Blame-Games, the Media and Discretionary Behaviour of Bureaucrats

Paul A. Raschky*

Abstract:
This paper investigates the negative effect of media reports on the provision of public goods by bureaucratic agencies. I provide a simple career concerns model where negative publicity in the media can affect the bureaucrat's future wage. The proposition of the model is tested using data of the U.S. Army Corps of Engineers' spending on flood protection from 1968-2008.

Keywords: Theory of Bureaucracy, Blame-Shifting, Natural Hazards

JEL classification: D72, D73, Q54

* [Corresponding author], Department of Economics, Monash University, 900 Dandenong Rd., Caulfield VIC 3145, Australia; email: paul.raschky@buseco.monash.edu.au

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1 Introduction

Only recently, media’s influence on government policy making has attracted attention from economists. [Besley and Burgess (2002)] find that Indian states with a higher penetration of newspapers receive more governmental food and calamity relief following natural disasters. [Strömberg (2004)] investigates the effect of radio listeners on federal relief spending under the New Deal in the U.S. A panel-data analysis by [Shi and Svensson (2002)] finds that per capita endowment with radios can moderate political business cycles. These studies focus on the effect of media on politicians behaviour. An area that has received only minor attention is the relationship between the media and bureaucratic agencies. Sometimes, politicians tend to delegate the more “risky” tasks to bureaucrats and keep “safer” tasks ([Alesina and Tabellini, 2008]). In general media can have two effects on bureaucratic behaviour: First, it can reduce informal bureaucratic output. People learn via the media reports about the outcomes of public spending and organizational slack. Voters can put indirect pressure on bureaucrats to demand politicians to tighten public spending in certain areas. An overall loss of prestige of a bureaucratic agency also reduces the outside career opportunities of bureaucrats. Second, it can increase formal bureaucratic output. Media can host a blame-game between the public, politicians and bureaucrats. Through this process of blame shifting, partly via the media, the bureaucrat ends up as the scapegoat. The possibility of becoming the “scapegoat of last resort” creates incentives for the bureaucrat to undertake actions that minimize this risk. [Sobel and Lee-A-son (2006)] define two types of errors of public bureaus responsible for risky tasks: Type-one-errors occur if agencies are too under-cautious. In connection with the flood disaster following hurricane “Katrina” [Shughart II (2006)] points out that bureaucrats seemed to have neglected less visible infrastructure projects and maintenance work on existing infrastructure. The public outrage about sluggish maintenance of existing levees was immense. In order to prevent type-one-errors bureaucrats might be over-cautiousness and commit type-two-errors. Bureaucratic agencies have an incentive to be over-
cautious and provide too much of their service because they do not want to be made responsible for disastrous events and the consequences for society.

This paper provides a simple model that describes the influence of blame-shifting in the media on discretionary bureaucratic behaviour and tests the hypotheses on data of the U.S. Army Corps of Engineers’ (USACE) spending on flood protection.

2 The model

The theoretical framework presented by Holmstrom (1999) is adopted to model the behaviour of a chief bureaucrat of an agency responsible for the provision of protective measures against natural hazards (e.g. building dykes). In period $t$, $t \in [1, 2]$ the agency’s output is

$$x_t = \eta + a_t + \epsilon_t$$

(1)

where $\eta$ is the bureaucrats ability, $\eta \in [-\infty, \infty]$, that is unknown to anyone. The bureaucrat’s effort in period $t$ is $a_t \in [0, \infty]$ and $\epsilon_t$ is a shock with ($\epsilon_t \sim$ iid $(0, \sigma^2_\epsilon)$) (e.g. a sudden increase in the likelihood of floods due to a climatic phenomenon). The bureaucrat’s utility depends on her wage $w_t$ in $t$ and the disutility involved with effort $g$.

$$U_t = w_t - g(a_t)$$

(2)

The output in period 1 is observed by everyone, however it cannot be described in a formal contract ex ante. Therefore, the manager receives a fixed wage, $w_1$, in period 1. In period 2, the compensation of the manager depends on the public perception of her past performance.

At the end of period 1 natural disasters occur and the agency’s output is “evaluated” by nature and the public. Increased precipitation could have caused an increase in the flow rate of a river, but dykes have prevented a disaster. Some disasters might have been beyond the control of the agency (e.g. flash floods with a very low probability of occurrence). However, certain disasters might have been preventable (e.g. bad maintenance of existing pro-
tective measures or poor effort in the identification of hazard zones). Those
directly affected by the disaster might not have enough impact to put press-
ure on the bureaucrat directly or indirectly via politicians. However, with
a probability $p(a)$ with $p(a) \in [0,1]$, a negative media report is aired and
blame is shifted to the bureaucrat. This negative publicity decreases the
overall public perception of the bureaucrat’s performance and her wage be-
comes $w_t(s_t)$ with $s_t = x_t - \xi h_t$. I assume that $h_t$ is the amount of negative
media reports and $\xi$ is a positive constant. In the situation where $x_t = h_t$
the bureaucrat loses her job. More effort by the agency can decrease the
likelihood that negative media reports are aired and that blame is shifted,
$p' < 0$ and $p'' = 0$. The risk-neutral bureaucrat chooses her level of effort to
maximize the intertemporal utility

$$E(U) = U_1 + p(a)U_2^m + (1 - p(a))U_2^n$$  \hspace{1cm} (3)$$

The solution of (3) determines the strategy equilibrium and an effort level
will be $a^\ast$. Applying the implicit function theorem on the first order condition
shows that $\frac{\partial a^\ast}{\partial h} > 0$. This implies that optimal effort increases in the amount
of negative media reports $h$.

3 Empirical application

I test the above proposition with a sample on the USACE’s expenditure
on flood control projects. Blame-shifting via the media and its negative
impact on the public perception of an agency’s output increases the output
in preceding periods in order to prevent future blame-shifting. In order to
test this relationship, the following equation is specified:

$$FloodExp_t = \beta_0 + \beta_1 FloodExp_{t-1} + \beta_2 Media_{t-x} + \beta_3 Flood_{t-x} + \nu_t$$  \hspace{1cm} (4)$$

$FloodExp_t$ is the fraction of the USACE’s total budget used for flood
control measures in year $t$. We use this variable as an empirical proxy for
the USACE’s effort. The explanatory variable of interest is $Media_{t-x}$, which
is a dummy variable that switches to 1 if there has been at least one negative report on one of the major U.S. TV station in connection with flood control measures and the USACE in \( x \) preceding years\(^1\). We expect this variable to have a positive impact on the dependent variable. \( \text{Flood}_{t-x} \) contains the number of major flood and hurricane disasters in the U.S. in \( x \) preceding years. We also estimate an alternative specification where \( \text{Flood}_{t-x} \) is replaced with \( \text{Fatalities}_{t-x} \), the total number of fatalities from floods and hurricanes in \( x \) preceding years. The purpose of this variable is to control for potential short term shocks in the public demand for flood protection following a major disasters. \( \beta \) is a vector of parameters to be estimated and \( \upsilon \) is the error term. The dataset is composed of yearly data from 1968 to 2008. A detailed description of the variables and datasources can be found in the appendix section of this paper. Table 1 reports the descriptive statistics.

Results of the OLS-estimates of equation are presented in Table 2. I do not find empirical support for the hypothesis using the first lag of the media variable. The sign of the coefficients for both the first lag media variable and first lag flood variable appear to be negative. However, the coefficients are not significantly different from zero.

The results for the estimates with the second lag of the media variable are consistent with the hypothesis that blame-shifting in the media can have a positive effect on a bureaucratic agency’s output. The coefficients are positive and significant. One explanation for this lagged reaction could be found in delays in the USACE’s internal budget allocation. It might take time until the information from the negative publicity is incorporated in budget planning and ultimately implemented in actual flood protection projects. Interestingly, the spending behaviour does rather respond to negative news reports in preceding years and not to disaster events. Both disaster control variables do not appear to have a significant impact on USACE’s flood control expenditure.

To ensure that the results are not driven by the events following hurricane "Katrina", I re-estimated the models with the observations from 2005 onwards.

excluded (columns 5-8). The coefficients for the second lag media variable are again positive and significant at the 90%-level.

4 Conclusion & Suggestions

Blame-games in the media can increase the provision of public goods by bureaucratic agencies. The USACE’s provision of flood control measures appears to respond to negative media reports on the agency rather than on the occurrence of flood disasters. However, it is hard to evaluate if this increase is the result of a decrease of organizational slack or simply an internal redistribution of funds. Whether blame-games in the media can actually result in an over-supply of public goods is a question for future research.
References


A Datasources


Media: Data on news coverage is provided by the Vanderbilt Television News Archive which contains news broadcasts and stories from the major U.S. national broadcast networks (ABC, CBS, CNN and NBC) since 1968. A keyword search was performed and each article including "Corps of engineers" and "flood" was screened for negative comments. An appendix with a complete collection of reports is available upon request (accessed April 2009).

Table 1: Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs.</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FloodExp</td>
<td>40</td>
<td>0.039</td>
<td>0.017</td>
<td>0.009</td>
<td>0.065</td>
</tr>
<tr>
<td>Media</td>
<td>40</td>
<td>0.200</td>
<td>0.405</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Flood</td>
<td>40</td>
<td>13.075</td>
<td>9.042</td>
<td>1.000</td>
<td>33.000</td>
</tr>
<tr>
<td>Fatalities</td>
<td>40</td>
<td>272.075</td>
<td>343.974</td>
<td>14.000</td>
<td>1935.000</td>
</tr>
</tbody>
</table>
Table 2: Estimated effects of media reports on flood control expenditure

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FloodExp</strong> t-1</td>
<td>0.735***</td>
<td>0.784***</td>
<td>0.814***</td>
<td>0.789***</td>
<td>0.764***</td>
<td>0.814***</td>
<td>0.825***</td>
<td>0.806***</td>
</tr>
<tr>
<td>(F-stat)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Media</strong> t-1</td>
<td>-0.409</td>
<td>-0.563</td>
<td>-0.439</td>
<td>-0.520</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(R-squared)</td>
<td>0.637</td>
<td>0.637</td>
<td>0.626</td>
<td>0.643</td>
<td>0.619</td>
<td>0.603</td>
<td>0.602</td>
<td>0.603</td>
</tr>
<tr>
<td><strong>Media</strong> t-2</td>
<td>0.778**</td>
<td>0.684**</td>
<td>0.686*</td>
<td>0.679*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N)</td>
<td>39</td>
<td>38</td>
<td>39</td>
<td>38</td>
<td>36</td>
<td>35</td>
<td>36</td>
<td>35</td>
</tr>
</tbody>
</table>

**Notes:** Dependent variable: FloodExp. Robust standard errors in parentheses. ***, **, * indicate significance at the 1, 5 and 10%-level, respectively.
Referee’s appendix for the manuscript:

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Media reports used to construct variable Media:

Source: Vanderbilt Television News Archive which contains news broadcasts and stories from the major U.S. national broadcast networks (ABC, CBS, CNN and NBC) since 1968. A keyword search was performed and each article including "Corps of engineers" and "flood" was screened for negative comments. The variable switches to 1 if there was at least one TV-report with critical comments on the USACE's work in a given year and 0 otherwise.


ABC Evening News for Friday, Aug 25, 1972

Headline: Flood Control

(Studio) Recent occurrence of floods raises questions about flood control systems. REPORTER: Howard K. Smith

(Isleton, California) [Film of June flood in California caused by broken levy shown.]

Abstract:

(Rapid City, South Dakota) [Film of June flood in South Dakota caused by heavy rains and failure of earthen dam shown.] (Wilkes-Barre, Pennsylvania) [June flood in Pennsylvania follows same pattern: old levys and dikes which hadn't been maintained and couldn't take rainfall from hurricane Agnes.] Congress orders Army Corps of Engineers to inspect all 28,000 private dams and dikes in country. (Oakland, California) Upper San Leandro Reservoir earthen dam might fail in earthquake. San Francisco dams could fail and result in tidal wave. REPORTER: Jules Bergman
**ABC Evening News for**  
**Monday, Nov 07, 1977**

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**Headline: Flooding / Georgia Dam Collapse / Local Dam Inspection**

(Studio) Rainstorms and flooding in eastern US, especially flooding in 3 Appalachian states noted. President Carter's declaration of Georgia as disaster area, in wake of collapse of earthen dam at Toccoa, noted. REPORTER: Barbara Walters

(Toccoa, Georgia) Report on aftermath of flood at Toccoa, Georgia. 1st victims were students at Toccoa Falls Bible College, and nearly all dead were associated with school. [Paul WILLIAMS - talks of parents' deaths.] [Army Corps of Engineers spokesperson Colonel Frank WALTER - has no information re: reason for collapse yet; cites Corps report on dams made available to state and local govs.]

**Abstract:** 
REPORTER: Bob Sirkin

(DC) Dam burst in Buffalo Creek, West Virginia, similar to Georgia dam burst, noted. (Film shown.) Congress authorization of Corps to investigate problem of nonfederal dams and results of inventory by Corps described. [Representative Leo RYAN - cites danger of such dams, using Kelley Barnes Dam as example] Corps' estimates of amount needed to fund local dam inspections, Nixon administration's policy of nonfederal dam inspection being nonfederal government responsibility and Carter administration's maintenance of this policy, so far, noted. Corps has received some funds for local dams, but administration policy not yet clear. REPORTER: Herbert Kaplow

**Broadcast Type:** Evening News Segment Type: News Content
Headline: Rain and Floods / Georgia Dam Collapse / Dam Safety / North Carolina Floods

(Studio) President Carter's declaration of Toccoa, Georgia, as disaster area in wake of dam burst there noted.
REPORTER: Walter Cronkite

(Toccoa, Georgia) Report on aftermath of flood and cleanup efforts; damage to area, include Toccoa Falls Bible College, noted. [Georgia governor's office spokesperson Tom PERDUE - notes difficulty of finding cause of dam burst, due to complete demolition of dam.] Army Corps of Engineers spokesperson Colonel Frank Walter's speculation with regard to dam burst cited. Other dams in Georgia designated by Corps as hazardous and details with regard to designation and inspection stated. [Corps spokesperson General Kenneth McIntyre - notes need for inspection of small dams across US.]
REPORTER: Bruce Hall

Abstract:

(Studio) House subcommittee's hearings on dam safety earlier in year noted.
REPORTER: Walter Cronkite

(DC) [Subcommittee chairperson Leo RYAN - cites belief that other dams have same potential as Toccoa dam did to burst; cites Kelley Barnes Dam as example] Congress provision for Corps inspection of dams, but without funds to carry it out, noted. [RYAN - cites money spent on airport safety and says dam safety ought to have same spent on it.] Ryan's suggestion of putting jobless to work repairing dams noted.
REPORTER: Jed Duvall

(Studio) Report on flooding due to rain in North Carolina's Blue Ridge Mts. (Film shown.)
REPORTER: Walter Cronkite
Headline: Segment 3 (The Corps of Engineers)

(Studio) Report introduced.

(DC) Army Corps of Engineers project on Red River in Louisiana said typical Corps venture; details given. Films shown. Incr. in estimated cost of project since congress authorization 10 years ago reported; graph shown. Corps reassessment of benefits gained by project cited. Federal law with regard to economy benefits of Corps projects in relationship to cost to taxpayers quoted. Allegations of cost underevaluations by Corps and Corps' defense of projects stated. Corps' position with regard to Red River project detailed; uselessness of lake created by project

Abstract: pointed out [Corps spokesperson Lieutenant General John MORRIS - comments.] Corps claim of flood prevention and erosion control benefits from Red. River project and allegation of lying by Corps reported [Corps OFFICIAL - talks about exaggeration by Corps with regard to project expenses; says was directed by superiors to lie.] [MORRIS - denies orders re: falsification.] Falsification of benefit analysis of Tennessee River-Tombigbee Canal project detailed. Admin. abandonment of plan to strip Corps of authority to calculate costs and benefits said due to congress opposition to plan; Congmen. reported to see Corps as source of money for home districts.

REPORTER: Robert Bazell

Headline: Floods / Jackson

(Studio) Receding of Jackson, Mississippi, flooding by Pearl River reported; questions re: lack of flood prediction noted.

REPORTER: David Brinkley

Abstract: (Jackson, Mississippi) Concern in Jackson over lack of warning cited [TIC. PEPPER - comments with regard to need for warning system.] Jackson mayor's response to complaints quoted. [Mayor Dale DANKS - comments with regard to inaccuracy of Army Corps of Engineers info.] Corps response noted.
CBS Evening News for Tuesday, Apr 24, 1979

Headline: Floods / North and South

Abstract:

(Studio) New snow in Butte, MT, continued flooding of Red River in Grand Forks, North Dakota, and receding of Pearl River in Columbia, Mississippi; Robert Patterson's successful efforts to save house noted. Films shown. Mississippi reported expecting more rain.

REPORTER: Walter Cronkite (WCCO-TV and WAFB-TV newstapes)

(Silver Spring, MD) Criticism of National Weather Service flood warnings outlined; Red. River situation cited. [National Weather Service spokesperson Robert CLARK - predicts more flooding for LA.] Clark quoted with regard to overtaxing of Army Corps of Engineers flood control projects. [CLARK - comments on flood control projects.] Amt. of damage from past week's floods stated.

REPORTER: Barry Serafin

(Studio) Environment group spokesperson quoted with regard to poor government approach to flood control money in Mississippi.

REPORTER: Walter Cronkite

Broadcast Type: Evening News Segment Type: News Content

Program Time: 05:42:50 pm - 05:45:30 pm. Duration: 02:40

Record Number: 263367

Link to this page http://tvnews.vanderbilt.edu/program.pl?ID=263367

Reporters: Cronkite, Walter; Serafin, Barry
ABC Evening News for  
Monday, Apr 11, 1983

**Headline: Floods / South**

(Studio) Amt. of damage in flood-ravaged South mentioned.  
REPORTER: Max Robinson

(Slidell, LA) Efforts of southe. Louisiana to recover from floods examined; films shown. Corps of Engineers role in region noted. [Parish president Bruce YUNIGAS - thinks Corps has responsibility to reevaluate their projections and take quick action.] Govt.'s assurances against flooding to Frank and Jan Hyde noted; state of their house at present shown. [Jan HYDE - is tired of bureaucratic delays.]  
REPORTER: Bob Sirkin

ABC Evening News for  
Monday, Jul 19, 1993

**Headline: Mississippi River / Midwest Flooding / Levee System**

(Studio: Renee Pousaint) Levels of the Mississippi River in Prairie du Chien, WI, Davenport, Iowa, Quincy, Illinois, and Saint Louis noted.

(Saint Louis: Tom Foreman) The flooding near Saint Louis and the criticism of the man-made levee system featured; scenes shown of water flowing over the levees. [Conservationist Dale PONTIUS, Army Corps of Engineers Gary DYHOUSE - offer differing opinions on the levee system of the Army Corps of Engineers.]

(Studio: Renee Poussaint) Report introduced.

(Des Moines, Iowa: Mike von Fremd) The flood damage in Des Moines, Iowa, featured; scenes shown. [Residents Nancy LOISCHNER, Dorothy and Bud STETLER - react to the damage.]

**Broadcast Type:** Evening News  
**Segment Type:** News Content  
**Program Time:** 05:37:00 pm - 05:41:40 pm. Duration: 04:40  
**Record Number:** 148856  
**Link to this page** [http://tvnews.vanderbilt.edu/program.pl?ID=148856](http://tvnews.vanderbilt.edu/program.pl?ID=148856)  
**Reporters:** Foreman, Tom; Poussaint, Renee; von Fremd, Mike
Headline: Clinton / Flood Policy

(Studio: Peter Jennings) Report introduced.

(New York: Ned Potter) President Clinton's decision to reverse the flood policy of rebuilding levees to one of moving homes out of the flood plain featured; scenes shown from July 1993 where the levee broke in Quincy, Illinois, and from Valmeyer, Illinois, where the town voted to move to higher ground. [American Rivers Scott FABER - comments.] [Senator Max BAUCUS - calls for a new Army Corps of Engineers' strategy.]

Broadcast Type: Evening News Segment Type: News Content
Program Time: 05:42:00 pm - 05:43:30 pm. Duration: 01:30
Record Number: 153979
Link to this page http://tvnews.vanderbilt.edu/program.pl?ID=153979
Reporters: Jennings, Peter; Potter, Ned

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Headline: El Nino / California Flooding

(Studio: Dan Rather) Report introduced.

(Marysville, California: Sandra Hughes) The possible effects of El Nino on California agriculture and how flooding will cause shortages and higher prices outlined; scenes shown from along the levees. [Farmer Dale NIESHELTZ, Army Corps of Engineers Jason FANSELAU - talk about last year's flood and the failure of the system of levees to prevent flooding.]

Broadcast Type: Evening News Segment Type: News Content
Program Time: 05:48:00 pm - 05:50:10 pm. Duration: 02:10
Record Number: 373331
Link to this page http://tvnews.vanderbilt.edu/program.pl?ID=373331
Reporters: Hughes, Sandra; Rather, Dan
Headline: Hurricane Katrina / Recovery / Gulf Coast / Bush Speech

(Studio: Shepard Smith) Tonight's French Quarter address by President Bush, and New Orleans Mayor Ray Nagin’s plans to reopen large sections of the city reported. [NAGIN†- says the city will "breathe again."]

(New Orleans: Phil Keating) Details given of plans to reopen parts of the city; progress reports from sewage and water department quoted; scenes shown of debris and cleanup. [NAGIN†- hopes to keep the city safe.] Plans to use the infamous Convention Center to house retail outlets for returning residents to get supplies for rebuilding noted.

(Studio: Shepard Smith) Red Cross statistics on damage in Mississippi quoted; scenes shown of flood waters, and the destruction in Port Sulphur†, Louisiana. [Port Sulphur storm victim Nick GIBSON†- plans to move back.] Details given of newly approved Senate housing vouchers for displaced Gulf Coast residents.

(Traveling with the president in New Orleans: Carl Cameron) Details given of the speech Bush will give tonight from Jackson Square; excerpts from speech quoted on screen; scenes shown of Bush's tour through Pascagoula†, Mississippi.

(Studio: Shepard Smith) An admission by the head of the Army Corps of Engineers of mistakes made in handling the levee breaches in New Orleans reported.

(Washington: Steve Centanni) "New York Times" interview with former FEMA director Michael Brown† blaming the botched Katrina response on disorganization of Louisiana officials quoted on screen; Louisiana Governor Kathleen†† Blanco† quoted as saying resources were available to Brown.

Broadcast Type: Evening News Segment Type: News Content

Program Time: 06:01:00 pm - 06:11:00 pm. Duration: 10:00

Record Number: 811292

Link to this page http://tvnews.vanderbilt.edu/program.pl?ID=811292

Reporters: Smith, Shepard; Keating, Phil; Cameron, Carl; Centanni, Steve