Polls, Politics, and SBA Disaster Loans

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Abstract

This paper investigates the relationship between presidential popularity and the generosity of U.S. Small Business Administration (SBA) disaster loans. Using data from 1996 to 2020, we find that lower presidential job approval ratings prior to a major natural disaster is associated with higher SBA loan amounts relative to verified uninsured losses. This negative relationship remains robust across alternative measures of presidential popularity and holds under instrumental variable estimation using high-profile captures or assassinations of U.S. adversaries as exogenous shocks to public opinion. Further analysis reveals that the effect of presidential popularity is conditioned by political context: it is attenuated when media scrutiny is high, and it varies significantly based on whether the president is a Democrat, in a second term, or facing re-election. We also find that disaster aid generosity is responsive to congressional representation on SBA oversight committees but not systematically influenced by local political alignment or electoral competitiveness of disaster-hit regions. These findings provide new evidence on the political economy of federal disaster relief, highlighting how strategic considerations and institutional factors shape the allocation of aid.

JEL Codes: G21, G32, and Q54

Keywords: Disaster loan program, US President, public opinion, presidential popularity, natural disasters

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1. Introduction

This paper investigates how politics can affect the economics of disaster aid in the US. In particular, we consider the effects of presidential popularity and other measures of political leanings in affected regions on SBA disaster loans. Our paper contributes to the growing literature on politics and finance. The classical case for government intervention involves externalities. In the presence of positive or negative externalities, the socially optimal investment levels may deviate from the privately optimal investment levels. In such cases the government can design institutions (in the form of laws, regulation, and taxes) such that the privately optimal investment choices are close to the socially optimal levels (See, e.g., Gande, John, Nair and Senbet ,2020)[1].

Recent work focuses on the "indirect" effects of politics on financial decisions which may or may not be beneficial. For example, Krause and Sevilir (2023) suggest that the election of a female mayor increases the number of female-led start-ups in that city. Kalmnovitz (2023) studies the revolving door between government and the private sector. Other papers consider more directly influences of politics on financial decisions. For example, Buttler, Fauver, and Mortal (2009) show how corruption affects the municipal bonds market. Ahern (2018) examines the effect of terrorist attacks on economic activity. Bebchuk and Neeman, (2010) examine the effect of lobbying on investor protection Fahlenbrach et al. (2025) consider the effects of the political climate and related regulation on bank payout policies. Finally, our work is most closely related to studies of the role

[1] Design of institutions and regulation can also be aimed at protecting minority shareholders (see e.g., La Porta et al., 1998, 2000; Shleifer and Wolfenzon, 2002; Djankov et al., 2008), protecting creditors (see e.g., Djankov, Mcliesh, and Shleifer, 2007; Djankov et al. 2008), enforcing contracts (Djankov et al., 2003), and restricting takeovers (Holmstrom and Kaplan, 2001). When not limited by incomplete contracts and/or asymmetric information, the government may also directly intervene by passing mandatory laws as required. Examples include those that prevent takeovers (Hellwig, 2000) and privatizations (see e.g., Boubakri and Cosset, 2002; Boubakri, Cosset, and Saffer, 2013). Laws may also be used to cure the failures of the credit and financial markets (Atkinson and Stiglitz, 2015), such as by nationalization of banks (see e.g., La Porta et al., 2002; Sapienza, 2004).

of politics in the allocation of "emergency" government aid (e.g., Duchin and Sosyura (2012) and Duchin and Hackney (2021)).

In this paper, we focus on presidential politics and disaster loans. Natural disasters are often followed by a declaration of disaster by the relevant state governor, and allocation of state funds to handle the emergency. In more extreme cases, for example, the Texas flood of 2025, a presidential declaration may occur. We focus on these latter cases. Part of the disaster aid process involves loans from the SBA, an agency headed by a cabinet level official. For major disasters, and/or ones that involve several states, the Stafford Act of 1988 explicitly allows the president to act by (1) authorizing federal disaster relief assistance (Electronic U.S. Code (42 U.S.C. 5170 and 5191), (2) coordinating all the disaster assistance (Electronic U.S. Code (42 U.S.C 5170, 5192), and (3) directing any United States government agency to participate in the disaster response and recovery efforts (Electronic U.S. Code (42 U.S.C 5192) before, during or in the aftermath of a natural disaster. An important limitation of the Stafford Act is that the president is not required to provide specific justification for his (we only have male presidents in our sample) decisions[2]. This setting provides a good opportunity to examine whether there are political motives at play in the allocation of federal disaster relief as we examine how national opinion polls affect the provision of federal disaster loans to small businesses, private nonprofit organizations, and homeowners located in regions affected by major natural disasters. The SBA does follow a set of rules, however, the SBA administrator is appointed directly by the president. Many SBA administrators served only short periods and were replaced. No administrator served for more than 5 years. Acting directors (and

[2] Please see Neumayer, Plümper, and Barthel (2014) and Cohen and Werker (2008) for an excellent review about the politicization of disaster relief. A conversation with several previous high level SBA officials suggests that the SBA process follows specific rules, but obviously local officials have some discretion in applying the rules for a specific disaster.

there have been 11 of them in our sample period) typically serve for less than a year. Former SBA officials told us that presidents generally favor providing aid and the declaration of a disaster by the president is viewed as a signal to local officials that the president wishes them to work harder to help affected areas.

We formulate our testable hypotheses based on three views on how current voter sentiment can affect SBA aid. The null hypothesis is simply that the amount of money (loans) provided is based on economic need (i.e. the amount of uninsured losses) and that presidential popularity (as measured by polls) should not affect the decision to provide relief or the amounts provided to affected regions.

The second view is the "people's presidency" view that implies a positive relationship between the level of president's job approval before the major natural disaster and the generosity of federal response to a major natural disaster. The public may feel positive about the president if he is paying attention to matters that are important to them such as having secure jobs, peace, and prosperity (Druckman and Jacobs, 2009). A major natural disaster is threatening to put many households in severe hardship through jobs or income losses (Kirchberger, 2017). If a president appears attuned to the needs of the public, the disaster relief should be part of the package. It may also be that a president whose views agree with the public sentiment will appoint officials who are more responsive and have a more hands-on approach to what is happening on the ground.

The third view is the political opportunity view. In that view, a negative sentiment about the president before a major natural disaster (as reflected in a low job approval ratings) can lead to a more generous SBA loan response. In other words, if a president provides generous federal relief to disaster affected regions, he will be viewed more favorably going forward.. Local officials and SBA officials appointed by the president may want to work harder to help the president win popular

support. Since our findings align with this hypothesis, we delve further into the interpretation of the results and test additional possible channels.

We measure popular sentiment using the national presidential job approval rating from Gallup polls. Public opinion polls are a powerful and reliable tool to evaluate the job performance of the incumbent President (See e.g., Verba, 1996; Strömbäck, 2012). Presidents attach importance to their own national job approval ratings since these rating can predict and influence the voting decisions of individuals. In this study, we use public opinion data about five former presidents George H.W. Bush, Bill Clinton, George W. Bush, Barack Obama, and Donald Trump.

The president authorizes the SBA to allocate federal disaster relief to major natural disaster hit regions following a disaster declaration. The SBA is a federal government agency, and the president nominates the SBA administrator (15 U.S. Code § 633, 2020). The disaster loan program of the SBA makes low-interest natural disaster loans that help small businesses, private nonprofit organizations, and homeowners to recover from declared natural disasters[3]. The SBA can authorize physical real-estate and content disaster loans to households, private nonprofit organizations, and small businesses. These types of loans can only be used for rebuilding or replacement of the uninsured part of the disaster damaged property. Small businesses can also apply for economic injury disaster loans (hereafter EIDL) with no need to report any natural disaster related losses (SBA-Office of Disaster Assistance, 2012; U.S. Small Business Administration Disaster Loans – Fact Sheet, 2020)[4].

[3] The Small Business Act of 1953 formally established the Small Business Administration with the main objective to provide aid, assistance, and counseling to small businesses necessary for small businesses to reach their full potential (Small Business Act Public Law 85-536 (§2), 1953). The predecessor of the SBA was the Reconstruction Finance Corporation (Davis, Hansen, and Husted, 2018).

[4] Businesses and private nonprofit organizations with damage to their equipment, fixtures, inventory, leaseholds, or machinery will apply for business physical content disaster loans (Lindsay, 2020).

We find that there is an inverse relationship between the level of presidential job approval at the time of the disaster and the generosity of the disaster relief, everything else equal. Our metric for the generosity of disaster relief is the percentage of loans granted, relative to uninsured losses. In other words, low presidential popularity is associated with SBA approval of a higher percentage of the requested disaster loans relative to the uninsured losses. This finding is in line with the political opportunity view. We also use an instrumental variable approach to establish that causality flows from the public perception about the president to the allocation of federal disaster relief by the SBA. The main finding of this paper is robust after considering alternative measures of the public perception about the president and various estimation methodologies.

We further explore the politics of disaster relief by examining how the relationship between presidential job approval and SBA loan generosity varies across key political contexts. We find that the president's political affiliation, term in office, and re-election status meaningfully shape this relationship. Specifically, the negative association between presidential popularity and disaster aid is more pronounced for Democratic presidents and for those in their final term, suggesting that less popular presidents may increase aid disbursements to reinforce their legacy or offset declining support. Additionally, we find that during re-election years, presidents with higher approval ratings tend to approve more generous SBA loans, indicating a strategic use of disaster aid to solidify voter support. In contrast, local political importance—measured by county-level alignment with the president, swing status, or voter turnout—does not significantly moderate the effect of popularity on aid allocation. Together, these findings suggest that the political calculus behind disaster aid is primarily driven by presidential-level incentives, rather than the electoral relevance of disaster-hit areas. We do not find support for the bureaucratic scrutiny channel but we can stronglyco support for the media diversion channel.

To our knowledge, we are the first to document empirically the relationship of the amount of the SBA disaster loans and the public perception of the president's job approval before a major natural disaster. The current literature has focused on the motivation for disaster loans as an attempt on the part of the government to correct market failures either by providing federal disaster relief or by pro-actively increasing the disaster resilience of local regions (see e.g., Cohen and Werker, 2008; Neumayer, Plümper, and Barthel, 2014).

We organize the remainder of this article as follows. Section 2 describes our data and the sample selection procedure. Section 3 presents our empirical estimation strategy. This Section also describes the sample. Section 4 presents the empirical results of this paper. Section 5 concludes

2. Data and sample selection procedure

Our sampling procedure starts with a declaration of a natural disaster by the president. The president can then authorize the SBA to allocate federal disaster relief to areas hit by major natural disasters. The SBA is a federal government agency and the president nominates the SBA administrator (15 U.S. Code § 633, 2020). The disaster loan program of the SBA makes low-interest natural disaster loans that help small businesses, private nonprofit organizations, and homeowners to recover from declared natural disasters[5]. The SBA makes physical real-estate and content disaster loans. These types of loans are only for rebuilding or replacing the uninsured part of the disaster damaged property. Small businesses can also apply for economic injury disaster loans (hereafter EIDL) which do not require reporting of any natural disaster related losses (SBA-

[5] The Small Business Act of 1953 formally established the Small Business Administration with the main objective to provide aid, assistance, and counseling to small businesses necessary for small businesses to reach their full potential (Small Business Act Public Law 85-536 (§2), 1953). The predecessor of the SBA was the Reconstruction Finance Corporation (Davis, Hansen, and Husted, 2018).

Office of Disaster Assistance, 2012; U.S. Small Business Administration Disaster Loans – Fact Sheet, 2020)[6].

We collect data on all the loans made to disaster affected households, businesses, and private nonprofit organizations by the SBA from 1992 until 2020 through a Freedom of Information Act (FOIA) request. The SBA data covers the period 1992 until 2020 since verified loss information for disaster affected households, businesses, and private nonprofit organizations was not available for fiscal years 1980 to 1991.

The initial sample covers 1,760,165 individual loan requests made for an SBA disaster loan. 78% of the requests for an SBA disaster loan are made by households. Within each SBA disaster loan program, we collect data on each approved loan for businesses, private nonprofit organizations, and households. 41% of individual applicants were not approved in which case the amount in the database is zero.

We next apply three filters to the SBA individual loan data. First, we remove loans following dam/levee breaks, human cause, terrorist attacks, two major man-made disasters (Riots, fires, and civil disorder in Los Angeles on April 29, 1992; and the September 11 attacks in NYC in 2001), and other incident types from the sample since the focus of the study is on natural disasters. Second, we only keep presidential declared natural disasters (FEMA disasters). The incumbent President is not directly involved in "local" (more minor) natural disasters and disasters declared by the

[6] Businesses and private nonprofit organizations with damage to their equipment, fixtures, inventory, leaseholds, or machinery will apply for business physical content disaster loans (Lindsay, 2020).

Secretary of Agriculture[7]. Third, we remove physical damage disaster loans (SBA real estate and content disaster loans) when data about verified losses for these physical damage loans are missing. We aggregate the individual SBA loan data at the ZIP code level by presidential declared disaster.

We collect data about the national presidential job approval rating from the American Presidency Project. The American Presidency Project at the University of California Santa Barbara makes the Gallup Poll data available on their own website. Gallup has a long tradition of conducting public opinion polls about the incumbent President which goes back to period of President Franklin D. Roosevelt. They ask their respondents to answer the following question poll: "Do you approve or disapprove of the way [enter President name] is handling his job as President?" (American Presidency Project, 2020).

Gallup uses a representative sample of adults (individuals who are 18 or older) living in the United States. The typical sample size is 1,000 respondents. Between 1986 and 2008 Gallup had conducted their national public opinion polls via landline telephones. Since 2008 Gallup has also started to call cell phones. Gallup uses a computer to randomly generate the phone numbers of candidates for their public opinion polls. Before releasing their survey data, Gallup uses U.S. Census Bureau data (i.e., gender, race, age, education, and region) to weight the processed public opinion survey data (Gallup, 2021). For our empirical analysis, we use all presidential job approval ratings except the ratings in the final January of a presidential term since it is a transition month.

For our analysis, we use the most recent national presidential job approval rating from the public opinion poll with a closing end date of at least one day before the calendar date of the natural

[7] The Secretary of Agriculture can authorize the SBA disaster loan program to activate it disaster loan program for agriculture-related disasters (United States Department of Agriculture, 2017).

disaster. Presidents can also commit disaster loans to lessen the impact of an impending natural disaster (The Stafford Act Section 102 (1)). The sample does not include any such request.

We collect data on members of the U.S. Senate Committee on Small Business and Entrepreneurship from *Congress.gov*. Because congressional reports identifying committee members are only available beginning with the 104th Congress (1995–1996), our sample period begins in 1996, as we measure committee membership at the start of each calendar year. We obtain information on members of the U.S. House Committee on Small Business from the *History, Art & Archives* of the U.S. House of Representatives.

We next collect data about the U.S. State presidential election results from two sources: Dave Leip's Atlas of Presidential Elections (1988-1996) and the MIT Election Data and Science Lab (2000-2016). We use the same two data sources to collect information about whether the incumbent President is up for her reelection. We also use information from these two sources to classify a county as a swing county or as a county that voted in favor for the incumbent President in the recent presidential election.

We use data from Kaplan (2020) to construct our measures of party favoritism. Kaplan (2020) constructs an extensive database about governors from U.S. States that covers the period from 1991 until 2020. We manually update the missing U.S. State-governors in Kaplan (2020) database by collecting data about missing U.S. State governors from the National Governors Association website (https://www.nga.org/cms/home).

Finally, we collect local socio-economic indicators from federal sources. Annual state-level Gross Domestic Product (GDP) and county-level per capita income and population are obtained

from the Bureau of Economic Analysis. Annual county-level unemployment rates are drawn from the Bureau of Labor Statistics' Local Area Unemployment Statistics (LAUS) program.

We correct for extreme values of the variables by winsorizing all continuous variables at their 1st and 99th percentile.

After cleaning the data, we aggregate the data at the zip code-disaster level. As a result, we obtain a final sample of 42,246 zip code-disaster observations for the period between 1996 and 2020. The sample includes 599 major presidential-declared natural disasters, classified by FEMA into 12 different types. Here are the types, ranked by increasing incidence: volcano (1), snow (1), muds/landslides (2), coastal storms (4), severe ice storms (7), typhoons (9), earthquakes (8), fires (20), tornados (21), flood (80), hurricanes (92), and severe storms (354).

Table 1 of Appendix A provides an overview of natural disasters as classified by FEMA. We observe there is a high degree of heterogeneity across U.S. States. The state with the highest number of presidential declared natural disasters in the sample is Florida (31). The lowest number of presidential declared natural disasters for a state in the sample is 2 (for Alaska, Montana, North Dakota, Rhode Island, South Carolina, Utah, and Wyoming).

3. Empirical estimation

Our null hypothesis - H_0 – is that there should be no association between presidential popularity polls and disaster relief. The latter should be determined by economic considerations alone. We test this simple view against two other hypotheses.

H_{1a} is the political-opportunity view- low presidential poll numbers will be associated with more aid to disaster affected regions.

H_{1b} is the "people's presidency" view which suggests that a popular president will provide more aid to disaster affected regions.

Because of the large number of zeros in our dependent variable, we use a Tobit regression model with a dependent variable that is left-censored at zero.

We define all variables and their corresponding data sources in Appendix C. The dependent variable is the SBA disaster loan-loss ratio, measured at the ZIP code level for each presidentially declared disaster. To construct this measure we first compute, for each approved loan, the ratio of the total SBA-approved disaster loan amount to the total verified uninsured losses. The total approved loan amount includes the sum of real estate, content, and business economic injury disaster loans. The total verified uninsured losses comprise both real estate and content losses. Businesses are not required to document disaster-related losses when requesting economic injury disaster loans (Electronic Code of Federal Regulations (13 CFR §123.202), 2020), which can result in loan amounts that exceed verified losses. We then calculate the average of these loan-level ratios within each ZIP code and disaster event. Because business applicants are not required to document losses when requesting working capital loans, the value of this ratio can exceed one. To mitigate the influence of extreme values, we apply a natural logarithmic transformation to one plus the calculated loan-loss ratio. Table 1 reports the sample means, median, minimum, maximum, and the standard deviation of the variables used in the baseline regression model across all observations in the sample. The mean (median) SBA disaster approved amount loan-loss ratio is 0.31. The range is 0.81.

The SBA disaster loan-loss ratio is equal to zero when no disaster loans were approved within a ZIP code for a given presidentially declared disaster. In our sample, 23% of ZIP codes affected by a declared disaster did not receive any SBA disaster loan aid. The substantial proportion of zero

observations in the dependent variable motivates the use of a Tobit regression model, where the loan-loss ratio is left-censored at zero.

We observe substantial variation in the presidential approval ratings. The mean (median) national presidential job approval rating based on one poll is 0.49 (0.49). The minimum (maximum) value of the national presidential job approval rating based on one poll is 0.28 (0.76).

Table 1 of Appendix B provides an overview of the summary statistics of the Gallup Poll Data for the five different Presidents from 1996 until 2020. We observe considerable variation in the number and duration of the sample period. The number of polls in our sample period varies from 53 in 2012 to nineteen polls both in 1997 and 2020. The maximum (minimum) means duration of public opinion poll conducted during a calendar year across the sample period is 1.65 (13.47) days in 1998 (2020).

We measure the control variables at the start of each calendar year, except for the fixed effects. We expect the incentives of the president and all political nominees to be different for the first and second term, when a president cannot get re-elected. Table 1 shows that 42% of the observations had a second term president.

The effect of the Democratic president on the SBA disaster approved amount loan-loss ratio is unclear. Democratic (Republican) presidents favor a stronger central (state) government involvement in disaster management (Sylves and Búzás, 2007). On the other hand, the Republican Party is more favorable towards small businesses and businesses are more likely to donate to candidates from the Republican Party (Dunlap and Gale, 1974; Miller and Schofield, 2008). In Table 1, we observe that 56% of the zip-disaster observations were during the tenure of a Democratic President providing an almost even split between presidents from the two parties.

We also include three variables that control for the impact of potential vote-seeking behavior. The first is re-election year (Healy and Malhotra, 2009). Table 1 shows that this includes 13% of the observations.

The second determinant of vote-seeking behavior is whether the county is friendly to the elected president. The theory on regional and partisan favoritism argues that the distributive policies of the government targets regions that are either friendly or preferential to the government (see e.g., Cox and McCubbins, 1986; Anderson and Tollison, 1991; Couch and Shugart, 1998; Larcinese, Rizzo, and Testa, 2005; Hodler and Raschky, 2014). In Table 1, we observe that 45% of the observations are in counties that voted in favor of the president during the recent presidential election.

The third and final determinant of potential vote-seeking behavior is being a swing county during the recent presidential election which includes 14% of the county/parish-disaster observations.

We also run a dummy variable for the case when the incumbent president and the incumbent U.S. State governor have the same political party affiliation which is the case in 52% of our observations.

We control for the impact of regional variation in the county-level voter turnout share during the recent presidential election. The expectation is that more federal dollars would be allocated to counties with a higher voter turnout during the recent presidential election, i.e. a more influential electorate (Kriner and Reeves, 2015). Table 1 shows that the mean (median) county-level voter turnout share during a presidential election is 0.04 (0.02).

We also control for the relative economic importance of an U.S. States- clearly one would expect higher economic damages to stronger economies. The mean (median) relative economic importance of an U.S. State is 0.04 (0.03). This is the state GDP scaled by US GDP.

We also control for the impact of different county-level socio-economic indicators on the SBA disaster loan-loss ratio. First, we use the county-level per capita income as a proxy for local wealth. Wealthier counties may exhibit greater demand for disaster loans, as higher-value properties are more likely to generate larger loan requests following disaster-related damage. We use the natural logarithmic transformation of the county-level per capita income. In Table 1, the mean logged per capita income is 10.33, with values ranging from 9.63 to 11.16, indicating substantial cross-county variation. Second, we also control for county population to account for differences in the scale of exposure to natural disasters. More populous counties may receive more disaster loans simply due to a larger number of affected residents and businesses, increasing the aggregate demand for assistance. The ZIP codes in our sample are in counties with a mean (median) natural log transformed population of 11.96 (11.91), indicating a relatively balanced distribution. As shown in Table 1, there is substantial variation in the county population, with a range of 7.56 in the natural log-transformed values. Third and final, we also control for the county-level unemployment rate to capture local economic conditions at the time of the disaster. Higher unemployment may increase reliance on federal disaster assistance, as financially constrained households and businesses are less able to absorb recovery costs on their own. Table 1 shows that ZIP codes in our sample are in counties with a mean (median) unemployment rate of 6%. The county-level unemployment rate ranges from 2% to 14%, reflecting considerable variation in local labor market conditions.

We finally control for the impact of local political representatives sitting on important committees that can excerpt an important influence on the Small Business Administration in either the U.S. Senate or U.S. House of Representatives. We have the U.S. Senate Committee on Small Business and Entrepreneurship and the U.S. House Committee on Small Business. These two committees have oversight over the SBA. We include an indicator for whether a U.S. senator serves

on the Senate Committee on Small Business and Entrepreneurship. Senators on this committee may exert greater influence over the allocation of SBA disaster assistance, potentially increasing their constituents' access to federal loan programs. Garrett and Sobel (2003) find that congressional representation on the FEMA oversight board is important for receiving disaster funds. In Table 1, we report summary statistics for the two committee variables, each defined as a binary indicator. The House committee variable has a mean of 0.19, while the Senate committee variable has a mean of 0.15 in Table 1.

We include three sets of fixed effects to address potential omitted variable bias. First, presidential fixed effects control for time-varying factors common to all areas under a given administration, capturing heterogeneity in disaster response across presidents. Second, we include FEMA disaster-type fixed effects to account for variation across disaster categories. Third, we use county fixed effects—rather than ZIP code fixed effects—due to computational constraints, as the inclusion of ZIP-level dummies substantially increases matrix size. Standard errors are heteroskedasticity-robust and clustered at the ZIP code level. We report t-statistics below the estimated coefficients.

[Insert Table 1 about here]

4. Empirical results

4.1. Presidential perception and SBA disaster loans

This section presents our main empirical analysis. Table 2 presents estimates from the baseline regression specification examining the relationship between presidential job approval and the generosity of disaster relief, measured by the log of one plus the SBA disaster approved loan-loss

ratio. Consistent with **Hypothesis 1a**, we find that presidential job approval is negatively and significantly associated with SBA disaster assistance. In Column (1), the coefficient on the approval rating from a single poll is –0.0930 (t = –3.38); the result remains robust when using the average of two polls in Column (2) (–0.0937; t = –3.40) and three polls in Column (3) (–0.1008; t = –3.63). These findings support the political opportunism view: presidents with lower public approval ratings appear more inclined to provide generous disaster relief, potentially to improve political standing or signal responsiveness.

Turning to the control variables, we identify four statistically significant predictors of SBA disaster generosity. First, the coefficient on the Friendly County indicator is negative and significant at the 5% level across all specifications (e.g., –0.0092; t = –2.39 in Model 1), suggesting that counties politically aligned with the president actually receive less generous loan outcomes. This counterintuitive result may imply that presidents allocate more disaster aid to politically unaligned counties as a strategic effort to broaden electoral appeal rather than reward loyal constituencies.

Second, the coefficient on the Per Capita Income is positive and highly significant at the 1% level across all models (e.g., 0.1907; t = 7.18 in Model 1). As expected, wealthier counties, which often suffer more costly damage due to higher property values, may qualify for larger SBA disaster loans. It is also possible that these counties have stronger administrative capacity to apply for and secure SBA assistance.

Third, the County Population is positive and significant at the 1% level (e.g., 0.0699; t = 3.07 in Model 1), indicating that more populous counties tend to receive more generous disaster loans. This may reflect both the scale of aggregate disaster impact in larger areas and the relative administrative resources available to pursue SBA funding.

Finally, the Unemployment Rate is negatively associated with the SBA loan approval ratio and statistically significant at the 1% level (e.g., –1.1901; t = –6.14 in Model 1). This suggests that economically distressed counties receive less generous SBA loans, potentially due to concerns over repayment risk or weaker local administrative capacity in navigating the SBA loan process.

Other controls—including political variables such as Democratic president, presidential re-election year, and shared party affiliation between the president and state governor—do not yield statistically significant effects in these baseline models. Additionally, we find no significant association between SBA generosity and congressional committee representation.

[Insert Tables 2-3 about here]

4.2. Endogeneity concern of the presidential job approval rating: Omitted variable bias.

In this section we suggest some endogeneity corrections for possible omitted variables. An example of an omitted variable can be the degree of local media coverage of the president before the natural disaster.

We have used various fixed effects to address the omitted variable bias but, in this section, we will use the instrumental variables Tobit model with continuous endogenous covariates to address the omitted variable concern.

The estimations of the instrumental variables Tobit model with a continuous endogenous covariate requires the selection of a valid instrument for presidential job approval rating. This candidate instrumental variable must satisfy two conditions of validity: the relevance condition and the exclusion condition (Woolridge, 2008). In our case the relevance condition requires that the candidate instrumental variable should have a causal impact on the endogenous variable, presidential job approval rating. The second condition is the exclusion condition, i.e., the candidate instrumental variable can only impact the SBA disaster approved loan-loss ratio through the endogenous variable presidential job approval rating. Hence, no direct impact of the candidate instrumental variable on the SBA disaster approved loan-loss ratio.

Our proposed instrumental variable is a binary indicator equal to one if the United States assassinated or captured a high-profile adversary during the sample period, and zero otherwise. We identify eight such individuals—four of whom were killed and four captured—in foreign countries including Pakistan, Iraq, Libya, and Syria. These operations are typically conducted as covert missions, with no prior public or media awareness. The U.S. government often delays disclosure of such events until DNA evidence confirms the identity of the individual involved. Once

confirmed, detailed information is released to the public and media. In some cases, the capture or killing of these individuals occurs by chance and without the deployment of significant federal resources. Intelligence on the whereabouts of these adversaries may be provided by allied or friendly nations, or may result from local actors responding to bounty incentives. Table 4 provides an overview of these events during the sample period. Data sources include official reports from the CIA, FBI, White House, and Pentagon, as well as media coverage from CNN, The New York Times, and Reuters. We lag the instrumental variable one month before the final public opinion poll we use to measure the presidential job approval rating before we use. In Table 1, we observe that the mean of the dummy variable "Assassination or capturing of an important adversary of the United States" is 0.04.

This variable is plausibly exogenous. These individuals are high-profile fugitives actively evading U.S. authorities and are typically located through intelligence gathered over prolonged periods. Their capture or assassination results from covert military or intelligence operations that are planned and executed in secrecy, often without the involvement of the broader political apparatus and with no advance notice to the public or media. Importantly, members of the public who respond to presidential job approval surveys can never have prior knowledge of these operations. Therefore, the timing and execution of these events are unlikely to be systematically correlated with contemporaneous shifts in public opinion or with SBA activity. This supports the validity of our instrument by satisfying both the relevance and exclusion restrictions necessary for credible instrumental variable estimation.

We expect a positive relationship between the binary variable "Assassination or Capture of an Important Adversary of the United States" and the presidential job approval rating. Presidential

approval ratings tend to rise in response to major international events, commonly referred to as *rally events*. Accordingly, we anticipate a positive rally effect on presidential popularity following the capture or killing of high-profile adversaries of the United States. For instance, President George W. Bush's approval rating in the final poll prior to the capture of deposed Iraqi President Saddam Hussein was 56%. After the news of Hussein's capture, his approval rating increased by seven percentage points, rising to 63% (Newport, 2011). Similarly, President Barack Obama's approval rating rose by six percentage points following the death of Osama Bin Laden during a U.S. raid on the al Qaeda leader's compound in Pakistan (Jones, 2011).

Our proposed instrumental variable also plausibly satisfies the exclusion restriction. It is highly unlikely that the assassination or capture of a major adversary of the United States would directly affect the amount of SBA disaster loans approved relative to uninsured disaster losses.

We show the results of the first and second stage of the instrumental regression model by measure of presidential job approval rating in Table 5. We first discuss the result of the test whether the presidential job approval rating is an endogenous variable. The null hypothesis is that the presidential job approval rating is an exogenous variable. We find that the p-value corresponding of the Wald Test statistic is 0.00 across the three presidential job approval measures. As a result, we reject the null hypothesis that the presidential job approval rating is an exogenous variable.

The first stage confirms the negative relationship between the binary variable "Assassination or Capturing of an Important Adversary of the United States" and the presidential job approval rating (one, two, ore three polls). The second stage shows a negative and statistically significant relationship between the instrumented presidential job approval rating (one, two, or three polls) and the SBA disaster approved loan-loss ratio. Our main result continues to hold.

[Insert Tables 4 and 5 about here]

4.3. Media attention to natural disasters

A potential alternative explanation for our findings is that variation in SBA disaster assistance is not driven solely by presidential popularity, but also by external pressure from media coverage. When natural disasters receive greater media attention, the president's response may come under heightened public scrutiny, prompting a more generous federal relief effort regardless of political motives. To examine this channel, we incorporate a measure of natural disaster-related media attention using daily topic frequency data from approximately 800,000 Wall Street Journal articles spanning 1984 to 2017, as compiled by Leland et al. (2021). We aggregate the data to the month-year level and lag the variable by one month prior to the disaster event to minimize endogeneity concerns.

We augment our baseline regression model by including an interaction between presidential job approval and media attention to natural disasters. Table 6 presents the results. Across all specifications, the coefficient on presidential job approval remains negative and statistically significant at the 1% level, reaffirming our main finding that presidents with higher popularity ratings tend to approve smaller disaster loans relative to uninsured losses. The coefficient on media attention is also negative and statistically significant at the 5% level, indicating that greater media coverage is independently associated with less generous SBA loan allocations. One interpretation is that increased media scrutiny leads to more cautious or bureaucratic decision-making within federal agencies.

Crucially, the interaction term between presidential approval and media attention is positive and statistically significant in all models ($p < 0.05$), indicating that the negative effect of

presidential popularity on disaster loan generosity is attenuated when media attention is high. In other words, popular presidents appear less likely to reduce disaster aid when the public spotlight is intense. This finding suggests that media scrutiny imposes reputational or political constraints on presidential discretion. When the media extensively covers a natural disaster, the president may face greater public pressure to respond generously, even if their popularity would otherwise permit a more restrained approach. Thus, media attention acts as a moderating force that mitigates the strategic use of disaster assistance tied to presidential approval levels.

Moreover, the average marginal effects of presidential job approval remain negative and statistically significant at the 1% level across all specifications, reinforcing the robustness of the core relationship. F-tests confirm that presidential approval, media attention, and their interaction are jointly significant ($p < 0.01$).

These findings support a nuanced interpretation: while presidential popularity plays a significant role in shaping disaster aid generosity, its effect is conditional on the level of media attention, which serves as an important accountability mechanism in the federal disaster relief process.

[Insert Table 6 about here]

4.4. A Further Discussion of Political Issues

In order to further consider the politics of disaster relief we consider several interaction terms between the approval ratings, including the political affiliation of the president, the term of the

president (first or second), presidential re-election and the local political importance of disaster hit regions.

4.4.1. Political Motive 1: Political Affiliation of the President

To examine whether the relationship between presidential job approval and SBA disaster loan generosity varies by political party, we augment our baseline regression with an interaction between the presidential job approval rating and a dummy variable indicating whether the president is a Democrat. The results are presented in Table 7.

Across all three model specifications, the main effect of presidential job approval remains negative, with coefficients ranging from –0.0491 to –0.0610. These coefficients are statistically significant at the 10% level in Models 1 and 2, but become insignificant in Model 3. The interaction term between presidential job approval and Democratic president is negative in all models but achieves statistical significance only in Model 3 (–0.1726; t = –2.38), suggesting that the negative relationship between popularity and disaster loan generosity is more pronounced under Democratic administrations—but this pattern is statistically discernible only in Model 3.

The estimated coefficients on the Democratic president dummy itself are negative but not statistically significant across all models, implying that presidential party affiliation alone does not have a direct impact on SBA disaster loan outcomes.

The average marginal effects of presidential job approval—reported in the penultimate row of Table 7—are large, negative, and statistically significant at the 1% level in all models (ranging from –0.1196 to –0.1465). These results confirm that, on average, higher presidential approval correlates with less generous SBA disaster assistance. Furthermore, the F-statistics for the joint significance of the presidential approval rating, Democratic president dummy, and their interaction

range from 5.26 to 7.16, with p-values below 0.01, supporting the relevance of these variables in explaining SBA loan outcomes.

Taken together, the evidence suggests that the seeming political calculus behind disaster aid allocation crosses party lines.

[Insert Table 7 about here]

4.4.2. Political Motive 2: Presidential Term

In Table 8, we assess whether the relationship between presidential job approval and SBA disaster loan generosity depends on whether the president is serving a second (final) term. We extend the baseline model by including an interaction term between the presidential job approval rating and a dummy variable indicating whether the president is in their second term.

Across all three model specifications, we find that the second-term president dummy is positive and highly statistically significant at the 1% level (e.g., 0.0669; t = 3.16 in Model 1), suggesting that presidents in their final term tend to approve more generous SBA disaster loans. This pattern is consistent with the hypothesis that second-term presidents may be more focused on securing their legacy and are therefore more inclined to use disaster relief as a tool to support constituents.

Importantly, the interaction term between presidential job approval rating and second-term president is negative and statistically significant at the 1% level in all models (e.g., –0.1247; t = –2.98 in Model 1), indicating that the positive effect of being in a second term is diminished when presidents are more popular. This suggests that less popular second-term presidents may be more inclined to provide generous disaster assistance—possibly as a means of reinforcing their legacy or public image.

The main effect of presidential job approval rating alone is negative but statistically insignificant across all specifications, aligning with earlier findings that its influence becomes meaningful only when conditional on political incentives.

The average marginal effects of presidential job approval ratings are negative and statistically significant in all three models (ranging from –0.0713 to –0.0765, with p-values below 0.05), reinforcing the conclusion that higher job approval ratings are generally associated with less generous SBA disaster loan outcomes, particularly during second terms.

Finally, the joint F-tests for the interaction terms and their components confirm that these variables are jointly significant at the 1% level in all models (F-statistics range from 7.97 to 9.66), underscoring the relevance of presidential term dynamics in shaping federal disaster aid.

Taken together, these results highlight that presidents in their final term are more likely to disburse generous SBA disaster loans, particularly when their approval ratings are low pointing to a complex interplay between legacy concerns and political popularity in federal disaster response.

[Insert Table 8 about here]

4.4.3. Political Motive 3: Presidential Re-election Year

In Table 9, we examine whether the relationship between presidential job approval and SBA disaster loan generosity varies in presidential re-election years. We extend our baseline model by including a re-election year dummy and its interaction with the presidential job approval rating.

The coefficient on the presidential re-election year dummy is negative and statistically significant in all three model specifications, though at varying levels of significance (e.g., –0.0897; t = –2.59 in Model 1, significant at the 1% level; –0.0686; t = –1.80 in Column 3, significant at the 10% level). This suggests that, contrary to expectations, presidents may actually approve smaller

SBA loans during re-election years when not accounting for popularity effects. One possible explanation is a heightened sensitivity to scrutiny or budget discipline during electoral campaigns.

More importantly, the interaction term between presidential job approval and re-election year is consistently positive and statistically significant (e.g., 0.2119; t = 2.97 in Model 1), indicating that popular presidents moderate the reduction in disaster loan generosity typically observed during re-election periods. In other words, higher job approval ratings are associated with more generous disaster relief specifically in the context of re-election campaigns—perhaps because popular presidents are more confident in leveraging public goodwill through generous aid without risking political backlash.

The average marginal effects of presidential job approval are negative and statistically significant in all models (ranging from –0.0792 to –0.0881), suggesting that, overall, the negative association between approval ratings and SBA loan generosity persists. However, this effect is conditional: it is attenuated or reversed during re-election years when approval ratings are high.

Joint F-tests for the re-election dummy, job approval rating, and their interaction confirm their combined significance at the 1% level in all models (F-statistics: 7.36 to 8.58), underscoring the importance of electoral incentives and political context in shaping disaster relief.

Taken together, these results imply that presidential disaster aid behavior is politically strategic. During re-election years, the generosity of SBA disaster assistance becomes more closely tied to a president's standing in public opinion.

[Insert Table 9 about here]

4.4.4. Political Motive 4: The Local Political Importance of Affected Regions.

Table 10 examines whether the local political importance of disaster-affected counties moderates the relationship between presidential job approval ratings and the generosity of SBA disaster loans. We focus on three proxies for political importance: counties aligned with the president's party (Panel A), swing counties (Panel B), and counties with higher voter turnout in presidential elections (Panel C).

Across all three panels, the main effect of presidential job approval rating remains negative and highly statistically significant at the 1% level, with average marginal effects ranging from –0.0901 to –0.1009. This reinforces our central finding that lower presidential popularity is associated with more generous SBA disaster aid.

In Panel A, we examine whether the effect of job approval varies in counties politically aligned with the president. While the coefficient on the *friendly county* dummy is small and statistically insignificant, the interaction term between job approval and friendly county is also insignificant across all models.

Panel B turns to *swing counties*. Again, neither the swing county indicator nor its interaction with job approval reaches statistical significance.

Panel C considers *counties with high voter turnout*, potentially politically engaged regions. The voter turnout measure and its interaction with job approval are statistically insignificant, and again, the main relationship between presidential approval and loan generosity holds.

Taken together, these results suggest that while disaster loan allocations respond to presidential popularity, they do not appear to be strategically targeted based on the political importance of affected counties as measured by party alignment, swing status, or voter engagement. The consistent and significant negative coefficients on job approval ratings support the hypothesis that

less popular presidents are more generous in disbursing disaster loans—regardless of local political stakes.

[Insert Table 10 about here]

4.4.5. Political Motive 5: Congressional Representation on SBA Committees

In Table 11, we examine whether the relationship between presidential job approval and SBA disaster loan generosity is moderated by congressional representation on the U.S. Senate and House Committees on Small Business. These committees oversee disaster loan programs, making representation potentially influential in resource allocation.

We include interaction terms between presidential job approval ratings and indicators for whether a disaster-affected ZIP code lies in a congressional district or state represented by a member of either the Senate or House Small Business Committee.

We find that Senate Committee representation is associated with more generous disaster loan approvals (e.g., 0.0446; t = 1.93 in Model 1), consistent with the idea that senators on this influential committee may use their position to channel aid toward their constituencies. However, the interaction between Senate committee representation and presidential job approval is negative and statistically significant (e.g., –0.1019; t = –2.04 in Model 1), suggesting that this positive effect weakens when the president is more popular. One possible explanation is that when presidents enjoy high public support, they may feel less pressure to accommodate political allies, relying instead on their broader appeal. Conversely, when popularity is low, the president may be more responsive to institutional stakeholders such as committee members to build political goodwill.

In contrast, House Committee representation is associated with lower disaster loan generosity (e.g., –0.0492; t = –2.07 in Model 1), which may reflect the broader and more fragmented representation in the House or potentially weaker individual influence. However, the interaction

between House committee representation and presidential approval is positive and significant at the 10% level across models (e.g., 0.0873; t = 1.84), indicating that the negative effect of presidential popularity on disaster aid is partially offset in these districts. This pattern suggests that presidents may selectively respond to House committee representation when their approval is high, perhaps to reinforce legislative cooperation or maintain visibility in diverse constituencies.

The main effect of presidential job approval remains consistently negative and highly significant across all specifications (e.g., –0.0948; t = –3.44), supporting the broader finding that popular presidents tend to approve smaller disaster loans relative to uninsured losses.

Finally, joint F-tests indicate that the presidential job approval ratings, committee indicators, and their interactions are jointly statistically significant at the 1% level in all models.

Taken together, the results in Table 11 underscore that presidents may strategically adjust disaster loan generosity not only in response to their popularity but also to the political and institutional environment, including congressional committee representation. The responsiveness to Senate versus House committee representation differs in both direction and political logic, suggesting that institutional proximity and electoral incentives jointly shape federal disaster relief policy.

Finally, we explore the bureaucratic scrutiny channel as an explanation for the effect of presidential popularity on SBA loans. We proxy for bureaucratic scrutiny with years of transition to a new SBA administrator, with the idea that these are the years when everyone is focused on the agency and its activities. In unreported results we do not find very significant results in these estimations.

5. Conclusion

This paper investigates whether presidential job approval ratings prior to major natural disasters influence the allocation of federal disaster assistance. The null hypothesis posits no effect of presidential popularity on disaster aid distribution. Using a rich dataset of SBA disaster loan activity from 1996 to 2020, we reject the null and document a robust, negative relationship between presidential job approval ratings and the generosity of SBA disaster loans, measured as the ratio of approved loan amounts to verified uninsured losses. This pattern is consistent with the political opportunity view: less popular presidents may seek to bolster public support by increasing aid to disaster-stricken areas.

We further explore how this relationship is moderated by key political conditions. Our interaction analyses show that the negative effect of presidential popularity on disaster loan generosity is especially pronounced when the president is in a reelection year or serving a second term, suggesting strategic behavior motivated by electoral or legacy concerns. Importantly, we also find that institutional and media contexts matter. The negative relationship between popularity and disaster aid is attenuated when media attention to natural disasters is high, indicating that public scrutiny constrains political maneuvering. Similarly, the influence of congressional representation on SBA oversight committees interacts with presidential approval in shaping aid distribution: Senate committee representation amplifies generosity when presidents are unpopular, while House committee representation offsets aid reductions under popular presidents.

Collectively, these findings highlight that disaster aid allocation does not just follow blindly a set of rules, but it is shaped by the interplay of public opinion, electoral incentives, institutional politics, and media pressure. While we cannot directly observe presidential decision-making, our results are consistent with the notion that politically appointed federal and local officials adjust

their behavior in response to prevailing political incentives. The study contributes novel empirical evidence to the literature on political economy and public finance and raises important normative questions about fairness and efficiency in the provision of disaster relief.

REFERENCES

15 U.S. Code § 633, 2020. Title 15. Commerce and Trade: Chapter 14A. Aid to small business. Section 633. Small Business Administration. Accessed on September 5, 2020. https://www.law.cornell.edu/uscode/text/15/633

Ahern, Kenneth R., 2018. The importance of psychology in economic activity: Evidence from terrorist attacks. *NBER Working Paper 24331*.

Aldrich, Daniel P., and Yasuyuki, Sawada, 2015. The Physical and Social Determinants of Mortality in the 3.11 Tsunami. Social Science & Medicine 124, 66-75.

American Presidency Project, 2020. Presidential job approval. Accessed on September 12, 2020. https://www.presidency.ucsb.edu/statistics/data/presidential-job-approval

Anderson, Gary M., and Robert D., Tollison. 1991. Congressional influence and patterns of new deal spending. *Journal of Law and Economics 34*, 161–175.

Atkinson, Anthony B., and Joseph E., Stiglitz, 2015. Lectures on public economics. Princeton University Press, 568 pages.

Bebchuk, Lucian A., and Zvika, Neeman, 2010. Investor protection and interest group politics. The Review of Financial Studies 23, 1089-1119.

Bechtel, Michael M., and Massimo, Mannino, 2022. Retrospection, fairness, and economic shocks: how do voters judge policy responses to natural disasters? Political Science Research and Methods 10, 260-278.

Boubakri, Narjess, and Jean-Claude, Cosset, 2002. The financial and operating performance of newly privatized firms: Evidence from developing countries. *Journal of Finance 53*, 1081-1110.

Boubakri, Narjess, Cosset, Jean-Claude, and Walid, Saffar, 2013. The role of state and foreign owners in corporate risk-taking: Evidence from privatization. *Journal of Financial Economics 108*, 641-658.

Buttler, Alexander W., Fauver, Larry, and Mortal, Sandra, 2009. Corruption, Political Connections, and Municipal Finance. *The Review of Financial Studies 22*, 2873-2905.

Cohen, Charles, and Eric D., Werker, 2008. The political economy of "natural" disasters. *Journal of Conflict Resolution 52*, 795-819.

Cohen, Jeffrey E., 1997. Presidential responsiveness and public policy making: the public and the policies that presidents choose. Ann Arbor: University of Michigan Press.

Cottle, Simon, 2014. Rethinking media and disasters in a global age: What's changed and why it matter? *Media, War & Conflicts 7*, 3-22.

Couch, Jim F., and William F., Shugart II. 1998. The Political Economy of New Deal Spending. Cheltenham, U.K.: Edward Elgar.

Cox, Gary W., and Mathew D., McCubbins. 1986. Electoral politics as a redistributive game. *Journal of Politics 48*, 370–389.

Davis, Matthew, Hansen, Mary Eschelbach, and Thomas, Husted, 2018. The impact of political influence on appointees: Evidence from the Small Business Administration Disaster Loan Program. Southern Economic Journal 84, 771-785.

Davlasheridze, Meri, and Qing, Miao, 2021. Natural disasters, public housing, and the role of disaster aid. Journal of Regional Science 61, 1113-1135.

Djankov, Simeon, Glaeser, Edward, La Porta, Rafael, Lopez-de-Silanes, Florencio, and Andrei, Shleifer, 2003. The new comparative economics. *Journal of Comparative Economics 31*, 595-619.

Djankov, Simeon, La Porta, Rafael, Lopez-de-Silanes, Florencio, and Andrei, Shleifer, 2008. The law and economics of self-dealing. *Journal of Financial Economics 88*, 430-465.

Djankov, Simeon, McLiesh, Caralee, and Andrei, Shleifer, 2007. Private credit in 129 countries. *Journal of Financial Economics 12*, 77-99.

Druckman, James N., and Lawrence R., Jacobs, 2009. "Presidential responsiveness to public opinion" in George C. Edwards III and William G. Howell, eds., The Oxford Handbook of the American Presidency, pages 160-181. Oxford: Oxford University Press, 2009

Duchin, Ran, and Denis, Sosyura, 2012. The politics of government investment. Journal of Financial Economics 106, 24-48.

Duchin, Ran, and John, Hackney, 2021. Buying the vote? The economics of electoral politics and small-business loans. Journal of Financial and Quantitative Analysis 56, 2439-2473.

Dunlap, Riley E., and Richard P., Gale, 1974. Party membership and environmental politics: A legislative roll-call analysis. *Social Science Quarterly 55*, 670-690.

Electronic Code of Federal Regulations (13 CFR §123.202) (2020). Accessed on August 6, 2020. https://www.law.cornell.edu/cfr/text/13/123.202

Electronic U.S. Code (42 U.S. Code § 5191), 2021. Accessed on May 31, 2021. https://www.law.cornell.edu/uscode/text/42/5191

Electronic U.S. Code (42 U.S.C. 5170), 2021. Accessed on May 31, 2021. https://www.law.cornell.edu/uscode/text/42/5170

Electronic U.S. Code (42 U.S.C. 5192), 2021. Accessed on May 31, 2021. https://www.law.cornell.edu/uscode/text/42/5192

Electronic U.S. Code (44 CFR § 206.35), 2021. Accessed on May 31, 2021. https://www.law.cornell.edu/cfr/text/44/206.35

Electronic U.S. Code (44 CFR § 206.36), 2021. Accessed on May 31, 2021. https://www.law.cornell.edu/cfr/text/44/206.36

Electronic U.S. Code (44 CFR § 206.38), 2021. Accessed on May 31, 2021. https://www.law.cornell.edu/cfr/text/44/206.38

Electronic U.S. Code (44 CFR § 206.40), 2021. Accessed on May 31, 2021. https://www.law.cornell.edu/cfr/text/44/206.40

Fahlenbrach, Rudiger, Minsu Ko and Rene Stulz, 2025, Politics, regulations and payout policies, Working Paper, presented at the NBER SI, 2025.

Federal Register, 2020. Presidential Documents. Accessed on September 5, 2020. https://www.federalregister.gov/presidential-documents

FEMA, 2020. FEMA preliminary damage assessment guide, FEMA publication.

Gallup, 2021, How does Gallup polling work? Accessed on April 28, 2021. https://news.gallup.com/poll/101872/how-does-gallup-polling-work.aspx.

Gande, Amar, Kose, John, Vinay, Nair, and Lemma W., Senbet, 2020. Taxes, institutions, and innovation: Theory

Garrett, Thomas A and Russell S., Sobel, 2003. The Political Economy of FEMA Disaster Payments, Economic Inquiry 41, 496-509.

Healy, Andrew, and Neil, Malhotra, 2009. Myopic voters and natural disaster policy. American *Political Science Review 103*, 387-406.

Heersing, Boris, Jeffery A., Jenkins, Michael P., Olson, and Brenton D., Peterson, 2022. Natural disasters, 'partisan retrospection' and U.S. presidential elections. Political Behavior 44, 1225-1246.

Hellwig, Martin, 2000. "On the economics and politics of corporate finance and corporate control"., in X. Vives (ed.), Corporate governance: Theoretical and empirical perspectives, Cambridge, Cambridge University Press, 95-136.

Hodler, Roland, and Paul A., Raschky, 2014. Regional favoritism. *The Quarterly Journal of Economics 129*, 995-1033.

Holmstrom, Bengt, and Steven N., Kaplan. Corporate governance and merger activity in the United States: Making sense of the 1980s and the 1990s. *Journal of Economic Perspectives 15*, 121-144.

Husted, Thomas, and David, Nickerson, 2022. Governors and electoral hazards in the allocation of federal disaster aid. Southern Economic Journal, 1-18.

Jones, Jeffrey M., 2011. Obama approval rallies six points to 52% after Bin Laden death. Gallup. https://news.gallup.com/poll/147437/obama-approval-rallies-six-points-bin-laden-death.aspx, consulted on July 24th, 2025.

Kahn, Matthew E., 2005. The death toll from natural disasters: the role of income, geography, and institutions. Review of Economics and Statistics 87, 271-284.

Kalmnovitz, Joseph, 2023. Regulatory intensity and firm-specific exposure. *Review of Financial Studies 36*, 331-3347.

Kaplan, Jacob. United States Governors 1775-2020, 2020. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2020-07-01. https://doi.org/10.3886/E102000V2)

Kirchberger, Martina, 2017. Natural disasters and labor markets. Journal of Development Economics 125, 40-58.

Krause, Thomas, and Merih, Sevilir, 2023. Female politicians and female entrepreneurship. Working Paper Series.

Kriner, Douglas L, and Andrew, Reeves, 2015. Presidential particularism in disaster declarations and military base closures. *Presidential Studies Quarterly 45*, 679-702.

La Porta, Rafael, Lopez-de-Silanes, Florencio, and Andrei, Shleifer, 2002. Government ownership of banks. *Journal of Finance 57*, 265-301.

La Porta, Rafael, Lopez-de-Silanes, Florencio, Shleifer, Andrei, and Robert, Vishny, 2000. Investor protection and corporate governance. *Journal of Financial Economics 5*8, 3-27.

La Porta, Rafael, Lopez-de-Silanes, Florencio, Shleifer, Andrei, and Robert, Vishny, 1998. Law and Finance, *Journal of Political Economy 106*, 1113-1155.

Larcinese, Valentino, Rizzo, Leonzio, and Cecilia, Testa, 2006. Allocating the U.S. Federal Budget to the states: the impact of the president. *The Journal of Politics 68*, 447-456.

Leland, Bybee, Bryan T., Kelly, Asaf, Manela, and Dacheng, Xiu, 2021. Business news and business cycles. NBER working paper series 29344.

Lindsay, Bruce R., 2020. SBA disaster loan program: Frequently asked questions. *Congressional Research Service report R44412*, 1-7.

Miller, Gary, and Norman, Schofield, 2008. The transformation of the Republican and Democratic Party coalitions in the U.S. *Perspectives on Politics 6*, 433-450.

MIT Election Data and Science Lab, 2017, ""“President 1976–2020"", https://doi.org/10.7910/DVN/42MVDX, Harvard Dataverse, V6, UNF:6:4KoNz9KgTkXy0ZBxJ9ZkOw== [fileUNF]

National Hurricane Center and Central Pacific Hurricane Center, 2021. Tropical Cyclone climatology. Accessed on May 22, 2021. https://www.nhc.noaa.gov/climo/

Neumayer, Eric, and Thomas, Plümper, 2007. The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy, 1981–2002. Annals of the Association of American Geographers 97, 551-566.

Neumayer, Eric, Plümper, Thomas, and Fabien, Barthel, 2014. The political economy of natural disaster damage. *Global Environmental Change 24*, 8-19.

Newport, Frank, 2011. History suggests a rally in Obama’s job approval rating as a result of Bin Laden’s death. Gallup. https://news.gallup.com/opinion/polling-matters/169721/history-suggests-rally-obama-job-approval-rating-result-bin-laden-death.aspx, consulted on July 24th, 2025.

Newport, Frank, and Lydia, Saad, 2021. Review: Presidential job approval. Public Opinion Quarterly 85, 223-241.

Pantti, Mervi, Wahl-Jorgensen, Karin, and Simon Cottle, 2012. Disasters and the Media, Simon Cottle, 235 pages.

Sapienza, Paola, 2004. The effect of government ownership on bank lending. *Journal of Financial Economics 72*, 357-384.

Sargan, John Denis. 1958. The estimation of economic relationships using instrumental variables. Econometrica 26, 393-415.

SBA-Office of Disaster Assistance, 2012. Overview of SBA Disaster Declarations. Accessed on August 6, 2020. https://www.sba.gov/sites/default/files/articles/Overview_of_SBA_Disaster_Declarations_updated_0513.pdf

Shleifer, Andrei, and Daniel, Wolfenzon, 2002. Investor protection and equity markets. *Journal of Financial Economics 66*, 3-27.

Small Business Act Public Law 85-536, 1953, 1-321 pages. Accessed on August 6, 2020. https://www.sba.gov/sites/default/files/2019-03/Small_Business_Act.pdf

Strömbäck, Jesper, 2012. The Media and Their Use of Opinion Polls: Reflecting and Shaping Public Opinion. In: Holtz-Bacha Christina and Strömbäck, Jurgen (eds) Opinion Polls and the Media. Palgrave Macmillan, London.

Sudman, Seymour, 1982. Public Opinion Quarterly 46, 301-310.

Sylves, Richard, and Zoltán, I. Búzás, 2007. Presidential disaster declaration decisions, 1953-2003: What influences odds of approval? *State and Local Government Review 39*, 3-15.

The Stafford Act Section 102 (1), 2013, Accessed on August 10, 2020, https://www.doi.gov/sites/doi.gov/files/uploads/Stafford_Act_pdf.pdf

U.S. Census Bureau, 2020. About race. Accessed on September 1, 2020, https://www.census.gov/topics/population/hispanic-origin.html

U.S. Senate, 2020. Nominations: A historical overview, United States Senate, consulted on September 5, 2020. https://www.senate.gov/artandhistory/history/common/briefing/Nominations.htm

U.S. Small Business Administration Disaster Loans – Fact Sheet, 1-2 pages, Accessed on January 20, 2021. https://www.sba.gov/sites/default/files/Concord%20Disaster%20Loan%20Fact%20Sheets.pdf

United States Department of Agriculture, 2017, Emergency disaster designation and declaration process. Accessed on May 1, 2021, https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/archived-fact-sheets/emergency_disaster_designation_and_declaration_process_may2017.pdf,.

United States Senate, 2021. Accessed on April 28, 2021. https://www.senate.gov/reference/glossary_term/fiscal_year.htm,.

Verba, Sidney, 1996. The citizen as respondent: sample surveys and American democracy presidential address, American Political Science Association, 1995. *American Political Science Review 90*, 1-7.

Woolridge, Jeffrey M., 2008. Introductory econometrics: a modern approach, fourth edition. Cincinnati, OH: South-Western College Publishing. 865 pages.

Table 1: Summary statistics of the full sample

This Table shows the summary statistics of the full sample. The sample period is 1994-2020. Variables are defined in Appendix C of this paper.

Variable	Nobs	Mean	St. dev	Min	Median	Max
Ln(1 + mean SBA disaster approved amount loan-loss ratio)	42,246	0.31	0.23	0.00	0.31	0.81
Presidential job approval rating (One poll)	42,246	0.49	0.11	0.28	0.49	0.76
Presidential job approval rating (Two polls)	42,246	0.49	0.10	0.29	0.49	0.76
Presidential job approval rating (Three polls)	42,246	0.49	0.10	0.28	0.49	0.76
Democratic President	42,246	0.56	0.50	0.00	1.00	1.00
Second term President	42,246	0.42	0.49	0.00	0.00	1.00
Presidential re-election year	42,246	0.13	0.33	0.00	0.00	1.00
Friendly county	42,246	0.45	0.50	0.00	0.00	1.00
Swing county	42,246	0.14	0.35	0.00	0.00	1.00
County-level voter turnout share during a presidential election	42,246	0.04	0.07	0.00	0.02	0.39
President and U.S. State governor have same party	42,246	0.52	0.50	0.00	1.00	1.00
The relative economic importance of an U.S. State	42,246	0.04	0.03	0.00	0.03	0.13
Per capita income	42,246	10.33	0.34	9.63	10.32	11.16
Population of county	42,246	11.96	1.71	8.47	11.91	16.03
Unemployment rate	42,246	0.06	0.02	0.02	0.06	0.14
Member of U.S Senate Committee on Small Business and Entrepreneurship	42,246	0.15	0.35	0.00	0.00	1.00
Member of U.S. House Committee on Small Business	42,246	0.19	0.39	0.00	0.00	1.00
Assassination or capturing of an important adversary of the United States	42,246	0.04	0.20	0.00	0.00	1.00

Table 2: The impact of presidential job approval rating on the mean SBA disaster approved amount loan-loss ratio

This Table shows the results of the baseline Tobit regression model with left censoring at zero. The dependent variable is the natural logarithm of one plus the mean SBA disaster-approved loan-loss ratio in the odd-numbered columns, and the mean SBA disaster-approved loan-loss ratio in the even-numbered columns. We report t-statistics below the estimated coefficient. Standard errors are robust for heteroskedasticity and clustered at the ZIP code level. For brevity, we do not report the estimated coefficient and the corresponding t-statistics of the president fixed effects, FEMA natural disaster type fixed effects, and zip code fixed effects. We define the variables in Appendix C of this paper. We use asterisks to denote statistical significance at 1% (***), 5% (**), or 10% (*) level, respectively.

Dependent variable:	Ln(1+ mean loan-loss ratio)	Ln(1+ mean loan-loss ratio)	Ln(1+ mean loan-loss ratio)
	(1)	(2)	(3)
Presidential job approval rating (One poll)	-0.0930***		
	(-3.38)		
Presidential job approval rating (Two polls)		-0.0937***	
		(-3.40)	
Presidential job approval rating (Three polls)			-0.1008***
			(-3.63)
Democratic President	-0.0927	-0.0914	-0.0922
	(-1.14)	(-1.12)	(-1.13)
Second term President	0.0045	0.0043	0.0038
	(0.79)	(0.75)	(0.66)
Presidential re-election year	0.0122*	0.0133**	0.0133**
	(1.92)	(2.10)	(2.11)
Friendly county	-0.0092**	-0.0092**	-0.0091**
	(-2.39)	(-2.39)	(-2.38)
Swing county	0.0002	0.0004	0.0004
	(0.02)	(0.06)	(0.06)
County-level voter turnout share during a presidential election	-0.0374	-0.0381	-0.0330
	(-0.90)	(-0.92)	(-0.80)
President and U.S. State governor have same party	0.0067	0.0064	0.0063
	(1.64)	(1.56)	(1.55)

The relative economic importance of an U.S. State	-0.7365 (-0.86)	-0.6843 (-0.80)	-0.6159 (-0.72)
Per capita income	0.1907*** (7.18)	0.1912*** (7.21)	0.1876*** (7.06)
Population of county	0.0699*** (3.07)	0.0695*** (3.05)	0.0698*** (3.06)
Unemployment rate	-1.1901*** (-6.14)	-1.1820*** (-6.13)	-1.1956*** (-6.22)
Member of U.S Senate Committee on Small Business and Entrepreneurship	-0.0032 (-0.58)	-0.0028 (-0.51)	-0.0026 (-0.48)
Member of U.S. House Committee on Small Business	-0.0049 (-0.87)	-0.0052 (-0.91)	-0.0055 (-0.96)
Intercept	Yes	Yes	Yes
President FE	Yes	Yes	Yes
FEMA disaster type FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
Left censored observations	9,787	9,787	9,787
Number of observations	42,246	42,246	42,246
Pseudo R2	0.17	0.17	0.17

Table 3: Robustness test 1: Alternative measures of presidential job approval ratings

This Table shows the estimation results of the baseline Tobit regression model with left censoring at zero by using alternative measures of presidential job approval ratings: presidential majority approval, the presidential net job approval rating, and the presidential job approval rating own political party members. The dependent variable is the natural logarithm of one plus the mean SBA disaster-approved loan-loss ratio. We only report the estimated coefficient of the alternative measures of presidential job approval rating. We also report t-statistics below the estimated coefficient. Standard errors are robust for heteroskedasticity and clustered at the ZIP code level. We define the variables in Appendix C of this paper. We use asterisks to denote statistical significance at 1% (***), 5% (**), or 10% (*) level, respectively.

Dependent variable:	Ln(1 + Mean SBA disaster approved amount loan-loss ratio)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Presidential majority approval (One poll)	-0.0204***								
	(-3.83)								
Presidential majority approval (Two polls)		-0.0214***							
		(-4.28)							
Presidential majority approval (Three polls)			-0.0235***						
			(-5.14)						
Presidential net job approval rating (One poll)				-0.0436***					
				(-3.17)					
Presidential net job approval rating (Two polls)					-0.0447***				
					(-3.22)				
Presidential net job approval rating (Three polls)						-0.0488***			
						(-3.51)			
Presidential job approval rating own political party members (One poll)							-0.1206***		
							(-3.60)		
Presidential job approval rating own political party members (Two polls)								-0.0893***	
								(-2.77)	
Presidential job approval rating own political party members (Three polls)									-0.0810**
									(-2.43)
Intercept and control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

President FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FEMA disaster type FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County code FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Left censored observations	9,787	9,787	9,787	9,787	9,787	9,787	9,787	9,787	9,787
Number of observations	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246	42,246
Pseudo R2	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17

Table 4: Overview of assassinations or captures of important adversaries of the United States

This table provides a chronological overview of assassinations or captures of important adversaries of the United States.

Name	Role/Group	Date	Outcome	Location
Khalid Sheikh Mohammed	9/11 mastermind	3/1/2003	Captured	Rawalpindi, Pakistan
Saddam Hussein	Iraqi President	12/13/2003	Captured	Tikrit, Iraq
Ahmed Ghailani	Embassy bombing conspirator	7/25/2004	Captured	Gujarat, Pakistan
Osama bin Laden	al-Qaeda founder	5/2/2011	Killed	Abbottabad, Pakistan
Abu Anas al-Libi	Embassy bombing suspect	10/5/2013	Captured	Tripoli, Libya
Adam Yahiye Gadahn	al-Qaeda propagandist	1/19/2015	Killed	Pakistan
Abu Bakr al-Baghdadi	ISIS caliph	10/27/2019	Killed	Idlib Province, Syria
Qassem Soleimani	Iranian Quds Force commander	1/3/2020	Killed	Baghdad, Iraq

Table 5: Endogeneity of presidential job approval rating by using instrumental variable Tobit regression model.

This Table shows the results of the first and second stage of the instrumental variables Tobit regression model. The dependent variable of the first stage of instrumental Tobit regression is the presidential job approval rating. The dependent variable of the second stage of the instrumental Tobit regression is the natural logarithm of one plus the mean SBA disaster-approved loan-loss ratio. Standard errors are robust for heteroskedasticity and clustered at the zip code level. We report the t-test statistic below in parentheses of the estimated coefficient of the independent variable. For brevity, we do not report the estimated coefficients and the corresponding t-statistics of the different types of fixed effects. We report the results of the Wald test of exogeneity of presidential job approval rating. The null hypothesis is that the presidential job approval rating is exogenous. We define the variables in Appendix C of this paper. We use asterisks to denote statistical significance at 1% (***), 5% (**), or 10% (*) level, respectively.

	Presidential job approval rating (One poll)	Ln(1 + Mean SBA disaster approved amount loan-loss ratio)	Presidential job approval rating (Two polls)	Ln(1 + Mean SBA disaster approved amount loan-loss ratio)	Presidential job approval rating (Three polls)	Ln(1 + Mean SBA disaster approved amount loan-loss ratio)
	First stage (1)	Second stage (2)	First stage (3)	Second stage (4)	First stage (5)	Second stage (6)
Assassination or capturing of an adversary of the United States	0.0429*** (24.97)		0.0404*** (23.01)		0.0322*** (19.45)	
Instrumented presidential job approval rating (One poll)		-0.9132*** (-3.78)				
Instrumented presidential job approval rating (Two polls)				-0.9701*** (-3.78)		
Instrumented presidential job approval rating (Three polls)						-1.2152*** (-3.76)
Democratic President	0.0501*** (4.58)	-0.0499 (-0.61)	0.0646*** (6.11)	-0.0330 (-0.41)	0.0520*** (5.50)	-0.0324 (-0.40)
Second term President	-0.0324*** (-22.34)	-0.0249** (-2.40)	-0.0348*** (-24.44)	-0.0290** (-2.57)	-0.0377*** (-26.33)	-0.0411*** (-2.88)
Presidential re-election year	-0.0417*** (-24.45)	-0.0240* (-1.91)	-0.0299*** (-18.46)	-0.0150 (-1.41)	-0.0276*** (-17.23)	-0.0195* (-1.67)

Friendly county	0.0050***	-0.0048	0.0046***	-0.0048	0.0047***	-0.0035
	(5.88)	(-1.16)	(5.42)	(-1.18)	(5.58)	(-0.82)
Swing county	0.0142***	0.0122*	0.0164***	0.0151**	0.0154***	0.0180**
	(9.66)	(1.69)	(11.02)	(1.97)	(10.40)	(2.19)
County-level voter turnout share during a presidential election	0.1273***	0.0696	0.1188***	0.0686	0.1619***	0.1500**
	(8.73)	(1.29)	(7.85)	(1.27)	(11.00)	(2.14)
President and U.S. State governor have same party	-0.0179***	-0.0093	-0.0210***	-0.0133*	-0.0202***	-0.0175**
	(-17.30)	(-1.49)	(-20.34)	(-1.88)	(-19.42)	(-2.17)
The relative economic importance of an U.S. State	-4.5710***	-3.8989***	-3.9375***	-3.5451***	-2.8971***	-3.2455***
	(-24.47)	(-3.04)	(-20.59)	(-2.91)	(-14.81)	(-2.77)
Per capita income	-0.4398***	-0.1705	-0.4313***	-0.1873	-0.4365***	-0.2993**
	(-58.26)	(-1.56)	(-59.45)	(-1.64)	(-59.84)	(-2.08)
Population of county	0.0140**	0.0781***	0.0089	0.0740***	0.0102*	0.0779***
	(2.32)	(3.30)	(1.47)	(3.12)	(1.68)	(3.21)
Unemployment rate	-2.9135***	-3.6203***	-2.8070***	-3.6829***	-2.7495***	-4.3010***
	(-63.02)	(-4.92)	(-59.96)	(-4.89)	(-57.33)	(-4.68)
Member of U.S Senate Committee on Small Business and Entrepreneurship	-0.0141***	-0.0161**	-0.0103***	-0.0133**	-0.0077***	-0.0126**
	(-11.31)	(-2.40)	(-8.05)	(-2.09)	(-5.94)	(-2.00)
Member of U.S. House Committee on Small Business	-0.0056***	-0.0086	-0.0081***	-0.0113*	-0.0104***	-0.0161**
	(-4.04)	(-1.46)	(-5.44)	(-1.86)	(-6.90)	(-2.41)
Intercept	Yes	Yes	Yes	Yes	Yes	Yes
President FE	Yes	Yes	Yes	Yes	Yes	Yes
FEMA disaster type FE	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes
Left censored observations	9,787		9,787		9,787	
Number of observations	42,246		42,246		42,246	
Wald test of exogeneity of presidential job approval rating	11.86***		11.98***		12.31***	

Table 6: Media attention to natural disasters

This Table shows the effect of the presidential job approval rating conditional on media attention to natural disasters. For brevity, we only report the estimated coefficients and the corresponding t-statistics of the presidential job approval rating, media attention to natural disasters, *media attention to natural disasters x presidential job approval rating*. In the row before the final row, we report the average marginal effect of the presidential job approval rating (other variables at their sample mean). We use delta method computed standard errors to construct the t-statistic corresponding the average marginal effect of the presidential job approval rating. In the final row, we report the F-test statistic of the test whether the presidential job approval rating, media attention to natural disasters, *media attention to natural disasters x presidential job approval rating* are jointly statistically significantly different from zero. The dependent variable is the natural logarithm of one plus the mean SBA disaster-approved loan-loss ratio. Standard errors are robust for heteroskedasticity and clustered at the ZIP code level. We define the variables in Appendix C of this paper. We use asterisks to denote statistical significance at 1% (***), 5% (**), or 10% (*) level, respectively.

Dependent variable:	Ln(1 + Mean SBA disaster approved amount loan-loss ratio)		
	(1)	(2)	(3)
Presidential job approval rating (One poll)	-0.2625***		
	(-4.01)		
Presidential job approval rating (Two polls)		-0.2502***	
		(-3.83)	
Presidential job approval rating (Three polls)			-0.2637***
			(-3.96)
Media attention to natural disasters	-10.9005**	-9.5180**	-10.0390**
	(-2.20)	(-1.99)	(-2.02)
Presidential job approval rating x media attention to natural disasters	26.5240**	23.0343*	23.9150**
	(2.19)	(1.96)	(1.98)
Intercept and control variables	Yes	Yes	Yes
President FE	Yes	Yes	Yes
FEMA disaster type FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
Left-censored observations	9,787	9,787	9,787
Number of observations	42,246	42,246	42,246
Pseudo R2	0.17	0.17	0.17
Average marginal effect of job approval rating	-0.1077***	-0.1159***	-0.1241***
	(-3.19)	(-3.39)	(-3.61)
Joint significance of interacted terms and interaction terms	8.31***	7.80***	8.66***

Table 7: Political motive 1: Political affiliation

This Table shows the effect of the presidential job approval rating conditional on whether the president is from the Democratic Party. For brevity, we only report the estimated coefficients and the corresponding t-statistics of the presidential job approval rating, Democratic president, *Democratic president x presidential job approval rating*. In the row before the final row, we report the average marginal effect of the presidential job approval rating (other variables at their sample mean). We use delta method computed standard errors to construct the t-statistic corresponding the average marginal effect of the presidential job approval rating. In the final row, we report the F-test statistic of the test whether the presidential job approval rating, Democratic president, *Democratic president x presidential job approval rating* are jointly statistically significantly different from zero. The dependent variable is the natural logarithm of one plus the mean SBA disaster-approved loan-loss ratio. Standard errors are robust for heteroskedasticity and clustered at the ZIP code level. We define the variables in Appendix C of this paper. We use asterisks to denote statistical significance at 1% (***), 5% (**), or 10% (*) level, respectively.

Dependent variable:	Ln(1 + Mean SBA disaster approved amount loan-loss ratio)		
	(1)	(2)	(3)
Presidential job approval rating (One poll)	-0.0603* (-1.70)		
Presidential job approval rating (Two polls)		-0.0610* (-1.67)	
Presidential job approval rating (Three polls)			-0.0491 (-1.35)
Democratic president	-0.0476 (-0.54)	-0.0486 (-0.55)	-0.0218 (-0.25)
Presidential job approval rating x Democratic president	-0.1106 (-1.58)	-0.1038 (-1.47)	-0.1726** (-2.38)
Intercept and control variables	Yes	Yes	Yes
President FE	Yes	Yes	Yes
FEMA disaster type FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
Left-censored observations	9,787	9,787	9,787
Number of observations	42,246	42,246	42,246
Pseudo R2	0.17	0.17	0.17
Average marginal effect of job approval rating	-0.1227*** (-3.79)	-0.1196*** (-3.78)	-0.1465*** (-4.50)
Joint significance of interacted terms and interaction terms	5.31***	5.26***	7.16***

Table 8: Political motive 2: The presidential term

This Table shows the effect of the presidential job approval rating conditional on whether the president is her second term as the president of the United States. For brevity, we only report the estimated coefficients and the corresponding t-statistics of the presidential job approval rating, second-term president, *second-term president x presidential job approval rating*. In the row before the final row, we report the average marginal effect of the presidential job approval rating (other variables at their sample mean). We use delta method computed standard errors to construct the t-statistic corresponding the average marginal effect of the presidential job approval rating. In the final row, we report the F-test statistic of the test whether the presidential job approval rating, second-term president, *second term president x presidential job approval rating* are jointly statistically significantly different from zero. The dependent variable is the natural logarithm of one plus the mean SBA disaster-approved loan-loss ratio. Standard errors are robust for heteroskedasticity and clustered at the ZIP code level. We define the variables in Appendix C of this paper. We use asterisks to denote statistical significance at 1% (***), 5% (**), or 10% (*) level, respectively.

Dependent variable:	Ln(1 + Mean SBA disaster approved amount loan-loss ratio)		
	(1)	(2)	(3)
Presidential job approval rating (One poll)	-0.0205 (-0.55)		
Presidential job approval rating (Two polls)		-0.0084 (-0.22)	
Presidential job approval rating (Three polls)			-0.0123 (-0.32)
Second term president	0.0669*** (3.16)	0.0781*** (3.59)	0.0791*** (3.56)
Presidential job approval rating x second term president	-0.1247*** (-2.98)	-0.1484*** (-3.43)	-0.1514*** (-3.42)
Intercept and control variables	Yes	Yes	Yes
President FE	Yes	Yes	Yes
FEMA disaster type FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
Left-censored observations	9,787	9,787	9,787
Number of observations	42,246	42,246	42,246
Pseudo R2	0.17	0.17	0.17
Average marginal effect of job approval rating	-0.0733** (-2.57)	-0.0713** (-2.50)	-0.0765*** (-2.65)
Joint significance of interacted terms and interaction terms	7.97***	9.15***	9.66***

Table 9: Political motive 4: The presidential re-election year

This Table shows the effect of the presidential job approval rating conditional on whether the president is her re-election year as the president of the United States. For brevity, we only report the estimated coefficients and the corresponding t-statistics of the presidential job approval rating, presidential re-election year, *presidential re-election year x presidential job approval rating*. In the row before the final row, we report the average marginal effect of the presidential job approval rating (other variables at their sample mean). We use delta method computed standard errors to construct the t-statistic corresponding the average marginal effect of the presidential job approval rating. In the final row, we report the F-test statistic of the test whether the presidential job approval rating, presidential re-election year, *presidential re-election year x presidential job approval rating* are jointly statistically significantly different from zero. The dependent variable is the natural logarithm of one plus the mean SBA disaster-approved loan-loss ratio. Standard errors are robust for heteroskedasticity and clustered at the ZIP code level. We define the variables in Appendix C of this paper. We use asterisks to denote statistical significance at 1% (***), 5% (**), or 10% (*) level, respectively.

Dependent variable:	Ln(1 + Mean SBA disaster approved amount loan-loss ratio)		
	(1)	(2)	(3)
Presidential job approval rating (One poll)	-0.1058***		
	(-3.79)		
Presidential job approval rating (Two polls)		-0.1019***	
		(-3.66)	
Presidential job approval rating (Three polls)			-0.1088***
			(-3.88)
Presidential re-election year	-0.0897***	-0.0681*	-0.0686*
	(-2.59)	(-1.83)	(-1.80)
Presidential job approval rating x presidential re-election year	0.2119***	0.1656**	0.1648**
	(2.97)	(2.20)	(2.16)
Intercept and control variables	Yes	Yes	Yes
President FE	Yes	Yes	Yes
FEMA disaster type FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
Left-censored observations	9,787	9,787	9,787
Number of observations	42,246	42,246	42,246
Pseudo R2	0.17	0.17	0.17
Average marginal effect of job approval rating	-0.0792***	-0.0812***	-0.0881***
	(-2.84)	(-2.89)	(-3.11)
Joint significance of interacted terms and interaction terms	8.58***	7.36***	7.82***

Table 10: Political motive 4: The local political importance of affected cities

This Table shows the effect of the presidential job approval rating conditional on the local political importance of the natural disaster hit city. The measures of local political importance of the natural disaster hit city are friendly county (Panel A), swing county (Panel B), and a county that has a relatively higher voter turnout (Panel C). For brevity, we only report the estimated coefficients and the corresponding t-statistics of the presidential job approval rating, the measure of local political importance of the natural disaster hit city, *the measure of local political importance of the natural disaster hit city x presidential job approval rating one poll*. In the row before the final row, we report the average marginal effect of the presidential job approval rating (other variables at their sample mean). We use delta method computed standard errors to construct the t-statistic corresponding the average marginal effect of the presidential job approval rating. In the final row, we report the F-test statistic of the test whether the presidential job approval rating, the measure of local political importance of the natural disaster hit city, *the measure of local political importance of the natural disaster hit city x presidential job approval rating* are jointly statistically significantly different from zero. The dependent variable is the natural logarithm of one plus the mean SBA disaster-approved loan-loss ratio. Standard errors are robust for heteroskedasticity and clustered at the ZIP code level. We define the variables in Appendix C of this paper. We use asterisks to denote statistical significance at 1% (***), 5% (**), or 10% (*) level, respectively.

Panel A: A friendly county

Dependent variable:	Ln(1 + Mean SBA disaster approved amount loan-loss ratio)		
	(1)	(2)	(3)
Presidential job approval rating (One poll)	-0.0825**		
	(-2.29)		
Presidential job approval rating (Two polls)		-0.0749**	
		(-2.12)	
Presidential job approval rating (Three polls)			-0.0864**
			(-2.41)
Friendly county	-0.0011	0.0059	0.0023
	(-0.06)	(0.34)	(0.13)
Presidential job approval rating x friendly county	-0.0167	-0.0315	-0.0237
	(-0.45)	(-0.85)	(-0.63)
Intercept and control variables	Yes	Yes	Yes
President FE	Yes	Yes	Yes
FEMA disaster type FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
Left-censored observations	9,787	9,787	9,787
Number of observations	42,246	42,246	42,246
Pseudo R2	0.17	0.17	0.17
Average marginal effect of job approval rating	-0.0901***	-0.0892***	-0.0972***
	(-3.18)	(-3.18)	(-3.43)

Joint significance of interacted terms and interaction terms	5.89***	6.03***	6.51***

Panel B: A swing county

Dependent variable:	Ln(1 + Mean SBA disaster approved amount loan-loss ratio)		
	(1)	(2)	(3)
Presidential job approval rating (One poll)	-0.0897***		
	(-3.18)		
Presidential job approval rating (Two polls)		-0.0910***	
		(-3.21)	
Presidential job approval rating (Three polls)			-0.0979***
			(-3.42)
Swing county	0.0110	0.0089	0.0092
	(0.43)	(0.35)	(0.36)
Presidential job approval rating x swing county	-0.0219	-0.0172	-0.0178
	(-0.43)	(-0.34)	(-0.34)
Intercept and control variables	Yes	Yes	Yes
President FE	Yes	Yes	Yes
FEMA disaster type FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
Left-censored observations	9,787	9,787	9,787
Number of observations	42,246	42,246	42,246
Pseudo R2	0.17	0.17	0.17
Average marginal effect of job approval rating	-0.0929***	-0.0935***	-0.1005***
	(-3.37)	(-3.39)	(-3.62)
Joint significance of interacted terms and interaction terms	3.83***	3.87***	4.41***

Panel C: A county with a relatively higher voter turnout

Dependent variable:	Ln(1 + Mean SBA disaster approved amount loan-loss ratio)		
	(1)	(2)	(3)
Presidential job approval rating (One poll)	-0.1060*** (-3.50)		
Presidential job approval rating (Two polls)		-0.0973*** (-3.20)	
Presidential job approval rating (Three polls)			-0.1029*** (-3.36)
County-level voter turnout share during a presidential election	-0.1637 (-1.30)	-0.0737 (-0.58)	-0.0536 (-0.41)
Presidential job approval rating x county-level voter turnout share during a presidential election	0.2696 (1.06)	0.0759 (0.30)	0.0438 (0.17)
Intercept and control variables	Yes	Yes	Yes
President FE	Yes	Yes	Yes
FEMA disaster type FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
Left-censored observations	9,787	9,787	9,787
Number of observations	42,246	42,246	42,246
Pseudo R2	0.17	0.17	0.17
Average marginal effect of job approval rating	-0.0939*** (-3.41)	-0.0939*** (-3.40)	-0.1009*** (-3.63)
Joint significance of interacted terms and interaction terms	4.54***	4.25***	4.78***

Table 11: Political Motive 5: Congressional Representation on SBA Committees

This Table shows the effect of the presidential job approval rating conditional on the Member of U.S Senate Committee on Small Business and Entrepreneurship and Member of U.S. House Committee on Small Business. For brevity, we only report the estimated coefficients and the corresponding t-statistics of the presidential job approval rating, the member to the U.S. House or U.S. Senate commission, *the member to the U.S. House or U.S. Senate commission x presidential job approval rating one poll*. In the row before the final row, we report the average marginal effect of the presidential job approval rating (other variables at their sample mean). We use delta method computed standard errors to construct the t-statistic corresponding the average marginal effect of the presidential job approval rating. In the final row, we report the F-test statistic of the test whether the presidential job approval rating, the measure of local political importance of the natural disaster hit city, *the membership to either the U.S. Senate or U.S. House committee x presidential job approval rating* are jointly statistically significantly different from zero. The dependent variable is the natural logarithm of one plus the mean SBA disaster-approved loan-loss ratio. Standard errors are robust for heteroskedasticity and clustered at the ZIP code level. We define the variables in Appendix C of this paper. We use asterisks to denote statistical significance at 1% (***), 5% (**), or 10% (*) level, respectively.

Dependent variable:	Ln(1 + Mean SBA disaster approved amount loan-loss ratio)		
	(1)	(2)	(3)
Presidential job approval rating (One poll)	-0.0966***		
	(-3.26)		
Presidential job approval rating (Two polls)		-0.0974***	
		(-3.25)	
Presidential job approval rating (Three polls)			-0.1056***
			(-3.48)
Member of U.S Senate Committee on Small Business and Entrepreneurship	0.0446*	0.0393*	0.0342
	(1.93)	(1.71)	(1.49)
Presidential job approval rating x Member of U.S Senate Committee on Small Business and Entrepreneurship	-0.1019**	-0.0897*	-0.0776
	(-2.04)	(-1.81)	(-1.58)
Member of U.S. House Committee on Small Business	-0.0492**	-0.0454*	-0.0450*
	(-2.07)	(-1.91)	(-1.88)
Presidential job approval rating x Member of U.S. House Committee on Small Business	0.0873*	0.0795*	0.0784
	(1.84)	(1.66)	(1.63)
Intercept and control variables	Yes	Yes	Yes
President FE	Yes	Yes	Yes
FEMA disaster type FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
Left-censored observations	9,787	9,787	9,787
Number of observations	42,246	42,246	42,246

Pseudo R2	0.17	0.17	0.17
Average marginal effect of job approval rating	-0.0948*** (-3.44)	-0.0953*** (-3.46)	0.1019*** (-3.67)
Joint significance of interacted terms and interaction terms	4.09***	3.76***	3.87***

Appendix A

Appendix A shows frequency of the different type of FEMA classified natural disaster types by U.S. states and the total number of presidential declared disasters by U.S. State.

Table A.1: Overview of different type of FEMA classified presidential natural disasters by U.S. State

U.S. State	U.S. State name	Coastal Storm	Earthquake	Fire	Flood	Hurricane	Mud/Landslide	Severe Ice Storm	Severe Storm	Snow	Tornado	Typhoon	Volcano	Total Presidential Declared disasters
AK	Alaska	0	0	0	0	0	0	0	2	0	0	0	0	2
AL	Alabama	0	0	0	5	6	0	3	13	0	1	0	0	28
AR	Arkansas	0	0	0	3	1	0	1	14	0	0	0	0	19
AZ	Arizona	0	0	0	1	1	0	0	1	0	0	0	0	3
CA	California	0	0	0	3	3	0	0	14	0	1	1	0	22
CO	Colorado	0	0	1	0	0	0	0	3	0	1	0	0	5
DE	Delaware	0	0	0	1	2	0	0	2	0	0	0	0	5
FL	Florida	1	1	0	2	13	0	0	11	1	1	1	0	31
GA	Georgia	0	1	0	2	2	0	0	6	0	3	0	0	14
HI	Hawai	0	0	0	1	0	0	0	4	0	0	0	1	6
IA	Iowa	0	0	1	2	1	0	0	7	0	0	0	0	11
ID	Idaho	0	1	0	1	0	0	0	3	0	0	0	0	5
IL	Illinois	0	0	0	5	0	1	0	14	0	2	0	0	22
IN	Indiana	1	1	0	0	3	0	0	11	0	1	0	0	17
KS	Kansas	0	0	1	1	0	1	1	5	0	1	0	0	10
KY	Kentucky	0	1	3	4	1	0	0	17	0	0	0	0	26
LA	Louisiana	0	0	0	1	7	0	0	5	0	0	0	0	13
MA	Massachusetts	0	0	1	2	0	0	0	7	0	0	0	0	10
MD	Maryland	0	0	0	1	1	0	0	4	0	0	0	0	6
ME	Maine	0	0	0	2	1	0	0	5	0	0	0	0	8
MI	Michigan	0	1	0	1	0	0	0	3	0	0	0	0	5
MN	Minnesota	0	0	0	3	2	0	0	9	0	2	0	0	16
MO	Missouri	0	0	2	3	1	0	0	14	0	0	0	0	20
MS	Mississippi	0	1	0	7	3	0	0	15	0	1	0	0	27
MT	Montana	0	0	1	1	0	0	0	0	0	0	0	0	2
NC	North Carolina	0	0	0	2	7	0	0	5	0	2	1	0	17
ND	North Dakota	0	0	0	1	0	0	0	1	0	0	0	0	2

NE	Nebraska	0	0	0	0	2	0	0	3	0	0	0	0	5
NH	New Hampshire	0	0	0	0	1	0	0	5	0	1	0	0	7
NJ	New Jersey	1	0	0	0	4	0	0	10	0	0	1	0	16
NM	New Mexico	0	0	0	0	0	0	0	3	0	0	0	0	3
NV	Nevada	0	0	0	0	0	0	0	3	0	0	0	0	3
NY	New York	0	0	0	1	7	0	0	15	0	1	0	0	24
OH	Ohio	0	0	1	1	2	0	0	13	0	0	2	0	19
OK	Oklahoma	0	0	1	3	1	0	2	12	0	1	0	0	20
OR	Oregon	0	0	1	1	0	0	0	3	0	0	0	0	5
PA	Pennsylvania	0	0	2	0	5	0	0	7	0	0	0	0	14
RI	Rhode Island	0	0	0	0	1	0	0	1	0	0	0	0	2
SC	South Carolina	0	0	0	0	1	0	0	1	0	0	0	0	2
SD	South Dakota	0	0	0	2	0	0	0	4	0	0	0	0	6
TN	Tennessee	0	0	0	3	0	0	0	14	0	1	0	0	18
TX	Texas	0	1	2	4	3	0	0	17	0	0	1	0	28
UT	Utah	0	0	0	0	0	0	0	2	0	0	0	0	2
VA	Virginia	1	0	1	1	5	0	0	10	0	0	0	0	18
VT	Vermont	0	0	0	0	1	0	0	5	0	1	0	0	7
WA	Washington	0	0	0	3	0	0	0	9	0	0	0	0	12
WI	Wisconsin	0	0	1	2	0	0	0	8	0	0	1	0	12
WV	West Virginia	0	0	1	4	3	0	0	14	0	0	0	0	22
WY	Wyoming	0	0	0	0	1	0	0	0	0	0	1	0	2
Total		4	8	20	80	92	2	7	354	1	21	9	1	599

Appendix B

This Table shows detailed summary statistics of the Gallup Polls by President over the period from 1996 to 2020. We do not include the Gallup Polls conducted in the month January when the incumbent President left her office. This is the case for President Clinton in January 2001; President W. Bush in January 2009; and President Obama in January 2017.

Table B.1: Summary statistics of public opinion polls and presidential job approval rating

Calendar year	President	Mean days of opinion poll	Frequency of opinion poll	Mean Job Approval Rating (One poll)
1996	William J. Clinton	2.17	24	54.54
1997	William J. Clinton	2.21	19	58.26
1998	William J. Clinton	1.65	31	63.77
1999	William J. Clinton	2.00	34	61.21
2000	William J. Clinton	2.21	28	59.89
2001	George W. Bush	2.29	31	66.42
2002	George W. Bush	2.22	45	72.18
2003	George W. Bush	1.88	41	60.49
2004	George W. Bush	2.26	35	50.77
2005	George W. Bush	2.40	42	46.05
2006	George W. Bush	2.43	30	38.03
2007	George W. Bush	2.37	27	33.63
2008	George W. Bush	2.50	30	29.97
2009	Barack Obama	6.00	49	57.65
2010	Barack Obama	6.00	52	46.87
2011	Barack Obama	6.00	52	44.79
2012	Barack Obama	6.00	53	47.68
2013	Barack Obama	5.98	52	46.52
2014	Barack Obama	5.94	52	42.37
2015	Barack Obama	6.00	52	46.33
2016	Barack Obama	6.00	52	51.46
2017	Donald Trump	6.06	49	38.51
2018	Donald Trump	6.00	51	40.33
2019	Donald Trump	12.14	21	41.62
2020	Donald Trump	13.47	19	44.32

Appendix C

This Table shows the definition and data source for each variable used in the regression analysis of this paper.

Table C.1: Variable definitions and data sources

Variable	Definition and data source
Mean SBA disaster approved amount loan-loss ratio	Mean ratio of total approved SBA disaster loans to total verified SBA disaster loans for each ZIP code by presidential declared disaster. We first calculate the loan-loss ratio for each individual disaster application. Disaster approved amount loan is the sum of the approved real estate and approved content loan for each individual disaster loan application. Disaster loss amount is the sum of the verified real estate disaster related losses and verified content disaster related losses for each disaster loan application. We take the mean of all these ratios for each ZIP code by presidential declared disaster. We consider individual consumer and business disaster loan applications. (Data source: SBA)
Ln (1 + mean SBA disaster approved amount loan-loss ratio)	Natural logarithm of the sum of one and the mean SBA disaster approved amount loan-loss ratio. (Data source: SBA)
Presidential job approval rating (One poll)	The final presidential job approval rating before the natural disaster. I scale this variable by dividing it by 100. (Data source: The American Presidency Project).
Presidential job approval rating (Two polls)	Average of the final two presidential job approval ratings before the natural disaster. We scale this variable by dividing it by 100. (Data source: The American Presidency Project).
Presidential job approval rating (Three polls)	Average of the final three presidential job approval ratings before the natural disaster. We scale this variable by dividing it by 100. (Data source: The American Presidency Project).
Presidential net job approval rating (One poll)	The difference between the presidential job approval rating (One poll) and the presidential disapproval rating (One poll). We scale this variable by dividing it by 100 (Data source: Gallup). We calculate in the same way the presidential approval min disapproval (Two and three polls). (Data source: Gallup).
Presidential majority approval rating dummy (One poll)	Dummy (0,1) with one if the presidential job approval rate (One poll) is more than 50%, else zero. We calculate in the same way the Presidential majority approval rating dummy (Two and three polls). (Data source: Gallup).
Presidential job approval rating own political party members (One poll)	Final presidential job approval rating based on followers from the political party of the incumbent President before the natural disaster. The data is unavailable for President H.W. Bush. We scale this variable by dividing it by 100. (Data source: Gallup).

Second term president	Dummy (0,1) with one if the incumbent President is a second-term President, else zero. (Data source: The American Presidency Project)
Democratic president	Dummy (0,1) with one if the political party of the incumbent President is the democratic president, else zero. (Data source: The American Presidency Project)
Presidential re-election year	Dummy (0,1) with one if the calendar year indicates that the incumbent President is up for her re-election, else zero. (Data source: Dave Leip's Atlas of Presidential Elections (1988-1996) and the MIT Election Data and Science Lab (2000-2016))
Friendly county	Dummy (0,1) with one if the electoral vote of the county went in favor of the incumbent President during the most recent presidential elections, else zero. (Data source: Dave Leip's Atlas of Presidential Elections (1988-1996) and the MIT Election Data and Science Lab (2000-2016))
Swing county	Dummy (0,1) with one if the county was a swing county in the most recent presidential elections, else zero. A swing county is when the absolute difference between the vote share of the two major party presidential candidates is less than five percentage points (Data source: Sylves and Búzás 2007; Dave Leip's Atlas of Presidential Elections (1988-1996) and the MIT Election Data and Science Lab (2000-2016)).
The relative economic importance of an U.S. State	Ratio of the GDP of a county to the GDP of a State (Date source: Bureau of Economic Analysis).
County-level voter turnout share during a presidential election	Ratio of the total number of votes in a county to the total number of the votes in the U.S. State of the county. (Data source: Dave Leip's Atlas of Presidential Elections (1988-1996) and the MIT Election Data and Science Lab (2000-2016)).
President and U.S. State governor have same party	Dummy (0,1) with one if the incumbent President and the state governor have the same party affiliation, else zero. (Data source: Kaplan (2020) and National Governors Association website (https://www.nga.org/cms/home)).
Per capita income	The natural logarithm of the per capita income of a county by year (Date source: Bureau of Economic Analysis).
Population of county	The natural logarithm of the population of a county by year (Data source: Bureau of Economic Analysis).
Unemployment rate	The unemployment rate of a county by year (Data source: Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS) program).
Member of U.S Senate Committee on Small Business and Entrepreneurship	Dummy (0,1) is one if a U.S. Senator is member of the U.S. Senate Committee on Small Business and Entrepreneurship, else zero (Data source: Congress.gov).

Member of U.S. House Committee on Small Business	Dummy (0,1) is one if a representative of the U.S. House of Representatives is member of the U.S. House Committee on Small Business, else zero (Data source: History, Art & Archives of United States House of Representatives).
Assassination or capturing of an important adversary of the United States	Dummy (0,1) if an assignation or capturing of an important adversary of the United States happened in a month by year, else zero (Data source: CIA, FBI, White House, Pentagon, CNN, NYT, and Reuters).