

# BUREAUCRATIC INFORMATION IN CONGRESS\*

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## Abstract

Due to their expertise, bureaucratic agencies produce a wealth of information that can be used by politicians when making policies. However, little is known about the extent to which members of Congress rely on bureaucratic information and what factors they consider when they do so. In this paper, I introduce a novel measure of politicians' reliance on bureaucratic information which uses natural language processing to extract and analyze bureaucratic information used by members of Congress in 8.3 million floor and committee speeches given over the past 40 years. I find that legislators make greater use of information coming from ideologically similar bureaucracies. However, statutory features insulating agencies from political control sharply reduce the effect of ideological distance. These findings have implications for theories of separation of powers and for the use of evidence in policy-making. Institutional features granting independence to bureaucracy can depoliticize the role of bureaucratic information in policy-making.

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In a statement given on 8th July 2015 during a session of the US Senate Committee on Environment and Public Works, Senator Barbara Boxer (D-CA) highlights some of the positive outcomes of President Obama's Climate Action Plan, an ambitious set of measures aimed at cutting carbon emissions.

*The recent study by the Environmental Protection Agency shows us 57,000 fewer deaths per year from poor air quality, with economic benefits valued at \$930 billion, 12,000 fewer deaths per year from extreme heat and temperature changes, \$180 billion per year in avoided damages from water shortages, \$3 billion per year avoided damages from poor water quality, \$11 billion a year avoided losses in our ag sector, 40 to 59 percent fewer severe and extreme droughts and almost 8 million fewer acres burned each year from wildfires.*

In the speech, the Senator cites evidence produced by the EPA to persuade the Republican-controlled committee and its chairman Senator Jim Inhofe (R-OK) to take action against climate change. These are the concluding words of her speech: "I feel stronger than ever the President is on the right path. This Committee is on the wrong path." Far from being an isolated case, my data shows that during the past 40 years the information produced by the EPA has been used in congressional speeches other 9,201 times by a total of 1,113 different members of Congress.

Due to their expertise, bureaucratic agencies produce a great wealth of information that can be used by politicians for both policy and electoral goals (Niskanen 1971; Wilson 1989). Bureaucratic information can help members of Congress persuade political opponents, make better policies, or frame to their favor the debate around certain policy issues. At the same time, citing bureaucratic information can represent a form of position-taking, with members of Congress signalling effort and commitment to policy to their constituents and donors (Mayhew 1974; Maltzman and Sigelman 1996; Przeworski, Stokes, and Manin 1999; Grimmer 2013). Producing expertise is ultimately the main reason why unelected bureaucracies are delegated significant discretion in administering policy (Gailmard and Patty 2013). However, little is known about the extent to which members of Congress rely on such information. When mem-

bers of Congress use bureaucratic information? And what do they consider when choosing the information? In this article, I remedy this lack of theory and data on the use of bureaucratic information in Congress, a question that has broad implications for evidence-based policy-making and for the legitimacy of unelected bureaucracies.

Theoretically, I argue that both the ideology and the independence of bureaucracies matter for lawmakers' decision to use bureaucratic information. Members of Congress care about the quality of information and its compatibility with their own political goals, and they know that bureaucracies can manipulate information in an attempt to influence the political agenda (Weber 1922; Aberbach, Putnam, and Rockman 1981; Workman 2015). The information asymmetries characterizing the relationship between political principals and expert bureaucratic agents limit MCs' ability to directly evaluate information. Therefore, MCs rely on heuristics to decide whether to use bureaucratic information. On the one hand, politicians discount the information coming from ideologically distant agencies. Climate-change skeptics are likely to believe the EPA report mentioned by Senator Boxer is blatant propaganda, at odds with their own preferences and those of hard-line conservative voters and donors. On the other hand, when agencies enjoy a high level of statutory independence and are insulated from political pressures, the information they produce is perceived to be more accurate by members of Congress, and the role of the ideological divide weakens (Bertelli and Whitford 2009; Koop and Hanretty 2018; Bellodi 2023).

To test this argument, I present the first attempt at studying MCs' use of the information produced by hundreds of US federal bureaucracies over the past 40 years. I introduce a new measurement strategy that uses natural language processing to detect when MCs use quantitative evidence and statistical facts produced by bureaucratic bodies in their speeches and apply it to an original corpus of 8.3 million speeches given by US members of Congress in floor and committee sessions. First, I apply dependency parsing to the corpus of speeches and extract

legislators' quotes of bureaucratic information. Second, I compute the extent to which the quote contains statistical facts and quantitative evidence, which allows me to produce continuous estimates for every sentence mentioning an agency. This measure yields a comprehensive picture of the role of bureaucratic information in Congress over a large period of time, for a wide set of agencies and legislators with different partisan affiliations.

I present descriptive evidence alongside a rigorous test of the role of ideology and independence in the MCs' consumption of bureaucratic information. A key stylized fact observed in the data is that, although Republicans and Democrats cite bureaucracies in their speeches to a similar extent, Republicans use fewer statistical facts when using bureaucratic information compared to Democrats. However, consistent with anecdotal evidence, Republicans make greater use of the expertise of drug- and law-enforcement agencies, whereas the information produced by the Centers for Disease Control and Prevention is mostly used by Democrats, perhaps an indicator of the different ideological approaches of Republicans and Democrats to the COVID-19 pandemic.

After presenting several descriptive facts, I leverage *within*-agency changes in ideological leaning resulting from bureaucratic turnover in leadership positions across presidencies and compare the frequency of statistical facts and quantitative evidence in legislators' statements mentioning bureaucracies estimating a series of fixed effects models. I find strong support for the proposed ideology-driven account. The effects are driven by executive departments and sub-agencies under tighter control of the President, which lends support to the moderating effect of agency independence. I strengthen these results with a difference-in-differences design which exploits a 2020 Supreme Court decision curtailing the independence of the director of the Consumer Financial Protection Bureau, and find that, after the Court's decision, Democrats are significantly less likely to use information from the ideologically distant, Trump-controlled Bureau.

This paper makes three contributions to the literature on the political use of information and politicians-bureaucracy interactions. First, while most of the scholarship on politicians-bureaucracy relations focus on how Congress and Presidents control drifting bureaucracies (e.g., Fiorina 1981; McCubbins, Noll, and Weingast 1987; Bolton, Potter, and Thrower 2016; Lowande 2018; but see Moe 2006), in this paper I show that bureaucracy can play an important role in congressional politics, accounting for a prominent source of information at legislators' disposal. Theoretically, I show how ideology and institutional features of bureaucracies contribute to MCs' decisions to use bureaucratic expertise in policy-making. Second, I present the first and largest measure of the role of bureaucratic bodies in legislative politics, presenting fine-grained data for 316 agencies and approximately 40 years of floor and committee speeches. Finally, I introduce a new, transparent, and objective way of measuring politicians' reliance on different sources of information, which can be used to study other questions about information provision and usage across different fields in political science. The findings also have implications for the institutional design of bureaucratic agencies, suggesting that statutory features granting independence to agencies can counteract the ideological polarization underlying legislators' decision to use bureaucratic expertise in Congress.

## **Bureaucratic Information in Legislative Politics**

Bureaucratic agencies can have a significant impact on politics even outside their implementation domain (Moe 2012). Krause (1996), for instance, describe the agency-political relations as a “two-way street”, where agency performance can affect politicians' budgetary preferences, and Carpenter (2001) shows that, during the US Progressive Era, bureaucratic agencies enjoying a good reputation across multiple audiences were able to secure their desired policies despite the opposition of elected politicians. Zooming in on legislative politics, Nicholson-Crotty and Miller (2012) find a positive relationship between the agency's perceived effectiveness and politicians'

perceptions of bureaucratic influence on legislative outcomes, while Blom-Hansen, Baekgaard, and Serritzlew (2021) find that local politicians in four different countries are likely to rely on bureaucrats' expertise and information when forming their opinions about policy proposals.

While this scholarship made important advancements in the study of the role of bureaucracies in the policy-making process, they all rely on perception measures, hence we know little about the extent to which they capture real-world phenomena. Moving to observational data, Shobe (2017) shows how federal agencies play an important role as reviewer and editor of legislative texts, either by request from Congress or as a result of the agency's own monitoring of legislation. Kroeger (2022) reports similar findings on state legislation and finds that bureaucracy-sponsored bills are more likely to be approved by the legislature when there is unified government and when the capacity of the legislature is weaker compared to that of the bureaucracy. A similar demand-side approach to study politicians seeking information is taken by Ban, Park, and You (2022), who map the universe of witnesses testifying before Congressional committees and show that bureaucrats – on top of being the largest category of witnesses – are important providers of analytical information and they are invited to testify mostly when legislators are exploring a legislative issue and are open to acquiring new information. Similarly, when looking at bureaucrats' incentives to supply information, Ban, Park, and You (2023) find that when appearing before committees, bureaucrats supply more analytical information to legislators who are presidential co-partisans, suggesting that ideology is key not only to legislators' decision to use the information, but for bureaucrats' decision to supply it too.

An important question that remain unanswered is when do members of Congress utilize bureaucratic information and the factors they consider when deciding to use it. In what follows, I provide new theory and new data on MCs' reliance on the information produced by the US federal bureaucracy in Congress.

## When Do MCs' Rely on Bureaucratic Information?

Members of Congress are moved by a combination of re-election and policy goals, and giving speeches – arguably one of the main activities of elected officials – can be a powerful tool to frame a policy-problem to their favor, to strengthen a political argument, or to communicate effectively to constituents and interest groups (Mayhew 1974; Grimmer 2013; Grimmer, Westwood, and Messing 2014; Lee 2016). Bureaucracies are a one-stop-shop for MCs seeking to acquire policy information (Ban, Park, and You 2023). Members of Congress might report what said by an independent agency or a department to claim credit for the success of a program or to direct voters' attention to a specific issue. Agency expertise can be mobilized to increase the salience of a political debate, influence the political agenda, or to persuade other members with credible information. At the same time, members of Congress know that bureaucracies can supply information to advance their own preferred policy or that of an out-partisan President, and they might be hesitant about using information coming from ideologically distant bureaus.

Politicians may decide to use the information produced by bureaucracy if they believe it is accurate and compatible with their own political goals. Therefore, when taking information from bureaucracies, MCs consider two dimensions: quality and ideology. Quality refers to whether the information faithfully describes or meaningfully synthesizes reality, whereas ideology refers to the extent to which the information is consistent with MCs' goals and preferences. For instance, information that – more or less explicitly – highlights the social benefits of higher taxes is likely incompatible with the preferences of a libertarian politician. Perfectly informed politicians could then scrutinize every piece of information and select the one that maximizes quality and ideological compatibility. However, MCs are only imperfectly informed and are not capable of directly assessing each piece of information produced by bureaucratic agencies. In fact, the entire principal-agent literature on information asymmetries and politicians' delegation of authority to bureaucracy posits that expert bureaucracies have an informational advantage

over their own political principals (Miller 2005; Gailmard and Patty 2012). Therefore, members of Congress resort to agency ideology and independence as heuristics when deciding whether to use the information or not, discounting information produced by ideologically distant agencies, but less so for more independent agencies.

Let us consider a conservative member of Congress exposed to some information coming from the (liberal) Environmental Protection Agency. The preferences of both actors towards environmental regulations are known, and the conservative politician is likely to think that the EPA is distorting the information it produces to advance its liberal agenda. Notice that the information advantage of bureaucracy does not mean that MCs are always incapable of assessing the accuracy and ideological slant of agency reports and studies. Even if the conservative member had expertise on environmental policy and could isolate accurate from biased information, she would quickly realize that the political implications of the information are at odds with her own policy preferences, and would ultimately decide to disregard it. Therefore, MCs discount information produced by ideologically distant bureaucracies, believing it to be incompatible with their own political priorities.<sup>1</sup>

*HYPOTHESIS 1: MCs are less likely to use information produced by ideologically distant bureaucracies.*

In practice, changes to the ideological leaning of agencies occur as a cascade: a new President is elected and, through appointments and turnover among agency leaders, she influences the ideological slant of agency communications and outputs. As members of Congress observe the new ideological leaning of agencies, they update their beliefs about the expected compatibility of the information with their own political goals. However, ideology is not the only agency attribute observed by members of Congress.

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<sup>1</sup>Although here I consider bureaucracies' supply of information exogenous, the intuition behind cheap talk models of strategic communication yields similar predictions on legislators' decision to use information produced by bureaucracy (Crawford and Sobel 1982; Gailmard and Patty 2012). Because the receiver of the information (the member of Congress) cannot verify the veracity of information, information exchange is greater when the sender (the bureaucratic agency) of the information and the receiver have similar preferences over policy.



Some agencies are designed to ensure a stronger independence from political and business influence. In certain policy areas, politicians delegate authority and grant statutory independence to bureaucratic bodies to ensure consistency and credibility of agency policy over time and irrespective of changing governments (Keeper and Stasavage 2003). By delegating independence to agencies, elected politicians shrink the degree of control that the President and Congress exert on bureaucracy, thereby cultivating bureaucrats' incentives to make costly investments in expertise and agency specialization (Gailmard and Patty 2013). As outlined by Gilligan and Krehbiel (1987), principals might decide to restrict the array of procedures aimed at controlling the agent to promote the agent's incentive to specialize and acquire information, especially when the agent is ideologically apart from the parent body. A clear example of such commitment is the independence of central banks and regulatory agencies for the credibility of monetary policies, for controlling inflationary tendencies, and for ensuring a level-playing field for public and private businesses (Cukierman, Webb, and Neyapti 1992; Keeper and Stasavage 2003). For instance, the Federal Reserve Board is governed by a multi-member body with proven expertise and serving for fixed terms. The polycentric decision-making body makes it harder for politicians to capture the agency decision-making process, and the fixed term of its members' mandate loosens their responsiveness to politicians' requests. Furthermore, the board members do not serve at the pleasure of the President and can only be dismissed for neglect of duty or malfeasance in office. These statutory features ensure the FED operates autonomously without responding to the will of the government of the day (Selin 2015).

Agency independence has important consequences for the way agency output (information included) is perceived by members of Congress. For instance, independence improves the perceived and objective quality of regulation (Bertelli and Whitford 2009; Koop and Hanretty 2018), and independent agencies enjoy a better reputation among political elites compared to more politicized agencies and departments (Bellodi 2023). Therefore, when exposed to infor-

mation from independent agencies, even though politicians might still disagree ideologically with the bureaucracy, they are more likely to believe that the information is accurate, given the strong commitment of the agency to its policy area. When members of Congress know that the source of information is an independent body, they receive an additional signal about the information agencies produce, which increases the expected quality of information and makes the ideological distance from the agency less salient. Statutory independence, acting as a quality-enhancing device, tempers politicians' skepticism towards information produced by ideologically distant agencies. Independence thus makes the ideological leaning of the agency less salient for members of Congress.

*HYPOTHESIS 2: The (negative) effect of ideological distance on MCs' reliance on bureaucratic information is weaker for more independent agencies.*

This account shows how institutional features of bureaucracy can moderate the effect of the ideological divide between agencies and members of Congress.

## **A New Measure of Legislators' Use of Information**

The role of bureaucratic information in the legislative process has generally been measured either qualitatively or through perception measures. However, though benefiting from "deep" observation and multiple sources of data, qualitative measures are limited to a few cases and do not allow for over-time comparisons. Similarly, answers to perception questions like "How often do you rely on information from agency  $x$ ?" are easily susceptible to social desirability bias.

In this section, I present a new objective and fully replicable measurement strategy that captures the extent to which bureaucratic expertise is used in Congress by applying natural language processing techniques to a large corpus of floor and committee speeches given by the universe of US members of Congress, detecting when MCs use agencies' information and

extracting what type of information they use. This measurement strategy has quantitative and qualitative advantages over existing methods. First, by looking at floor and committee speeches, I am able to trace how MCs use the evidence produced by a large set of bureaucratic bodies over a long period of time and on a daily (or debate) basis. Second, by observing how MCs' use information from sources with different fixed and time-changing characteristics, this measurement strategy is uniquely suitable for theory-testing and comparative analysis. Third, the proposed strategy allows to measure the intensity of information usage, namely the frequency and the extent to which the information used by MCs is dense with factual information.

## **Information Extraction**

The key assumption of the proposed measurement strategy is that MCs' use of bureaucratic information can be detected by parsing the syntactic relations of terms in segments of text (e.g., sentences). Syntactic analysis can identify the action of saying something, the subject carrying out the action, and the object of the action. Let us consider a MC saying “The Federal Reserve [*subject*] said [*action*] that higher interest rates will slow inflation [*object*]”. By creating extraction rules that detect certain syntactic relationships, I can therefore match every instance in which a bureaucracy is used as a source of information in a speech and then analyze the type of information that is being used. Syntactic analysis and dependency parsing are new frontiers in political science research, but a few promising applications show the benefit of retaining dependency relationships between words when analyzing text. Atteveldt et al. (2017), for instance, shows how US and Chinese media portrayed differently the role of Hamas and Israel in the 2008-9 Gaza war, and Vannoni, Ash, and Morelli (2019) apply syntactic analysis to a corpus of US state laws to estimate delegation of powers to governors of US states.

The measurement strategy I propose consists of three steps. First, I split every speech men-

tioning the name of an agency into sentences, tag parts of speech (e.g., subject, verb, predicate, etc.), and detect dependency relations. Second, I extract clauses that match pre-defined syntactic frames capturing different ways in which MCs can use bureaucratic information. Third, I isolate the quote, namely the actual piece of information used by legislators, and measure the extent to which the quote reports statistical facts and quantitative evidence. Eventually, I obtain a sample of sentences mentioning the name of an agency, and every sentence is classified based on whether it uses the agency as a source of information or not, and is also assigned a continuous score equal to the frequency of statistical facts and quantitative evidence contained in the quote.

### **Step 1: Parts-of-Speech Tagging and Dependency Parsing**

I tag and parse the sentences with SpaCy, a supervised learning algorithm which achieves state-of-the-art performance on several NLP tasks like part-of-speech tagging and dependency parsing (Choi, Tetreault, and Stent 2015; Honnibal and Johnson 2015). After splitting speeches into sentences, the parser tags parts of speech and detects dependency relations between words.

For instance, let us consider the sentence “The FED said that higher interest rates will slow inflation”. The tokens – namely every single word – within this sentence have syntactic properties and follow specific dependency relations. For instance, “The” refers to the “FED”, which in turn is the nominal subject of the verb “to say”. The result of syntactic parsing is displayed in Table 1, which reports the token ID, the token (i.e., the word), the part-of-speech, the ID of the head token (i.e., the “parent” token), and the type of dependency relation. For instance, the head token ID of the words “higher” and “interest” is the token ID 7, “rates”.

### **Step 2: Extraction Rules**

Once the parser has tagged each token of the sentence, I annotate the sentence based on extraction rules that detect quotes, namely instances where somebody is reporting (*i*) something

Table 1: Dependency Parsing.

Token ID	Token	Part-Of-Speech	Head Token ID	Dependency Relation
1	The	DETERMINER	2	determiner
2	FED	PROPER NOUN	3	nominal subject
3	said	VERB	3	ROOT
4	that	ADPOSITION	9	marker
5	higher	ADJECTIVE	<b>7</b>	adjectival modifier
6	interest	NOUN	<b>7</b>	compound
<b>7</b>	rates	NOUN	9	nominal subject
8	will	VERB	9	auxiliary
9	slow	VERB	3	clausal complement
10	inflation	NOUN	9	direct object
11	.	PUNCT	3	punctuation

*Notes:* Output of dependency parsing. Each token is assigned an ID, which is used to describe syntactic dependency relations between tokens. Token IDs in bold used as example in text.

said, written, or released by someone, *(ii)* the source of the information contained in the quote, and *(iii)* the content of the quote. I create two comprehensive sets of extraction rules that match who-says-what syntactic structures: one that captures direct and indirect statements of agencies (“the FED said”, “as said by the FED”) and “according-to” structures (“according to the FED”); while the other captures direct or indirect outputs of agencies (“the FED’s proposal is”, “the FED’s proposal to”, the “FED’s study suggests”).

To match direct and indirect statements, I specify a vector of “say verbs” so that the parser marks the lemmatized version of the verb – therefore capturing verbs declined in every form (active or passive) or tense – and its respective subject or, in case of an indirect statement, the agent.<sup>2</sup> For “according-to” structures, the parser detects the lemmatized token “accord” and the object of the preposition, which will be the source of the information. For direct and indirect nominal outputs, I specify a vector of output-related words for the parser to detect (e.g., study, proposal, recommendation, suggestion), and their possessive determiner or the object of prepositions such as “of”, “by”, or “from” – which mark the owner of the output – will be labelled as the source of the output.<sup>3</sup> When labeling the source of the information, I also include

<sup>2</sup>Importantly, I exclude instances where a negation is syntactically dependent of one of these “say verbs” (e.g., “The FED did not respond to my request” will not be marked). Similarly, I do not consider questions – namely sentences terminating with a question mark – when extracting quotes.

<sup>3</sup>Say-verbs and output-type words are reported in Section A in the appendix.

Table 2: Syntactic Frames.

Extraction Rule	Syntactic Structure	Sentence Example
<b>Statements</b>		
Direct Statement	subject + say verbs	The FED said <i>that higher interest rates will slow inflation.</i>
Indirect Statement	agent + say verbs	As reported by the FED, <i>higher interest rates will slow inflation.</i>
According-to Structure	accord + object of preposition	According to the FED, <i>higher interest rates will slow inflation.</i>
<b>Outputs</b>		
Direct Nominal Output	output + possession modifier	The FED’s [output] is <i>to increase interest rates.</i>
Indirect Nominal Output	output + possession modifier	I fully endorse the FED’s [output] <i>to increase interest rates.</i>
Direct Output	output + say verbs	A [output] from the FED indicates <i>to to increase interest rates.</i>

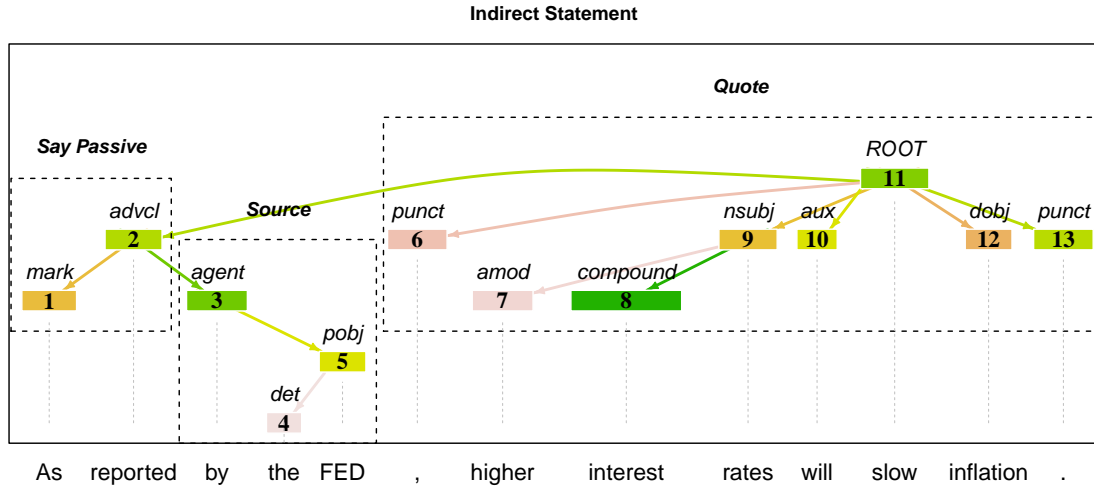
*Notes:* Syntactic frames designed to extract quotes from sentences with examples of sentences matching each frame.

cases where individuals affiliated with the agency are producing information. For instance, the algorithm is able to mark the following direct statement by Representative Proxmire (D-WI) as a quote from the EPA: “*EPA’s Deputy Assistant Administrator for Radiation Programs has stated that if all Americans reduced the air infiltration in their homes by 50 percent, the resulting buildup of radon gas could eventually lead to an additional 10,000 to 20,000 cases of lung cancer a year.*”

Finally, all the tokens that are dependencies of say verbs, output-related verbs, or according-to structures are labelled as quotes. Table 2 reports the precise tokens and syntactic structures used to compile the extraction rules, and the toy sentences in which a legislator could use the information produced by the FED, with the quote in italics.

I then apply the extraction rules to the tagged sentences. Figure 1 shows the dependency tree of the final output of the syntactic analysis for the example of the indirect statement, one that might seem particularly challenging to extract. Dependency trees of other extraction rules are shown in Figure B.1 in the Appendix.

Figure 1: Dependency Tree.



*Notes:* Dependency tree of an illustrative example where the FED’s information is used in a speech.

### Step 3: Analysing Quotes

Using bureaucratic information does not occur by just citing bureaucracies. Politicians might report what is said by agencies with a negative tone (e.g., “The FED said something completely wrong!”) or they could cite an agency without making any reference to policy (e.g., “The FED said that in the long term we’re all dead.”). Step three of the proposed measurement strategy addresses this issue by extracting qualitative information from the quotes, hence establishing whether the information used by politicians taps into the expertise of the bureaucracy.

For each tagged sentence identified as a quote, I extract the text of the quote and compute the frequency of statistical facts and quantitative evidence in the quote. To do that, I apply a simple dictionary-based approach, whereby every quote is assigned a score capturing the frequency of words belonging to a pre-defined dictionary of statistical facts and quantitative evidence. I use the licensed off-the-shelf LIWC dictionary (Pennebaker et al. 2015), which contains a comprehensive list of words related to quantifiers and numbers, such as “amount”, “approximately”, “average”, “entirety”, “equal”, “less”, “multiple”, “percentage”, “whole”, “twice”, “total”, as well as all digits and numbers used to express quantities, which I integrate with verbs capturing quantitative change (e.g., “increase”, “decrease”, “grow”, “drop”, etc.). In Table C.1

I report the full list of words used to build the dictionary.

The frequency measure I use is the term-frequency inverse-document-frequency (*tf-idf*), which is a weighted frequency that down-weights (up-weights) words that are in the dictionary but that appear in many (few) quotes, for they are less (more) useful at differentiating between quotes. The precise formula to build the metric is reported in the Appendix (see Section D).

As an example, the frequency of statistical facts and quantitative evidence in the following statement given by Senator Jim Inhofe (R-OK) equals 8, whereas the *tf-idf* equals 9.94. The tokens in italics are those matched by the dictionary.

“According to the US Department of Transportation, *every 1 billion* invested in highway construction *creates 47,500* jobs and generates *more than \$2 billion* in economic activity.”

I ultimately assemble a dataset comprising all sentences *mentioning* the name of a bureaucracy. Sentences simply mentioning the agency will receive a *tf-idf* score of 0, whereas for sentences using the agency as a source of information (i.e., quoting agencies), the score will be its *tf-idf*. In the main statistical analysis reported below, I use the *tf-idf* score as main dependent variable, comparing how MC-agency ideological distance – conditional on mentioning/engaging with the agency – affects the use of statistical facts and quantitative evidence.

## Validation and Limitations

I present two validation tests for the measurement strategy, one focusing on the crucial step of quote extraction and one for the measurement as a whole. First, to ensure the parser can successfully detect instances in which legislators are using a bureaucratic agency as a source of information, I compare the performance of the automatic extraction of quotes to human judgement. I extract 200 random sentences which are classified as quotes by the parser and 300 which are not classified as quotes. I then take these 500 sentences and ask an independent coder to decide whether the sentence mentioning a name of an agency is using that agency



Table 3: Performance Metrics of Validation Tasks.

	<i>Quote Extraction</i>	<i>Facts Detection</i>
Accuracy	0.80	0.79
Precision	0.70	0.64
Recall	0.79	0.81
F1	0.75	0.72

*Notes:* Performance metrics from the comparison of the proposed measure and manual coding (for quote extraction) and GPT output (for quote extraction and facts detection) of 500 sentences mentioning the name of a bureaucratic agency.

as a source of information. Second, to ensure the proposed strategy is also able to capture legislators’ reliance on quantitative policy information, I rely on recent availability of large language models (LLMs) and their applications in zero-shot classification tasks. In particular, I prompt the GPT-4 language model and ask to decide whether, in the sentence, the member of Congress is citing policy information produced by the agency. As shown by Gilardi, Alizadeh, and Kubli (2023), LLMs can even outperform human annotators in text classification tasks and can hence provide new ways of producing and validating NLP pipelines. An example of the prompt and the answer given by the model is reported in the Appendix (see Table E.2). I then dichotomized the *tf-idf* of statistical facts so that quotes either contain or do not contain statistical facts and then compare the answers given by GPT and the ones given by the proposed measurement strategy.

Table 3 shows the performance metrics from the confusion matrices of the two classification tasks: quote extraction and statistical facts detection. The accuracy of both tasks is rather high (approximately .80) and the F1 score – assessing the balance between precision and recall – is satisfactory and above .70. These performance metrics suggest that the measurement strategy performs well at extracting quotes and detecting whether the quotes contain statistical facts.

Despite the validation exercises reported above, the proposed measure has limitations too. First, this measurement strategy does not capture implicit ways legislators could use the information produced by bureaucracies. By anchoring the quote to the name of the agency (or

individuals whose affiliation with the agency appears in the text), the proposed method is only able to capture explicit ways of using bureaucratic information. Second, this strategy is silent about the reasons why members of Congress use bureaucratic information. MCs have different motives for using bureaucratic information, and this paper represents a first general attempt at detecting the main conditions under which politicians decide to do so.

## Speeches and Bureaucracies

I apply the proposed method to a corpus of 1,634,602 floor and 6,654,065 committee speeches. I scraped floor (1994-2022) and committee (2010-2022) speeches from the digitized version of the Congressional Record and I obtained transcripts of congressional committee sessions for the period 1980-2009 from ProQuest.<sup>4</sup> After replacing the various ways in which agencies are mentioned with a standardized name, I subset all speeches mentioning at least one agency. The list of agencies combines large samples of bureaucratic bodies from Bertelli and Grose (2011), Chen and Johnson (2014), Selin (2015), and Richardson, Clinton, and Lewis (2018) integrated with information on the type of agency directly obtained from the US government website ([usa.gov/federal-agencies](http://usa.gov/federal-agencies)), for a total of 322 agencies.

A total of 285,255 floor speeches and 739,558 committee speeches mention the name of at least one agency, 17% and 11% of the total speeches, respectively. I parse these speeches into sentences and keep only the sentences which contain the name of an agency. I then apply the extraction rules described in Table 2 to each sentence. I extract the quotes from each sentence using bureaucracies as source of information and apply the dictionary analysis to the quote, measuring the *tf-idf* of words that belong to the dictionary of statistical facts and quantitative evidence. The share of sentences quoting bureaucracies is equal to 6% of the 2,275,303 sentences mentioning agencies, and the average *tf-idf* – the outcome variable for the statistical analysis

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<sup>4</sup>A note on the quality of the transcripts and the speech parsing steps are reported in Section G of the Appendix.

Table 4: Descriptive Statistics.

Descriptive Statistics	Floor	Committee
Sentences with agency mentioned (analysis dataset)	917,480	1,430,393
Share of sentences with agency used as source	6.5%	5.4%
Years covered	1994-2022	1980-2022
Unique agencies mentioned	309	316
Unique legislators	1,573	1,796
<b>Average <i>tf-idf</i> of Statistical Facts</b> (outcome variable)	0.17	0.11

*Notes:* Descriptive statistics of sample of sentences, number of unique legislators, agencies used as source of information, and average use of statistical facts and quantitative evidence.

– is equal to 0.13. Descriptive statistics about the sample of sentences, quotes, number of agencies, and MCs are reported in Table 4.

To benchmark the frequency with which MCs rely on bureaucracy as source of information in their speeches, I compare the number of times legislators use bureaucracies as a source of information to the number of times they use alternative sources. I replicate the measurement strategy using a different set of sources including a comprehensive list of 54 newspapers and 138 think tanks. I do find that bureaucracies are used as a source of information 12 times more often than the most important newspapers and 34 times more often than the major think tanks of the country, suggesting that bureaucratic bodies are key players in providing information to Congress.<sup>5</sup>

## Ideological Distance

I build a measure of ideological distance between legislators and the agency as the absolute value between the ideal points of each MC and each agency mentioned in the sentence. Data on legislators’ ideal points are obtained from Lewis et al. (2020) and consist of the first dimension of the DW-NOMINATE score. For agency ideology, I use the dataset assembled by Chen and Johnson (2014), for it is the only one that at the same time *i*) includes both cabinet- and non-cabinet-level agencies, *ii*) allows *within*-agency variation in ideology as a result of bureaucratic

<sup>5</sup>The lists of newspapers and think tanks have been assembled from Wikipedia pages `/List_of_think_tanks_in_the_United_States` and `/List_of_newspapers_in_the_United_States` and are available in the replication package accompanying this paper.

turnover across different presidencies, *iii*) and is on the same scale as the DW-NOMINATE scores, thus allowing to compute meaningful ideological distance metrics.<sup>6</sup>

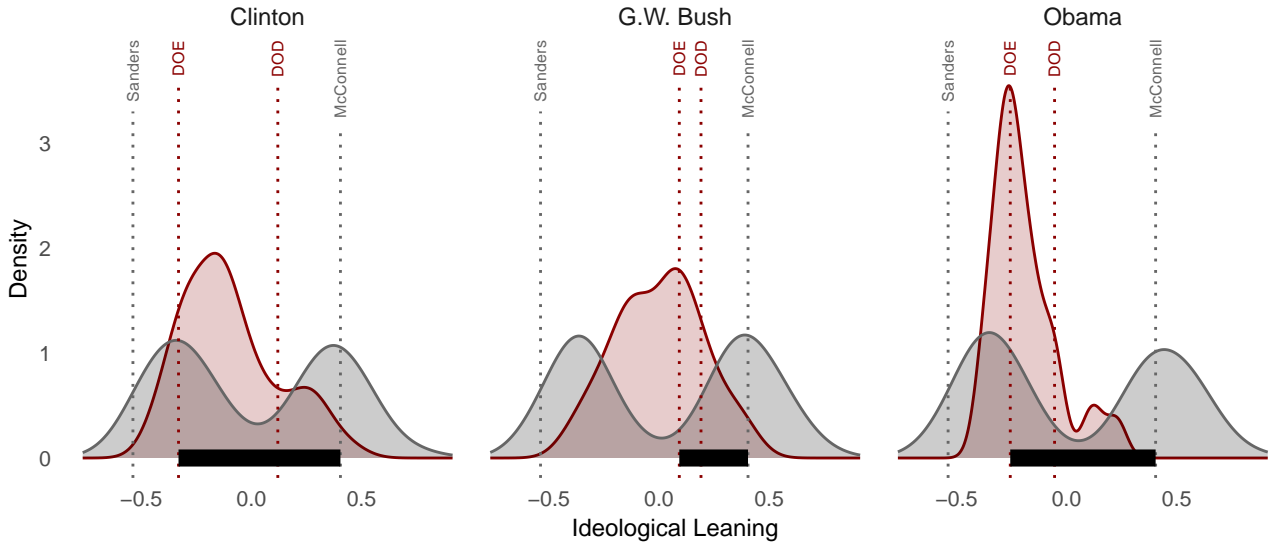
The ideology estimates are built using federal bureaucrats' campaign contributions to individual politicians. The key assumption – validated by Bonica (2019) – is that campaign donations are strong predictors of policy preferences. The resulting estimates are weighted averages of the DW-NOMINATE scores of legislators who receive donations from bureaucrats, with weights accounting for the amount of the donation, so that larger contributions receive a larger weight. If, for instance, employees of agency  $i$  make equal donations to two legislators, the ideological score of the agency will be equal to the average of the ideal points of those two legislators. The assumption underlying these weights is twofold. First, as donations predict preferences, it is reasonable to assume that the quantity donated is correlated with the intensity of those preferences. Second, large donations are more likely to come from better-paid, upper-level bureaucrats, who in turn have more influence over agency policy-making. Clearly, all measures of agency ideology have limitations. In the case of the estimates produced by Chen and Johnson (2014), a non-trivial assumption required to obtain valid estimates is that the sample of bureaucrats who are donors is representative of the employees of the agency. To mitigate concerns about the robustness of the results, I replicate the main analysis with four additional measures of agency ideology, which I describe in Section *Robustness Analysis*.

Figure 2 shows the ideological distribution of bureaucracy and members of Congress across the first Clinton, G.W. Bush, and Obama presidencies, with the thick dark bar on the horizontal axis showing how I construct the measure of ideological distance between MCs and bureaucracy. From the plot, it is clear to see the ideological distance between Sen. Mitch McConnell (R-KY) and the Department of Education – an agency generally perceived very liberal – shrinking under

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<sup>6</sup>This dataset has been widely used in political science to study the political control of the bureaucracy (Lowande 2018), strategic appointments (Moore 2018), career paths of bureaucrats (Bolton, Figueiredo, and Lewis 2020), and rule-making (Ellig and Conover 2014; Potter 2019). Another dataset with time-changing bureaucratic ideal points on the same scale as members' of Congress is the one produced by Bertelli and Grose (2011), though it includes only cabinet-level agencies. In Section H5 in the Appendix, I show the results are robust to using this as well as three additional measures of agency ideology.

Figure 2: Agency and MCs Ideology.



*Notes:* Distribution of the ideology scores of bureaucratic agencies (in red) and of members of Congress (in grey) across the first presidencies of Clinton, G.W. Bush, and Obama. Thick black bars represent the changing ideological distance between two actors: Senator Mitch McConnell and the Department of Education.

the Bush presidency compared to the previous and following democratic presidencies.<sup>7</sup>

## Methods

The sample on which I perform the analysis consists of all the sentences *mentioning* a bureaucratic agency in floor and committee speeches, so that I can compare politicians using bureaucratic information (the *tf-idf* of statistical facts) supplied by agencies that are ideologically close or far.

There are three methodological concerns for identifying the effect of ideological distance on the use of bureaucratic information. First, on the legislator side, there could be many individual characteristics that are correlated with ideology, their engagement with bureaucratic agencies, and the extent to which they use bureaucratic information in speeches (e.g., education, socioeconomic background, but also legislators' level of attention to towards bureaucracy). Second, on the agency side, some agencies – e.g., executive departments or large independent agencies –

<sup>7</sup>I find a negative correlation between MCs' reliance on bureaucratic information and agency ideology (conservatism) (see Table H.9).

might be more salient than others, and their salience might be correlated with their ideological leaning and their level of politicization. Third, the attention to bureaucracy and policy for each legislator can change over time, and the fact that legislators use frequently the information produced by certain bureaucracies might be the result of a legislator following closely a specific policy sector in that particular period of time or holding specific roles in committees, rather than being the result of more similar ideological positions.

To address these sources of omitted variable bias, I exploit within-agency variation in ideological leaning to account for agency-level heterogeneity in MCs' reliance on information. By estimating agency fixed effects, I account for all time-constant differences between agencies, their statutory features (i.e., independent agencies, executive departments, executive sub-agencies, agencies within the office of the president, and government-owned corporations), their level of informal politicization, and their own policy domain. In addition, I include a set of MC-by-congress fixed effects to hold constant both time-invariant and time-changing characteristics at the legislator-level (e.g., their legislative activism, committee roles, seniority, etc.), as well as other shocks that could affect the use of the information produced by agencies for every legislator in any given congress.

In particular, I estimate the following model via OLS:

$$tf-idf \text{ of Statistical Facts}_{ijat} = \gamma_{jt} + \delta_a + \beta \text{Ideological Distance}_{jta} + X_{ijat} \zeta' + u_{ijat} \quad (1)$$

where the outcome variable is the *tf-idf* of the statistical facts in sentence  $i$ , congress  $t$ , and given by MC  $j$ , mentioning agency  $a$ .  $\gamma_{jt}$  are MC-by-congress fixed effects,  $\delta_a$  are agency fixed effects, and  $\text{Ideological Distance}_{jta}$  is the time-changing ideological distance between MC  $j$  and agency  $a$  in congress  $t$ . Variation in treatment status is given by the different ideological leaning of bureaucratic agencies (which changes every presidency) and the ideology of MCs (fixed over time).  $X_{ijat}$  is a vector of covariates, namely the length of the sentence, whether

the sentence was given in a floor or committee speech and, in specifications without MC-by-congress dummies, it includes MC-level covariates: whether the legislator is a subcommittee chair, majority-party leader, minority-party leader, and legislative effectiveness score, which synthesizes several indicators about the proven ability of a legislator to advance her agenda items through the legislative process and into law (data from Volden and Wiseman 2020).  $\beta$ , the marginal effect of ideological distance on the use of statistical facts when mentioning bureaucratic agency, is identified by exploiting “shocks” to ideological leaning of bureaucracies resulting from changes to personnel happening with presidential transitions. Standard errors are clustered at the legislator level.

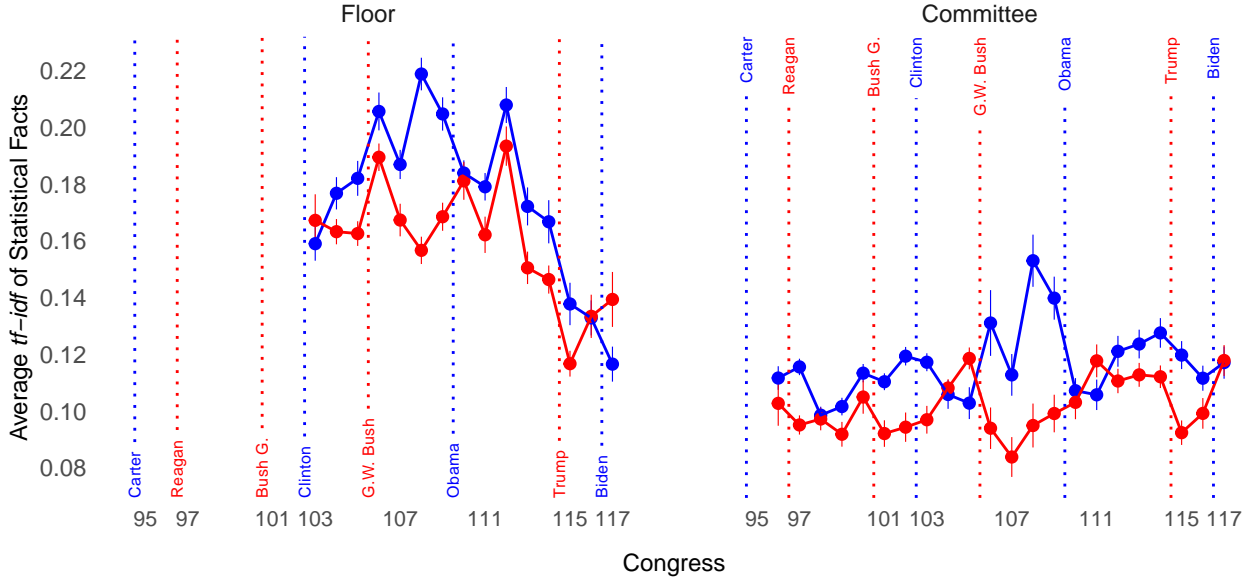
## Results

Out of the 2,084 unique legislators who mention bureaucratic agencies in the period under study, Christopher H. Shays (R-CT) is the one citing bureaucracies the most during the 14 Congresses he served, for a total of 171,040 mentions. Among these mentions, Rep. Shays cited information produced by bureaucracy 5.2% of the times, with an average *tf-idf* of 0.11 statistical facts. The proposed measure allows documenting two sets of stylized facts about *i*) partisan differences and *ii*) agency-specific differences in the use of bureaucratic information in Congress.

Figure 3 shows the average *tf-idf* of statistical facts in MCs’ statements *mentioning* the name of a bureaucracy. Four partisan differences are noteworthy.

First, while both Democrats and Republicans use bureaucracies as source of information approximately 6% of the times they mention a bureaucracy, Democrats make greater use of statistical facts and quantitative evidence compared to Republicans, (+12% in the floor and +10% in committees). Second, the polarization in MCs’ reliance on bureaucratic information is most pronounced during the first G.W. Bush presidency, when Democrats cite statistical facts

Figure 3: Partisan Reliance on Bureaucratic Information.



*Notes:* Average use of bureaucratic information across all agencies for every Congress in floor and committee speeches. Blue for Democrats, red for Republicans.

and quantitative evidence produced by bureaucracy between 47% (in committees) and 25% (in the floor) more compared to Republicans. Third, President co-partisans make less use of bureaucratic expertise compared to MCs of the same party as the President, a difference that is statistically significant at the 95% level for both floor and committee statements. This may suggest that MCs utilize evidence from bureaucratic agencies more vigorously when in the opposition, aiming to present more credible criticisms of the President’s agenda. Consistent with this interpretation, I also find that using bureaucracies as a source of information is positively correlated with using a negative tone in the sentence, suggesting that MCs use bureaucratic expertise to shed light on negative aspects or inefficiencies documented by bureaucracies.<sup>8</sup> Finally, the most striking trend is perhaps the decline in MCs’ reliance on bureaucratic information in floor speeches, with the average *tf-idf* sharply decreasing from the second Obama presidency. This downward trend might be the result of the high level of partisan polarization in the floor, where MCs increasingly care about scoring political points rather than engaging with policy

<sup>8</sup>The sentiment analysis is reported in Section F in the Appendix. An example of such negative sentiment is the following statement given by Sen. Reid (D-NV) in a floor speech in 2004 “Walmart, the country’s biggest retailer, has expressed concern that these higher fuel prices will result in lower sales – and in fact, the Department of Commerce reported yesterday that retail sales saw their largest drop in 16 months.”



information. This interpretation is consistent with the contrasting trend in committees. In committees, MCs' reliance on bureaucratic information is more stable and, though fluctuating over time, it does not experience such a drastic decrease as observed on the floor.

As for agency-specific differences, the data indicates that both Republicans and Democrats most frequently cite information from the EPA and the Government Accountability Office. However, there are noticeable partisan distinctions in the utilization of information produced by specific agencies. Perhaps unsurprisingly, Democrats use information from the EPA 26% more often than Republicans. Moreover, the frequency of statistical facts and quantitative evidence in Democrats' quotes of the EPA is 15% greater than that of Republicans. Similarly, since 2019, Democrats were more likely than Republicans to use the information produced by the Centers for Disease Control and Prevention and the FDA – agencies that played pivotal roles in the government's response to the COVID-19 pandemic. Conversely, Republicans exhibit a 24% higher use of facts produced by drug- and immigration-enforcement agencies compared to Democrats.<sup>9</sup>

Moving from stylized facts to the statistical analysis, Table 5 presents the main regression results. Let us recall that the unit of analysis is each sentence mentioning the name of a bureaucracy, hence the estimates capture the effect of ideological distance on the *tf-idf* of statistical facts at the intensive margin. The third column estimates Equation (1) and represents the preferred specification with MC-by-congress fixed effects. On average, ideological distance has a negative effect on the use of bureaucratic information, even when holding constant everything at the agency and legislator-by-congress level, and hence conditioning the estimated effect on time-changing characteristics of members of Congress (e.g., attention to different issues or co-partisanship with the President).<sup>10</sup>

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<sup>9</sup>These bureaucracies are: Drug Enforcement Administration, Office of National Drug Control Policy, Department of Homeland Security, Immigration and Customs Enforcement, Customs and Border Protection, and Bureau of Prisons. All the aforementioned differences are statistically significant at the 95% level.

<sup>10</sup>In the Appendix, I show that the MC-agency ideological distance does not matter at the extensive margin. I assemble a dataset of every possible MC-agency-congress triplets. The results of dyadic regression analysis suggest that ideological distance has no effect on the probability that MCs mention, quote, or report facts

Table 5: Ideological Distance and MCs' Use of Bureaucratic Information.

	<i>tf-idf</i> of Statistical Facts				
	Agency Type				
	All Agencies	Independent	Controlled		
	(1)	(2)	(3)	(4)	(5)
Ideological Distance	-0.021*	-0.024**	-0.025**	-0.006	-0.039**
	(0.011)	(0.011)	(0.011)	(0.021)	(0.017)
MC-level controls:		✓			
Other Controls:		✓	✓	✓	✓
Mean DV	0.13	0.13	0.13	0.14	0.13
R <sup>2</sup>	0.014	0.018	0.026	0.044	0.031
Observations	710,933	710,905	710,933	240,173	470,760
MC FE	✓	✓			
Congress FE	✓	✓			
Agency FE	✓	✓	✓	✓	✓
MC-Congress FE			✓	✓	✓

Notes: OLS estimates. SE clustered by member of Congress. Signif. codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

The effect size is as large as 20% the mean in the data, and a +1SD increase in ideological distance is associated with a decrease in the *tf-idf* of statistical facts in sentences mentioning a bureaucracy as large as 4.2% compared to the mean in the data. Importantly, I find no significant difference between the estimated effects in committee and floor speeches. This suggests that ideology matters both in more public-facing venues such as floor debates – where legislators are aware that their constituents have easy access to what they say – and in more specialized meetings such as committee sessions – where MCs' audience shift from voters to interest groups. However, for the purpose of this study, the direction of the effect is more relevant than the effect size. While ideological distance possesses a clear conceptual meaning, it proves challenging for substantive interpretations.<sup>11</sup>

To estimate the moderating effect of agency independence (*Hypothesis 2*), I estimate Equations

produced by bureaucracy at the extensive margin. This suggests that ideology matters conditional on MCs mentioning bureaucracies, namely when MCs engage with bureaucracies (see Section H2).

<sup>11</sup>In Table H.10 I show that the results are more precisely estimated in the post-2001 period, when C-SPAN3 started to televise some important hearings. This suggestive evidence is consistent with the electoral considerations of MCs when using bureaucratic information in their speeches, which gain importance when the probability of voters listening to the speech is higher. Similarly, I also find that effects are stronger and more precisely estimated in the House compared to the Senate, which is consistent with the stronger partisan dynamics of the lower chamber (see Section H10).

tion (1) separately on two subsets of the data, one where the agency mentioned in the sentence is an independent agency, and one where the agencies mentioned are not independent agencies. Among the 316 agencies mentioned by members of Congress, 84% have information on their official “status” within the executive branch, as published on the US government website. Of these, 65 out of 267 are independent agencies, operating outside executive departments. Columns (4) and (5) of Table 5 display the estimated effect of ideological distance for independent agencies and departments and executive sub-agencies, respectively. The estimates suggest that the observed effect in the entire sample of agencies is primarily driven by agencies under tighter political control. While the point estimate for independent agencies remain negative, the large standard errors do not allow to distinguish the effect from 0 at standard confidence levels.<sup>12</sup>

One source of concern in interpreting the difference in the estimates as the product of different levels of statutory independence is that independence can be correlated with other features of agencies that can confound the relationship between ideological distance the members’ use of bureaucratic information. A more robust test for the moderating effect of independence require some form of as-if random change to statutory features determining agency independence. A potential natural experiment is offered by the 2020 *Seila Law v. Consumer Financial Protection Bureau* case, when the Supreme Court ruled that statutory restrictions on the removal of the CFPB director were unconstitutional. This ruling lifted a key source of independence, previously insulating the agency from presidential control.<sup>13</sup>

## **For Cause or at Will?**

In response to the 2008 financial crisis, Congress and former President Barack Obama established the Consumer Financial Protection Bureau, an independent federal agency whose goal

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<sup>12</sup>I find similar results when using the independence scores produced by Selin (2015) (see Table H.7 in the Appendix).

<sup>13</sup>I am thankful to Alex Acs for pointing me to this case.

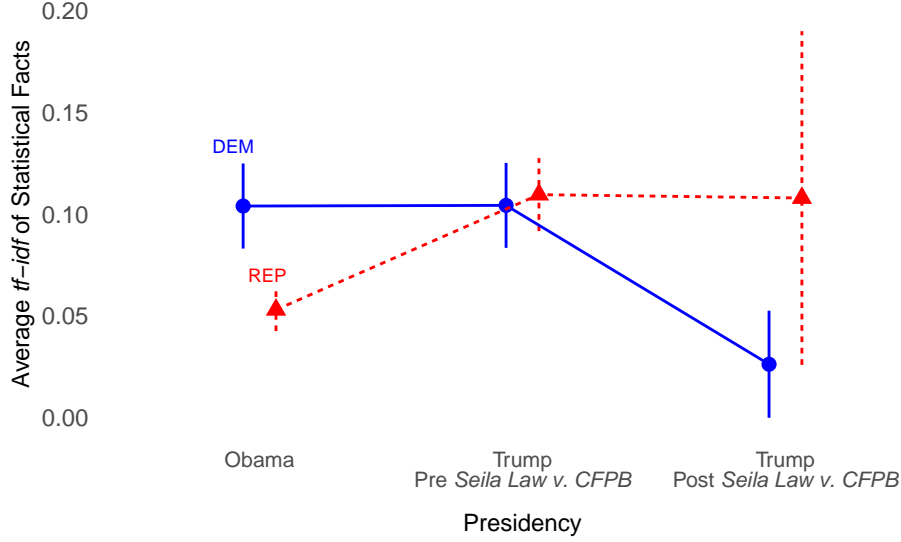
was to watch over predatory financial services practices. Initially proposed by Senator Elizabeth Warren (D-MA), the agency played an important role in safeguarding consumers' rights by ensuring fair treatment in the financial marketplace, enforcing financial laws, and addressing consumer complaints. Under the Trump administration, the mission (hence ideological leaning) of the agency changed direction. Former President Trump appointed fierce critics of the agency as administrators, accused of using the Bureau "to serve the wishes of the most powerful financial companies in America."<sup>14</sup> While during the Obama presidencies, Democrats' reliance on the information produced by the CFPB was 82% larger than Republicans', the gap closed under Trump. As evidenced by Figure 4, Democrats' average *tf-idf* when mentioning the CFPB is larger than that of Republicans during the second Obama presidency but not under Trump.

As provided by its statute – and unlike other independent agencies – the CFPB was governed by one director which could be removed by the President from her position only for "inefficiency, neglect of duty, or malfeasance in office." This statutory feature was a way of insulating the agency from undue political pressure during the 5-year mandate of the administrator. Political appointees serving as director – while clearly favored by the serving President – were protected from at-will dismissal and enjoyed a significant degree of independence in managing the agency. This guarantee of independence was nonetheless removed with the 2020 *Seila Law v. Consumer Financial Protection Bureau*, where the Supreme Court ruled that the restrictions on the removal of the CFPB director are unconstitutional. The dispute began when Seila Law, a law firm that provides debt-relief services to consumers, was under investigation by the CFPB for possible violations of telemarketing sales rules. Seila Law challenged the CFPB's powers to obtain documents from the firm, arguing that the Bureau's organization was unconstitutional due to the one-director structure with substantial power though removable only "for cause". Instead, Seila Law argued, the director should be removable "at will" by the President – that

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<sup>14</sup>See <https://www.forbes.com/sites/advisor/2020/06/30/supreme-court-says-trump-can-fire-consumer-watchdog-director-but-cfpb-here-to-stay/?sh=582cd3218c6a>.

Figure 4: Consumer Financial Protection Bureau and *Seila Law v. CFPB*



*Notes:* Average use of information produced by the CFPB in the second Obama presidency and during the Trump presidency before and after the decision of the Supreme Court.

is, for any reason.

The effect of this sudden shock to the CFPB independence on Democrats' reliance on the information produced by the Bureau is striking. As displayed in Figure 4, Democrats' average *tf-idf* after the *Seila Law v. CFPB* dramatically drops.

To strengthen the evidence provided visually, I leverage the shock to the independence of the CFPB to estimate a difference-in-differences model. Democrats are the treated legislators, for they are those ideologically distant from the CFPB under the Trump presidency, and the post-treatment period is the period from 29th June 2020 until the end of 2020 (the case was argued on March 3rd, 2020 and decided on June 29th, 2020). The analysis is performed on the years 2017-2020 during the Trump presidency, to hold fixed the ideological leaning of the Bureau and prevent the transition to the Biden presidency to confound the effect of the decreased level of statutory independence. Specifically, I estimate the equation

$$tf\text{-idf of Statistical Facts}_{ijat} = \gamma_{jt} + \delta_a + \tau \mathbb{1}\{j \in D, a = \text{CFPB}\} \times Post_{ijat} + X_{ijat} \zeta' + u_{ijat} \quad (2)$$

$\mathbb{1}\{j \in D, a = \text{CFPB}\}$  is an indicator equal to one for statements given by Democrats

Table 6: Effect of *Seila v CFPB* Case.

	<i>tf-idf</i> of Statistical Facts		
	(1)	(2)	(3)
Democrat $\times$ CFPB $\times$ Post	-0.071* (0.042)	-0.078* (0.043)	-0.074* (0.044)
MC-level controls:		✓	
Other Controls:		✓	✓
Mean DV	0.12	0.12	0.12
R <sup>2</sup>	0.047	0.050	0.053
Observations	176,789	176,766	176,789
MC FE	✓	✓	
Congress FE	✓	✓	
Agency FE	✓	✓	✓
MC-Congress FE			✓

*Notes:* OLS estimates. SE clustered by member of Congress. Signif. codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

(i.e., when legislator  $j$  belongs to the set of Democratic MCs) mentioning the CFPB, and  $\tau$  is the difference-in-differences estimator, capturing the difference in Democrats' reliance on information produced by the CFPB before and after 29th June 2020, the day when the *Seila Law v. CFPB* case was decided. The key identifying assumption is that, absent the Supreme Court ruling, Democrats' reliance on CFPB information would have experienced parallel trends to Democrats' reliance on information produced by other agencies.<sup>15</sup>

Table 6 shows that, as a result of the decreased independence of the agency and holding constant its ideological leaning, after the case, Democrats were less likely to use information and statistical evidence produced by the CFPB in their speeches. As a result of the decreased independence, the *tf-idf* of Democrats' mentions of the CFPB drops by  $-0.07$ , which is as large as 83% compared to the sample mean of the *tf-idf* of sentences mentioning the CFPB since its establishment.

<sup>15</sup>In Section H11 in the Appendix I indirectly test the parallel trends assumption by estimating Equation (2) with placebo post-treatment indicators.

## Robustness Analysis

In Section H in the Appendix, I include a series of robustness and additional tests. First, because the dependent variable is a frequency variable, I report regression estimates with alternative transformations of the dependent variable in order to reduce the importance of extreme values when estimating  $\beta$  (Table H.4). Second, results are robust to removing from the analysis quotes reported during oversight hearings, when members of Congress might use the information produced by agencies to question them (Table H.11).<sup>16</sup> Third, I show that alternative measures of agency ideology yield similar results. I use the estimates produced by Bertelli and Grose (2011), Clinton and Lewis (2008) Clinton et al. (2012), Richardson, Clinton, and Lewis (2018), who use a mix of expert surveys and executives' testimonies about specific bills as input to estimating agency ideology (see Table H.8). Moreover, the results for independent/controlled agencies are robust to using as a measure of statutory independence the indicators produced by Selin (2015) (see Table H.7 in the Appendix). Finally, I show that the effect of ideological distance are overall robust when restricting the sample from all the sentences *mentioning* a bureaucracy to all the sentences *quoting* a bureaucracy (see Table H.6).

## Discussion and Conclusions

The ability to produce expertise and information is one of the main sources of legitimacy of unelected bureaucracies that, despite governed by presidential directives, enjoy large degree of autonomy. By supplying expertise at the disposal of elected representatives, they contribute to the policy making process in all its stages, from the agenda setting and problem definition phase to the implementation and administration of programs. However, very little is known about the extent to which this information is used by politicians in Congress. While most

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<sup>16</sup>I adopt a very conservative exclusion criterion, removing every hearing whose title contains the word “oversight”, removing about 8% of the sentences mentioning bureaucratic agencies in committees.

studies on the role of bureaucracy in legislative politics resort to perception measures, this paper represents the first attempt at bringing observational evidence to a key question in the scholarship on bureaucracy, Congress, and policy-making.

With this paper, I show that bureaucracies play an important role in the legislative arena and I find that their information is vastly used by members of Congress in floor and committee sessions alike. However, legislators' reliance on bureaucratic information is not immune from political prioritization. Members of Congress favor information coming from agencies inside their ideological camp. Since lawmakers are only imperfectly able to assess the merits of information, they rely on the ideological leaning of bureaucracy as a device to decide whether they can rely on the information when making policy, harboring skepticism towards bureaucracies whose ideological leaning is apart from their own. However, my findings show that institutional features governing bureaucracy – and in particular the extent to which bureaucratic agencies are independent – can increase the perceived quality of information compensate the ideological differences between agencies and MCs.

These findings have implications for theories of separation of powers, consolidating the dynamic relation between Congress and the federal bureaucracy, as well as for normative considerations about the use of evidence in policy-making. This paper also has implications for the institutional design of bureaucratic bodies, for it suggests that institutional features granting independence to bureaucracy can mitigate the salience of the ideological divide between legislators and bureaucratic agencies.

This paper also opens new research avenues both within the study of politicians and bureaucracy as well as for other sub-fields in political science. While here I focused on legislators' reliance on information produced by bureaucracies, scholars could study the market for policy-relevant information and the competitive nature that exists between different sources of information. There can be situations in which bureaucracy holds a monopoly in the supply



of information compared to other actors, or “environments” in which government agencies are the only credible sources of information. Future work could focus on other influential organizations such as think tanks or interest groups and how changes in congressional staff capacity and composition affect legislators’ reliance on policy expertise. Future work could also look at policy-level outcomes and how they change and possibly improve when bureaucratic expertise enters the legislative arena. For instance, there might be a persuasion effect whereby legislators’ deploying bureaucratic information are able to build bipartisan coalitions in support of their favored bills or are more likely to see their proposed amendments passed. Finally, the new flexible measurement strategy proposed in this paper can be used in other sub-fields of political science to observe how information is used by a multitude of actors in different venues, from campaign messages, to social media, and press releases.

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## A Extraction Rules

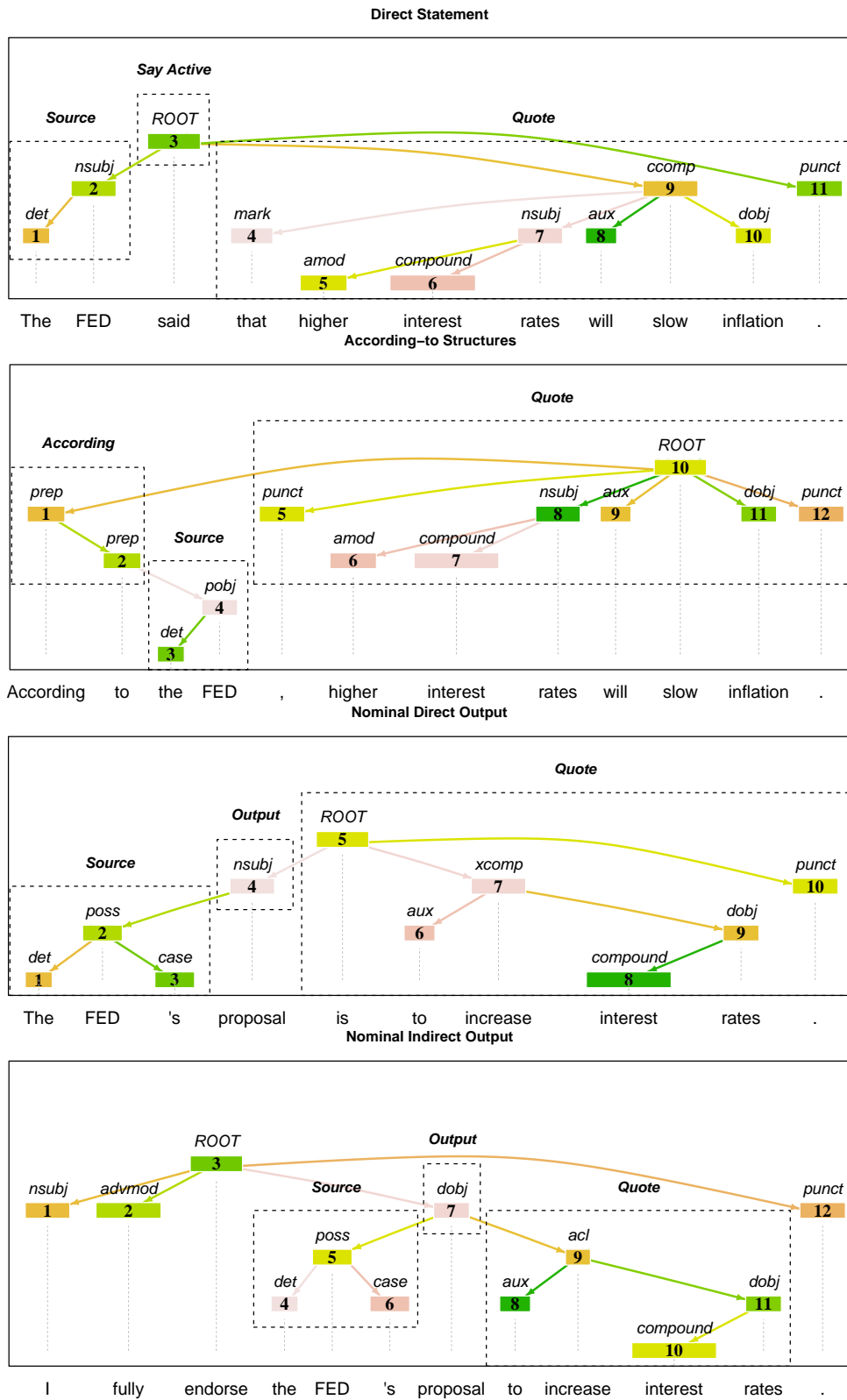
Below I report the lists of say-verbs and output-type words used to extract legislators' quotes of bureaucratic information.

**Say verbs** used to match syntactic rules: acknowledge, admit, advance, advise, advise, affirm, agree, argue, assert, assume, assume, assure, believe, claim, clarify, complain, concede, conclude, confirm, consider, contend, convince, decide, decide, define, demonstrate, document, encourage, estimate, evaluate, explain, find, identify, indicate, inform, predict, present, presume, project, propose, propose, prove, realise, realize, recommend, refer, remind, report, respond, reveal, say, see, set out, show, state, suggest, tell, testify, think, warn.

**Output-type words** are: advice, advise, analysis, argument, article, assessment, brief, comment, complaint, conclusion, copy, data, datum, decision, directive, document, estimate, evidence, figure, forecast, guidance, guideline, idea, indication, information, input, inquiry, instruction, memo, observation, opinion, paper, plan, position, prediction, prevision, program, programme, project, projection, proposal, rationale, reasoning, recommendation, report, statement, statistic, statistics, strategy, study, suggestion, survey, testimony, thesis, view.

## B Dependency Parsing: Examples

Figure B.1: Dependency Tree.



*Notes:* Parsed dependency trees of the four remaining illustrative examples where the FED is used in speech. Implemented through the *rsyntax* package in R.

## C LIWC Dictionary

In the table below I report the LIWC dictionary on numbers and quantifiers as well as a list of verbs capturing quantitative description.

Table C.1: Dictionary of Statistical Facts and Quantitative Evidence.

Source	Words
LIWC Dictionary	billion*, doubl*, dozen*, eight*, eleven, fift*, first, five, four*, half, hundred*, infinit*, million*, nine*, onc, one, quarter*, second, seven*, singl, six*, ten, tenth, third, thirt*, thousand*, three, trillion*, twel*, twent*, twice, two, zero, zillion*, add, ad, all, allot, alot, amount, anoth, ani, approxim*, averag, bit, both, bunch, chapter, coupl, each, either, entire*, equal*, everi, extra, few, fewer, fewest, group*, unequal*, least, less, lot, lotof, lotsa, lotta, major, mani, mo, more, most, much, mucho, multipl, nada, none, part, percent*, piec, plenti, remain, sampl*, scarc, scarcer, scarcest, section, segment*, seri, several*, some, somewhat, ton, total, triple*, tripl, varieti, various, whole, [All digits that are not dates]
Verbs (Quantitative Description)	increase, decrease, reduce, boost, lower, decline, skyrocket, eliminate, enhance, rise, limit, accelerate, significantly, plummet, spike, overall, large, face, hurt, harm, end, nurture, criticize, cause, induce, suffer, exacerbate, result, inflict, prevent, worsen, consequence, impact, affect, effect, combat, minimize, maximize, ensure, allow, curb, avoid, curtail, save, mitigate, promote, cultivate, facilitate, create, adopt, sustain, develop, bolster, improve, expand, maintain, restore, intensify, decay, crumble, erode, collapse, evolve, neglect, stop, budget, lose, fund, regulate, provide, discourage, encourage, go, plan

*Notes:* Stemmed tokens of LIWC dictionary of numbers and quantifiers and verbs capturing quantitative description. Numbers in digit format, except for dates and years, are included in the dictionary.

## D Building the *tf-idf*

To build the *tf-idf*, I first build a document-token matrix, with one row for every quote, and one column for every unique token used in the corpus as a whole. Tokens are assigned a weight which is equal to the logarithm of the inverse fraction of the quotes that contain the word.

For each quote mentioning the information produced by a bureaucratic body, the final score is the sum of the *tf-idf* frequencies of tokens that appear in the dictionary. More formally, consider the full corpus a set of quotes, and each quote a set of words, whose cardinality represents the number of unique words in the quote. For each quote, the use of facts and evidence is given by the following formula:

$$Facts_q = \sum_{t \in Dict} tf - idf_{t,q} \quad \text{with} \quad tf - idf_{t,q} = \frac{f_{t,q}}{|q|} \times \log \frac{|Q|}{|\{q \in Q : t \in Dict\}|} \quad (3)$$

where  $t$  is each token of quote  $q$ ,  $Dict$  the list of words capturing the use of statistical facts, and *tf-idf* is the term frequency-inverse document frequency of token  $t$  in quote  $q$ . The *Fact* score is ultimately a function of the absolute frequency of the token  $t$  ( $f_{t,q}$ ), the number of words in quote  $q$  ( $|q|$ ), the number of quotes of the total corpus  $Q$ , and the number of documents in the corpus that contain the token  $t$  ( $|\{q \in Q : t \in Dict\}|$ ).

## E Validation with GPT

In the table below, I report an example of the prompt/reply of the validation task performed with ChatGPT.

Table E.2: GPT Prompt for Validation Task.

---

**Prompt Input:** I will show you a statement given by a US member of Congress mentioning the Bureau of the Census. Please tell me whether the member of Congress is explicitly citing policy information or evidence produced by the Bureau of the Census. Please reply YES or NO and justify your response. This is the sentence: “The Bureau of the Census projects that by the year 2030, Hispanic children will represent 25 percent of the total student population, and even the most recent Census figures show that Hispanics are now on pace to become the nation ’s largest minority sooner than expected.”

---

**GPT Output:** YES, the member of Congress is explicitly citing policy information or evidence produced by the Bureau of the Census. The statement refers to projections made by the Bureau of the Census about the future representation of Hispanic children in the total student population, and also cites recent Census figures about the pace of growth of the Hispanic population.

---

*Notes:* Input and output of zero-shot text classification with GPT. Model used gpt-4 with temperature set to 0 to minimize idiosyncrasy in responses.

## F Sentiment Analysis of Sentences Mentioning Bureaucracies

In Table F.3 below I report OLS estimates of the effect of whether the sentence is using the agency mentioned as a source of information (dummy) on the probability of the sentence being assigned a negative sentiment.

To classify the sentiment of the sentence, I use a pre-trained language model to classify the sentiment of the sentence. Pre-trained models benefit from domain-specific training and yield better performance when compared to dictionary-based approaches relying heavily on the correct specification of the list of words. Because bureaucracies are highly technical bodies, I use the FinBERT model used by Huang, Wang, and Yang (2023) to classify the sentiment of financial communication text and train on a large financial communication corpus. FinBERT is a three-label classifier which takes as input a string of text (i.e., a sentence) and returns two outputs: one of the three sentiment labels (negative, neutral, positive) as well as the probability that the text belongs to the label.

There is a strong correlation between using information produced by bureaucracies and the negative sentiment assigned to the sentence, even when including MC-by-congress and agency fixed effects. The probability of using a negative sentiment in the sentence increase by 6-7 percentage points when the sentence cites the agency compared to when it simply mentions it.

Table F.3: Sentiment Analysis.

	Negative Sentiment		
	(1)	(2)	(3)
Agency Used as Source	0.067*** (0.002)	0.061*** (0.001)	0.066*** (0.002)
MC-level controls:		✓	
Other Controls:		✓	
Mean DV	0.11	0.11	0.11
R <sup>2</sup>	0.016	0.022	0.023
Observations	2,275,052	2,118,171	2,275,052
MC FE	✓	✓	
Congress FE	✓	✓	
Agency FE	✓	✓	✓
MC-Congress FE			✓

*Notes:* OLS estimates. DV is the probability of the sentence's sentiment being classified as negative. Independent variable equal to 1 if the sentence uses agency as source of information and 0 if it just mentions the agency. Signif. codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

## G Speeches: Data Quality

I access transcripts of speeches from two sources. For floor speeches (1994-2022) and for committee speeches (2010-2020), I scraped the digitalized version of the Congressional Record. For committee speeches (1980-2009) I relied on transcripts available through ProQuest.

### Online Version of Congressional Record

To access speeches on the online version of the Congressional Record I obtain the universe of available links to congressional hearings material and to floor speeches via the website <https://www.govinfo.gov/sitemaps>. The sitemaps contain one main url for each year, and each url contains as many urls as the number of packages in which the record has been grouped. For instance, the material for the Senate Hearing with ID 76804 can be accessed via the following link: <https://www.govinfo.gov/content/pkg/CHRG-107shrg76804/html/CHRG-107shrg76804.htm>, which re-directs to the text of the entire committee session.

Thanks to metadata listing the members of Congress who gave speeches in the session, it is possible to extract the speech with a set of flexible regular expressions that capture the structure “title + surname + period + white space + start of sentence”.

### Pro-Quest Data

For older committee sessions, I accessed transcripts directly from ProQuest. I obtained 42,277 transcripts of congressional committee sessions, each one consisting of one large html file, and no metadata exists to facilitate the extraction of single speeches. Speeches are nonetheless identifiable thanks to the way they appear in the text. The title and SURNAME of the speaker precedes the speech and is reported in capital cases. “Mr. FORD”, for instance, marks a new speech. Many individuals give speeches or statements and to extract speeches given by politicians alone, I exploit the fact that at the beginning of each transcript, the names of all members of Congress are reported followed by their home state. From every transcript I therefore extract all the name of politicians with a regular expression that matches the name and surname of individuals followed by the name of their respective state. Only speeches given by any of the extracted names are parsed from the transcript.

Despite some typos in the full text, a careful look at a random sample of parsed speeches suggests the quality of the parsing procedure is sufficiently high to confidently attribute speeches to legislators. By merging surname, date of congressional session, and state of the legislators I am then able to match data on committee speeches with the DW-NOMINATE score of each legislator.

## H Robustness Checks

### H1 Transformation of DV

Table H.4: Transformations of Outcome Variable.

	Abs. Frequency (1)	Log Abs. Frequency (2)	Log <i>tf-idf</i> (3)	Dummy Measure (4)	Abs. Frequency / Length Quote (5)
Ideological Distance	-0.021*** (0.008)	-0.008*** (0.003)	-0.009** (0.004)	-0.005** (0.003)	-0.007** (0.003)
MC-level controls:					
Other Controls:	✓	✓	✓	✓	✓
R <sup>2</sup>	0.027	0.030	0.029	0.028	0.185
Observations	710,933	710,933	710,933	710,933	40,337
MC-Congress FE	✓	✓	✓	✓	✓
Agency FE	✓	✓	✓	✓	✓

*Notes:* OLS estimates. SE clustered by member of Congress. Alternative measures of use of information from left to right: absolute frequency (1), log of absolute frequency (2), log of extittf-idf (3), dummy measure (equal to 1 if the absolute frequency is greater than 0 and 0 otherwise) (4), absolute frequency divided by the length of the sentence (5). Frequency refers to statistical facts and evidence in quotes of agencies mentioned in legislators' speeches. Signif. codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1



## H2 Effect of Ideological Distance at the Extensive Margin

To test whether members of Congress are less likely to mention, quote, or report facts from ideologically distant agencies at the extensive margin, I assemble a dyadic dataset at the MC-agency-congress level, combining every MC giving at least one speech for every Congress with agencies mentioned at least once in any given Congress, to make sure that agencies not yet established are not treated as never mentioned. The dataset includes 2,087 unique MCs and 317 unique bureaucracies. However, because data on bureaucracies' ideology is limited to fewer agencies, the sample used in the analysis contains 53 agencies for which I have the time-changing measure produced by Chen and Johnson (2014) and 160 agencies for which I have the time-constant measure produced by Richardson, Clinton, and Lewis (2018). I report the results using both measures of agency ideology.

I then estimate the following dyadic regression model via OLS:

$$y_{ijat} = \beta \text{Ideological Distance}_{jat} + \zeta_{ja} + \gamma_{jt} + \epsilon_{ijat}$$

where  $y_{ijat}$  is the logarithm of either the number of mentions, quotes, and *tf-idf* in speeches given by legislator  $j$  in Congress  $t$  mentioned agency  $a$ . Ideological distance is the absolute value between the agency ideal point (using alternatively the data produced by Chen and Johnson (2014) and Richardson, Clinton, and Lewis (2018)) and the first dimension of the DW-NOMINATE score for members of Congress.  $\zeta_{ja}$  are dyad fixed effects and  $\delta_{jt}$  are MC-by-Congress fixed effects. SE are clustered by MC-agency dyad. Table H.5 reports the results. There is no effect of MC-agency ideological distance on the number of mentions, quotes, and facts produced by bureaucracy when looking at the extensive margin.

Table H.5: Ideological Distance and MCs' Use of Bureaucratic Information at the Extensive Margin.

	Agency Ideology Data					
	Chen and Johnson (2014)			Richardson et al. (2018)		
	Mentions (1)	Quotes (2)	Facts (3)	Mentions (4)	Quotes (5)	Facts (6)
MC-Agency Ideological Distance	0.003 (0.007)	0.001 (0.002)	0.004 (0.003)	-0.024 (0.022)	-0.007 (0.006)	-0.007 (0.009)
Log. N. Speeches	0.096*** (0.002)	0.017*** (0.001)	0.020*** (0.001)	0.052*** (0.001)	0.008*** (0.000)	0.010*** (0.000)
R <sup>2</sup>	0.517	0.379	0.328	0.484	0.320	0.265
Observations	421,378	421,378	421,378	2,455,968	2,455,968	2,455,968
MC-Agency FE	✓	✓	✓	✓	✓	✓
MC-Congress FE	✓	✓	✓	✓	✓	✓

*Notes:* Dyadic regression, OLS estimates. Outcomes are log-transformed number of agency mentions, quotes, and *tf-idf* of statistical facts. SE clustered by MC-agency dyad. Signif. codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

### H3 Sample is All Sentences Quoting a Bureaucracy

In the table below I report the results when looking at the effect of ideological distance on sentences *quoting* a bureaucracy and using several measures of quantitative evidence and statistical facts in the quote as outcome.

Table H.6: Ideological Distance and MCs' Use of Information Conditional on Quoting Bureaucracies.

	<i>tf-idf</i>	Absolute Frequency	Log Abs. Frequency	Log <i>tf-idf</i>	Dummy Measure	Abs. Freq./ Length Quote
	(1)	(2)	(3)	(4)	(5)	(6)
Ideological Distance	-0.228 (0.138)	-0.185* (0.100)	-0.072* (0.037)	-0.080* (0.044)	-0.049* (0.026)	-0.007** (0.003)
MC-level Controls:						
Other Controls:	✓	✓	✓	✓	✓	✓
R <sup>2</sup>	0.186	0.188	0.184	0.179	0.148	0.185
Observations	40,337	40,337	40,337	40,337	40,337	40,337
Legislator-Congress FE	✓	✓	✓	✓	✓	✓
Agency FE	✓	✓	✓	✓	✓	✓

Notes: OLS estimates. DV is *tf-idf* of statistical facts in sentences quoting bureaucracy. Signif. codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

## H4 Alternative Measures of Independence

In Table H.7 I show that the effect of ideological distance is larger for less independent agencies using an alternative measure of agency independence. I use the two different indicators produced by Selin (2015), capturing independence along two dimensions: independence as the ability of an agency to make policy decisions without political interference; and independence as requirements imposed on agency officials and limitations to presidential power of appointment/removal of agency heads. The indicators are derived by modelling 50 structural features about agencies with a Bayesian latent variable model. The estimates range between 0 and 4, with higher values signifying higher independence. These measures do not capture variation over time, therefore I estimate Equation (1) on two subsets of agencies above and below the average of each of the two indicators separately.

Table H.7: Alternative Measures of Agency Independence.

	Above Average Independence		Below Average Independence	
	Decision Makers (1)	Political Review (2)	Decision Makers (3)	Political Review (4)
Ideological Distance	-0.008 (0.020)	0.024 (0.025)	-0.041** (0.018)	-0.041*** (0.016)
MC-level controls:				
Other Controls:	✓	✓	✓	✓
R <sup>2</sup>	0.043	0.068	0.031	0.028
Observations	255,545	140,009	455,388	570,924
MC-Congress FE	✓	✓	✓	✓
Agency FE	✓	✓	✓	✓

*Notes:* OLS estimates. SE clustered by member of Congress. Signif. codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

## H5 Alternative Measures of Agency Ideology

Results using alternative measures of agency ideology. When the measure is fixed over time, agency fixed effects are replaced by agency-type fixed effects (i.e., independent agencies, executive departments, executive sub-agencies, etc.)

Table H.8: Alternative Measures of Agency Ideology.

	<i>tf-idf</i> of Statistical Facts				
	(1)	(2)	(3)	(4)	(5)
Ideological Distance (Chen and Johnson 2014)	-0.025** (0.011)				
Ideological Distance (Bertelli and Grose 2011)		-0.052** (0.021)			
Ideological Distance (Richardson et al. 2018)			-0.013*** (0.002)		
Ideological Distance (Clinton and Lewis 2008)				-0.010*** (0.002)	
Ideological Distance (Clinton et al. 2012)					-0.022*** (0.007)
MC-level controls:					
Other Controls:	✓	✓	✓	✓	✓
R <sup>2</sup>	0.026	0.034	0.016	0.019	0.022
Observations	710,933	211,526	1,910,258	1,338,431	1,007,168
MC-Congress FE	✓	✓	✓	✓	✓
Agency FE	✓	✓			
Agency Type FE			✓	✓	✓

*Notes:* OLS estimates. SE clustered by member of Congress. Signif. codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

## H6 Agency Ideology and MCs Reliance on Bureaucratic Information

Table H.9 shows that the information produced by conservative agencies is less likely to be used by members of Congress. The coefficients represent linear estimates of the effect of agency ideology on the *tf-idf* of statistical facts in sentences mentioning bureaucracies using alternative measures of agency ideology. I include MC-by-congress and agency-type fixed effects, as well as the length of the sentence and a dummy for floor/committee sentences as covariates. The coefficients are negative and precisely estimated, suggesting that MCs are less likely to rely on statistical facts and quantitative evidence produced by conservative agencies.

Table H.9: Agency Ideology and MCs' Use of Bureaucratic Information.

	<i>tf-idf</i> of Statistical Facts				
	(1)	(2)	(3)	(4)	(5)
Agency Ideology (Chen and Johnson 2014)	-0.114*** (0.013)				
Agency Ideology (Bertelli and Grose 2011)		-0.060*** (0.019)			
Agency Ideology (Richardson et al. 2018)			-0.028*** (0.002)		
Agency Ideology (Clinton and Lewis 2008)				-0.023*** (0.002)	
Agency Ideology (Clinton et al. 2012)					-0.029*** (0.005)
MC-level controls:					
Other Controls:	✓	✓	✓	✓	✓
R <sup>2</sup>	0.018	0.029	0.016	0.019	0.021
Observations	820,765	227,335	2,062,719	1,446,213	1,088,750
MC-Congress FE	✓	✓	✓	✓	✓
Agency Type FE	✓	✓	✓	✓	✓

Notes: OLS estimates. SE clustered by member of Congress. Signif. codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

## H7 Committee Results and the Introduction of Televised Hearings via C-SPAN3

To test whether the results for committee speeches are different in the period when some hearings started being televised on C-SPAN3, I split the sample into a pre and post C-SPAN3 periods. From 2001, some salient hearings started being televised on C-SPAN3. I find the results are more precisely estimated in the post 2001 period. Clearly, there could be many other confounding changes occurring from 2001, but these results suggest that MCs' audiences play an important role in the decision of which information to use in their speeches.

Table H.10: Committee Analysis and the Introduction of C-SPAN 3.

	<i>tf-idf</i> of Statistical Facts		
	Full Sample	Pre C-SPAN3	Post C-SPAN3
	(1)	(2)	(3)
Ideological Distance	-0.029** (0.012)	-0.016 (0.015)	-0.035* (0.021)
Legislator-level Controls:			
Other Controls:	✓	✓	✓
R <sup>2</sup>	0.023	0.023	0.025
Observations	272,943	145,434	127,509
MC-Congress FE	✓	✓	✓
Agency FE	✓	✓	✓
Committee-Chamber FE	✓	✓	✓

*Notes:* OLS estimates. DV is the *tf-idf* of statistical facts and evidence in quotes of agencies mentioned in legislators' speeches. Separate regressions on three periods: entire period, before introduction of televised hearings (pre-2001) and after introduction of televised hearings (post-2001). Signif. codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

## H8 Committee Results Accounting for Oversight Hearings

Because in committees legislators might report what said by bureaucracies to hold them to account, in the table below I report the results of the statistical tests performed after removing all oversight hearings. I adopt a very conservative exclusion criterion, removing every sentence which contains the word “oversight” in the title of the hearing, removing approximately 8% of the sentences given in committee speeches. For instance, an example of oversight hearing is the following: “Automobile Fuel Economy: EPA Oversight. Congressional Hearing, Jan. 29, Feb. 1, 1980”. The results are robust to both conditioning on and omitting such speeches

Table H.11: Committee Analysis Accounting for Oversight Hearings.

	<i>tf-idf</i> of Statistical Facts		
	(1)	(2)	(3)
Ideological Distance	-0.029** (0.012)	-0.029** (0.012)	-0.035*** (0.013)
Oversight Hearing		-0.005 (0.007)	
MC-level Controls:			
Other Controls:	✓	✓	✓
R <sup>2</sup>	0.023	0.023	0.024
Observations	272,943	272,943	253,395
MC-Congress FE	✓	✓	✓
Agency FE	✓	✓	✓
Committee FE	✓	✓	✓

*Notes:* OLS estimates. DV is the *tf-idf* of statistical facts and evidence in legislators’ sentences mentioning agencies. Col. (1) all sentences, Co. (2) specification conditioning on oversight hearing, Col. (3) removing oversight hearings. Signif. codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

## H9 Committee (and Topic) Fixed Effects

In the table below I show the results are robust to including committee fixed effects. In particular, committee fixed effects can be interpreted as topic fixed effects. There are 399 unique committees across both chambers in the data, hence it is possible to control for very subtle topics/policy sectors such as the Committee on Agriculture, Nutrition, and Forestry or the Committee on Banking, Housing, and Urban Affairs.

Table H.12: Committee Analysis Including Committee Fixed Effects.

	<i>tf-idf</i> of Statistical Facts		
	(1)	(2)	(3)
Ideological Distance	-0.028** (0.012)	-0.029** (0.012)	-0.029** (0.012)
MC-level Controls:			
Other Controls:	✓	✓	✓
R <sup>2</sup>	0.022	0.023	0.023
Observations	273,002	272,943	272,943
MC-Congress FE	✓	✓	✓
Agency FE	✓	✓	✓
Committee-Chamber FE		✓	✓

*Notes:* OLS estimates. DV is the average *tf-idf* of statistical facts and evidence in quotes of agencies mentioned in legislators' speeches. SE clustered by legislator. Signif. codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1



## H10 Differences between House and Senate

I find the estimated effect of ideological distance on the *tf-idf* of statistical facts to be stronger and more precisely estimated in the House compared to the Senate. The test replicates the main analysis reported in Table 5.

Table H.13: Ideological Distance and MCs' Use of Bureaucratic Information in House and Senate.

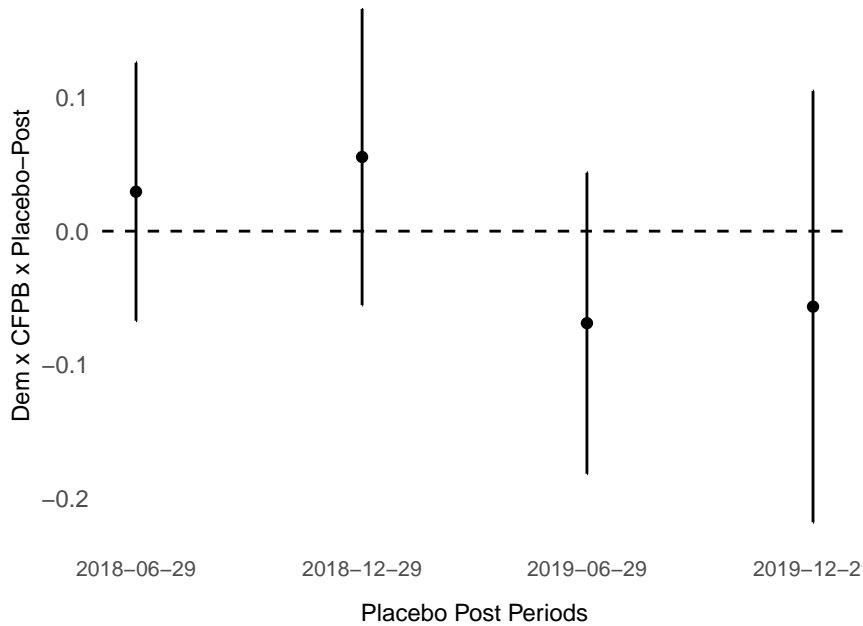
	<i>tf-idf</i> of Statistical Facts					
	House			Senate		
	(1)	(2)	(3)	(4)	(5)	(6)
Ideological Distance	-0.037*** (0.013)	-0.036*** (0.013)	-0.038*** (0.014)	-0.006 (0.017)	-0.011 (0.017)	-0.015 (0.017)
MC-level controls:		✓			✓	
Other Controls:		✓	✓		✓	✓
R <sup>2</sup>	0.015	0.018	0.031	0.013	0.018	0.022
Observations	383,409	383,388	383,409	327,524	327,517	327,524
MC FE	✓	✓		✓	✓	
Congress FE	✓	✓		✓	✓	
Agency FE	✓	✓	✓	✓	✓	✓
MC-Congress FE			✓			✓

Notes: OLS estimates. SE clustered by member of Congress. Signif. codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

## H11 Parallel Trends

In the figure below I report the results of a robustness test showing that Democrats' reliance on information from the CFPB was on parallel trends compared to Democrats' reliance on other agencies during the Trump presidencies. I do so by estimating Equation (2) on a sample of sentences mentioning bureaucracies in the pre-treatment period (i.e., sentences given before 29th June 2020) and use a series of placebo post-treatment indicators (reported on the horizontal axis). On the vertical axis I plot the estimated effect of the triple interaction Democrat  $\times$  CFPB  $\times$  Placebo Post. The 95% confidence intervals largely include 0.

Figure H.2: Placebo Post-Treatment Periods.



*Notes:* Estimated effect of the triple interaction of Democrat  $\times$  CFPB  $\times$  Placebo Post-treatment period on the *tf-idf* of statistical facts in sentences mentioning bureaucratic agencies. SE clustered by member of Congress. The period of analysis is the Trump presidency up until the day before the Supreme Court ruling (i.e., 25th June 2016).