009)).

of international sector and economy-wide bailouts we will test the relevance of these country specific factors in the market's perception to the bailouts.

Preliminary results indicate that the market perceives the bailouts to be more efficient in firms which are better governed. Furthermore, the markets penalize bailouts which are large relative to a firm's size. Finally, our analysis suggests that firm lobbying significantly increases the likelihood of a firm receiving a bailout.

The remainder of the paper will be organized as follows. Section II discusses the existing literature, Section III describes our datasets and methodology in detail, Section IV presents our empirical results, Section V tests the robustness of our findings, and Section VI concludes.

II. Literature Review

This study contributes to several streams of existing literature. First and foremost, it contributes to the emerging literature which documents the financial crisis. Calomiris (2008) offers a detailed explanation of the subprime crisis, while Diamond and Rajan (2009) offer “conjectures” about its causes and possible remedies. They argue that some well capitalized banks seem unwilling to lend money in the current crisis and suggest that this unwillingness is a result of management waiting for “a good deal” and wanting to have liquidity. The anecdotal evidence previously mentions suggests that at least some of this unwillingness to lend comes from improper, inefficient use of bailout funds resulting from poor corporate governance practices. An integral component of the subprime crisis was the ability of banks to “shop for ratings” and disclose the most favorable rating. Skreta and Veldkamp (2009) develop a theoretical model of ratings shopping and show that an increase in a security's complexity can

create an incentive to shop for ratings, which in turn can give more incentive to create increasingly complex securities.

Many studies investigate the factors which influence government bailout recipient selection and the use of bailout money, another area in which this study contributes. Faccio, Masulis, and McConnell (2006) use logit model regressions to investigate how political connections influence which firms receives government bailouts and document a highly significant relationship between firm political connections and the likelihood of a bailout. They further show that a larger firm size increases the likelihood that the government will rescue a firm from bankruptcy which is empirical justification that governments identify firms which are “too-big-to-fail” incentivizing management to act irresponsibly. Their study is based on a large sample of firms across time, while our study will allows us to analyze the how political factors affected the likelihood and magnitude of government bailouts during one event. By focusing on one time period with a large sample of firm bailouts and incorporating previous firm lobbying expenses we are able to document the political-economic landscape during the sample period. Fisman (2001) considers a sample of Indonesian firms which were connected to President Suharto and studies the effect of negative announcements about his health on their value. Our paper explores one way in which politically connected firms can extract value.

Several other papers explore different ways in which politically connected firms can leverage their relationships to extract value. Claessens, Feijen, and Laeven (2008) study the effect of political contributions in Brazil using data collected by the Brazilian National Election Court and find a positive relationship with firm value. They further find that the bank leverage ratio of firms which contributed to elected officials’ campaigns substantially increased in the term following the elections. Yu and Yu (2009) use the Political Money Line database, the same

database used in our analysis, to study the relationship between corporate lobbying and fraud detection. They find that US firms which spent money on lobbying were able to delay fraud detection by approximately 117 days when compared to similar firms which did not lobby.

The response of several countries to the widespread failure of their national banks has been bank nationalization. Our paper will also add to the literature which documents the effects of government ownership of banks. Dinç (2005) shows that banks with government ownership tend to vary their lending practices in order to suit political agendas. Our paper will add to this literature by documenting the market's response to the announcement of government nationalization. La Porta, Lopez-de-Silanes and Schleifer (2002) give further evidence on the inefficiencies of government ownership of banks; in particular, they find a statistically negative relationship between government ownership of banks and credit availability. One of the key drivers of the world recession has been a lack of credit availability; increasing government ownership of banks worldwide could therefore adversely affect recovery prospects.

More generally, our study will also contribute to the literature which examines the efficiency of private sector bailouts. Mason and Schiffman (2002) study US railroad bailouts during the Great Depression and conclude that managers in the railroad industry allowed operating profitability to significantly affect necessary maintenance investments while not affecting dividend payouts, recognizing that the US government would bail them out when they ran into financial difficulties. While the firms did use the government money to invest in the business, they delayed investment until they had been bailed out. Cordella and Yeyati (2003) develop a theoretical model which distinguishes between bailouts which are the result of adverse macroeconomic states and bailouts which are the result of past portfolio decisions. The current crisis is both a result of past bank portfolio decisions and the resulting credit crunch and

recession. Our empirical study will, therefore, provide evidence of the market's perception of the "grey area" when it is not clear whether a firm is being bailed out because of its excessive risk taking or adverse conditions in the general economy. Wilson (2009) develops a theoretical model motivated by the current crises which considers bank bailouts with a focus on removing "toxic" securities from their balance sheets. He concludes that direct purchases of these securities or direct equity investment in banks are the most efficient bailout method while preferred share purchases (the primary method that the US is using) is the least efficient method.

Finally, this study will contribute to the literature which investigates banking shocks. Kho, Lee, and Stulz (2000) examined how banking shocks outside of the United States have affected US bank performance. In a recent paper, Giannetti and Simonov (2009) investigate the micro-level effect of the Japanese bank bailouts and find that both bank government and private recapitalizations increase lending to existing borrowers and related firms but that these loans do not create a significantly greater amount of jobs than were created by a comparable group of firms. Furthermore, they show that the government bailout announcements had a statistically significant negative affect on the bank valuations using abnormal returns but a *positive* affect on the valuation of related firms. Our paper similarly studies the micro-level effect of firm bailouts on firm valuation using abnormal returns. On the macro level, Kang and Stultz (2000) examine the affect of banking shocks on the performance of Japanese firms and find that firms which rely on bank financing are significantly negatively affected by banking crises. Kho, Lee and Stultz (2000) show that the market reaction for currency shocks differs for firms with different levels of exposure also by using Cumulative Abnormal Returns. Our study will contribute to macro-level understanding of banking shocks by analyzing what factors drive the market's perception of

bank bailouts. This will allow us to understand the subsequent performance of firms which are dependent on banks for financing.

III. Hypotheses, Data, and Methodology

A. Methodology

In order to gauge the market's perception of the bailout efficiency on both the firm and country/sector levels, we computed Cumulative Abnormal Returns (CARs) around the day that it was announced that the firm would be receiving a bailout. As in Faccio (2004) and Brown and Warner (1985) we computed CARs for an event window surrounding the announcement that each firm would be receiving a bailout. An abnormal return for firm i is defined as follows:

$$AR_i = R_i - R_m, \quad (1)$$

where R_m is the value-weighted return on the securities in index of the country to which the stock belongs and the Cumulative Abnormal Return is obtained by multiplying the returns over the event period. A higher CAR implies that the market perceives the bailout to be more efficient. We computed sector CARs as follows:

$$AR_c = R_c - R_w, \quad (2)$$

where R_c is the return on the sector receiving the bailout, e.g. Russian Banks, and R_w represents the value-weighted return on the world index. For bailouts which targeted an entire economy we took the return on the country's market index as R_c . The industry, market, and world indices that we used are described in the Data section below. We ran multiple regressions to explain the market perceived efficiency of firm and industry/country bailouts.

On the firm level our hypotheses are as follows:

Hypothesis 1: There should exist a positive relation between firm governance and perceived efficiency (measured by Cumulative Abnormal Returns) since insiders in better governed firms will be less able to misuse or tunnel bailout funds.

The primary purpose of the bailouts to financial institutions, which dominate our sample, was to recapitalize them to avoid a mass wave of bankruptcies. As governments give increasing amounts of money relative to a firm's size to the firm it has greater ability to misuse the funds since a there exists finite amount of money which will allow the firm to remain solvent. Any funds given to the firm beyond this amount will be much more easily tunneled by the firm since the firm will not go bankrupt through their misuse. The second hypothesis follows.

Hypotheses 2: We expect a negative relationship to exist between the bailout amount scaled by firm assets and efficiency of bailouts as measured by Cumulative Abnormal Returns.

We conjecture that firms which spend money on lobbying will have a higher likelihood of being bailed out, and that increasing a higher amount of money spent lobbying will further increase the likelihood of a bailout. Therefore, our political connection hypotheses are:

Hypothesis 3: Firms which spend money lobbying have a higher probability of receiving a bailout.

Related to Hypothesis 3, we expect that the size of a firm's bailout divided by its total assets will increase with the amount spent lobbying.

Hypothesis 4: There exists a positive relation between the amount spent lobbying and the amount received in a bailout relative to the firm's size.

On the country level, our hypotheses are as follows:

Hypothesis 5: there exists a negative relationship between corruption, the degree of autocracy and bailout efficiency since insiders of firms which operate in countries that are more corrupt will find the misuse of bailout funds easier.

Hypothesis 6: We hypothesize that there exists similarly negative relationship between bailout size and bailout efficiency on the country level as on the firm level.

B. Data

Our sample of bailouts comes from Grail Research (2009) “Global Financial Crisis Bailout Announcements” report and is described in Tables I-III. Grail Research is an affiliate of the Monitor Group, and the firm’s research provides international coverage of firm level bailouts (bailout packages announced by governments that target individual firms in the country) with the enactment date and US dollar amounts of each bailout, firm level guarantees (guarantee packages which cover debts or asset backed securities announced by governments targeting individual firms in the country), country or regional bailouts (larger bailout packages announced by governments to deal with the financial crisis), and country or regional guarantees (guarantees made by governments to banks and other financial institutions to avoid a bank run and renew consumer and business confidence in the financial system). The database was compiled in order to help policy makers, companies and lobbyists, journalists, and other parties interested in reporting on the bailouts. The Grail research contains information on 728 individual firm bailouts (from 30 countries) and 36 country/sector bailouts. Grail research analyzed news stories from major newspapers, magazines, government websites, and research think tanks to compile its list of bailout information beginning with July 31, 2008 and continually updates its records,

republishing its results monthly. Our study will be concerned with firm level bailouts along with the country and regional sector bailout announcements.

The Grail Research file contains bailout *enactment* dates but does not contain *announcement* dates. In order to compute abnormal returns we manually searched the Dow Jones and Company's Factiva news archive for bailout announcement dates. In most cases, the Factiva search yielded the announcement date of each firm's bailout, however, for some smaller firms there were either no articles published or those that were published did not pertain to its bailout. When the announcement date was not available we used the enactment date to compute CARs. This only affected five percent of our observations.

We matched both American and international firms with GvKeys from Compustat in order to obtain financial statement data for all firms and price information for international firms. We matched each firm with a CRSP PermNo in order to use the Eventus program to compute CARs for American firms. Eventus computes CARs using the price information available in the CRSP database and the CRSP value weighted index for the market index. Many of the recipient banks are either privately held or traded over-the-counter and are therefore not available in CRSP, furthermore, CRSP has not updated its security prices to include 2009, so any bailouts enacted after the end of 2008 cannot be included in the analysis. We computed CARs with the following windows around bailout announcements: -10 to +10 days, -5 to +5 days, -3 to +3 days, -1 to +1 day, -1 day to event day, and event day to +1 day. Tables I-III report CAR statistics.

We used Compustat Global and Emerging Market Database to find price information for non-US stock returns and used the Morgan Stanley Capital country indices for the non US market returns. We searched DataStream for sector indices, and where they existed we used the DataStream price indices to compute sector returns. When DataStream did not compile an index

we used Dow Jones indices. We used the Morgan Stanley Capital World index to measure the return on the world index.

We used the Institutional Shareholder Service's corporate governance score as previously used in Durnev and Fauver (2007) and Aggarwal et al. (2009) and to measure firm governance. This index combines 44 different attributes of corporate governance divided into four subcategories: Board of Directors, executive compensation, anti-takeover provisions, and auditor independence into one governance score ranging from 0 (the worst governance practices) to 100 (the best governance practices). The most recent data that we were able to obtain was from June 2007, however, governance variables such as anti-takeover provisions are slow to change, so these values should serve as reasonable proxies for current corporate governance conditions.

We computed the standard deviation of each firm's monthly returns from 2005 to 2007, the three years before the sub-prime crisis began, using CRSP and Compustat price data in order to control for firm specific risk. We obtained the 2007 value of each firm's total assets, capital expenditure and long term debt level from Compustat.

On the country level we have the bailout amount announced for each country from the Grail Research. We have scaled it by 2007 GDP in order to capture the relative size of the bailout to the country's production. In order to evaluate the effect of country level corruption, we obtained the 2008 values from Transparency International's Corruption Perception Index, an index which ranges from 0 to 10 where higher numbers indicate less perceived corruption. We obtained macro economic variables including 2007 GDP from the Economist Intelligence Unit along with each country's degree of property rights protection score, a variable which ranges between 0 and 5 where higher values indicate a higher level of property rights protection. We measure the democracy/autocracy of countries using the Polity IV Democracy and Autocracy scores each of

which ranges from 0 to 10 where higher values indicate more characteristics of democracy or autocracy respectively. Table I contains basic summary statistics for the variables.

Our data on lobbying and political candidate contributions comes from the Congressional Quarterly's Political Money Line database. Since 1998, firms must register all US lobbying activity that they engage in and report amounts spent which are greater than \$10,000. Congressional Quarterly has compiled these filings in an online database. In order to test whether firms which lobby have a higher probability of receiving a bailout, we searched the Political Money Line database to see whether the firms which had received bailouts from the US government spent money lobbying during the last ten years. We created a binary variable where the value was equal to one if the firm lobbied and zero otherwise in order to run a probit model. We considered lobbying by a parent firm to be an instance of lobbying on the child firm. We searched Compustat for all firms which operated in 2007 in same industries using the four-digit SIC of the bailed out firms and removed the firms which received a bailout in order to have a sample of competitors which did not receive a bailout. We then searched the Political Money Line database to see which competitors spent money lobbying. We considered only firms which are found in Compustat in our analysis; Table VIII summarizes our lobbying and bailout findings.

We plan to use the same set of firms which received a bailout and are found in Compustat along with their four digit SIC competitors to analyze the affect of campaign contributions to the US legislative bodies which are responsible for financial regulation, The United States Senate Committee on Banking, Housing, and Urban Affairs or United States House Committee on Financial Services, more commonly known as the Senate Banking Committee and the House Banking Committee respectively. Using Congressional Quarterly's Political Money Line Dataset, we intend to manually search the campaign contribution data for the recent election years of all

the members of both committees, 95 in all, from the firm Political Action Committees (PACs) and executives from the firms. We will further group the contribution data into incumbent vs. challenger categories and contribution to the various subcommittees, most notably the House subcommittee on Oversight and Investigations and the Senate subcommittee on Financial Institutions. We plan to consider both the act of contributing by creating a binary variable which took the value of 1 if a firm contributed campaign finances and a value of 0 otherwise, along with a second variable which aggregated the total amount contributed by a firms' PAC and its executives.

IV. Results

In order to test Hypotheses 1 and 2, the relation between firm governance, bailout amount and the perceived efficiency of the bailout we ran OLS regressions using event windows of (-1, +1), (-3, +3), (-5, +5), and (-10, +10). Table IV presents our results. We find support for our hypotheses in the specifications which use the (-1, +1) event window as our dependent variable as we find a statistically positive coefficient for firm governance and a statistically negative coefficient for bailout amount when scaled by the firm's total assets. Specification (3), in particular, shows the strongest support for both of our hypotheses. As we move to longer event windows, we can see that the market still penalizes firm returns due to large bailouts as shown by regressions (4) through (9) since we have statistically negative coefficients on the bailout amount variable, but does not seem to consider governance. On the longest time horizon, however, it seems that firm governance once again significantly affects the firm's abnormal return.

In order to test the effect of a firm's institutional environment, we regress firm abnormal returns against our corruption, autocracy and bailout amount. Table V presents our results.

Overall, we find weak support for Hypothesis 5, that corruption lowers bailout efficiency. On the country/industry level, we ran the same regressions, substituting firm bailout amount by the amount spent in each country scaled by the country's GDP. Table VI presents our findings. While we fail to obtain statistical significance for our results, this can be largely attributed to our small sample size.

In order to test Hypothesis 3, whether firms which spent money lobbying were more likely to be bailed out, we ran a probit regression where the dependent variable was a binary variable took the value of one if the firm received a bailout and zero otherwise. Our independent variable was a binary variable which took the value of one if the firm spent money lobbying over the past 10 years and zero otherwise. Table VII reports the results of our probit model. As we can see, the coefficient on the lobbying dummy variable is highly statistically significant and positive which implies that there is a positive relation between lobbying and bailout receipt. Reverse causality is not a problem since lobbying always occurred before the bailout was given to the firm.

V. Conclusion

The economic crisis has prompted governments and supranational bodies to provide more than 2 trillion US dollars in firm bailouts. In this paper, we investigate the factors which affect the likelihood of a firm receiving a bailout along with the firm and institutional factors which explain the market's reaction to the bailout announcements. Specifically, we test to see whether lobbying activity increases the likelihood that a firm will receive a bailout and intend to test whether corporate campaign contributions affect the likelihood of a firm bailout. Additionally we test whether the market reacts more positively to a firm being bailed out when it has strong corporate governance characteristics and whether the size of a bailout relative to the recipient's

assets affects the market's reaction. Although our study is currently hindered by a lack of 2009 data we find weak support that the act of lobbying prior to the crisis significantly impacted the likelihood of receiving a bailout and that the market reacts more favorably to bailouts of firms with strong corporate governance. We find stronger support for our hypothesis that firms react more negatively to larger firm bailouts. As we collect more data and incorporate the bailouts which occurred in 2009 we expect the power of our tests to improve and to find more empirical evidence supporting our hypotheses.

References

- Aggarwal, R., I. Erel, R. Stulz, and R. Williamson, 2009, Differences in governance practices between U.S. and foreign firms: Measurement, causes, and consequences, *Review of Financial Studies*, forthcoming.
- Brown, S., and Warner, J., 1985, Using daily stock returns: The case of event studies, *Journal of Financial Economics*, 8, 205-258.
- Calomiris, C., 2008, The subprime turmoil: What's old, what's new, and what's next, Working paper, Columbia University.
- Claessens, S., E. Feijen, and L. Laeven, 2008, Political connections and preferential access to finance: The role of campaign contributions, *Journal of Financial Economics* 88, 554-580.
- Congressional Oversight Board, 2009. *April Oversight Report Assessing Treasury's Strategy: Six months of TARP*.
- Cordella, T. and E. L. Yeyati, 2003. Bank bailout: Moral hazard vs. value effect, *Journal of Financial Intermediation* 12, 300-330.
- Diamond, D., and R. Rajan, 2009, The credit crisis: Conjectures about causes and remedies, NBER Working paper W14739.
- Dinç, S., 2005, Politicians and banks: Political influences on government-owned banks in emerging markets, *Journal of Financial Economics* 77, 453-479.
- Durnev, A., and L. Fauver, 2007, Stealing from thieves: Firm governance and performance when states are predatory, Working paper, McGill University.
- Faccio, M., 2004, Politically connected firms, *American Economic Review* 96, 369-386.
- Faccio, M., R. Masulis, and J. McConnell, 2006, Political connections and corporate bailouts, *Journal of Finance* 61, 2597-2635.
- Fisman, R., 2001, Estimating the value of political connections, *The American Economic Review* 91, 1095-1102.
- Giannetti, M., and A. Simonov, 2009, On the real effects of bank bailouts: Micro-evidence from Japan, Working Paper, Michigan State University.
- Grail Research, 2009. *Global Financial Crisis Bailout Announcements* (Monitor Group Press, New York, N.Y).
- Kang, J., and R. Stultz, 2000, Do banking shocks affect borrowing firm performance? An analysis of the Japanese experience, *Journal of Business* 73, 1-23.

- Kho, B., D. Lee, and R. Stultz, 2000, U.S. banks, crises, and bailouts: From Mexico to LTCM, *American Economic Review Papers and Proceedings*, 28-31.
- Kho, B. and R. Stultz, 2000, Banks, the IMF, and the Asian crisis, *Pacific-Basin Finance Journal* 8, 177-216.
- La Porta, R., F. Lopez-de-Silanes, and A. Shleifer, 2002, Government ownership of banks, *The Journal of Finance* 57, 265-301.
- Mason, J., and D. Schiffman, 2002, Too-big-to fail. Government bailouts, and managerial incentives: The case of reconstruction finance corporation assistance to the railroad industry during the Great Depression, Working paper, Louisiana State University.
- Paletta, D., and Enrich, D., 2009, Political interference seen in bank bailout decision--- Barney Frank goes to bat for lender, and it gets an infusion, *The Wall Street Journal*, January 22, pp A1.
- Skreta, L., and L. Veldkamp, 2009, Ratings shopping and asset complexity: A theory of ratings inflation, Working paper, New York University.
- Vandore, E., 2009, France to curb bonuses as public outrage grows, *Associated Press*, March 26.
- Wilson, L., 2009, Debt overhang and bank bailouts, Working paper, University of Louisiana at Lafayette.
- Yu, F., and X. Yu, 2009, Corporate lobbying and fraud detection, Working paper, Indiana University.

Table I
Firm bailouts. Summary statistics by country

The international firm-specific bailout sample consists of 729 firms that received a bailout from their respective government during the financial crisis. Property Rights Protection data comes from the Economist Intelligence Unit, while Transparency International provides data on corruption. Polity the difference between democracy and autocracy scores provided by the Polity IV Project. Bailout information, the amount guaranteed data come from the Grail Research and hand collection by the authors, while the GDP figures are provided by the World Bank's World Development Indicators (2007 values). Finally, the Cumulative Abnormal Returns (CARs) are computed with the data on stock prices given by CRSP or Datastream. Panel A reports the summary statistics of country-level variables, overall bailout amount per country, and average cumulated abnormal returns per country. Panel B presents t-tests on the cumulated abnormal returns according the four time window considered in this study, (-1,+1), (-3,+3), (-5,+5), and (-10,+10). The symbol "." denotes a missing value. Boldface figures correspond to statistically significant results at the 10% level.

Panel A: Summary statistics by country

Target Country	Country-Level Variables					Bailout Information		Cumulative Abnormal Returns % (CARs)			
	Firms	Cumulative Percentage	Corruption	Property Rights Protection	Polity	Amount Guaranteed (USD - millions)	Amount Guarantee (% GDP)	(-1,+1)	(-3,+3)	(-5,+5)	(-10,+10)
Argentina	1	0.14	2.9	3.00	8	.	.	.	.	.	.
Austria	5	0.82	8.1	5.00	10	20,708	5.49	2.48	4.47	-2.36	.
Belgium	5	1.51	7.3	5.00	8	26,607	5.93	-10.30	-22.26	-21.42	.
Brazil	6	2.33	3.5	4.00	8	.	.	-6.86	-4.67	1.90	.
Canada	2	2.61	8.7	5.00	10	22,586	1.70	-11.42	-2.51	3.19	1.1
China	4	3.16	3.6	2.60	-7	8,000	0.24	-4.35	-3.55	5.26	.
Denmark	2	3.43	9.3	5.00	10	17,885	5.81	-49.34	-64.70	-64.44	.
France	11	4.94	6.9	5.00	9	65,901	2.57	2.68	-0.28	-0.28	.
France and Belgium	3	5.35	.	.	.	.	.	8.7	-7.48	-28.26	.
Germany	7	6.31	7.9	5.00	10	136,650	4.14	4.24	24.83	-16.68	.
Gulf	1	6.45	.	.	.	.	.	.	.	.	.
Hungary	1	6.58	5.1	4.60	10	31,930	23.11	.	.	.	.
Iceland	4	7.13	8.9	.	.	5,100	26.14	.	.	.	.
India	2	7.41	3.4	3.60	9	719	0.06	.	.	.	.
Ireland	3	7.82	7.7	5.00	10	7,690	3.02	-33.12	-34.32	-35.68	.
Italy	1	7.96	4.8	4.00	10	15,301	0.73	1.65	0.83	-16.91	.
Japan	3	8.37	7.3	5.00	10	1,231	0.03	-1.34	-4.24	-3.27	.
Kazakhstan	8	9.47	2.2	2.40	-6	9,239	8.90	.	.	.	.
Latvia	2	9.74	5.0	.	8	10,830	39.88	.	.	.	.
Luxembourg	1	9.88	8.3	.	0	4,197	8.76	.	.	.	.
Netherlands	6	10.70	8.9	5.00	10	94,241	12.50	-17.28	-28.02	-21.44	.
Norway	1	10.84	7.9	5.00	10	56,321	14.75	.	.	.	.
Portugal	1	10.97	6.1	5.00	10	.	.	.	.	.	.
Russia	11	12.48	2.1	3.00	5	227,888	17.65	11.89	-3.46	-17.11	.
Sweden	2	12.76	9.3	5.00	10	8,740	1.97	.	.	.	.
Switzerland	1	12.89	9.0	5.00	10	59,300	14.27	7.68	-3.53	-2.72	.
Taiwan	1	13.03	5.7	5.00	10	.	.	.	.	.	.
UAE	9	14.27	5.9	.	-8	52,600	40.55	2.98	-1.35	-1.69	.
UK	6	15.09	7.7	4.40	10	511,237	18.74	4.92	-1.82	0.56	.
USA	617	99.73	7.3	5.00	10	725,000	5.25	0.39	-0.51	-2.02	-0.24
Ukraine	2	100	2.5	2.60	7	22,042	15.69	.	.	.	.

Table I Continued

Panel B: t-tests on the means of Cumulated Abnormal Return (CARs)

Cumulated Abnormal Return (CARs)	Number of Observations	Mean (%)	Standard Deviation	H ₀ : mean=0		H _a : mean<0		H _a : mean>0	
				t statistic	p-value	t statistics	p-value	t statistics	p-value
(-1,+1)	244	0.01	0.150	-0.014	0.989	0.495	0.506		
(-3,+3)	244	-1.32	0.168	-1.225	0.222	0.111	0.889		
(-5,+5)	244	-3.36	0.193	-2.719	0.007	0.004	0.997		
(-10,+10)	203	-0.23	0.174	-0.195	0.846	0.423	0.577		

Table II
Firm bailouts. Summary statistics by industry

The 729 firms that received bailouts during the financial crisis operate in 13 industries. Our dataset comes from the information provided by the Grail Research and hand collection by the authors, while the Cumulative Abnormal Returns (CARs) are computed with the data on stock prices given by CRSP or Datastream. There exists one observation which we have no information about its sector. The symbol “.” denotes a missing value.

Target Industry	Frequency	Percentage	Cumulative Percentage	Cumulated Abnormal Returns % (CARs)			
				(-1,+1)	(-3,+3)	(-5,+5)	(-10,+10)
Agribusiness	1	0.14	0.14	.	.	.	.
Automobile	18	2.47	2.61	3.44	2.00	4.54	.
Aviation	9	1.24	3.85	-2.08	0.39	9.33	.
Banking	663	91.07	94.92	-0.23	-0.98	-3.09	.
Banking and Insurance	3	0.41	95.33	-9.12	-6.63	-3.42	.
Insurance	5	0.69	96.02	-0.74	-12.61	3.49	.
Mortgage Banker	16	2.20	98.21	.	.	.	.
Non Banking Finance	5	0.69	99.04	11.98	-41.18	-66.02	.
Oil	4	0.55	99.59	-4.79	-16.28	-15.23	.
Pulp and Paper	1	0.14	99.73	-18.66	-18.75	-17.02	.
Steel	1	0.14	99.86	78.62	47.82	-24.62	.
Utility	1	0.14	98.35	.	.	.	.
N.A.	1	0.14	100	.	.	.	.

Table III
Country bailouts. Summary statistics.

The international firm-specific bailout sample consists of 24 countries that provided with 36 sectoral or economy-wide bailouts in total during the financial crisis. Property Rights Protection data comes from the Economist Intelligence Unit, while Transparency International provides data on corruption. Polity is from the difference between democracy and autocracy scores provided by the Polity IV Project. Bailout information, the amount guaranteed data come from the Grail Research and hand collection by the authors, while the GDP figures are provided by the World Bank's World Development Indicators (2007 values). Finally, the Cumulative Abnormal Returns (CARs) are computed with the data on stock prices given by CRSP or Datastream. Panel A reports the summary statistics of country-level variables, overall bailout amount per country, and average cumulated abnormal returns per country. Panel B presents t-tests on the cumulated abnormal returns according the four time window considered in this study, i.e., (-1,+1), (-3,+3), (-5,+5), and (-10,+10). The symbol "." denotes a missing value. Boldface figures correspond to statistically significant results at the 10% level.

Panel A: Summary statistics by country

Target Country	Country-Level Variables					Bailout Information		Cumulated Abnormal Returns (CARs)			
	Number of Bailouts	Cumulative Percentage	Corruption	Property Rights Protection	Polity	Amount Guaranteed (USD - millions)	Amount Guarantee (% GDP)	(-1,+1)	(-3,+3)	(-5,+5)	(-10,+10)
Austria	2	0.06	8.1	5	10	20,708	63.93	2.39	-3.67	-11.28	-10.59
Canada	2	0.12	8.7	5	10	22,586	17.42	3.99	15.36	18.71	24.18
Denmark	1	0.15	9.3	5	10	17,885	89.39	-3.76	-4.88	-1.66	17.63
France	2	0.20	6.9	5	9	65,901	30.79	-1.98	-1.90	-7.21	0.00
Germany	1	0.23	7.9	5	10	136,650	47.71	-1.69	-7.57	-19.53	-26.59
Greece	1	0.26	4.7	4	10	17,663	52.00	-17.86	-21.67	-27.23	-13.07
Hungary	2	0.31	5.1	4.6	10	31,930	162.59	0.81	-7.16	-14.43	-22.60
Indonesia	1	0.34	2.6	3	8	1,500	1.65	0.15	2.59	6.98	12.99
Italy	1	0.37	4.8	4	10	15,301	8.51	4.78	-2.48	-6.72	-17.54
Latvia	1	0.40	5	.	8	10,830	279.43	-3.61	-8.72	-12.51	-23.04
Norway	2	0.45	7.9	5	10	56,321	208.85	5.18	-1.35	8.03	21.01
Oman	1	0.48	5.5	.	-8	2,000	29.82	4.62	9.15	-1.38	-13.82
Qatar	1	0.51	6.5	.	-10	5,300	58.15	4.09	4.39	2.99	-1.87
Romania	1	0.53	3.8	3.6	9	27,191	101.11	2.26	0.54	12.22	23.36
Russia	2	0.59	2.1	3	5	47,472	21.00	-7.96	-9.97	-7.09	-18.78
Serbia	1	0.62	3.4	.	8	4,050	50.16	11.19	4.73	13.23	-25.89
South Korea	3	0.70	5.6	5	8	35,200	25.89	-15.97	-19.85	-21.73	-20.77
Spain	2	0.76	6.5	5	10	69,157	48.53	-2.18	2.43	2.49	-12.92
Sweden	2	0.81	9.3	5	10	8,126	24.01	2.11	7.13	6.09	0.92
Thailand	1	0.84	3.5	5	-1	429	0.79	9.24	12.76	10.35	21.09
UAE	1	0.87	5.9	.	-8	20,000	124.09	2.98	11.47	17.92	25.88
UK	2	0.92	7.7	4.4	10	511,237	232.62	0.89	-7.39	-1.69	-3.29
Ukraine	1	0.95	2.5	2.6	7	16,500	48.72	0.20	-0.78	7.15	-11.66
USA	2	1.01	7.3	5	10	725,000	50.83	-2.60	-0.53	-0.33	-1.71

(-5,+5)		36	-2.3	0.024	-0.955	0.346	0.173	0.827
Panel B) t-tests on the means of Cumulated Abnormal Return (CARs)		36	0.030	-1.696	0.099	0.050	0.951	
		H ₀ : mean=0			H _a : mean<0		H _a : mean>0	
Cumulated Abnormal Return (CARs)	Number of Observations	Mean %	Standard Deviation	t statistics	p-value	t statistics	p-value	
(-1,+1)	36	-1.0	0.015	-0.640	0.527	0.263	0.737	
(-3,+3)	36	-2.4	0.020	-1.207	0.235	0.118	0.882	

Table IV
Firm bailouts: Relation between CARs, firm governance, and bailout amount

The dependent variable corresponds to the Cumulative Abnormal Returns (CARs), encompassing the time windows (-1,+1), (-3,+3), (-5,+5), and (-10,+10). The Ordinary Least Squares is the estimation technique employed in our analyses. Specifications (1), (4), (7), and (10) consist of the regression of CARs on firm governance, measured by the Institutional Shareholder Service. In addition, Specifications (2), (5), (8), and (11) comprise the regression of CARs on bailout amount, measured by the Grail Research for U.S. and Canadian recipient firms, scaled by total assets, provided by the World Bank's World Development Indicators (2007 data). Finally, Specifications (3), (6), (9), and (12) encompass the full empirical model. The values in parentheses represent the robust standard errors. *, **, *** denote significance at the 10%, 5%, and 1% levels respectively.

Dependent variable: CAR	(-1,+1)			(-3,+3)			(-5,+5)			(-10,+10)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Firm governance</i>	0.23 (0.11)**		0.30 (0.10)***	0.03 (0.11)		0.03 (0.10)	-0.03 (0.13)		0.06 (0.12)	0.32 (0.13)**		0.33 (0.14)**
<i>Bailout Amount</i>		-103.67 (32.93)***	-205.55 (58.12)***		-198.23 (33.93)***	-356.95 (55.09)***		-265.69 (38.58)***	-397.60 (68.56)***		-14.34 (40.42)	-77.89 (77.03)
<i>Constant</i>	-13.48 (6.89)**	3.02 (1.38)**	-13.62 (6.81)*	2.42 (6.97)	4.11 (1.42)***	7.20 (6.46)	0.84 (8.53)	4.59 (1.61)***	6.70 (8.04)	-20.65 (8.77)**	0.22 (1.69)	-19.43 (9.03)**
Observations	176	216	174	176	216	174	176	216	174	176	194	174
F-stat	4.6	9.91	9.67	0.11	34.12	21.02	0.07	47.44	16.84	5.69	0.13	3.28
F p-value	0.033	0.002	0	0.744	0	0	0.79	0	0	0.018	0.723	0.04
Adjusted R ²	0.020	0.040	0.091	-0.005	0.134	0.188	-0.005	0.178	0.155	0.026	-0.005	0.026

Table V
Firm bailouts: Relation between CARs, corruption, and bailout amount

The dependent variable corresponds to the Cumulative Abnormal Returns (CARs), encompassing the time windows (-1,+1), (-3,+3), and (-5,+5). The Country-Clustered Ordinary Least Squares (OLS) is the estimation technique employed in our analyses. Specifications (1), (3), and (5), consist of the regression of CARs on corruption, measured by Transparency International's Corruption Perception Index, and bailout amount scaled by total assets, provided by the Grail Research and hand collection by the authors. In addition, Specifications (2), (4), and (6) comprise the regression of CARs on the full empirical model, which involves the aforementioned variables as well as Polity IV, the difference between democracy and autocracy scores provided by the Polity IV . The values in parentheses represent the robust standard errors. Project. *, **, *** denote significance at the 10%, 5%, and 1% levels respectively.

Dependent variable: CAR	(-1,+1)		(-3,+3)		(-5,+5)	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Corruption</i>	-1.97 (0.98)*	-2.97 (1.56)*	-1.00 (0.72)	-2.26 (1.36)	-0.11 (1.33)	-0.65 (1.85)
<i>Polity</i>		0.94 (0.58)		1.18 (0.74)		0.51 (0.92)
<i>Bailout Amount</i>	- 112.13	- 114.46	- 202.50	- 205.44	- 266.18	- -267.43
<i>Constant</i>	(37.96)** 17.34 (6.92)**	(36.36)*** 15.40 (6.00)**	(42.23)*** 11.35 (5.53)*	(40.35)*** 8.90 (5.52)	(12.34)*** 5.42 (9.54)	(11.34)*** 4.37 (9.46)
Observations	216	216	216	216	216	216
F	9.62	12.89	11.6	8.92	238.51	187.05
F p-value	0.006	0.001	0.003	0.005	0	0
R ²	0.059	0.063	0.141	0.145	0.182	0.182

Table VI
Country analyses

The dependent variable corresponds to the Cumulative Abnormal Returns (CARs), encompassing the time window (-3,+3). The Ordinary Least Squares (OLS) is the estimation technique employed in our analyses. Specifications (1) and (3) consist, respectively, of the regression of CARs on corruption, measured by Transparency International's Corruption Perception Index, and Polity, the difference between democracy and autocracy scores provided by the Polity IV Project. Furthermore, Specifications (2) and (4) follow, respectively, (1) and (3), with the addition of two variables: the bailout amount, measured by the Grail Research and hand collection by the authors, scaled by the GDP, provided by the World Bank's World Development Indicators (2007 data); and the natural logarithm of GDP. Finally, Specification (5) contains the full empirical model. The values in parentheses represent the robust standard errors. *, **, *** denote significance at the 10%, 5%, and 1% levels respectively.

Dependent variable: CAR	(-3,+3)				
	(1)	(2)	(3)	(4)	(5)
<i>Corruption</i>	0.94 (9.97)	1.21 (0.93)			1.53 (0.95)
<i>Polity</i>			-0.60 (0.37)	-0.40 (0.41)	-0.56 (0.41)
<i>Bailout Amount / GDP</i>		-62.20 (34.27)*		-52.72 (35.01)	-55.29 (34.21)
<i>Ln(GDP)</i>		-3.18 (1.57)**		-2.22 (1.73)	-2.26 (1.69)
<i>Constant</i>	-8.20 (6.29)	13.82 (11.91)	1.99 (3.38)	17.48 (11.41)	9.63 (12.15)
Observations	36	36	36	36	36
F	0.94	2.07	2.59	1.79	2.06
F p-value	0.340	0.124	0.117	0.169	0.111
Adjusted R ²	-0.002	0.084	0.043	0.063	0.108

Table VII
Relation between lobbying and bailout receipt likelihood

The dependent variable is the binary variable which corresponding to the receipt of a bailout in our Probit model estimation. The dependent variable, Lobbying is a binary variable corresponding to at least one instance of lobbying in the period 1999-2008. The values in parentheses represent the standard errors. *, **, *** denote significance at the 1%, 5%, and 1% levels respectively.

Bailout	
<i>Lobbying</i>	0.515 *** (0.142)
<i>Constant</i>	-0.359 *** (0.049)
Observations	776
F-stat.	13.23
F p-value	0.0003
Adjusted R ²	0.0128

Table VIII
Number and Percent of firms by Lobbying Activity and Bailout

The number and percent of firms which are found in Compustat North America in industries which received a bailout during the crisis. The lobbying data comes from Congressional Quarterly's Political Money Line Database and the Bailout data comes from the Grail Research Database.

Number of Firms			
	Received a Bail Out	Did Not Receive A Bail Out	Total
Lobbied	50	39	89
Did Not Lobby	247	440	687
Total	297	479	776

Percent of Firms			
	Received a Bail Out	Did Not Receive A Bail Out	Total
Lobbied	6.44	5.03	11.47
Did Not Lobby	31.83	56.70	88.53
Total	38.27	61.73	100