

# Credit Claiming and Accountability for Legislative Effectiveness

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January 2025

**Abstract:** The growing literature on public opinion and legislative effectiveness has produced an unsolved puzzle. Survey research shows that voters approve more highly of legislators when informed they are effective. Despite this, constituents show little awareness of how effective their individual legislator is, and more effective lawmakers do not perform better in general elections. Why can effective legislators not convey their legislative accomplishments via credit claiming? To answer this question, we use new data on credit claiming in social media posts and email newsletters by members of Congress, as well as original survey experiments comparing credit claiming to other common forms of messaging. Our analyses produce three main findings, all casting doubt on the efficacy of credit claiming. First, there is a weak relationship between credit claiming and legislative effectiveness; even ineffective legislators credit claim at high rates. Second, survey respondents do not distinguish between messages that simply stake out a position on an issue versus messages where members describe taking action and achieving results. Third, there is effectively no relationship between the total volume of credit claiming and member approval among constituents. Together, the results suggest that while voters may value effective lawmakers, credit claiming is not seen as a credible signal of effectiveness.

**Keywords:** Accountability, credit claiming, legislative effectiveness, congressional communication **Word Count:** 8,286

# Center for Effective Lawmaking Working Paper 2025-01

Theories of electoral accountability assume that individuals evaluate the performance of those in office and then reward or punish them accordingly come election time. Do voters reward legislators for being effective lawmakers? Recent research paints a puzzling picture. On the one hand, when constituents are given independent information about how effective representatives are at getting bills through the legislative process, they report higher levels of support for the legislator (Butler et al. 2021; Strickler 2022). On the other hand, more effective members of Congress (as measured using the Legislative Effectiveness scores introduced in Volden and Wiseman 2014) do not perform any better in general elections than less effective members (Butler et al. 2021), although there is some evidence of accountability for the ineffective in primary elections (Treul et al. 2022).

One commonly cited reason for the disconnect between what voters want and who they vote for is incomplete information about which legislators are effective and which ones aren't. Treul and coauthors explicitly posit this as an explanation for their findings, writing on page 1715:

"[T]o the extent that primary voters are more interested in, and knowledgeable about, politics than are general election voters... the accountability link is influenced by the broader informational environment in which the primary election takes place."

This explanation is bolstered by survey evidence from Butler et al. (2021), which finds essentially zero correlation between a member's Legislator Effectiveness score and how effective respondents perceive their member of Congress to be.

In this paper, we evaluate whether legislators can address this informational gap by informing constituents about their legislative accomplishments, or *credit-claiming*. A long line of research in political science highlights the central role of credit-claiming in legislative communication (Grimmer 2013; Grimmer, Westwood, and Messing 2014; Mayhew 1974; Russell 2021; Yiannakis 1982). In an era of online communication and social media, where legislators can share information

instantly and near-costlessly with voters, it's plausible that effective legislators can showcase their productivity to an extent not previously possible. However, the ease of communication opens the possibility of strategic messaging by legislators, potentially misleading constituents about members' actual legislative effectiveness. For example, the frequency with which a representative claims credit influences impressions of effectiveness more than actual outcome measures, such as the dollar amount procured via legislation (Grimmer, Messing, and Westwood 2014). If the effective and ineffective credit claim at similar rates, the rise of the internet and social media platforms may not contribute to more informed awareness of credit claiming.

To evaluate whether credit claiming reinforces or undermines accountability for effectiveness, we draw on two sources of evidence. First, we introduce new data on credit claiming in six years' worth of congressional social media posts and email newsletters. These messages, identified using supervised machine learning classification, are used to evaluate whether credit claiming is a meaningful signal of effectiveness (i.e., do more effective members credit claim more frequently?), as well as to determine whether members that credit claim more receive higher approval ratings from constituents.

Second, we conduct survey experiments where individuals are randomly shown different message types from a hypothetical legislator, including credit-claiming for various accomplishments.<sup>1</sup> These studies allow us to isolate the effect that individual messages from legislators might have in shaping perceptions of a legislator's effectiveness and overall approval, in

<sup>&</sup>lt;sup>1</sup> Both experiments were pre-registered with documents available at <u>https://aspredicted.org/968\_PVW</u> and at <u>https://aspredicted.org/u3wz7.pdf</u>. Full texts are also included in the Appendix.

comparison to other common types of messages legislators send (e.g., position-taking, advertising, and partisan posturing).

Our analyses produce three main findings, which together cast doubt on the ability of credit claiming to solve the problem of accountability for effectiveness. First, credit claiming is only a weak signal of legislative effectiveness. The difference in expected legislative effectiveness for a member whose credit claiming is one standard deviation below the average versus a member whose credit claiming is one standard deviation above the average is approximately 0.3 on a 10 point scale. Second, the public does not distinguish between credit claims and messages where members discuss policy without taking credit for it. While survey respondents do rate legislators more highly in dimensions such as lawmaking ability and overall satisfaction after seeing a credit claiming message relative to some types of messaging (e.g., advertising or partisan posturing), they do not distinguish between credit claiming for actual accomplishments versus position-taking in general. Third, there is little evidence that representatives and senators who credit claim more have higher approval ratings from constituents. When comparing the volume of credit claiming on social media and newsletters to approval ratings drawn from the Cooperative Election Study (CES), the relationship is either nonsignificant or miniscule in size. This holds true both in aggregate and among subsets (same-party constituents, the politically attentive, general and primary voters) where we might expect awareness of credit claiming to be higher.

Together, these findings point to the limitations of legislator-led communication to credibly convey effectiveness to the mass public. Much of credit claiming is cheap talk, and voters appear to treat it as such. By demonstrating the limitations of credit claiming as a possible solution to the accountability problem, our paper contributes to a growing literature (e.g., Butler et al 2021; Hunt and Miler 2024; Park 2023; Treul et al 2022; Strickler 2022) studying whether and how legislators can

be rewarded for being effective lawmakers. Additionally, our research calls into question earlier work (e.g., Grimmer 2013; Grimmer, Westwood, and Messing 2014; Mayhew 1974; Russell 2021; Yiannakis 1982) assuming credit claiming strengthens the electoral connection. Given the paucity of evidence we find for a meaningful impact of credit claiming on the mass public, future research on communication by political elites should consider other audiences for credit claiming, such as donors, organized interests, or fellow politicians.

# Legislative Effectiveness, Credit Claiming, and Accountability

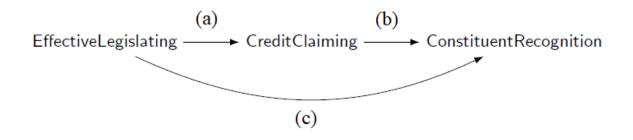
The concept of credit-claiming comes from Mayhew (1974), where it was one of three activities (along with advertising and position-taking) that Mayhew argued members engage in to ensure re-election. As the 2004 update of the original text states, "The political logic of [credit claiming], from the congressman's point of view, is that an actor who believes that a member can make pleasing things happen will no doubt wish to keep him in office so that he can make pleasing things happen in the future" (p. 53). Credit claiming is described as an essential activity that members of Congress were "relentless" in pursuing. However, Mayhew was appropriately skeptical of whether credit claiming was as effective as members believed. "There is an overwhelming problem of information costs," he writes, "For typical voters Capitol Hill is a distant and mysterious place; few have anything like a working knowledge of its maneuverings. Hence there is no easy way of knowing whether a congressman is staking a credible claim or not" (p. 59-60).

Recent research has only reinforced Mayhew's agnosticism regarding credit claiming's effectiveness, although questions still remain. Credit claiming can play a role in ensuring voters hold legislators accountable for being effective while in office, but only under certain conditions, conditions which may or may not hold in practice. To structure our discussion and subsequent analyses, Figure 1 depicts a simple theoretical model of how voter accountability for effective

lawmaking and credit claiming might operate. The figure displays a set of labelled causal links between Effective Legislating, Credit Claiming, and Constituent Recognition.

# Figure 1: Causal Diagram of Credit Claiming and Accountability for Legislative

Effectiveness



*Note:* The figure shows a causal diagram of how legislative effectiveness can be translated into constituent recognition (and reward) for legislators. First, legislators may claim credit for legislative accomplishments (the edge labelled a above). Constituents may receive these signals directly (the edge labeled b above) and reward legislators accordingly, as evidenced by higher approval ratings, larger vote margins, etc. Alternatively, constituents may receive signals of a legislator's effectiveness from sources other than the legislator themselves (the edge labeled c above), sources such as the media, interest groups, or other political elites.

The first necessary condition for credit claiming to aid accountability is that effective legislators must claim credit for their accomplishments (the edge labeled *a* in the diagram above). Specifically, more effective legislators must credit claim more than less effective legislators; if ineffective legislators are equally likely to credit claim and voters find it similarly plausible, credit claiming would be mere cheap talk and voters would be correct to tune it out. Do legislators credit claim regardless of how effective they are? Indeed, there are numerous well-documented instances where individual members have claimed credit for legislation that they actually voted *against*.<sup>2</sup> Despite

<sup>&</sup>lt;sup>2</sup> For example, several Republicans were called out for claiming credit for a 2021 infrastructure bill that they opposed: https://www.cnn.com/2022/09/09/politics/biden-republicans-infrastructure-law/index.html.

this, there's reason to believe that, on average, credit claiming is tied to a legislator's effectiveness. In a study of Congressional press releases, Grimmer, Messing, and Westwood (2012) demonstrate that there is considerable variation in how much credit claiming legislators engage in, variation that correlates with other legislator characteristics such as the partisanship of their districts. Hunter and Miler (2024) provide more direct evidence, showing that more effective legislators credit claim more frequently in newsletters.

Even if, in aggregate, more effective legislators claim credit at higher rates than ineffective ones, a second requisite condition for accountability is that voters both receive and believe these messages (this is represented as the edge labelled *b* in Figure 1). Members of Congress and other legislators today have more tools at their disposal than at any time before to communicate with constituents. In addition to more traditional vehicles of communication such as physical letters, newsletters, and press releases, members (and their staffers) use personal websites and social media accounts on sites such as Facebook, Twitter/X, YouTube and Instagram. And while new tools exist to reach constituents (and others), it's unclear how much constituents take advantage of these platforms to acquire information. While there is surprisingly little academic research on this topic, one recent nationally representative survey found that only 10% of Americans report following their member of Congress on a social media site (Neely and Bowra 2022). For those who do follow legislators and are cognizant of their credit claiming, they must also believe the claim is credible and support the legislative effort for the credit claim to have its desired effect.

Finally, even if more effective legislators credit claim more frequently *and* constituents both receive and believe these credit claiming messages, there are alternative pathways via which information about effectiveness can reach votes (the edge denoted as *c* in the diagram above). Traditional media sources, such as newspapers (both local and national), broadcast and cable news

shows, radio shows, and more all cover legislation as it is being developed, debated, and passed. Organized interests inform members of policies that are priorities for their group and which legislators are working for (or against) their goals. And other political candidates, particularly political opponents, can highlight which legislators are or are not effective. For credit claiming to contribute to political accountability, messaging provided by legislators themselves must convey information that voters do not receive from other sources.

Research on constituent responses to legislative effectiveness (Butler et al. 2021; Sickler 2024) has mainly evaluated this third causal pathway, *c*, by providing survey respondents independent information on a legislator's effectiveness.<sup>3</sup> This work finds that information about effectiveness leads to higher approval of and intention to vote for a legislator. However, members promoting their own effectiveness may be seen as less credible than neutral third-party sources. Thus it's important to consider how direct credit claims are perceived. Furthermore, no research (to our knowledge) has considered the relationship between credit claiming in the aggregate and measures of voter awareness and approval, as we do here.

To assess whether and how credit claiming can contribute to accountability, we evaluate all three pathways depicted in Figure 1. To do so, we use a combination of observational data on actual credit claiming by members of Congress in email newsletters and social media, as well as evidence from survey experiments on how constituents perceive credit claiming. Specifically, we answer the following three questions: First, how informative are credit claims about the effectiveness of the member? Second, how do members of the public perceive (individual) credit claiming messages?

<sup>&</sup>lt;sup>3</sup> For example, Sickler (2024) randomizes whether survey respondents see the following information: "[This member of Congress] is also ranked as one of the (most/least) effective members of his party by the Legislative Effectiveness Project. This project tracks the ability of each representative to move bills through Congress and get them passed into law."

And finally, does legislative effectiveness and (aggregate) credit claiming lead to higher constituent approval? The following three sections describe how we approach each of these questions and the answers we find.

# Is Credit Claiming a Credible Signal of Legislative Effectiveness?

The first question we address is whether credit claiming is a credible signal of legislative effectiveness. In other words, when a constituent sees a member claim credit for a legislative accomplishment, how informative is that signal? Answering this question requires pairing data on the legislative effectiveness of a lawmaker with the amount of credit claiming they engage in, and evaluating how strong of a relationship there is between the two.

To accomplish this, we collect six years' worth of communication by members of Congress, both senators and representatives, and classify which messages are credit claiming using a supervised machine learning classification approach. For all officeholding members of the  $115^{th}$ ,  $116^{th}$ , and  $117^{th}$ Congresses (2017 – 2022), we download their tweets using the Twitter API and from the DCinbox website maintained by Lindsey Cormack.<sup>4</sup> All tweets (n = 3,275,060) and newsletters (n = 84,398) publicly shared by officeholding members during this time period are included in the analysis.

In order to identify credit claiming messages, a team of researchers and research assistants read and classified a random sample (stratified by chamber and session) of approximately 10,000 tweets as credit claiming or not. Credit claiming messages were separated into two possible categories: credit claiming into credit claiming for constituency work (efforts focused on bringing money to or aiding a member's constituency specifically) and credit claiming for policy work (efforts focused on changing a policy status quo that are not constituency-specific). Examples of the two

<sup>&</sup>lt;sup>4</sup> See Cormack (2017) for a description of the newsletter data and its collection.

types of credit claiming messages are shown in Figure 2. Intercoder reliability for the classifications were extremely high. For the category of credit claiming for policy work, Krippendorf's alpha was 0.95. For the category of credit claiming for constituency work, the Krippendorf's alpha was 0.92. We augmented this sample with approximately 18,000 tweets by U.S. senators during the 113<sup>th</sup> and 114<sup>th</sup> sessions previously classified as credit claiming or not by Annelise Russell (2021). We also classified 2,000 newsletter sentence pairs (which were approximately equal in length to the average tweet), to ensure a supervised classification algorithm trained on Twitter/X data could also reliably classify sentences from newsletters.

Using this manually classified sample, we trained and assessed a variety of supervised classification models. We withheld 2,000 tweets and the 2,000 newsletter sentence pairs for assessing out-of-sample performance. Random forest models implemented using the *ranger* package in R produced the best balanced accuracy. The accuracy (balanced accuracy) in the credit claiming for policy work category was 95% (84%) for tweets and 85% (78%) for newsletter sentence pairs, while the balanced accuracy in the credit claiming for constituent work category was 89% (75%) for tweets and 77% (68%) for newsletter sentence pairs, accuracies that are similar to those in other recent research using supervised classification to categorize legislative messages (Ballard et. al. 2022; Payson et. al. 2022; Yu et. al. 2024). <sup>5</sup>

<sup>&</sup>lt;sup>5</sup> One feature of our classification procedure worth noting is that rather than assign a classification (credit claiming or not) using a 50%-plus tree decision rule, as is common with random forest models, we chose the classification threshold so that the number of expected false positives equaled the number of false negatives in the training data. Doing so should ensure that, when the classification model is applied to the entire set of tweets or newsletter sentences for a given member, the false positives and false negatives cancel each other out, producing a close approximation to the true number of credit claims. Results from the test data suggest this is the case, as the net number of misclassifications was below 2% of the total for both the out-of-sample tweet and newsletter data.

# Figure 2. Examples of Credit Claiming Messages



Proud to have secured \$7.2M in federal funds to extend water mains to areas of Cascade Township whose wells were contaminated by PFAS.

...

As a member of the bipartisan PFAS Task Force, I am firmly committed to ensuring all West Michiganders have access to clean drinking water.

Grand Rapids Press 🔗 🔛 @GRPress · Jun 12, 2022 The funds were secured by U.S. Rep. Peter Meijer, R-Grand Rapids Township, in a federal water infrastructure bill. mlive.com/news/grand-rap								
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*Note:* The figure shows two tweets classified as credit claiming. The top tweet, where Representative Peter Meijer (R-MI) takes responsibility for securing over \$7 million to provide clean drinking water to a town in his district, is an example of Credit Claiming for Constituency Work. The bottom tweet, where Senator Amy Klobuchar (D-MN) highlights her role in passing a bill to ease shipping backlogs, is an example of Credit Claiming for Policy Work.

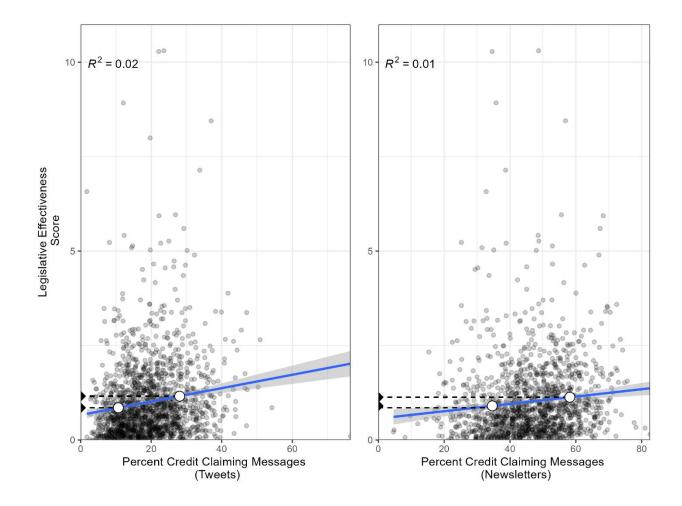
For each member and session, we then calculate both the total number of credit claiming messages and the percent of credit claiming message in tweets and newsletters. These totals can then be compared to the member's legislative effectiveness score (as measured using data from the Center for Effective Lawmaking).<sup>6</sup>

In Figure 3, we assess the relationship between the total amount of credit claiming (both for constituency and policy work) members engage in and the legislative effectiveness of the member. The figure displays, on the x-axis, the percent of a member's tweets or newsletter sentences in a particular session that involve credit claiming. The y-axis shows the legislative effectiveness of the member. On one hand, the relationship is clearly positive; similar to Hunt and Miler (2024), we find that more effective legislators credit claim more. On the other hand, the relationship is rather weak. This can be seen in two ways. First, the *R*<sup>2</sup> value of the OLS regression fit is very weak: 0.02 in the case of tweets, and 0.01 in the case of newsletter sentences. In words, the proportion of the variance in legislative effectiveness of a member based on how much they credit claim is minute. The regression line suggests that the difference between a member whose credit claiming on Twitter is one standard deviation below the average (28% of tweets involve credit claiming) is 0.3 points on a 10 point scale. The equivalent difference in predicted legislative effectiveness is even smaller when looking at credit claiming in newsletters instead.

We also conduct a more formal evaluation of the informativeness of credit claiming at the level of an individual message. Let  $X_{ij}$  represent whether a single message *j* by member *i* contains a credit

<sup>&</sup>lt;sup>6</sup> Available for public download here: <u>https://thelawmakers.org/data-download</u>

Figure 3. Credit Claiming Frequency and Legislative Effectiveness



*Note:* The figure displays two scatterplots showing the relationship between a congressional member's legislative effectiveness score and the percent of messages classified as credit claiming in the member's tweets (left-hand side) and newsletters (right-hand side). Solid blue line displays the OLS regression line of best fit, with 95% confidence interval band in grey. Open circles indicate the points on the regression line one standard deviation below and one standard deviation above the mean for Percent Credit Claiming Messages, while the dashed line shows the predicted legislative effectiveness score associated with each of those points. R<sup>2</sup> values for each regression shown in top left.

claim  $(X_{ij} = 1)$  or not  $(X_{ij} = 0)$ . Then one way to define the informational content of a single

message is

(1) 
$$E[Y_i|X_{ij} = 1, Z_i] - E[Y_i|X_{ij} = 0, Z_i],$$

where  $Y_i$  indicates the legislative effectiveness of member *i*, and  $Z_i$  indicates other characteristics of the member that may also provide information about how effective the member is. Equation 1 thus represents the average additional information a credit claiming message provides about how effective a member is.

The difference in conditional expectations shown in Equation 1 can be estimated using linear regression. To do so, for each tweet or newsletter sentence bigram we regress the legislative effectiveness of the member who shared the message on a binary indicator for whether the message was classified as credit claiming or not. In the baseline model, we do not include any control variables besides a session-party fixed effect. The interpretation of the slope coefficient  $\beta$  in this model is thus the difference in expected legislative effectiveness relative to other members of the legislator's party in that particular session, representing a low information context where an individual doesn't know anything besides the party of the member.<sup>7</sup> In the full model, we include several other variables from the Center for Effective Lawmaking dataset that may correlate with both credit claiming and legislative effectiveness and that may also be known by a voter. These variables are a member's gender and race (measured using binary indicators for whether the member is a Woman, African-American, or Hispanic), seniority (measured as the number of terms the member has been in office), ideological extremism (measured using the member's first dimension DW-NOMINATE score, folded), the partisanship of their district (measured using the presidential vote share of the member's party in their district), and binary indicators for whether the member is a party leader or committee chair. We estimate the models, both without and with the full set of member control variables, for tweets and newsletters separately. We also estimate models for constituency and policy credit claiming separated, as well as combined. In all models we cluster our

<sup>&</sup>lt;sup>7</sup> This approach also implicitly controls for whether the member was in the majority or minority party in that session.

standard errors by member to account for non-independence of errors in messages by the same legislator.

The estimated slope coefficients ( $\beta$ ) corresponding to equation 1 across the different model specifications are shown in Table 1. The top half of Table 1 displays the estimates from the tweet data, while the bottom half shows the estimates from the newsletter data; the estimates are very similar regardless of the communication platform. Mirroring what we observe in Figure 3, credit claiming is associated with higher legislative effectiveness, but the relationship is weak. The estimate in column 1 at the top of the table suggests that the expected difference in legislative effectiveness based on a single tweet is 0.05 on a scale that ranges from 0 to 10. The standard deviation in legislative effectiveness score in a given session is approximately 1, meaning a single tweet is associated with roughly a  $1/20^{\text{th}}$  standard deviation increase in predicted legislative effectiveness.<sup>8</sup> When the additional member-level variables are controlled for, the estimated relationship weakens by approximately 1/3 in magnitude (column 2). The relationship is approximately twice as strong when focusing solely on credit claiming for policy (columns 5 and 6), but the relationship is insignificant when focusing solely on credit claiming for constituency work (columns 3 and 4). All of these conclusions are essentially unchanged when the focus is shifted to credit claiming in newsletters (the bottom half of the table).

<sup>&</sup>lt;sup>8</sup> One counterpoint is that people who follow their member on Twitter/X or who subscribe to their email newsletter may see many credit claims, as opposed to a single one. If the impact of a single tweet added up cumulatively, so the argument goes, by the estimate in column 1 above 20 credit claiming tweets would be associated with roughly a one standard deviation increase in expected legislative effectiveness for the member. This logic is misleading, however. Additional tweets are less informative than a single tweet. In other words, seeing whether a single tweet by a member is credit claiming or not is less informative than seeing whether another tweet is credit claiming or not, after observing 19 previous tweets. Put differently, the regression results shown in Table 1 provide a lower bound on the cumulative number of credit claims necessary to achieve a given difference in legislative effectiveness. The estimate in Table 1 suggests it would require observing more than 20 credit claims (potentially many more) to reasonably conclude the member was one standard deviation above the average in legislative effectiveness.

	Dependent Variable: Legislative Effectiveness Score					
	(1)	(2)	(3)	(4)	(5)	(6)
Credit Claim (Tweets)	0.052*	0.037*	0.013	0.008	0.093*	0.065*
	(0.020)	(0.016)	(0.020)	(0.018)	(0.024)	(0.021)
Ν	2.4mil	2.4mil	2.4mil	2.4mil	2.4mil	2.4mil
Туре	All	All	Constituent	Constituent	Policy	Policy
Session-Party FEs	Y	Y	Y	Y	Y	Y
Member Controls	N	Y	Ν	Y	Ν	Y

**Table 1.** Difference in Predicted Legislative Effectiveness by Credit Claiming

	Dependent Variable: Legislative Effectiveness Score					
	(1)	(2)	(3)	(4)	(5)	(6)
Credit Claim (Newsletters)	0.059*	0.028	0.030	0.007	0.078*	0.044*
	(0.020)	(0.018)	(0.024)	(0.019)	(0.020)	(0.010)
N	3.5mil	3.4mil	3.5mil	3.4mil	3.5mil	3.4mil
Туре	All	All	Constituent	Constituent	Policy	Policy
Session-Party FEs	Y	Y	Y	Y	Y	Y
Member Controls	N	Y	Ν	Y	N	Y

*Note:* Entries are OLS coefficients. Standard errors clustered by member are shown below in parentheses. \*=p<0.05, two-tailed test.

Together these analyses suggest that credit claiming is only weakly associated with legislative effectiveness. Why is that the case? To illustrate, take House Representative Mike Rogers (R-AL). During the 117<sup>th</sup> Congress, Rogers sponsored only 2 bills (one to withdraw the United States from the UN and the WHO, and the other to change to a year-round daylight savings time). Neither bill

had much of a chance of being passed, and neither made it past the introduction stage. Despite this, Rogers tweeted 42 times taking credit for policymaking efforts. Several of these were trumpeting the introduction of the aforementioned two bills. Other tweets took credit simply for voting in favor of or against legislation. Still others claimed credit for minor, non-billed related actions (e.g., signing onto a letter to the United States Olympic Committee criticizing the decision to take part in a Chinese-based Olympic Games). Put simply, despite a remarkably thin record of demonstrated legislative accomplishment, members can find plenty to claim credit for.

# Does the Public Give Credit for Credit Claiming Messages?

Do voters view credit-claiming as credible, despite the limited informativeness of the typical credit claim? To answer this question, we turn to evidence from two survey experiments, which allow us to manipulate the content of messages and compare credit-claiming to other common types of communication by legislators.

We conduct two survey experiments where respondents are shown messages from hypothetical legislators at random, then asked to rate the legislator on several dimensions, such as legislative ability, quality of constituent service, and overall satisfaction. Both survey experiments were pre-registered and fielded via Prime Panels.<sup>9</sup> Prime Panels uses patented data quality solutions to recruit participants from a network of opt-in market research panels.<sup>10</sup> Although a relatively newer tool for social scientists, research shows that across multiple measures of data quality, Prime Panels delivers data comparable to that obtained from MTurk, but with the added advantage of offering greater diversity on such characteristics as age, family composition, religiosity, education,

<sup>&</sup>lt;sup>9</sup> Approval to work with human subjects obtained from [redacted for review].

<sup>&</sup>lt;sup>10</sup> https://www.cloudresearch.com/products/prime-panels/

and political attitudes (Chandler et al. 2019). The first study was done in August of 2022 and the second in July of 2023. More details can be found in Appendix A.

In each study, we compare the effect of credit claiming messages on our respondent perception metrics to other common message types that have been extensively studied in the political science literature (Bernhard, Sewell, and Sulkin 2017; Costa 2020; Mayhew 1974; Russell 2018). Specifically, we compare credit claiming messages to advertising, position taking, and partisan posturing messages. In the first study, we do not distinguish between credit claiming for constituency work versus credit claiming for policy work, while in the second study we include separate treatments for each.

The treatments in Study 1, which included 1,000 respondents (after respondents who failed attention checks were dropped), consisted of a series of mock posts from Twitter/X. The posts were attributed to four hypothetical state representatives – two Democrats and two Republicans. For each representative, we designed the posts and accompanying information to vary not just in post content, but also post volume, as previous work (Costa 2021; Grimmer, Messing, and Westwood 2012; Sulkin, Testa, and Usry 2015) suggests that individuals judge legislators on both the quantity and content of their communications. This was conveyed through both the prompt that preceded the post (e.g., "This is one of the many tweets Representative posted...") and the number of reposts, quotes, and likes the displayed post received. The specific statements used in each treatment are displayed in Table 2. Note that we varied the issues referenced in the position-taking posts and whether the partisan posturing was positive or negative in nature.

	Position-Taking	Credit-Claiming	Partisan Posturing	Advertising
Mike Andrews (D)	The private healthcare system is costing families way too much. Government needs to step in and fix the system.	Met with leaders of the medical community today. Ready to continue my work to deliver quality healthcare to the people of this states.	Republicans are attacking rights and trying to take this country backwards. They must be stopped!	My weekly newsletter is out! If you would like our newsletter sent directly to you, please subscribe.
Bradley Martin (D)	Investments in childcare make our workforce stronger. We need to make affordable childcare a priority.	Had the pleasure of visiting a local daycare that benefits from funding I fought so hard to deliver.	Proud of Biden and my fellow Democrats for getting Americans back to work.	Check out the @dailyjournal's coverage of my latest plans for this great state.
Dave Cahill (R)	Attacking the oil and gas industry only hurts consumers. We need energy that hard-working people can afford.	Proudly led a group of lawmakers today who met to discuss how we can keep oil and gas at prices every family can afford.	Americans deserve better than what Biden and the Democrats are giving them. Join me in fighting for your families!	Catch me on @MaxintheMorning tomorrow discussing all the great things happening in this district.
Garrett Hall (R)	Tax increases are a threat to our state's industry. We must fight to protect family- owned farms and small businesses.	What are you doing for dinner tonight? We will be eating at one of the many family- owned restaurants I fight to protect from high taxes.	Kudos to Republican leaders all across the U.S. for getting people back to work and our kids back in school.	Check your inbox or your mailbox for my latest updates from the capitol!

Table 2: Content Featured in Study 1 Treatments

Subjects were randomly assigned to view one post from three of the four state legislators, with each post coming from a random draw of all possible posts for that individual legislator. After viewing the post, respondents were asked to use a 5-point scale ranging from "far below average" to "far above average" to rate the legislator on (1) activity on social media; (2) ability to write, pass, and deliver legislation; (3) willingness to serve constituents; and (4) loyalty to the party. The first item is a manipulation check, and the latter three items are dependent variables. Each is intended to represent an aspect of a legislator's behavior that may be valued by constituents. Subjects were also asked to use a 5-point scale ranging from "extremely dissatisfied" to "extremely satisfied" to rate how they would feel about the legislator's performance if he was their representative. After viewing and rating three different legislators, subjects then proceeded to other modules of the survey.

Study 2 followed the same basic procedure as Study 1, but with three basic differences. First, we do not vary volume. Instead, all treatments portray the legislator as an infrequent communicator, giving us a stricter test of the effects of the messages of themselves. Second, we alter the nature of the four types of messages. We make the credit-claiming messages more explicit and divide them into types: (1) pork claims, where the legislator takes credit for a specific amount of money, and (2) legislation claims, where the legislator takes credit for a specific bill. We continue to use position-taking and partisan posturing messages, but omit advertising, as our main interest is in seeing if the lack of distinction found in Study 1 replicates when our treatments are more specific.

Lastly, we drop the post-treatment questions about constituency service and party loyalty and instead add a dependent variable to address our concerns about the credibility of the statements. Adapted from Clifford and Simas (2022), Study 2 includes a measure of sincerity that asks respondents to gauge whether they think the statements made by the legislator are true or if the legislator is just saying what they think voters want to hear

We begin with a look at our attention check. Across all treatment types, those who received the high volume treatment rated the legislator as significantly (p<0.01) more active than those who received the low volume treatment. These results give us confidence that subjects were picking up on differences in the treatments as we proceed to our fuller analyses. We stack each subject's three responses, as this allows for within-subject analyses that increase our statistical power. We analyze the full, attentive sample using ordinary least squares.<sup>11</sup> Our key independent variables are a dichotomous indicator of post volume and three dichotomous indicators of post type. We use the advertising treatment as the baseline, as this is the most neutral of our treatments. Models available in the Appendix show that interactions between the volume and type indicators failed to reach conventional levels of significance. Thus, we focus on these basic models. As pre-registered, we include controls for the subject's partisan and ideological alignment with the legislator.<sup>12</sup> We also include fixed effects for each legislator and random effects for each subject. Table 3 displays the results.

We find that credit-claiming messages do bolster a representative's reputation as a legislator and public servant. Credit-claiming messages give legislators a significant (p<0.01) boost over advertising messages as well as partisan posturing messages when respondents are asked to rate the legislative ability, quality of constituency service, and overall satisfaction. They also rate the legislator higher for party loyalty.

However, the positive effects observed for credit-claiming messages also apply to positiontaking messages, which do not involve the hypothetical legislator taking responsibility for any specific action. Position-taking messages have essentially the same effects (p>0.50) on effectiveness, service, and satisfaction that credit-claiming messages do. Furthermore, the high volume

<sup>&</sup>lt;sup>11</sup> Since OLS returns the same substantive results as ordinal logistic regression models, we present the OLS models for ease of interpretation.

<sup>&</sup>lt;sup>12</sup> Leaners are treated as partisans, leaving pure independents (N=150) as our omitted baseline. Ideological alignment is derived from the subject's self-placement on the 7-point ideological scale. This measure is coded so that higher values indicate a more liberal (conservative) subject when the legislator is a Democrat (Republican).

	Legislative	Constituent	Party Loyalty	Overall
	Ability	Service		Satisfaction
Credit-Claiming	.14*	.18*	.13*	.15*
	(.05)	(.05)	(.04)	(.05)
Position-Taking	.15*	.20*	.14*	.19*
	(.05)	(.05)	(.05)	(.05)
Partisan	01	.03	.25*	00
Posturing	(.05)	(.05)	(.05)	(.05)
High Volume	.12*	.12*	.17*	.11*
	(.03)	(.04)	(.03)	(.04)
Subject from	.01	.03	.20*	30*
<b>Opposite Party</b>	(.05)	(.05)	(.06)	(.06)
Subject from	.39*	.54*	.48*	.51*
Same Party	(.05)	(.05)	(.06)	(.06)
Ideological	.08*	.07*	.03*	.13*
Alignment	(.02)	(.02)	(.02)	(.02)
Legislator FEs	Y	Y	Y	Y
Respondent REs	Y	Y	Y	Y
Ν	2,997	2,997	2,996	3,000
	(1,000 clusters)	(1,000 clusters)	(1,000 clusters)	(1,000 clusters)

Table 3: OLS Regression Analyses of Perceptions of Legislators by Treatment, Study 1

*Note:* Entries are OLS coefficients. Standard errors clustered by subject are shown below in parentheses. \*=p<0.05, two-tailed test.

manipulation produced similar positive effects, suggesting that the act of sending frequent messages in and of itself may be interpreted as a sign of hard work.

The results in Table 3 also show clear and significant effects due to shared partisanship and ideological alignment. As such, we re-run these analyses but include interactions between our treatments and a dichotomous indicator that is coded 0 if the subject and the legislator are from the same party and 1 if they are from opposite parties. Pure independents are excluded from these analyses, which are shown in Table 4.

	Legislative	Constituent	Party Loyalty	Overall
	Ability	Service		Satisfaction
High Volume	.20*	.21*	.18*	.20*
	(.05)	(.05)	(.05)	(.06)
Position-Taking	.15*	.21*	.09	.15*
	(.07)	(.07)	(.11)	(.08)
Credit-Claiming	.13	.15*	.12	.09
	(.07)	(.07)	(.07)	(.08)
Partisan	.15*	.21*	.38*	.21*
Posturing	(.07)	(.07)	(.07)	(.08)
Subject from	25*	37*	28*	66*
<b>Opposite Party</b>	(.09)	(.10)	(.10)	(.11)
Opposite X	11	13	.03	11
Volume	(.07)	(.08)	(.07)	(.08)
Opposite X	.02	02	.15	.06
<b>Position-Taking</b>	(.11)	(.12)	(.11)	(.12)
Opposite X	.02	.09	.02	.09
Credit-Claiming	(.11)	(.11)	(.10)	(.12)
Opposite X	29*	31*	18	46*
Partisan	(.12)	(.12)	(.11)	(.12)
Posturing				
Democratic	.08	.05	03	.03
Subject	(.04)	(.05)	(.05)	(.05)
Ideological	.09*	.08*	.04*	.14*
Alignment	(.02)	(.02)	(.02)	(.02)
Legislator FEs	Y	Y	Y	Y
Respondent REs	Y	Y	Y	Y
Ν	2,547	2,547	2,546	2,550
	(850 clusters)	(850 clusters)	(850 clusters)	(850 clusters)

Table 4: OLS Regression Analyses of Perceptions of Legislators by Treatment and SharedPartisanship, Study 1

*Note:* Entries are OLS coefficients. Standard errors clustered by subject are shown below in parentheses. \*=p<0.05, two-tailed test.

The results in Table 4 show in- and outpartisans differ in the value they derive from partisan messages, but not from credit-claiming (or position-taking) messages. When subjects were rating legislators from their own party, partisan messages were viewed as more valuable than advertising but no different from either position-taking or credit-claiming messages. When subjects were rating legislators from the opposite party, partisan messages led to significantly lower effectiveness and service scores than either credit-claiming or position-taking messages, and significantly lower

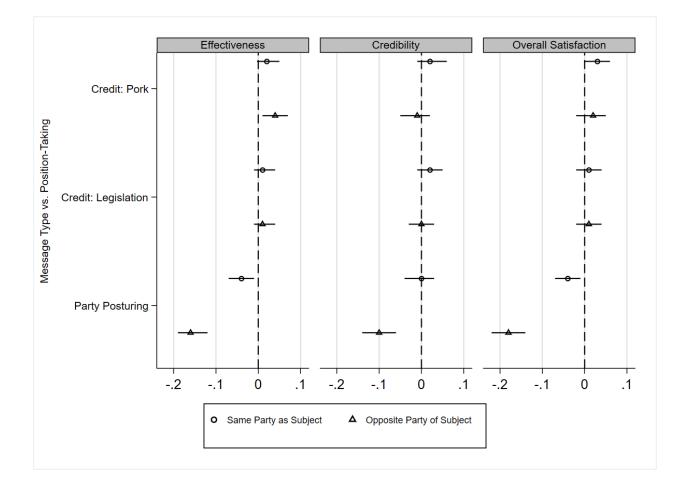
satisfaction scores than any of the other three types of messages. Out-partisans were less swayed by overall volume, though not significantly so. And neither in- nor out-partisans made significant distinctions between position-taking and credit-claiming. Thus, it seems that even in more mixed constituencies, just talking about the issues may be enough to persuade voters that a legislator is actually working on them.

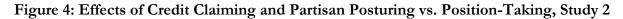
One possible reason we did not find greater differences between credit-claiming and position-taking messages is because the treatments in Study 1 featured claims about general legislative accomplishments, as opposed to the specific benefits those accomplishments may bring. In the absence of these details, these messages may have been viewed as cheap talk that was, in practice, no different than simply taking a position. And relatedly, these more generic messages may not have been seen as credible. To use the terminology of Arnold (1990), voters may reward or punish incumbents only when actions are *traceable*, meaning the voter can "plausibly trace an observed effect first back to a governmental action and then back to a representative's individual contribution" (p. 47).

Figure 3 displays the results derived from interactive models akin to those featured in Table 4, with full results available in the Appendix. In this iteration, individuals who failed the pretreatment attention check were redirected out of the survey and thus, our analyses focus on the 1,183 who gave at least partial responses to any of our post-treatment questions. Since our main interest is in whether individuals differentiate between position-taking and more direct credit claims, we treat position-taking as the omitted baseline and graph the differences between this type and the other three.

Overall, the results from Study 2 are consistent with those from Study 1. The partisan posturing messages continue to receive the lowest ratings from out-partisans, but make little

difference to in-partisans. And even when messages explicitly reference funds brought to the district, subjects still do not appear to differentiate between credit claiming and position taking.<sup>13</sup>





*Note:* Plots derived from models available in the Appendix. Circles and triangles represent estimated difference in effect size for each message type relative to position-taking messages, while bars represent 95% confidence intervals.

Of note, however, is the fact that when we separate by party (see the Appendix), we see that

Democratic representatives do receive significant effectiveness boosts from Democratic subjects

<sup>&</sup>lt;sup>13</sup> This holds even when we limit our analyses to the two treatment sets where the legislators specifically mentioned passing the bill versus just introducing it. See the Appendix.

exposed to the pork message and Republican subjects exposed to either type of credit claim. Though this was not expected and the interaction term between the pork treatment and the outparty indicator in the Democratic model is not statistically significant (p=0.27), it is consistent with the idea that Republicans' association with fiscal responsibility leads pork barrel politics to be of greater benefit to Democratic legislators (Sellers 1997; Sidman 2018).<sup>14</sup> This type of party reputation story also aligns with findings that Democratic subjects found the Republican representatives to be significantly less credible when making pork claims. While further investigation into these partisan differences is needed, the fact remains that in the majority of cases explored in our two studies, individuals seemed to give equal weight to what legislators *said* and what legislators said they actually *did*. Given that, as we saw above, credit claiming can represent cheap talk, perhaps this is a reasonable position for members of the public to take.

#### Does Credit Claiming Lead to Higher Approval?

The final question we evaluate is whether members who credit claim at high rates receive are rewarded via better approval ratings from their constituents. The first empirical section revealed that individual credit claiming messages are not very informative about a member's legislative effectiveness, while the second section showed that in survey experiments voters do not distinguish between credit claiming messages and other similar messages. Perhaps given a sufficient amount of credit claiming, however, voters might update on and give proper credit to legislators.

To answer this question, we use data from the Cooperative Election Study (CES) surveys covering the years of our tweet and newsletter data (2017-2022). The CES samples respondents from across the United States but identifies each respondent's Congressional district. The surveys

<sup>&</sup>lt;sup>14</sup> Though see Barron and McLaughlin (2024), who find that pork barrel messages from either party were punished by Republican subjects.

ask each respondent how much they approve of their representative and two senators on a fourpoint scale ranging from Strongly Approve to Strongly Disapprove. We merge our data on credit claiming with CES data on constituent approval, regressing the latter on the former. Each row in the data represents a member-respondent pair, with each respondent entering the dataset three times (as they give one rating for their representative and one for each of their two senators). The CES approval ratings range from 1 to 5 and are coded so that higher values indicate higher approval. The main independent variables are the member's legislative effectiveness score and the percent of messages in their tweets or newsletters classified as credit claiming, evaluating pathways (b) and (c) in Figure 1 above. For interpretability, both independent and dependent variables are standardized so coefficients can be interpreted in terms of standard deviations.

In addition to our credit claiming measures, we also include the same set of control variables described above and used in Table 1. To these, we also add an indicator variable for whether the CES respondent shares the same party identification as the member and one for whether they identify with the opposite party (independent-identifying respondents have a zero for both of these two indicators). In some models, we substitute member-level fixed effects for the member controls. These models control for additional unobservable characteristics of legislators, and thus are less susceptible to bias, but the small number of sessions per member in our data (3 at most) mean they might be more variable. We thus estimate our models both ways. All models include respondent and session-party fixed effects.

	(1)	(2)	(3)	(4)	(5)	(6)
Legislative Effectiveness	0.00 (0.01)	0.00 (0.00)	0.00 (0.01)	0.00 (0.00)	0.00 (0.00)	0.00 (0.01)
Credit Claims (All)	0.01 (0.01)	0.00 (0.01)		0.02* (0.01)	0.00 (0.01)	
Credit Claims (Constituency)			0.00 (0.01)			0.02* (0.01)
Credit Claims (Policy)			0.00 (0.01)			0.00 (0.01)
N	536,528	564,191	536,528	416,910	433,334	416,910
Туре	Tweets	Tweets	Tweets	Newsletters	Newsletters	Newsletters
Member Controls	Y	N	Y	Y	N	Y
Member FEs	N	Y	Ν	Ν	Y	N
Session-Party FEs	Y	Y	Y	Y	Y	Y
Respondent FEs	Y	Y	Y	Y	Y	Y

Table 5. OLS Regression Analyses of Credit Claiming and Constituent Approval

The results are shown in Table 5. The table reveals little evidence that legislative effectiveness or credit claiming affects member approval. Across all model specifications, legislative effectiveness is not significantly associated with higher or lower approval ratings. For credit claiming, there is a significant positive relationship between the percent of newsletter sentences classified as credit claiming and approval of the member (column 3). This appears to be driven by credit claiming for constituency work, not policy work (column 6). Despite this, there is not a significant

*Note:* Entries are OLS coefficients. Standard errors clustered by member are shown below in parentheses. \*=p<0.05, two-tailed test.

relationship between credit claiming in tweets and approval (columns 1-3), or when member fixed effects are included in the newsletter model (column 5). Furthermore, the significant relationship between credit claiming in newsletters and approval is quite weak. The coefficient on the standardized variables indicates that a one standard deviation increase in credit claiming is associated with only a 0.02 standard deviation increase in approval rating. To summarize, there is little evidence that credit claiming – or legislative effectiveness – lead to substantially higher constituent approval for legislators.

In Appendix B, we replicate the analysis of Table 5 further by focusing on specific types of respondents and members. We re-estimate the main specification (with aggregated credit claiming and member controls, as shown in columns 1 and 4 of Table 5) for different subsets of the data. First, we first separate respondents into in-party, out-party, and independent respondents based on whether they identify with the same party as their representative, the opposing party, or neither. Second, we separate respondents into those that follow the news closely versus those that do not using a CES question that asks how closely the respondent follows political news (we code respondents reporting the highest level of interest as attentive, and all others as non-attentive, a threshold that splits the sample approximately in half). Third, we separate respondents who voted in the general election, and who voted in neither, given research suggests primary voters may be more in tune with legislative effectiveness (Treul et. al. 2022). Fourth, we separate House Representatives and U.S. Senators.

As can be seen in Figure B1, there across all these subsets the relationship between credit claiming and approval rating is non-significant or very weak. No major differences across party identification, news attentiveness, voting status, or member chamber stand out. This provides additional confidence that the lack of a relationship found in Table 5 is a robust one.

#### Discussion

In this paper, we assess whether credit claiming might be a path to achieving recognition for effective lawmaking. The rise of the internet, email, and social media platforms has given elected officials an unprecedent ability to let constituents know what they have accomplished, potentially bridging the information gap that led Mayhew to describe Capitol Hill as a "distant and mysterious place". Credit claiming today can reach a broader audience than ever before. Despite this, it has been unclear the extent to which voters receive and believe these messages.

Our findings cast doubt on the potential of credit claiming to inform the mass public. Although more effective members do credit claim more than less effective members, this relationship is extremely weak, due in part to even ineffective legislators engaging in copious credit claiming. Second, when asked in a survey experiment, members of the public do not seem to distinguish between credit claiming and messages that merely talk about policy without taking any credit for accomplishing anything. Third, members who credit claim more frequently (and more effective lawmakers) do not appear to have meaningfully higher approval ratings than those who credit claim less. Together, our analyses suggest credit claiming is largely cheap talk and voters generally treat it as such.

One plausible interpretation of our findings is that credit claiming messages are not meant to shift the views of the mass public, but are intended for a more targeted audience. Several possibilities come to mind. First, credit claiming may be intended to persuade donors that the member can get things done and is worth investing in. Park (2023) provides some evidence in favor of this possibility, showing that more effective members of Congress receive more money in campaign contributions from political action committees (PACs) than less effective members. Similarly, credit claiming may convey to interest groups and other external actors that the member is

worth collaborating with on legislation (e.g., Hall and Deardorff 2006). Finally, credit claiming may be an effort on a legislator's part to signal to other legislators and politicians they are influential, facilitating ambitions within a chamber (for example, becoming a committee chair or party leader) or outside it (for example, garnering support for a different office such as a senatorial, gubernatorial, or presidential run).

Despite the plausibility of these motivations, they are unlikely to explain all or even the majority of credit claiming. Credit claiming is more common in our newsletter data than our Twitter data, despite the former being explicitly a constituent-focused form of communication. Similarly, more electorally vulnerable members credit claim more (Russell 2021). These observations suggest that credit claiming is at least in part due to a desire to persuade voters. As our findings show, these efforts face challenges. Receiving proper credit requires more than simply claiming it.

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