Policy Subsidies and Vetoes:
Partisanship and Presidential Management of the Executive Branch*

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Abstract

U.S. presidents and their policy staff often work closely with agencies throughout the federal government. Examples of this abound, and especially for Democratic presidents. I present a theory focused on one particular presidential tool: review of agency policymaking through the Office of Information and Regulatory Affairs (OIRA). The core assumption of the theory is that presidents can use OIRA review to veto or to subsidize agency policies. In addition to the theory, I contribute three empirical findings that the theory both motivates and explains: when a given agency is ideologically closer to the president, it both (i) issues more policies and (ii) its policies are more likely to be reviewed by OIRA, than when it is more distant from the president; and (iii) when a given agency is ideologically more distant from the president, it withdraws more policies than when it is closer to the president. Together with the theory these findings suggest that the focus on viewing the president as a veto player in many existing studies overlooks the role of the president in subsidizing the work of agencies.

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The president’s policy staff frequently work closely with agency staff. Consider actions on climate change under the Obama administration. Obama has focused on working with the Environmental Protection Agency (EPA) on better regulating the co-pollutants of carbon and other greenhouse gases such as coal, oil, and natural gas. These are efforts with broad political support, unlike a comprehensive climate law or executive order (Ansolabehere and Konisky (2014)), and they are things that the EPA has had the authority to do and has been working on before Obama’s involvement. Obama’s environmental policy staff have gotten involved and worked with the EPA to improve policies on carbon pollution emission standards, mercury and air toxics standards, national ambient air quality standards, and storm water discharges. In all of these examples, Obama’s policy staff and EPA policy staff have worked with each other to share expertise and information, and they have sought out the expertise of policy staff in other relevant agencies, such as the Department of Energy, in order to improve these policies.

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2For example, joint work by Obama’s staff and EPA staff on the EPA’s “Standards of Performance for Greenhouse Gas Emissions from Existing Sources: Electric Utility Generating Units” rule making docket, and on policy 2060-AR33 in particular. See http://www.reginfo.gov/ last accessed March 20, 2015

3For example, joint work by Obama’s staff and EPA staff on the EPA’s “National Emission Standards for Hazardous Air Pollutants for Coal- and Oil-fired Electric Utility Steam Generating Units” rule making docket, and on policy 2060-AP52 in particular. See http://www.reginfo.gov/ last accessed March 20, 2015

4For example, joint work by Obama’s staff and EPA staff on the EPA’s “Ozone National Ambient Air Quality Standards” rule making docket, and on policy 2060-AP38 in particular. See http://www.reginfo.gov/ last accessed March 20, 2015

5For example, joint work by Obama’s staff and EPA staff on the EPA’s “National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater from Industrial Activities” rule making docket, and on policy 2040-ZA21 in particular. See http://www.reginfo.gov/ last accessed March 20, 2015

6Records of this expertise- and information sharing, as well as records of consultation with other agencies, are made public after the review of a given policy has been completed.
Although examples of presidents—and especially Democratic presidents—working together with agencies abound, very few studies have examined this dynamic. While many studies of presidential management of executive branch agencies focus on the role of the president in vetoing (Wiseman (2009); Acs and Cameron (2013); Nou (2013); Moe (1982); Wood (1990); Wood and Waterman (1991); Wood and Anderson (1993)) or massively delaying agency policymaking (Hwang et al. (2014)), far fewer focus on the role of the president in bolstering agencies’ work. We have studies of presidents creating and designing new agencies (Lewis (2003); Howell and Lewis (2002)); centralizing policy (Moe (1985b); Rudalevige (2002); Wood and Waterman (1991)); and making appointments (Lewis (2008); Moe (1982); Moe (1985a); Moe (1985b); Randall (1979); Stewart Jr and Cromartie (1982); Wood (1990); Wood and Waterman (1991)), but not on trying to bolster or subsidize the policymaking that agencies are already doing. This gap in existing work is surprising. Working with agencies in the executive branch is certainly an important aspect of most presidents’ work, and perhaps especially Democratic presidents’ work. Crucial details of legislation are left to the implementing agencies and some policy areas—such as climate change—lack comprehensive legislation and are tackled through a hodgepodge of regulations carried out by agencies working within their existing authority.

In this paper, I address these issues through the lens of one particular presidential tool: the Office of Information and Regulatory Affairs (OIRA). I propose a theory of OIRA review that makes the core assumption that presidents can use OIRA review to veto or to subsidize agency policies. In addition to the theory, I contribute three empirical findings that the theory both motivates and explains:
when a given agency is ideologically closer to the president, it both (i) issues more policies and (ii) its policies are more likely to be reviewed by OIRA, than when it is more distant from the president; and (iii) when a given agency is ideologically more distant from the president, it withdraws more policies than when it is closer to the president.

Together with the theory these findings suggest that the focus on viewing the president as a veto player in many existing studies overlooks the role of the president in subsidizing the work of agencies. The evidence in this paper suggests that while vetoing is certainly important (including the changes in agency behavior that the possibility of a veto induces), the instances of OIRA review that we actually observe seem to be more about bolstering, not blocking agencies’ work. Presidents not interested in bolstering an agency’s policymaking efforts may well simply do nothing. Rather than paying the costs of getting involved and vetoing agencies’ policies, they may simply leave under-resourced agencies on their own.

This paper proceeds as follows. The first section presents a brief background on OIRA. The second section presents the model and hypotheses. Then I discuss the methods and data used for the empirical analysis and present the results of a series of empirical tests. The last section concludes.

0.1 Brief Background on OIRA

OIRA is relatively new in American politics. Congress created OIRA as part of the Paperwork Reduction Act in 1980 and Reagan formalized OIRA’s role in reviewing agency policymaking through executive orders in 1981 and 1985.\footnote{Though early presidential experimentation with centralized review dates back as early as the System Analysis Group in the Department of the Army during the Johnson ad-}
OIRA is a small office of fewer than 50 staff that coordinates the review process, and I will refer to it as “OIRA” review, but OIRA has at its disposal the full extent of the resources and expertise of all the president’s staff, where and when needed, across specialized policy offices throughout the Executive Office of the President.

Presidents have not sought to extend OIRA preclearance to independent agencies. The concept of “independent” agencies is that they are more independent from the president than cabinet departments and executive agencies. Since Humphrey’s Executor v. United States (1935), presidents have not been able to fire appointees heading up independent agencies without cause, but can do so in the case of executive agencies and cabinet departments. More directly relevant to this paper, presidents review the policies of executive and cabinet department agencies, but have not sought to extend OIRA review to independent agencies. Whether they could is somewhat ambiguous and there are at least a few instances of independent agency policy’s reviewed by OIRA. But in general, OIRA does not review the policies of independent agencies.

Other than the fact that presidents have not sought to extend preclearance to independent agencies, OIRA faces little in the way of constraints on the policies that it can review. According to Executive Order 12,866, which President Clinton issued in 1993, any “significant” policy is eligible for OIRA review. Typically agencies indicate whether their own policies meet the criteria for “significant” laid out in Executive Order 12,866: having $100 million or more annual impact on the economy, being inconsistent with another agency’s policy, altering the budgetary impact of grants or entitlements, or raising novel legal or policy issues. But if

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administration and the Quality of Life Review done by the Bureau of the Budget under the Nixon and Ford administrations (Tozzi, 2011).

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OIRA disagrees with an agency’s determination of which policies are significant, it can change that determination. With a sufficiently broad definition of significance and the ability to make the determination on its own when it wants to, OIRA can essentially choose what it reviews among policies initiated by cabinet departments and executive agencies.

Once an agency proposes a policy, OIRA has ninety days to review it, though extensions are possible. According to Executive Order 12,866, OIRA can request an extension of the ninety day review period of up to thirty days, though in practice policies are sometimes held up much longer than an additional thirty days (see for example Hwang et al. (2014)). Moreover, according to Executive Order 12,866, OIRA can work directly with an agency to obtain an extension on review of any length.

If OIRA wants to revise an agency’s policy before preclearing it, it is the agency that has to make the revision. OIRA can refuse to preclear a policy but cannot revise the policy itself. This means that upon receiving required revisions back from OIRA, an agency could make those revisions and gain preclearance or withdraw the policy in favor of the status quo. As such, presidents can certainly use the OIRA review process to block policies they dislike. As this paper will argue, however, viewing OIRA only as a veto player overlooks that presidents use the OIRA review process to provide resources subsidies to agencies.

0.2 Model and Hypotheses

To formalize OIRA as a tool that presidents can use to either veto or subsidize, consider a game with an agency A and the president P. The agency could be
any executive agency or cabinet department agency—in other words, any “non-independent” agency, whose policies the president can review.

The sequence is as follows. First, nature draws the ideological alignment of the president with respect to the agency, \( \sigma \in \{-1, 0, 1\} \), and shows both players. \( \sigma = -1 \) represents a distant president, \( \sigma = 0 \) represents a neutral president, and \( \sigma = 1 \) represents a close president. The distant president is ideologically distant from the agency, the close president is ideologically close to the agency, and the neutral president is in the middle.

Nature also draws the cost to the president of reviewing the agency’s policy, \( c_{rev} > 0 \), and shows only the president. The agency knows only that \( c_{rev} \) is drawn from a uniform distribution between \( [c_{rev}, c_{rev}] \). This uncertainty on the agency’s part captures that while the agency knows whether or not a given president will like its policy, it does not know the opportunity cost to the president of devoting the resources necessary to getting involved and reviewing it.

Then, the agency chooses whether or not to issue a policy. I denote issuing a policy with \( I \in \{0, 1\} \), where \( I = 1 \) represents issuing a policy and \( I = 0 \) represents not issuing a policy. Issuing a policy costs the agency \( c_{issue} > 0 \). If the agency does not issue a policy, the president has no choice to make, and the game ends with success on that policy equal to zero.

If the agency issues a policy, the president then chooses whether to review and subsidize the policy, review and veto the policy, or not review the policy (i.e. do nothing). When the president reviews a policy, he or she pays \( c_{rev} \) regardless of whether the review is used to subsidize or veto. This captures the cost to the president of triggering the OIRA review process and the associated staff time and
transaction costs that this entails. The agency has uncertainty about \( c_{rev} \), as previously discussed.

When the president subsidizes a policy, he or she chooses a level of matching grant, \( m > 0 \). The cost to the president of the subsidy is the cost of paying out the matching grant \( \frac{1}{2}(me_A)^2 \), where \( e_A \) is the amount of effort put forth by the agency in the last step of the game. When the president vetoes a policy, he or she pays a fixed cost \( c_{veto} > 0 \). It is costless for the president to do nothing.

After observing the president’s choice, the agency chooses its effort level, \( e_A \in [0, 1] \), where \( e_A = 0 \) can be interpreted as “shelving” a policy by stopping all work on it before it is finalized. When the agency shelves a policy, success on that policy is equal to zero.

The outcome of the game is in terms of success of the agency’s policy. I simplify success as either 1 or 0, where 1 is successful and 0 is not. The final success of the agency’s policy is stochastic with \( Pr(success = 1) = e_A + me_A \), and \( Pr(success = 0) = 1 - (e_A + me_A) \). In other words, the probability of the policy’s success is equal to the combined effort of the agency and the president on that policy.

The president’s utility function is

\[
U_P = \delta \sigma (e_A + me_A) - \frac{1}{2}(me_A)^2 - c_{rev} - c_{veto},
\]

where \( \delta \in \{0, 1\} \) signifies whether the president vetoes, with \( \delta = 1 \) signifying no veto. This says that if the president does not veto, he or she gets a payoff from the sum of the agency’s effort and any matching grant that is weighted by the alignment between the president and the agency. This payoff from effort will be
negative for a distant president, zero for a neutral president, and positive for a close president. The president also pays costs to review, to subsidize, and to veto.

The agency’s utility function is

$$U_A = \delta(e_A + me_A) - \frac{1}{2}(e_A)^2 - c_{\text{issue}}, \quad (2)$$

where $\delta$ is the same indicator function as in the president’s utility function. This says that if the president does not veto, the agency’s policy is successful with probability equal to the sum of the agency’s effort and the matching grant effort of the president. The agency pays a cost to issue the policy in the first place and for the amount of effort it puts into the policy.

From this model, I derive four hypotheses for the empirical analysis. The first hypothesis is that when an agency is under a neutral or a close president, it issues more policies than when that same agency is under a distant president. This follows from the fact within this model that the distant president will want to veto the agency’s policies as long as the cost of reviewing and vetoing is not too high, and that the agency knows this and will try to conserve its resources by not issuing a policy whenever it believes the president will veto. I refer to this hypothesis as the **Policy Issuing Hypothesis**.

**Policy Issuing Hypothesis.** The probability of an agency issuing a policy is higher under a neutral or close president than under a distant president.

The second hypothesis is that when an agency is under a close president, its policies will be more likely to be reviewed than when that same agency is under a distant president.

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8See appendix for proofs.
neutral president. This follows from the fact within this model that as long as the
costs of reviewing are not too high, a close president benefits from reviewing and
subsidizing the agency’s policy. I refer to this hypothesis as the Subsidy Hypothesis.

**Subsidy Hypothesis.** The probability of a close president reviewing is higher
than the probability of a neutral president reviewing.

The third hypothesis is that when an agency is under a distant president, its
policies will be more likely to be reviewed than when that same agency is under
a neutral president. This follows from the fact within this model that as long as
the costs of reviewing and vetoing are not too high, a distant president benefits
from vetoing the agency’s policy, and from the fact that the agency has some
uncertainty about the president’s cost of review. This uncertainty will lead to the
agency issuing some policies that the president will veto because it wrongly thinks
that the president’s cost to vetoing them is higher than it actually is. I refer to
this hypothesis as the Veto Hypothesis.

**Veto Hypothesis.** The probability of a distant president reviewing is higher than
the probability of a neutral president reviewing.

The fourth hypothesis is that when an agency is under a distant president,
it “shelves” more policies than when that same agency is under a neutral or a
close president. This follows from the fact within this model that the agency has
uncertainty about the president’s cost of review and because of this will sometimes
issue policies that it knows a distant president does not like but thinks that distant
president’s cost to veto is too high to be worth the president’s while. When the
agency gets the cost wrong, we expect to see a shelved policy since the agency is

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better off not putting its resources into a policy that the president has blocked. I refer to this hypothesis as the *Policy Shelving Hypothesis*.

**Policy Shelving Hypothesis.** The probability of an agency shelving its policy is higher under a distant president than under either a neutral or a close president.

### 0.3 Data and Empirical Strategy

#### 0.3.1 Data

This paper uses three datasets. The first is a new dataset of all Notice of Proposed Rulemakings (NPRMs) issued by all agencies in the U.S. federal government from 1975-2012. Following Yackee and Yackee (2012) I compiled all “553 NPRMs,” which are NPRMs meeting two basic requirements: 1) a request for public input and 2) a proposed modification to the Code of Federal Regulations. Also following Yackee and Yackee (2012), to identify NPRMs, I ran the following Westlaw search in Westlaw’s FR-ALL database: PR(“PROPOSED RULE”) & “COMMENT” “PARTICIPAT!” & DA(AFT 1973 & BEF 2011). For each NPRM I recorded the issuing agency, the Federal Register citation, date of publication, proposed title, and CFR section affected.

The second is a merged dataset of OIRA review data (available at reginfo.gov) with existing NPRM data from O’Connell (2008), which spans from 1983-2008.\(^9\) O’Connell’s NPRM data comes from the Unified Agenda of Federal Regulatory and Deregulatory Actions. It includes each policy’s unique Regulatory Identification Number (“RIN”), which greatly simplifies the process of merging it with the OIRA.

\(^9\)I am in the process of extending this data to include the Obama administration.
review data. But it is time-limited, becoming available online in 1983, and suffers from some agency discretion as to what is reported in the Unified Agenda.

The third is a dataset of normalized agency ideology scores from Clinton and Lewis (2008) and normalized presidential ideology scores from the Common Space database. The agency ideology measures from Clinton and Lewis (2008) are based on a survey of expert observers regarding their perceptions of agency ideology and is meant to measure the underlying ideology of the agency’s mission, not the ideology of the appointees in the agency at the time of the survey.

0.3.2 Empirical Strategy

To test all hypotheses, I restrict my data to include only executive agencies and cabinet departments (in other words, I exclude independent agencies). This is because I do not have a theoretical prediction about independent agencies since, as discussed previously, their policies are not generally reviewed by OIRA.

In order to test the policy issuing hypothesis, I look for evidence of a higher quantity of policies proposed by an agency in a given year when that agency is ideologically closer to the president. The relevant comparison is the quantity of policies proposed by that same agency during years when the agency is ideologically more distant from the president. I specify the following ordinary least squares model. (I also run the analysis using a negative binomial model.)

\[
policies_{iy} = \beta_0 + \alpha_i + \beta_1 \text{ag.pres.distance}_{iy} + \epsilon_{iy} \tag{3}
\]

Subscript \( i \) denotes agencies and subscript \( y \) denotes years. The dependent variable is the number or proposed policies, or rules, per year per agency.\(^{10}\) The

\(^{10}\)Appendix Table A.5 provides descriptive statistics on all variables.
The explanatory variable of interest is $ag\text{. pres.distance}_{iy}$, which is the absolute value of the ideological distance between each agency with the president in a given year. $\alpha_i$ represent agency fixed effects, which allow me to eliminate any time-invariant attributes of agencies that could influence both their proximity to the president and the number of policies that they issue. The unit of analysis is the agency-year.

In order to test the subsidy and the veto hypotheses, I look at within-agency change in the probability that an agency’s policies are reviewed as that agency’s ideological distance to the president changes. I specify the following ordinary least squares model. (I also run the analysis using a probit model.)

$$reviewed_{iy} = \beta_0 + \alpha_i + \beta_1 ag\text{. pres.distance}_{iy} + \beta_2 total\text{. policies} + \epsilon_{iy} \quad (4)$$

Subscript $i$ denotes agencies, subscript $y$ denotes years, and subscript $p$ denotes policies. The dependent variable is a dummy variable indicating whether each policy was reviewed by OIRA. The explanatory variable of interest is $ag\text{. pres.distance}_{iy}$, which is the absolute value of the ideological distance between each agency with the president in a given year. $\alpha_i$ represent agency fixed effects, which allow me to eliminate any time-invariant attributes of agencies that could influence both their proximity to the president and the likelihood that their policies are reviewed by OIRA. $total\text{. policies}$ controls for the total number of policies issued by the issuing agency during the issuing year of each policy. The unit of analysis is the policy.

In order to test the policy shelving hypothesis, I look for evidence of a higher probability that an agency will withdraw policies when that agency is ideologically further from the president. The relevant comparison is the probability of that same agency withdrawing its policies during years when the agency is ideologically more aligned with the president.
I treat policy shelving here as formally withdrawing a policy from consideration during the rule making process, an option that agencies have up until policies are finalized and that we can observe in the Federal Register. Since the point here is to consider the relationship between OIRA and agencies within a given presidential administration, I do not count instances of policies initiated under one president and then withdrawn under the next president, which we have evidence of during transitions in administrations (O’Connell (2008); O’Connell (2011); Gersen and O’Connell (2009)).

I specify the following ordinary least squares model. (I also run the analysis using a probit model.)

\[
withdrawn_{iyp} = \beta_0 + \alpha_i + \beta_1ag.pres.distance_{iy} + \epsilon_{iyp} \tag{5}
\]

Subscript \(i\) denotes agencies, subscript \(y\) denotes years, and subscript \(p\) denotes policies. The dependent variable is a dummy variable indicating whether each policy was withdrawn by the agency during the same administration it was issued. The explanatory variable of interest is \(ag.pres.distance_{iy}\), which is the absolute value of the ideological distance between each agency with the president in a given year. \(\alpha_i\) represent agency fixed effects, which allow me to eliminate any time-invariant attributes of agencies that could influence both their proximity to the president and the number of policies that they issue. The unit of analysis is the policy.

In addition to the empirical strategies just described, I am also able to run two placebo tests on independent agencies, one for the policy issuing hypothesis and

\[^{11}\text{A measurement extension that I am working on that will make this measure of shelved policies more accurate is to combine the policies that are formally withdrawn with the policies that are not formally withdrawn but that also never become finalized.}\]
one for the policy shelving hypothesis. I provide results on the placebo test for the policy shelving hypothesis here and the next version of this paper will include results from both placebo tests. For these placebo tests, I use the same empirical specifications just described but I use data only on independent agencies since I do not expect the hypotheses to hold for independent agencies.

0.4 Analysis

With regard to the policy issuing hypothesis, looking at within-agency change from the Ford through Obama administrations, I find that a one standard deviation increase in an agency’s proximity to the president is associated with an increase of about 10% of one standard deviation in the number of policies issued per year by that agency. This result holds after including agency fixed effects. These results are presented in the Appendix in Table A.1.

With regard to the subsidy and veto hypotheses, looking at within-agency change from the Reagan through George W. Bush administrations, I find that a one standard deviation decrease in an agency’s ideological distance from the president is associated with an increase of about 2.4 percentage points in the probability of that agency’s policies undergoing OIRA review. This result holds after including agency fixed effects and controlling for the total number of policies put forth by the issuing agency during the issuing year of each policy. These results are presented in Table A.2.

With regard to the policy shelving hypothesis, looking at within-agency change from the Reagan through George W. Bush administrations, I find that a one standard deviation increase in an agency’s ideological distance from the president
is associated with an increase of about 0.4 percentage points in the probability of that agency withdrawing its policies. This result holds after including agency fixed effects and controlling for the total number of policies put forth by the issuing agency during the issuing year of each policy. These results are presented in Table A.3.

With regard to the placebo test on independent agencies of the policy shelving hypothesis, I find no significant relationship between the probability that an agency withdraws its policies and that agency’s ideological proximity to the president. These results are presented in Table A.4.

0.5 Conclusion

Although examples of presidents—and especially Democratic presidents—working together with agencies abound, very few studies have examined this dynamic. In this paper, I examine this dynamic through the lens of one particular presidential tool: the Office of Information and Regulatory Affairs (OIRA). I propose a theory of OIRA review that makes the core assumption that presidents can use OIRA review to veto or to subsidize agency policies. This is a theoretical departure from the standard view found in most existing work that OIRA is a tool to veto policies and an institution in general that agencies seek to avoid (Wiseman (2009); Acs and Cameron (2013); Nou (2013); Moe (1982); Wood (1990); Wood and Waterman (1991); Wood and Anderson (1993)).

In addition to the theory, I contribute three empirical findings that the theory both motivates and explains: when a given agency is ideologically closer to the president, it both (i) issues more policies and (ii) its policies are more likely to
be reviewed by OIRA, than when it is more distant from the president; and \((iii)\) when a given agency is ideologically more distant from the president, it withdraws more policies than when it is closer to the president.

Together with the theory these findings suggest that the focus on viewing the president as a veto player in many existing studies overlooks the role of the president in subsidizing the work of agencies. The evidence in this paper suggests that while vetoing is certainly important (including the changes in agency behavior that the possibility of a veto induces), the instances of OIRA review that we actually observe seem to be more about bolstering not blocking agencies’ work. Presidents not interested in bolstering an agency’s policymaking efforts may well simply do nothing. Rather than paying the costs of getting involved and vetoing agencies’ policies, they may simply leave under-resourced agencies on their own.
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A Proofs

Policy Issuing Hypothesis. When $\sigma = -1$, the president chooses veto if $c_{\text{review}} + c_{\text{veto}} < 1$, and otherwise chooses no review. The president never subsidizes since subsidizing would bring utility $-(1 + 2m + m^2) - \frac{1}{2}m^2(1 + m)^2 - c_{\text{review}}$, which is always less than -1, the utility the president would get from not reviewing. If $\frac{(c_{\text{review}} + c_{\text{veto}})}{2} + c_{\text{veto}} < 1$ or if $c_{\text{issue}} > \frac{1}{2}$, the agency will not issue a policy.

When $\sigma = 0$, the president always chooses not to review, which brings utility of zero, which is larger than utility would be from vetoing $(-c_{\text{review}} - c_{\text{veto}})$ and larger than utility would be from subsidizing $(-\frac{1}{2}(m(1 + m))^2 - c_{\text{rev}})$. The agency issues a policy whenever $c_{\text{issue}} < \frac{1}{2}$.

When $\sigma = 1$, the president never vetoes since utility from a veto is $-c_{\text{review}} - c_{\text{veto}}$, which is always less than both utility from a subsidy $(\frac{63}{32} - c_{\text{review}} - c_{\text{veto}})$ and utility from no review (1). Given, a subsidy, $m$, the agency’s optimal effort, $e_A$, is $1 + m$. The president’s optimal $m$ is $\frac{1}{2}$. So the president subsidizes whenever $c_{\text{review}} + c_{\text{veto}} < \frac{31}{32}$, and otherwise does not review. The agency issues a policy whenever $c_{\text{issue}} < \frac{1}{2}$.

Comparing the agency’s choice of whether to issue a policy under the three possible values of $\sigma$, we see that the agency is weakly more likely not to issue a policy when $\sigma = -1$ than when $\sigma = 0$ or when $\sigma = 1$.

Subsidy Hypothesis.

As we saw above, the president reviews a policy when $\sigma = 1$ whenever $c_{\text{review}} + c_{\text{veto}} < \frac{31}{32}$, and the president never reviews a policy when $\sigma = 0$. This comparison shows that the president is weakly more likely to review when $\sigma = 1$ relative to
when $\sigma = 0$.

**Veto Hypothesis.**

As above, the president reviews a policy when $\sigma = -1$ whenever $c_{\text{review}} + c_{\text{veto}} < 1$, and the president never reviews a policy when $\sigma = 0$. This comparison shows that the president is weakly more likely to review when $\sigma = -1$ relative to when $\sigma = 0$.

**Policy Shelving Hypothesis.**

As above, the only case in which the president chooses to veto is the case of $\sigma = -1$. When the president vetoes, the agency’s optimal effort, $e^*_A$, is equal to zero. When $\sigma = 0$, the president never reviews, and $e^*_A = 1$. As above, when $\sigma = 1$, the president subsidizes whenever $c_{\text{review}} + c_{\text{veto}} < \frac{31}{32}$, and otherwise does not review. In either case, $e^*_A > 0$. Specifically, when the president gives a subsidy, $e^*_A = 1 + m$ and when the president does not review, $e^*_A = 1$. This comparison shows that the agency is weakly more likely to choose $e_A = 0$ when $\sigma = -1$ than when $\sigma = 0$ or $\sigma = 1$.
### Table A.1: Policy Issuing Hypothesis

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<th>DV: NPRMs/year</th>
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<td></td>
<td>Model 1</td>
<td>Model 2</td>
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<td>Pres-agency distance</td>
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<td>-16.41***</td>
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<td>(6.41)</td>
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</tbody>
</table>

**Notes:** ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$. Robust standard errors reported in parenthesis. All models reported are from ordinary least squares (OLS) regressions. Results are consistent using negative binomial regressions (available on request).
Table A.2: Subsidy and Veto Hypotheses

<table>
<thead>
<tr>
<th>DV: Reviewed (dummy)</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pres-agency distance</td>
<td>-.012***</td>
<td>-.024***</td>
</tr>
<tr>
<td></td>
<td>(.0027)</td>
<td>(.0028)</td>
</tr>
<tr>
<td>Mean of dependent variable</td>
<td>.428</td>
<td>.428</td>
</tr>
<tr>
<td># Observations</td>
<td>50084</td>
<td>50084</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.0004</td>
<td>0.122</td>
</tr>
<tr>
<td>Agency FEs</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Notes: ***p < 0.01, **p < 0.05, *p < 0.1. Robust standard errors reported in parenthesis. Included with the agency fixed effects is a control for the number of policies issued by each policy's issuing agency in the same year. All models reported are from ordinary least squares (OLS) regressions. Results are consistent using probit regressions (available on request).

Table A.3: Policy Shelving Hypothesis

<table>
<thead>
<tr>
<th>DV: Withdrawn (dummy)</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pres-agency distance</td>
<td>.005**</td>
<td>.004*</td>
</tr>
<tr>
<td></td>
<td>.0019</td>
<td>.002</td>
</tr>
<tr>
<td>Mean of dependent variable</td>
<td>.133</td>
<td>.133</td>
</tr>
<tr>
<td># Observations</td>
<td>50084</td>
<td>50084</td>
</tr>
<tr>
<td>R-Squared</td>
<td>.000</td>
<td>.024</td>
</tr>
<tr>
<td>Agency FEs</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Notes: ***p < 0.01, **p < 0.05, *p < 0.1. Robust standard errors reported in parenthesis. All models reported are from ordinary least squares (OLS) regressions. Results are consistent using probit regressions (available on request).
Table A.4: Policy Shelving Hypothesis — Placebo Test on Independent Agencies

<table>
<thead>
<tr>
<th></th>
<th>DV: Withdrawn (dummy)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td>Pres-agency distance</td>
<td>-.003</td>
</tr>
<tr>
<td></td>
<td>.0059</td>
</tr>
<tr>
<td>Mean of dependent variable</td>
<td>.099</td>
</tr>
<tr>
<td># Observations</td>
<td>7894</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.000</td>
</tr>
<tr>
<td>Agency FEs</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes: *** p < 0.01, ** p < 0.05, * p < 0.1. Robust standard errors reported in parenthesis. Included with the agency fixed effects is a control for the number of policies issued by each policy’s issuing agency in the same year. All models reported are from ordinary least squares (OLS) regressions. Results are consistent using probit regressions (available on request).

Table A.5: Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newly collected NPRM data: 1975 - 2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPRMs/year per agency</td>
<td>874</td>
<td>102.1</td>
<td>170.39</td>
<td>27</td>
</tr>
<tr>
<td>Clinton-Lewis agency-president ideological distance data</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(time invariant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pres-agency ideological distance per administration</td>
<td>874</td>
<td>1.137</td>
<td>0.817</td>
<td>.880</td>
</tr>
<tr>
<td>O’Connell rulemaking data merged with OIRA review data: 1983 - 2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probability policy OIRA-reviewed</td>
<td>50084</td>
<td>0.428</td>
<td>0.495</td>
<td>0</td>
</tr>
<tr>
<td>Probability policy withdrawn within the same administration</td>
<td>50084</td>
<td>0.133</td>
<td>0.340</td>
<td>0</td>
</tr>
</tbody>
</table>

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