

Pork versus Policy: Experimental Evidence on Majoritarian Bargaining with Real-World Consequences

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Pork barrel politics has long attracted controversy; difficult to prove and vigorously denied by those accused of it, the practice is nevertheless defended by others who argue that pork facilitates compromise. We design a novel field-in-the-lab experiment to study how legislators bargain over pork and real-world policy. We first introduce a new incentivized method to measure subjects' ideological peak preferences and attitudinal strength. Subjects then bargain over a two-dimensional agenda: a donation to a political interest group and the division of a sum of money. Consistent with our theoretical model, we find that subjects trade off monetary and policy considerations. Subjects who are in the ideological majority and who prefer status quo policies extract better bargains, but minorities gain most from the possibility of compromise afforded by two dimensions. Finally, we show that artificially induced preferences fail to fully capture the bargaining dynamics observed using naturally occurring preferences.

In 2004, a new line item in Illinois Democratic Governor Rod Blagojevich's education reform package caught the eye of Republican lawmakers. The package, which gave the governor broad control over the state school bureaucracy, had been amended to include \$20 million in construction funding earmarked for a school in the district of Senate President Emil Jones, who had only recently signaled his critical support for the reform. Republican Senator Steve Rauschenberger accused Blagojevich, who had promised to rid the state of such practices and who strenuously denied the charges, of hypocrisy: "Mr. Governor Reformovich has a distinct smell of pork . . . legislative quid pro quo and horse trading at its worst" (Long and Parsons 2004). In contrast, the 2019 construction program promoted by Illinois Democratic Governor J. B. Pritzker put some Republicans on the defense. While many Republican lawmakers remained steadfast in their opposition to the program on the ideological grounds that it required too much

government spending and taxes to fund, "the opportunity to bring home the bacon proved tempting" to others who supported what they argued was a good, if imperfect, compromise after a lengthy period of partisan gridlock under the previous governor (Long, Petrella, and Munks 2019). Such cases seemed to confirm the enduring saying that "pork knows no party lines" (Goldstein 1995).

Pork barrel politics, or the targeting of spending projects to local constituencies in order to secure a legislator's vote, has long been controversial. Frequently alleged and decried as a wasteful practice, accusations almost always provoke forceful denials. However, some maintain that pork barrel politics can actually promote the public good by "greasing the wheels" of the legislative process and facilitating compromise, and they argue against recent efforts to ban it (Evans 2004; Lazarus 2018). Are legislators really willing to trade off material and ideological considerations? Can we identify how much they

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weigh each factor, and their utility functions, in a way that maps onto real-world outcomes? Who extracts better bargains when both pork and policy are “on the table”? Do certain groups gain more from the greater ability to compromise afforded by two dimensions?

Answering these questions promises new insights into not only a subject of vigorous current debate but also a fundamental puzzle in political economy: how to measure preference trade-offs between different political issues and domains and, more importantly, how these trade-offs affect legislative bargaining outcomes. Over the last three decades, a large literature in formal modeling has significantly advanced our understanding of decision-making in legislatures (for reviews, see Diermeier 2014; Eraslan and Evdokimov 2019). However, the vast majority of empirical investigations, which have mainly been experimental, have focused on the distributive aspects of bargaining as in Baron and Ferejohn (1989), where the bargaining space is a budgetary division.¹ These experiments can thus speak to the “pork” side of pork barrel politics but not to the second dimension: nondivisible ideological policy decisions, such as whether to support Blagojevich’s education reform.

Meanwhile, empirical testing of spatial models of bargaining such as Banks and Duggan (2000), Jackson and Moselle (2002), and Morelli (1999) has been quite limited, despite the fact that all these models speak directly to pork barrel bargaining dynamics. Testing the implications of these models with real-world data poses some challenges. Notably, controlling the bargaining protocol is not possible, legislators’ preferences are hard to measure accurately, politicians’ objective functions may include long-run goals that the models do not account for, and fully assessing the dimensionality of the bargaining space is virtually unfeasible.

While experimental tests of theoretical models involving pork barrel decisions may alleviate some of these problems, such as fixing the bargaining protocol and information structures, other challenges arise. The standard procedure following Christiansen, Georganas, and Kagel (2014), who conduct a test of Jackson and Moselle (2002), is to artificially induce preferences over hypothetical policies (i.e., choosing a point in a line) and to incentivize subjects such that implementing hypothetical policies away from their assigned preferences is monetarily costly. This procedure is quite valuable as a direct test of the theory and a first step in furthering our understanding of the problem at hand. However, this methodology effectively reduces the bargaining space to a monetary dimension and, importantly, does not inform us about the trade-offs that people may make when considering monetary

divisions vis-à-vis policy choices from which they gain no direct monetary compensation.

In this article, we present the results of two novel experiments designed to evaluate pork barrel bargaining dynamics as well as the overall and distributional consequences should the practice be banned, as many have demanded. In experiment 1, subjects bargain over pork (how to distribute \$10) and policy (a \$100 donation to a real interest group). Experiment 2 considers the banned counterfactual where individuals bargain over either pork or policy in isolation. Our experiments provide for a close test of our theoretical model while also incorporating naturally occurring ideologies into the lab.

Our findings support the predictions of our theoretical model and offer important insights into not only how pork barrel bargaining unfolds but also who would benefit from its absence. First, we observe that subjects are willing to trade pork for policy in ways that correspond to their and their partners’ political preference intensities. Second, we find that certain individuals are advantaged in the bargaining process and obtain superior outcomes: notably, those in the ideological majority and whose preferred policy would be implemented in the event that bargaining breaks down extract the best bargains. Third, we find that while majority members extract the best bargains under pork barrel bargaining, it is minority members who would be hurt most by a ban on the practice. Where pork and policy are both on the table, minority members have an incentive to compromise on policy in exchange for pork. Where the two are decoupled, they have no such incentive and, as a result, they typically receive neither pork nor policy as their proposals are usually rejected. These latter findings highlight a need for debates over pork barrel politics to consider differential group impacts.

In the following sections, we present relevant literatures on legislative bargaining and political preference elicitation and then introduce our experiments. We first present experiment 1, including our theory and results, and then present experiment 2 and its results. We discuss our findings as well as two additional questions—on the role of information in bargaining and the impact of using naturally occurring, as opposed to artificially induced, preferences. Finally, we conclude.

LITERATURE REVIEW

Multidimensional bargaining

Important theoretical advances that account for multidimensionality in legislative bargaining have been made since Baron and Ferejohn (1989). For example, Banks and Duggan (2000) provide a general setting that admits any voting rule and coalition structure, asymmetric players, and multicameral institutional settings. Jackson and Moselle (2002) consider a two-dimensional bargaining space (policy and budget) in which

1. See Palfrey (2016) for a review and Baranski and Morton (2022) for a meta-analysis.

players bargain indefinitely to reach an agreement as in Baron and Ferejohn (1989).²

Our model is a simplified version of the one presented in Jackson and Moselle (2002). The three-player, one-round version that we present allows us to derive equilibria in pure strategies (which are generally unique) for each preference distribution and status quo policy. Although a multiround model is, in principle, richer and more realistic, the one-round model captures similar trade-offs. As in Banks and Duggan (2000), we assume that disagreement leads to a vanishing of the private goods and the implementation of a status quo policy. Importantly, we consider a discrete policy space with three alternatives and focus on the case in which two players have a common preference and a third player has a different peak preference.

To our knowledge, Christiansen et al. (2014) is the only experimental investigation of Jackson and Moselle (2002). In their study, the authors induced artificial policy preferences by assigning subjects their preferred policy choice and disutilities associated with alternative policies. Subjects were told to imagine that they were choosing where to place a bus stop and that, the further away it was from their preferred location, the higher the walking costs would be. Under their parameterizations, strange bedfellow coalitions are predicted to occur (i.e., members with opposing bus stop peak preferences form a coalition that does not involve the median player) and are often observed. In their experiment, like in ours, committees are composed of three members, and there is a majority voting rule.

In a related experiment, Delton, DeScioli, and Ryan (2020) framed a two-player ultimatum game in the context of a series of political issues on which they had previously surveyed subjects' preferences. Subjects were matched with partners who disagreed with their views on the topic in hand. The allocator's task was described in the instructions as proposing a policy. Policies closer to subjects' political stances earned them more points and less points for the recipient. The authors report a positive correlation between the strength of moral convictions and the policy proposed (i.e., share of money kept). It should be noted that in their study, the choice of policy is hypothetical and merely expressive, as it has no material consequences outside the laboratory. Moreover, it is not possible for subjects to compromise on a second dimension because the budgetary division and policy choice represent one single decision. Finally, the game was played between two members as in most ultimatum games (see Roth [1995] for a comprehensive survey).

Our experiment is also related to the experimental investigations of the Baron and Ferejohn (1989) model over the

division of a fixed budget. Minimum winning coalitions (i.e., coalitions formed with the exact number of votes required for passage) are found to be the most common allocations, representing close to 60% of agreements (see Baranski and Morton 2022). Laroze, Hugh-Jones, and Leininger (2020) investigate behavior in a three-player majoritarian variant of the game in which subjects' self-reported ideological stances are publicly revealed (but there are no policy choices to be made, only a budgetary split). The authors find that ideological distance negatively affects sharing, a result we share as we find that majority members typically transfer less pork to minorities.

Finally, our study builds on an empirical literature that uses real-world data to study pork barrel spending. While much of this literature assumes that legislators trade pork for policy support, there is nevertheless little direct evidence, especially causal, of this phenomenon. Evans (1994) studies a 1987 highway bill in the US House of Representatives and finds evidence consistent with pork being used to build policy coalitions. Studies by Lee (2000, 2003) indicate that pork helps determine coalition formation and policy support in both the US Senate and House of Representatives. Lazarus (2010) finds that pork distribution is predicted both by intrachamber factors, such as seniority or membership in the majority party, and by local demand-side factors.

A number of other observational studies engage more directly with majority-minority bargaining dynamics but take a theoretical approach different from our own. Carroll and Kim (2010) find that majority legislators who are policy "losers" receive larger pork transfers. In their theory, offering pork is done not to garner legislators' favorable votes on a policy but instead to maintain their support more generally for majority party procedural control, and thus it goes to majority members who vote more often against majority policies. Nevertheless, their findings indicate that legislators may indeed trade off pork and policy considerations and that these patterns might differ for majority and minority legislators. In another study on majority-minority dynamics, Balla et al. (2002) posit that majority members include minority members in pork distributions primarily as a way to avoid blame from the public.

Political preference elicitation

As stated earlier, experimental evaluations of pork barrel bargaining dynamics have heretofore relied on artificially induced political preferences. While these designs facilitate close tests of formal theories, one potential concern is that by attaching monetary values to artificial policies, researchers are effectively collapsing two dimensions (pork and policy) into a single one (pork). To address this concern and to get us closer to the real world, in our article we used real-world behaviorally elicited preferences.

2. See Morelli (1999) for a demand game (players state their desired budgetary share and policy) in a fixed sequential order.

Table 1. Two Experiments on Bargaining

	Research Questions	Bargaining Features
Experiment 1 (characterizing pork barrel bargaining)	1. What happens when legislators have the option of engaging in pork barrel bargaining? a) Do they trade pork and policy? b) Do their decisions correspond to: i) measures of policy preference intensity? ii) predictions of theoretical models? c) Who extracts better bargains?	Two-dimensional pork barrel bargaining over divisible budget and nondivisible real-world policy
Experiment 2 (considering counterfactuals)	2. Would overall and distributional outcomes differ if pork barrel bargaining was banned? a) would fewer bills get passed? b) would political minorities or majorities fare differently?	One-dimensional bargaining over either divisible budget or nondivisible real-world policy

In order to study how individuals trade off pork and policy preferences, it was necessary that we measure both individuals’ preferred policies and the intensities of those preferences. To do so, we adopted a donation-based behavioral elicitation method that was validated as an effective way to overcome issues of respondent satisficing, social desirability bias, and a lack of respondent knowledge (see Haas and Morton [2018] for more on the method and its theorized advantages). In their study, Haas and Morton (2018) compare individuals’ ideal points and find that they differ under two methods: a behavioral one in which subjects were asked to divide a sum of money between two interest groups on a number of issues and a nonbehavioral one in which subjects were asked to answer questions on a Likert scale on the same set of issues. In our design, we first have subjects make a series of donation decisions, and then we measure their preference intensities through a second exercise (described subsequently). In our discussion section, we investigate the consequences of using naturally occurring versus artificially induced preferences in our pork barrel game.

TWO EXPERIMENTS ON BARGAINING

To evaluate our research questions, we conducted two laboratory experiments on bargaining. Each experiment is designed to tackle a different motivating research question (see table 1). Taken together, they provide insights into pork barrel bargaining dynamics, their overall and distributional implications, and the potential consequences of efforts to ban pork barrel politics by mandating that pork be decoupled from policy in the negotiation process.

In what follows, we present each experiment and its results in turn, before reflecting on overall takeaways across them.

Experiment 1 investigates behavior in a two-dimensional game in which subjects bargain over a divisible sum of money and a nondivisible policy choice with real-world implications. Experiment 2, in contrast, evaluates bargaining over a single dimension: either a divisible sum of money only or a nondivisible policy choice only. Finally, in our discussion section, we report results from additional experiments designed to probe the robustness of our results, to aid in their interpretation, and to examine the implications of our findings and some of our more novel experimental design features, most notably our incorporation of naturally occurring, as opposed to artificially induced, political preferences in the lab.

In total, just over 400 subjects participated in over 3,000 rounds of bargaining across 19 experimental sessions of our study. Subjects were recruited from an ideologically diverse undergraduate student population at Ohio State University. Average payments, including the show-up fee, were between \$13 and \$14, with sessions lasting close to 1 hour. Sessions were conducted between November 2018 and November 2021.³

EXPERIMENT 1: BARGAINING OVER PORK AND POLICY

In this section, we explain each stage of experiment 1, detail our theoretical predictions and hypotheses, and finally, present and discuss results. Experiment 1 consisted of three stages (see fig. 1).⁴ In stages 1 and 2, we measured participants’

3. See the appendix for information on sample demographics and evidence that randomization was effectively implemented across experiment conditions.

4. All experimental material, including instructions, can be found in the appendix.

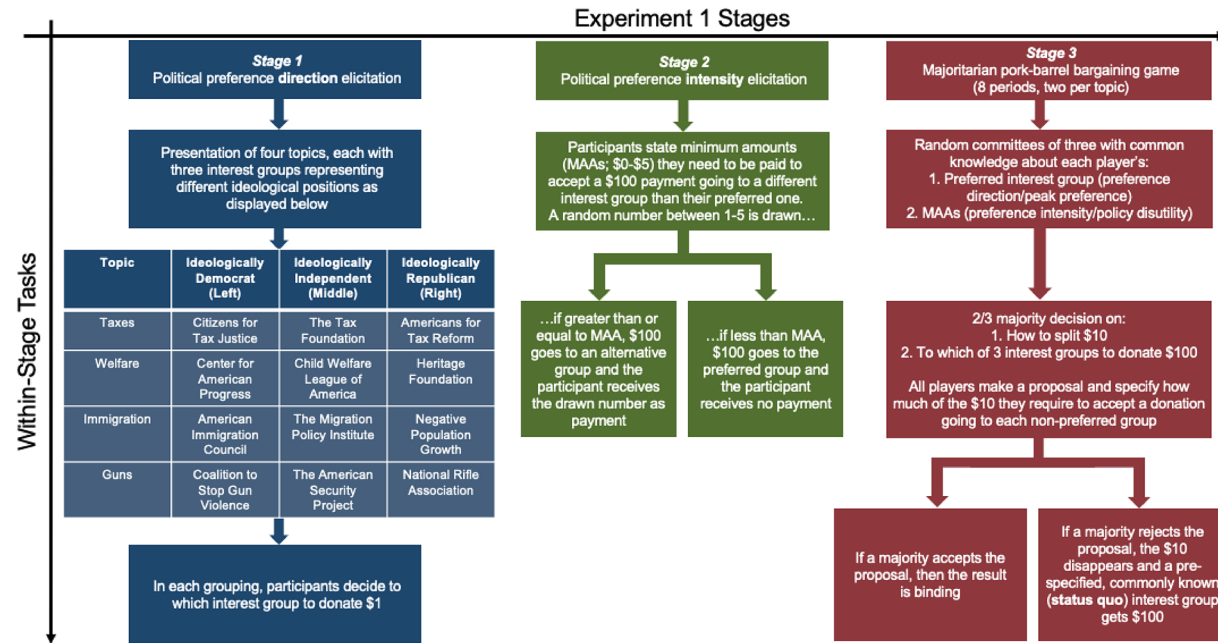


Figure 1. Experiment 1 design. Subjects also completed a brief demographic survey at the start of the study and some questions on political knowledge at the end.

political preferences. In a behaviorally incentivized way, subjects answered whether they preferred the left, middle, or right alternative for different policies, and they said how much this choice was worth to them (details explained in the next section).

In stage 3, subjects played eight periods of a bargaining game in which a division of a sum of money and a policy choice were made (details explained in a subsequent section). In each period, they were randomly matched in groups of three and received information from stages 1 and 2 on partners' policy preferences.⁵

Preference elicitation: Stages 1 and 2

To measure their directional (or policy peak) preferences, in stage 1 of the experiment participants were shown US interest groups working in four different issue areas: welfare, taxes, immigration, and gun control. For each issue area, we selected groups advocating for either ideologically left-leaning, middle, or right-leaning policies. Participants saw a brief description of the three groups and their activities that were taken from official web pages, and groups were arrayed from left to right, with corresponding ideological and partisan labels (see figs. 1 and A1).⁶ Subjects were then asked, for each issue area, to select

one group to which they wanted the experimenter to donate \$1 on their behalf.⁷ One donation was randomly chosen to be implemented for each subject, and this information was shared with participants following the conclusion of the experiment.

The purpose of stage 2 of the experiment was to identify the strength of participants' preferences for the interest groups they had selected in stage 1. We accordingly measured preference strength by eliciting the monetary cost, or disutility, that subjects associated with donations to nonpreferred interest groups.⁸ Specifically, subjects revisited each issue area and saw again their preferred group from stage 1. They were then asked to state a minimum amount, between \$0 and \$5, that they would need to be paid in order for them to accept the experimenter donating \$100 not to their preferred interest group but rather to each nonpreferred, alternative group. Thus, for example, if a participant had decided in stage 1 to donate \$1 to

demonstrated a link between partisan identification and donation allocation decisions (Haas and Morton 2018). We similarly find a link in this study (see app. sec. 4.4).

7. One might argue that in a perfect experiment the chosen interest groups should differ on only one dimension, be equally renowned, and have similar financial composition. However, in stage 2, we elicit a subject's strength of preference for one group relative to nonpreferred groups, and thus we do not require that the groups are equidistant in the ideological spectrum.

8. Our elicitation procedure might therefore also be considered an improvement over the donation method advanced by Haas and Morton (2018) in that we disentangle preference direction and strength (see Malhotra, Krosnick, and Thomas [2009] on the importance of disentangling the two in survey research).

5. Importantly, in stages 1 and 2 of the experiment, subjects were not aware that they would participate in a subsequent bargaining game (although they were aware that there were other parts to the study), to reduce the likelihood that they would seek to strategically misrepresent their true ideological stances.

6. These design features ensured that the political ordering of groups was common knowledge and that subjects could make an effort to become more informed before making a donation decision. Prior research has

the National Rifle Association (NRA), which is on the ideological right, they would be asked in stage 2 to state amounts between \$0 and \$5 that they would need to be paid in order to accept \$100 going not to the NRA but instead to a group in the ideological middle (American Security Project) or left (Coalition to Stop Gun Violence). We made it clear to participants that they could block the alternative donation if they felt strongly about their own group by stating a minimum of \$5.

A subject's minimum acceptable amount (MAA) carried potential consequences both for a subject's own earnings and the interest group that stood to receive a \$100 donation.⁹ After a subject stated their MAAs, a computer randomly drew a number in the same \$0–\$5 interval. If the number drawn was greater than or equal to the subject's MAA, then the subject would be paid the drawn amount and \$100 was donated to a nonpreferred group. If the number was less than the stated minimum amount, the subject was paid \$0 and the \$100 was donated to their preferred group.¹⁰

A pork barrel bargaining game: Stage 3

After participants had completed stages 1 and 2 of the experiment, they advanced to stage 3 and a game in which they bargained in groups of three over a divisible sum of money (pork) and to which interest group a sizable donation would go (nondivisible policy). Our game was designed to mirror pork barrel bargaining and is based on a simplified, one-round version of Jackson and Moselle (2002). In this section, we describe the different phases of the game (see app. sec. 1 for a more formal, game-theoretic presentation).

Each of the eight periods of our bargaining game began with subjects being randomly assigned to committees of three. We also randomly selected one of the same four topic areas as in stages 1 and 2—welfare, taxes, immigration, or gun control—to be the issue considered in a given period. Each topic appeared twice: once in periods 1–4 and once in periods 5–8. All three members of a committee could see two pieces of information about their partners (and themselves): their preferred interest group for the randomly chosen topic (*preference direction*, elicited in stage 1), and how much they preferred that interest group to each of the two alternatives (*preference intensity*, stage 2).

9. Because of the high donation amount, we randomly selected one participant's stage 2 decision from each session to "count" and implemented it accordingly. While this choice of compensation is unusual, compensating every person would have made our experiment prohibitively costly due to the real donations (and the large donation amounts to create a high-stakes scenario) we made to interest groups.

10. Appendix sec. 3 displays the distribution of preference directions and intensities, and app. sec. 4.4 compares them to stated ideologies and partisan leanings. We observed a wide range of answers, as well as a high degree of correspondence with stated preferences.

Committees were tasked with bargaining over both pork and policy. As regards pork, they were asked to divide a \$10 endowment among themselves.¹¹ As regards policy, they had to choose to donate \$100 to one of three interest groups in a given topic area: one on the left, middle, or right of the ideological spectrum.¹² Thus, while pork was divisible, policy was not: members could only choose a single interest group. Each subject, acting individually and independently, first made a proposal, specifying a share of the \$10 for each member of the committee and an interest group to receive the \$100. One proposal was then randomly selected to be the one on which subjects voted.

Voting worked in the following way: after subjects had submitted their proposals, but before seeing their partners' proposals or knowing which proposal would take the floor for a vote, each subject stated a "voting threshold" specifying the smallest share of the \$10 endowment that they would have to be offered in order to vote in favor of a policy proposal. Because a proposal could potentially include one of three different policies, each subject thus stated three voting thresholds: that is, they said how much of the endowment they would have to be paid in order to support a bill that included a left, middle, or right policy choice. Finally, votes for the randomly chosen proposal were tallied according to subjects' stated voting thresholds, and subjects were informed as to the outcome (see table 2). If two or more votes were in favor, then the proposal was approved and implemented: each member received the specified share of the endowment, and the specified interest group received the \$100 donation.

If a proposal was rejected, no one received any pork (the \$10 endowment vanished). However, in the case of rejection, it was still important that an interest group receive a donation: both because having a policy implemented should a new proposal not pass more closely resembled the real world and was of theoretical interest and because having both policy and pork disappear in the event of rejection would likely stack the deck too far in the direction of agreement. We thus chose in each period an interest group that would receive the \$100 donation if a proposal was rejected, and we communicated this choice to all members of the committee before eliciting their proposals and voting thresholds.¹³ We call a donation to this group the "status quo" or "default" policy, as it represents the policy that would be implemented should no proposal pass.

11. We use "endowment," "budget," and "pork" interchangeably.

12. As in stage 2, because of the high donation amount, we randomly selected one committee's stage 3 decision from each session to "count" and implemented it accordingly (see n. 9).

13. In periods 1–4, the group's median peak preference was the default, and in periods 5–8 it was a nonmedian peak.

Table 2. Voting Outcome Implications in Experiment 1

Dimension	Voting Outcome	
	Majority Votes for Proposal	Majority Votes against Proposal
Pork (divisible \$10 endowment)	\$10 divided between members as dictated by proposal	\$10 endowment is lost; no member receives any money
Policy (nondivisible \$100 donation)	\$100 donated to single interest group as dictated by proposal	\$100 donated to single interest group, which was selected and known to all members before bargaining in a given period*

* This is understood as the status quo, or default, policy, as it represents the policy that will be implemented should no change to policy be made (no bill is passed).

The bargaining game was thus designed to reflect pork barrel bargaining in a legislature. That is, legislators (experiment subjects) proposing an ideologically divisive policy (\$100 donation to an interest group) might promise some pork (share of the \$10 endowment) to other lawmakers (committee members) in exchange for their vote. And legislators considering a bill (proposal) might demand that a certain amount of pork be attached to a policy to earn their support. If no agreement is reached, the bill will not pass and no one receives any pork, but often the policy that preceded bargaining remains in place. Next, we turn to theoretically expected bargaining dynamics in such a legislature.

Experiment 1 hypotheses

What dynamics are expected to emerge when legislators bargain over two dimensions, one divisible and monetary and the second nondivisible and ideological? Our empirical expectations are informed by our formal game-theoretic analysis of the bargaining game described above, as well as relevant empirical regularities reported in the literature. Appendix section 1 contains our formal analysis and resulting equilibrium predictions.¹⁴ Here, we simply provide some intuition into the forces at play in the game and how their interplay informed our hypotheses.

In order to better understand pork barrel bargaining dynamics, we seek to identify in particular when, theoretically, subjects should compromise on policy (i.e., choose an interest group different from their preferred one to receive the \$100) and how they should divide the pork (i.e., the \$10 endowment). We then conduct an empirical test of our theoretical expectations. In our theoretical and empirical analysis, we

focus on cases in which two of three members share a policy preference, in order to understand the bargaining dynamics between majority and minority members.

First, we ask whether individuals will be receptive to trading pork and policy. Will subjects adjust their voting thresholds depending on the policy proposal? Consistent with trading, our model predicts that players proposing a policy are more likely to make a monetary transfer to whichever of their partners suffers less disutility from that policy, reflecting an expectation that players are more (less) willing to accept a smaller share of the budget where a policy is more (less) preferred. Hypothesis 1 accordingly posits that people should demand less pork when the proposed policy matches their preference.

H1 (Voting Thresholds). Players are willing to accept a smaller share of the budget when the policy proposed is their preferred one and demand a larger share for alternative policies.

People might be willing to engage in pork barrel bargaining, but under what conditions should we theoretically expect it to occur, and among whom? Should certain parties obtain better outcomes? As explained in appendix section 1, we expect three factors to drive proposers' policy and pork offers: (1) whether the proposer is in the ideological majority, (2) the status quo policy, and (3) the relative strength of her preferences vis-à-vis the voters. Table 3 summarizes our theoretical predictions; the proceeding hypotheses incorporate their qualitative insights.

H2 (Majority Advantage). For any status quo policy, majority members propose their preferred policy and a larger share of the budget for themselves. If transfers occur, these take place between majority members.

This hypothesis follows from the fact that members are always better off voting in favor of their preferred policy,

14. Our formal analysis is based on two assumptions. First, subjects are motivated to maximize their own utility, and second, their utility can be decomposed into the sum of the money they receive and the utility (or disutility) they receive from the policy choice. The solution concept we use is subgame perfect Nash equilibrium; precise definitions can be found in the appendix.

Table 3. Theoretically Predicted Proposer Behavior in Experiment 1

Ideology	Status Quo	
	Own Preferred Policy	Nonpreferred Policy
In majority	Keeps \$10, proposes own policy	Keeps \$10, proposes own policy
In minority	Keeps \$10, proposes own policy	Depends on relative preferences

and majority members will always have the votes required to pass such proposals. Note that, if a majority member rejects a proposal in which the policy is her preferred one and the proposal fails to be approved, she will suffer two potential consequences: no pork (it vanishes) and an equally or less preferred status quo policy. Thus, the strict equilibrium prediction regarding pork is that majority members should transfer \$0 to their committee partners.

However, we know from previous experimental work that such divisions rarely occur with human subjects. Explanations for divergences between strict theoretical predictions and actual behavior in bargaining games vary, but most prominent are references to fairness or other-regarding preferences. A meta-analysis of Baron and Ferejohn (1989) bargaining games suggests a similar gap between prediction and empirical data, with subjects transferring and demanding more than anticipated (Baranski and Morton 2022). Hence, we predict that majority members will allocate themselves comparatively more pork than will minority members and that, when majority members do transfer pork, it should primarily go to their majority and not their minority partners.

H3 (Status Quo Proposer Advantage). Members whose preferred policies are also the status quo propose their preferred policy and a larger share of the budget for themselves.

A member whose preferred policy is implemented in case of proposal rejection should, according to the strict subgame perfect prediction, keep all the budget and propose her preferred policy. The other members are then indifferent between voting in favor or against, and such indifference may be broken with a small pork transfer.

H4 (Minorities Compromise). Members of the minority will choose their own policy only if at least one of the following conditions hold: (1) The status quo is their preferred policy or (2) there exists a majority partner with weaker preferences. In this case, the minority partner transfers the minimum amount of pork

required to compensate the cheapest majority partner in return for their vote. In all other cases, a minority player compromises on policy by proposing the majority's preferred policy or a middle ground.

Hypothesis 4 highlights the trade-off between pork and policy compromise that minorities may face.¹⁵ Minority partners have two viable options to secure the approval of their proposals: to propose their preferred policy or the majority's preferred policy. If they choose their own, they must compensate at least one majority partner with enough pork such that she would prefer to vote in favor than to reject. Recall that rejection entails implementing the status quo. If the majority partner cares little about policy (has weak preferences), the minority proposer will find it suitable to transfer pork and choose her preferred policy. Otherwise, the minority partner would have to transfer too much pork to obtain a favorable vote, and she would rather compromise on policy and keep the pork for herself.¹⁶

Experiment 1 results

We conducted six experiment 1 sessions with 15 subjects each for a total of 90 subjects and 720 bargaining periods. To elucidate majority-minority bargaining dynamics, we focus our analysis on cases in which two of three group members shared a policy preference: 67% of all randomly formed committees had the desired majority-minority composition. We relate results to our respective stated hypotheses, and we probe their robustness and offer additional analyses in appendix section 4.

Trading pork and policy. When given the opportunity, do individuals trade pork and policy? We find that in 49% of cases in which subjects preferred a proposed policy, they were willing to guarantee their vote in favor of that policy for \$0; on

15. The status quo proposer advantage has been explained in the justification of the preceding hypothesis; hence, we focus here on the second aspect of hypothesis 4 concerning the relative strength of preferences.

16. A detailed graphical explanation of the theoretical arguments behind this hypothesis can be found in app. sec. 1.

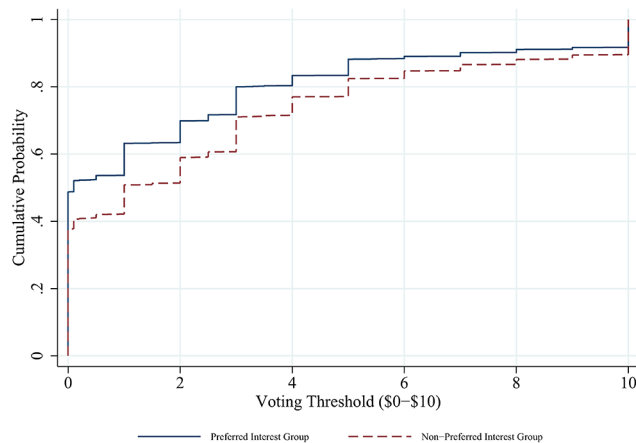


Figure 2. Willingness to trade pork and policy in experiment 1. Subjects' stated voting thresholds—the required amount of pork for a vote in favor of the relevant policy—for preferred and nonpreferred interest groups. We pool across subjects in the ideological majority and minority (see fig. A8 for disaggregation).

average, they asked for only \$1.99 of the \$10 budget. In contrast, when proposed policies were nonpreferred, subjects were willing to accept \$0 for their favorable vote only 38% of the time and on average demanded \$2.68.¹⁷ Figure 2, which displays cumulative distribution functions of subjects' demanded amounts of pork, illustrates individuals' systematic tendency to demand lesser amounts of pork for votes in favor of preferred, as compared with nonpreferred, policies.¹⁸ These results provide strong support for hypothesis 1, which predicted that subjects would be willing to accept a smaller share of the budget for preferred policies and, thus, for the notion that individuals do indeed trade off pork and policy considerations.

Extracting better bargains: The majority advantage. Are individuals in the ideological majority in an advantaged position when bargaining? We find that 71% of majority subjects propose their preferred policy, as compared with only 28% of those in the minority (see fig. 3).¹⁹ The substantially lower willingness of majority players to compromise on policy indicates the existence of a majority advantage. It is also consistent with the first empirical prediction of hypothesis 2: while majority players do not always propose their preferred policy, they do so at a much higher rate than minority players.

17. Two-sample two-tailed tests of proportions willing to accept \$0, and of mean demanded amounts, yield, respectively, $z = 4.91$, $\text{Pr} = 0.00$, and $t = 4.68$, $\text{Pr} = 0.00$.

18. A Kolmogorov-Smirnov test indicates that the distribution functions are not equal ($p < .001$). Figure 2 pools across nonpreferred interest groups. As expected, we also find that subjects state higher voting thresholds for comparatively more nonpreferred interest groups (see app. sec. 4).

19. A two-sample two-tailed test of proportions shows $z = 8.67$, $\text{Pr} = 0.00$.

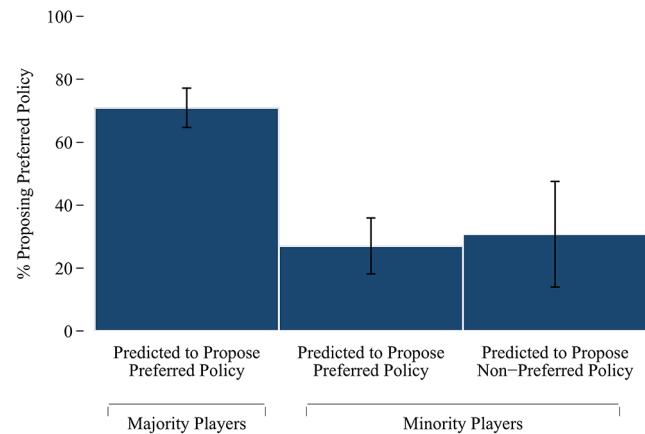


Figure 3. How majority status affects the likelihood of policy compromise. Compares how often subjects proposed their preferred policy on the basis of whether they were in the ideological majority or ideological minority and whether they were theoretically expected to propose their preferred policy or to compromise on policy. While majority members are always predicted to propose their preferred policy, predictions for minority members depend on the minority proposer's strength of preferences relative to voters (see table 3). Standard errors are clustered at the individual level, and we display 95% confidence intervals.

Does the majority advantage in policy extend to pork? On the one hand, we do not observe that subjects in the majority allocate themselves a greater share, and their partners a lesser share, of the budget as compared with minority subjects (see fig. 4).²⁰ On the other hand, we do find that majority players on average transfer a significantly larger portion of the budget (\$2.66) to other majority players than to their minority partners (\$1.89; also shown in fig. 4).²¹ Indeed, even though majority players do not allocate themselves more pork than do minority players, transfers between majority partners are sufficiently larger than transfers to minority partners such that majority players take home, on average, more pork (\$3.66) across proposals than do minority players (\$3.19).²²

We thus find more mixed evidence as regards the majority advantage with allocations of pork. We do not observe, as hypothesis 2 would predict, that majority members allocate themselves more pork than do minority players. However, we do find support for our expectation under hypothesis 2 that majority members should transfer greater amounts to their majority partners than to their minority partners. Further, the fact that majority players take home on average more money across proposals than do minority players points to a majority advantage also on the pork dimension.

20. We consider self-allocated amount and not whether one allocated the full \$10 to oneself (thus transferring \$0 to partners) as our dependent variable because so few subjects allocated themselves the full \$10 budget. We report results with this alternative operationalization in app. sec. 4.

21. A two-sample two-tailed t -test yields $t = 5.60$, $\text{Pr} = 0.00$.

22. A two-sample two-tailed t -test yields $t = 3.03$, $\text{Pr} = 0.00$.

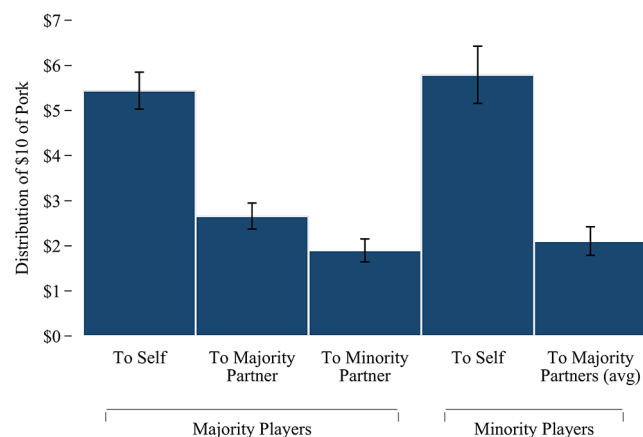


Figure 4. How majority status affects the distribution of pork. Compares how much of the \$10 budget subjects allocated to themselves and their partners on the basis of whether they and their partners held the majority or minority peak preference. Recall that all members made a proposal, one of which was then randomly selected to be the one on which members voted (see experiment 1's design). Majority members are expected to take home more pork than are minority members; when transfers do occur, majority members are expected to transfer more pork to their majority partner than to their minority partner. Standard errors are clustered at the individual level, and we display 95% confidence intervals.

Extracting better bargains: The status quo advantage.

Do individuals whose preferred policy matches the status quo—the policy implemented in the event of proposal rejection—extract superior bargains? We find that where there is a match, subjects propose their preferred policy 62% of the time, as compared with only 52% of the time where there is a mismatch (see fig. 5).²³ However, we do not observe a parallel effect with pork: subjects whose preferred policy matches the status quo do not on average allocate themselves larger amounts of the budget (see table A8). We thus find partial support for our third hypothesis: there appears to be a status quo advantage on the policy dimension, but we do not find evidence of an advantage as regards pork.

Minority compromise. Do minority players compromise on policy when predicted? Overall, we find that minority players proposed their own preferred policy only 28% of the time, substantially less than the 48% our theory would predict on the basis of the specific observed committee compositions.²⁴ While the overall rate at which minority players proposed the majority's preferred policy (55%) more closely approximated the

23. A two-sample two-tailed test of proportions shows $z = 2.11$, $Pr = 0.03$.

24. Recall that minorities' decisions to compromise on policy depend, theoretically, on the relative strength of policy preferences and the location of the status quo policy. The specific prediction as to whether a minority player should compromise on policy thus varies by committee composition.

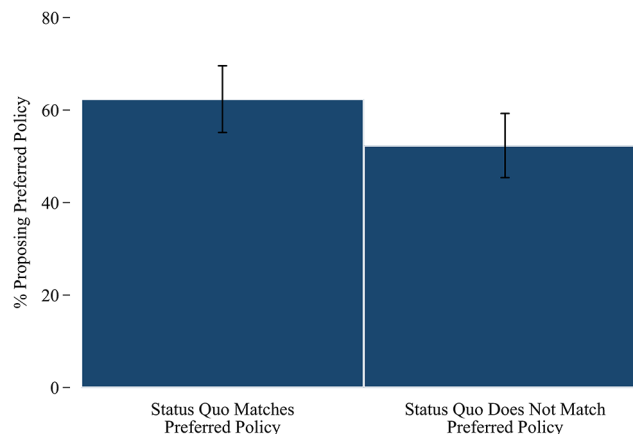


Figure 5. How the status quo affects the likelihood of policy compromise. Compares how often subjects proposed their preferred policy on the basis of whether their preferred policy matched the status quo policy (in which case they would always be expected to propose their preferred policy) or did not (in which case their likelihood of policy compromise would depend on their strength of preferences relative to voters and their majority/minority status). Standard errors are clustered at the individual level, and we display 95% confidence intervals.

prediction (52%), a further disaggregation of decisions by prediction reveals little overlap between observed and expected minority behavior on a case-by-case basis (see fig. 6).²⁵ Minority players predicted to propose their own preferred policy did so 27% of the time and proposed the majority's preferred policy in 56% of cases. Contrary to hypothesis 4, these rates are statistically indistinguishable from those—respectively, 29% and 54%—for minority players predicted to propose the majority's preferred policy. Across predictions, minority members thus choose the majority policy over half of the time.

Our results, then, indicate a tendency for minorities to overcompromise.²⁶ Why? One reason could be a belief that majorities will drive a tougher bargain. We find that odds of proposal approval rise from 73% to 89% when minority members propose the majority's preferred policy instead of their own.²⁷ When theory predicts that minorities should propose their preferred policy, there is a 95% chance of proposal acceptance if minorities opt instead for proposing the

25. In cases in which the majority and minority players are at the extremes of the spectrum, we find that 22% of the time minority players propose a middle ground.

26. Interestingly, we find support for the status quo advantage on the pork dimension when we limit analysis to majority members, who allocate themselves significantly more pork when their policy preference matches the status quo than when it does not (\$5.79 vs. \$5.15, $p = .02$ using a two-tailed t -test). Thus, the weaker status quo effects on this dimension discussed above may be attributable to the overcompromising behavior of minority players.

27. In contrast, majority members face lower approval odds when proposing the minority player's preferred policy, as the agreement rate drops from 91% to 87%.

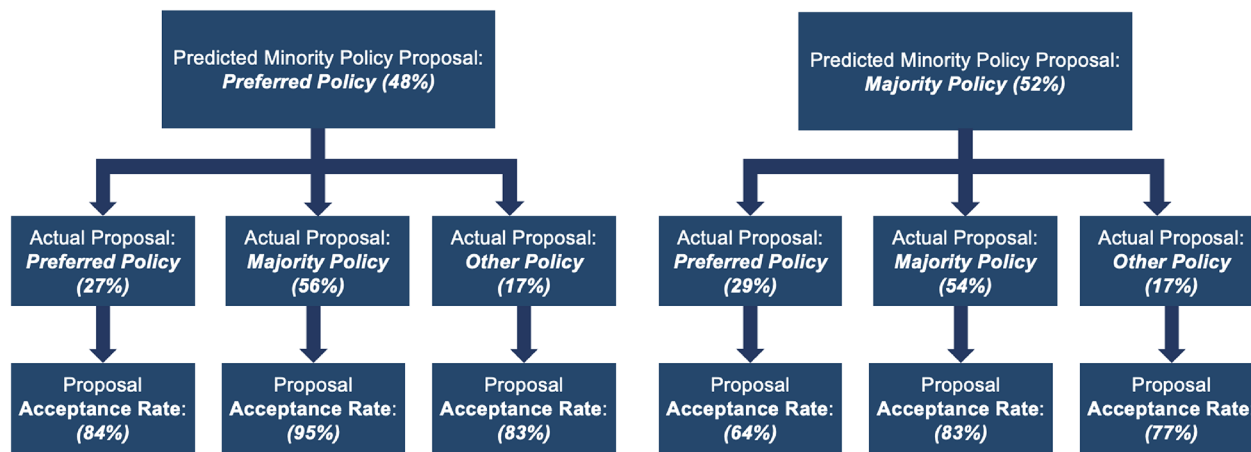


Figure 6. Comparing predicted and observed minority policy proposals. Percentage of minority players who actually proposed their predicted policy as well as the acceptance rate of their proposals displayed separately for minority players predicted to propose their preferred policy and those predicted to propose the majority policy. Minority proposal predictions are made according to our theory and are based on players' relative strength of preferences.

majority's policy, 11 percentage points higher than if they had followed the prediction (84%; see fig. 6). Minorities face the lowest odds of acceptance (64%) when they are predicted to choose the majority policy but choose their own policy instead. In this case, following the prediction leads to an 83% chance of approval. Observed behavior thus provides some support for the notion, even if theoretically irrational, that majorities drive a tougher bargain: notably, even when theory predicts that minorities should propose their preferred policy, proposed policy compromises are more likely to garner the majority votes needed to pass.

Summing up. In summary, experiment 1 yields significant support for all four of our empirical hypotheses: we find that (1) players are willing to trade off pork for policy, (2) majority players and those whose (3) preferred policies match the status quo use their respective advantages to extract superior bargains, and (4) a majority of minority players compromise on policy when predicted to. While behavior diverges from strict equilibrium predictions—for example, we find that majority players keep less of the budget for themselves and transfer more than predicted and that minorities compromise more often than anticipated—this divergence is consistent with a large literature showing less than perfect adherence to strict equilibrium predictions, and results are generally in line with qualitative predictions.

EXPERIMENT 2: CONSIDERING COUNTERFACTUALS

The findings we have reported thus far promise to increase extant understandings of the dynamics of pork barrel politics. However, current debates also focus on whether bargaining over two dimensions should be allowed. Critical to these debates are questions over whether the practice “greases the

wheels” of the bargaining process and whether certain groups benefit differentially from the ability to compromise. In experiment 2, we shed additional light on the impact of pork barrel politics by considering counterfactuals advocated by many where bargaining is only permitted over one dimension: pork or policy.

Experiment 2 contained two treatments (see fig. 7). In our pork only treatment, subjects bargained over \$10 without any contributions to interest groups. In our policy only treatment, they bargained over a \$100 donation to an interest group without any \$10 endowment at play.²⁸ Everything else about experiment 2, including stages 1 and 2, which preceded the bargaining game, was unchanged from experiment 1. In what follows, we present results from experiment 2, contrasting them with experiment 1 results to compare two- and one-dimensional bargaining dynamics. For conciseness, we present our empirical expectations and their rationale alongside results.

Comparing two- and one-dimensional bargaining

Does the ability to negotiate over two dimensions “grease the wheels” of the legislative process, as some have argued (Evans 2004; Lazarus 2018)? To evaluate the effects of pork barrel bargaining on the likelihood of reaching policy compromises and on the distribution of pork, we compare the pork and policy game in experiment 1 to, respectively, the policy only and pork only games in experiment 2.

First, we consider effects on policy. In experiment 1, we find support for our prediction that pork can facilitate policy

28. We conducted six sessions with 87 subjects of the pork only treatment and three sessions with 48 subjects of the policy only treatment. See table A2 for a full list of experiment conditions and the number of experiment sessions and subjects for each.

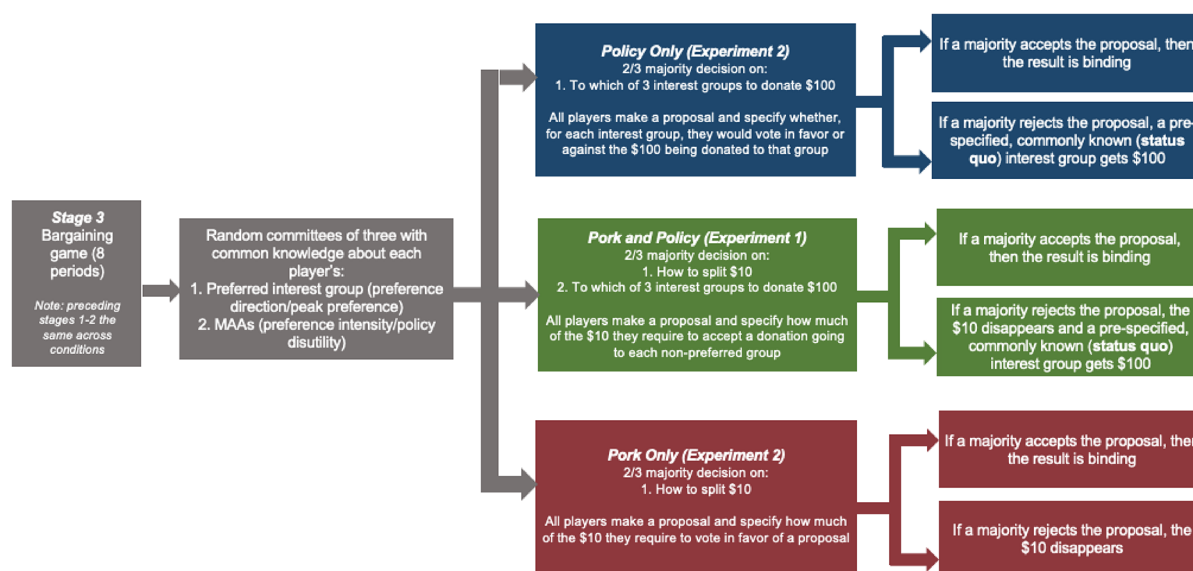


Figure 7. Bargaining game designs of the pork only and policy only treatments of experiment 2 compared to the pork and policy game in experiment 1.

compromise: under certain conditions, minorities compromise on policy and accept a pork transfer (see experiment 1 results section). Where policy is decoupled from pork as in our policy only treatment, such transfers and trade-offs are not possible, and thus we expect that minorities will see less of a reason to compromise on policy.

We find that minority subjects are substantially less likely to propose their preferred policy in the pork and policy treatment (28%) than in the policy only treatment (71%).²⁹ While we observe the same pattern with majority players, the difference between treatments is of much lesser magnitude (14%, from 71% to 85%) as compared with minority players (44%; see fig. 8 and table A10). We thus observe an overall increase in willingness to compromise on policy in two- as compared with one-dimensional bargaining, particularly for minority players. These results are consistent with expectations and indicate that pork does indeed facilitate policy compromise.

Second, we evaluate how the presence of policy affects individuals' demands for pork. Where both pork and policy are on the table, our theory predicts that subjects should in certain cases forgo pork when their preferred policy is proposed. We accordingly expect players to demand more pork on average in one-dimensional bargaining where it is impossible to trade pork for policy.³⁰

We observe that subjects in the pork only game demand on average \$2.66 of the \$10 budget, significantly more than sub-

jects in the pork and policy treatment demand to vote in favor of preferred policies (\$1.99) and about the same as they demand to vote in favor of nonpreferred policies (\$2.68).³¹ A substantial portion of subjects in the pork only game demand \$3 of the \$10 endowment, indicating that when subjects only negotiate over pork they are more likely to ask for a share that would result in an equal split between their partners and themselves (see fig. 9).³² Demanded shares of pork to vote for preferred policies in the pork and policy game are lower overall (see fig. 9 and table A11), especially for minority players, who demand on average \$1.02 less than in the pork only game—as compared with a decrease of \$0.58 for majority players. We thus find that subjects demand comparatively less pork in two-dimensional bargaining only when they prefer the proposed policy, which is precisely when we would theoretically expect them to forgo pork. Further, this difference is particularly magnified for minority players, who we would expect to trade pork for preferred policy most often.

In sum, two-dimensional bargaining appears to increase the likelihood of compromise: when both pork and policy are on the table, subjects are more willing to compromise on policy and to demand lesser shares of pork for a favorable vote. One

hypotheses) and results presented thus far, we know that subjects rarely accept such highly unequal divisions.

31. Two-tailed t -tests yield $t = 4.98$, $\text{Pr} = 0.00$, for the comparison with preferred policies and $t = 0.15$, $\text{Pr} = 0.88$, for the comparison with nonpreferred policies. See table A11.

32. Consistently, as we show in app. sec. 4, a greater willingness of players in the pork and policy game, as compared with the pork only game, to accept no pork (\$0) when their preferred policy is proposed results in a higher frequency of one-way splits (all \$10 of pork allocated to one person).

29. A two-sample two-tailed test of proportions shows $z = 6.65$, $\text{Pr} = 0.00$.

30. According to the subgame perfect Nash equilibrium, players in the pork only treatment should accept any positive pork transfer, as rejection means no pork. However, from the extant literature (see experiment 1

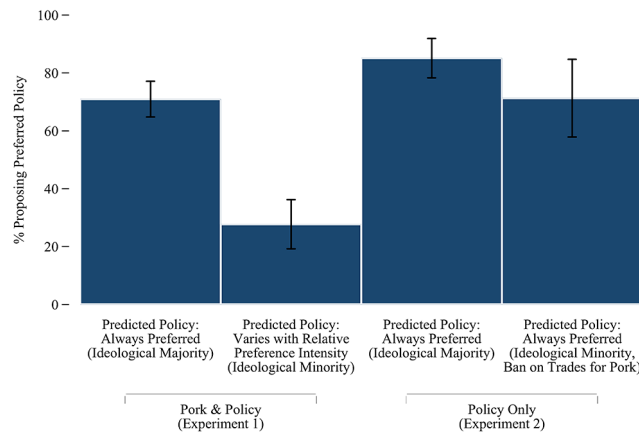


Figure 8. How the presence of pork affects the prospect of policy compromise. Proposers in the ideological majority are always predicted to propose their preferred policy, as are proposers in the ideological minority when there is no pork for which they can trade their policy (policy only treatment). Only proposers in the ideological minority where trades for pork are allowed (pork and policy treatment) are potentially expected to compromise on policy by proposing a nonpreferred policy (in exchange for a pork transfer), which in turn depends on their strength of preferences relative to voters. Standard errors are clustered at the individual level, and we display 95% confidence intervals.

relevant additional measure of whether pork “greases the wheels” is to consider whether its inclusion results in higher proposal agreement rates. While one might expect that it would, especially in light of a greater willingness to compromise, it is important to note that players’ utilities are common knowledge in our study; our theory would therefore predict no differences across bargaining games, as proposers should in all

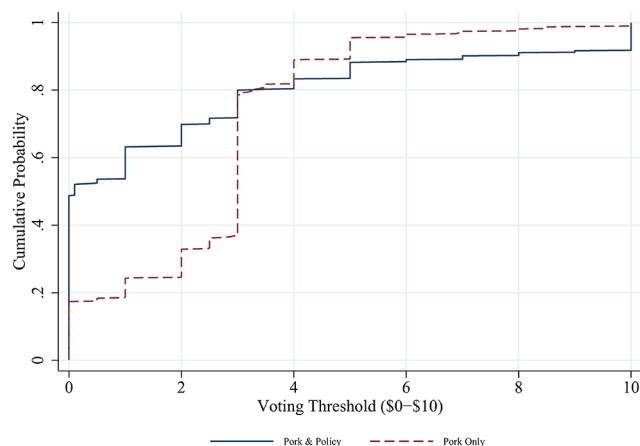


Figure 9. How the presence of policy affects demands for pork. Subjects’ stated voting thresholds—the required amount of pork for a vote in favor of the relevant proposal—where pork and policy were both on the table (pork and policy treatment, experiment 1), as compared with when only pork was on the table (pork only treatment, experiment 2). In the pork only treatment, subjects stated thresholds for a budget division only; we compare their thresholds with subjects’ thresholds for preferred interest groups in experiment 1 (pork and policy). A Kolmogorov-Smirnov test yields a significant difference in distributions ($p < .001$).

cases be able to compute the optimal offer that will result in a partner voting in favor of the proposal.

We find that approximately 86% of proposals are accepted in both two-dimensional (pork and policy) and one-dimensional (policy only and pork only) games, with no significant difference between treatments. Effects of pork on agreement rates may thus be greater when information about others’ preferences is imperfect, which we rule out by design in our common knowledge experiments.

A final additional question relevant to normative debates over the banning of pork barrel bargaining concerns whether certain groups benefit comparatively more from its presence. Experiment 1 results indicate that those in the ideological majority and whose preferred policies match the status quo extract better bargains when both pork and policy are on the table (see experiment 1 results section). However, it is members of an ideological minority who we would theoretically expect to be the most active traders of pork and policy (see table 3 and hypothesis 4). Our theory thus predicts that it is members of the minority who would be hurt most in a counterfactual world with a ban on pork barrel bargaining.

We have already shown that minority members compromise in the majority of cases predicted in our pork and policy game and are more likely to compromise in two- as compared with one-dimensional bargaining. Proposal acceptance rates provide further evidence indicating that minorities benefit most from pork barrel politics: their odds of approval rise from 66% in the policy only game to 83% in the pork and policy game.³³ While majority members are advantaged in pork barrel bargaining, then, our theory and empirical findings indicate that decoupling pork from policy would exacerbate the majority advantage and further damage the standing of members of the minority.

DISCUSSION

Our results presented thus far elucidate pork barrel bargaining dynamics and their overall and distributional consequences. They also shed insight into the motivating questions laid out in table 1. Consistent with theoretical expectations, we find that individuals are willing to trade pork and policy in ways that correspond to their policy preference intensities, that majority members and those who fare better under a status quo policy extract superior bargains, and that banning the practice would undercut minority members’ ability to compromise and thus disproportionately hurt their bargaining prospects. In appendix section 4, we conduct supplementary analyses and show

33. In contrast, approval odds decrease for majority members, from 98.4% to 90.5%.

that results are robust to regression specifications including period and session fixed effects. We accordingly dedicate the remainder of this section to briefly considering two additional questions that carry important implications for how we should interpret our experimental findings.

First, how does the revelation of information on political preferences affect pork barrel bargaining dynamics? Given that bargaining often occurs in politically polarized settings as is the case with our context of study, the present-day United States, one might imagine that political preference information significantly affects bargaining. Second, what are the implications of using naturally occurring political preferences to study pork barrel bargaining? As explained in our literature review section, experimental studies typically use artificially induced policy preferences, which effectively reduces the bargaining space to a single, monetary (pork) dimension. We thus consider whether one of our central experimental innovations affected bargaining outcomes.

We investigate the role of information in two ways. First, to evaluate to what extent the revelation of information alone matters for bargaining outcomes, we conducted a pork only no information bargaining game that exactly mirrored the pork only bargaining game except for a single design feature: subjects received no information about their partners' political preference directions or intensities before bargaining (see fig. 7). Because subjects in both cases are not bargaining over policy but only pork, comparing outcomes across the two conditions allows us to more effectively isolate the role of information in and of itself on bargaining absent other considerations. Second, we conducted a conditional pork and policy bargaining game that was the exact same as the pork and policy game of experiment 1, except that subjects could condition their voting thresholds not just on a specific policy proposal but further based on which proposer put forward the proposal. For example, subjects not only stated how much they needed to be paid in order to vote in favor of a policy on the left but how much they would need to be paid to vote in favor of a left policy if the proposer was partner A, partner B, or themselves. Comparing outcomes across these latter two games, then, allows us to consider whether dynamics differ when, as in the real world, voting can be conditioned on proposer identity.

We find that proposal acceptance rates are lowest in the pork only no information game (79%), highest in the conditional pork and policy game (92%), and fall somewhere in between for the pork only (86%) and pork and policy (88%) games, patterns that broadly hold across both minority and majority proposers (see table A12).³⁴ One might have expected

34. Voting thresholds in the pork only no information and pork only games, and the conditional pork and policy and pork and policy games,

that the revelation of information, and allowing individuals to condition thresholds on proposers' identities, would make subjects less likely to bargain in good faith in a polarized setting and thus hinder coalition formation. However, our findings suggest to the contrary that subjects put information on others' policy preferences to a positive use: to identify with whom to form a coalition and share pork.

Finally, we consider the impact of using naturally occurring political information. To do so, we replicate the design of the only other experimental evaluation of Jackson and Moselle (2002), by Christiansen et al. (2014), who used artificially induced political preferences. In our pork and induced policy game, subjects bargained over a policy decision of where to place a fictitious bus stop: left, middle, or right. They were assigned a "preferred" location as well as monetary disutility values (equivalent to MAAs) for each nonpreferred location. To keep treatments as comparable as possible, subjects were assigned preferred locations and disutility values from real subjects who had completed the pork and policy game.³⁵ We are thus able to compare bargaining dynamics among subjects with the same preference directions and intensities, except that in one case these intensities were naturally occurring and in the other case they were artificially induced.

We find first that proposal agreement rates are significantly higher in the pork and policy game (88%) than in the pork and induced policy game (80%).³⁶ This offers additional support for the notion, discussed above, that information on real policy preferences aids coalition formation. Second, we observe that voting thresholds for nonpreferred policies are higher in the pork and induced policy game than the pork and policy game (see fig. A15). We cannot say definitively why we observe this difference. However, one possibility for which we find some support is that real-world consequences moderate the behavior of subjects with weak policy preferences, who state lower thresholds than they would with artificial preferences because they view a real-world donation as a positive outcome, even if it goes to a nonpreferred interest group.

CONCLUSION

Today, policy makers and scholars are engaged in an active debate over the merits of pork in politics, with some pushing

are remarkably similar (see app. sec. 4.3.2). The acceptance rate in the policy only game was 87%; as discussed in the experiment 2 section, it was much lower for minority proposers who faced little incentive to compromise on policy when there was no pork.

35. Besides inducing preferences, we kept group compositions identical to those in the pork and policy sessions to control for experience and learning.

36. A two-sample two-tailed test of proportions shows $z = 3.18$, $Pr = 0.00$.

for a permanent ban on earmarks and others arguing the reverse on the grounds that earmarks can reduce partisan gridlock and facilitate compromise (Lazarus 2018). However, we still know little about how pork and policy interact in legislative bargaining or who stands to gain or lose from potential regulation of the practice. Our experiment is a first attempt at incorporating elements of realism to the study of budgetary and policy negotiations where field studies are nonexistent. While we do not claim that our experiment perfectly resembles a natural setting, we believe it brings us closer to the real-world phenomena that we are studying.

Several of our results show support for the game-theoretic predictions in our pork and policy bargaining games. Notably, majority members and players whose preferred policy matches the status quo typically propose their preferred policy. More substantively, we find that subjects are willing to make budgetary concessions to implement preferred ideological choices and that our individual preference elicitation method largely correlates with strategic bargaining behavior. The current study is also the first to behaviorally measure ideological position and strength of preferences and investigate how such measures correlate with behavior in a relevant strategic domain.

Does pork barrel politics grease the wheels of the legislative process, as many have claimed (Evans 2004; Lazarus 2018)? Who benefits more from pork barrel politics? Our experimental investigation shows that agreement rates are virtually identical across treatments in which real ideological preferences are displayed regardless of whether subjects negotiate over only a budget division (pork), only a policy choice, or both. While one may argue that this result runs counter to the common presumption that a two-dimensional bargaining space greases the wheels of the bargaining process, this is not so, since demands for budgetary shares are much lower compared to the pork only treatment and minority policies are often implemented. We find that the impossibility to negotiate in a two-dimensional space negatively affects political minorities far more than political majorities as evidenced by minority players' lower budgetary transfers, lower chances of proposal approval and lower likelihood of enacting their preferred policies. Moreover, minority members tend to propose the majority's policy more often than prescribed by the game-theoretic predictions in order to enhance their approval odds. In light of these findings, one can speculate that majorities may seek an advantage by separating the bargaining process for each dimension so that minorities lose the ability to compromise.

There are two unanticipated results in our study that underscore the efficacy of information on ideological preferences in reducing bargaining impasses. The first is that when subjects negotiate on two dimensions and preferences over policy are artificially induced by the experimenter, voting thresholds are

higher, which can be interpreted as a lower willingness to compromise. Second, agreement rates are lower in the pork only treatment absent information on political preferences. Both unexpected findings suggest that information on policy preferences may help solve the coordination problem of deciding with whom to partner—even if policy decisions are not at stake.

In our theory and experimental design we have abstracted away from several aspects that are quite relevant outside the laboratory. Would communication, which has been shown to increase proposer power in the Baron and Ferejohn (1989) game, still do so where policy was at stake? Would minorities benefit? If subjects could revise their stated preferences, would minority members misrepresent themselves as majority members to reap more pork? We leave these and other relevant extensions for future work.

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