

Bargaining over a New Welfare State*

A Model of the Regional Distribution of New Deal Funds

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Abstract

We develop a theoretical model of bargaining in the US Congress and we apply it to the presidential period of Franklin Roosevelt. The goal of the paper is twofold: first, to improve our understanding of the objectives behind the New Deal; secondly, by developing an estimable model of the US Congress, to narrow the gap between formal models of legislatures and their empirical or qualitative counterparts. In the theoretical model, the distribution of federal funds across different regions of the country is the outcome of a bargaining game in which the President acts as the agenda-setter and Congress bargains over the final shape of the spending bill. For any set of preferences (for the President) and any given distribution of seats in the Congress, we can solve the model for a unique predicted outcome. We then use the actual distributions for several New Deal programs to estimate the preference parameters of the Roosevelt administration. We link theory to data and estimate the model's parameters using a simple minimum distance approach. The results indicate that economic concerns for relief and recovery, though not necessarily for fundamental reform and development, largely drove the New Deal, and that political concerns mattered, but more on the margin.

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1 Introduction

The New Deal period was, by most accounts, the birth of the US welfare state. It was an era of unprecedented growth in government spending, and in the scope of activities performed by the federal government. In the mid 1920's, total federal (non-military) spending were approximately 3 percent of GNP, while in the mid 1930's this figure had increased to about 10 percent. The support for state and local government expenditures from the federal level also increased dramatically. In the early part of the 20th Century, less than one percent of state and local revenues came from the federal government, while in the late 1930's about 15 percent of state and local revenues were federal aid.¹

The New Deal was controversial already from the beginning and has stayed controversial ever since.² Of particular relevance here is the official line of “the three R's” (relief, recovery and reform) emphasized by the New Dealers as the motivation behind this increase in federal spending and federal aid to the local level. However, Roosevelt's critics accused him of using national funds in order to reward Democratic states as well as to gain popularity in potential swing states.

Economic historians have long been interested in this debate about the motivation behind the New Deal, and the determinants of the New Deal spending allocation. As stated by John Wallis, the question of focus in this New Deal literature has been:

Did Roosevelt and the New Dealers allocate money between states to achieve their stated goals of relief and reform by giving money to states with lower employment and lower incomes, or did they promote their won interests and allocate more money to states that were politically sensitive? [Wallis, 1998]

This empirical literature started with Reading (1973), who developed a simple model in order to test whether the New Deal spending pattern was in fact consistent with a focus on reform and relief/recovery. The reform variables contained variables such as per capita income and percentage of African-American households, and the relief variables measured changes in state-level macro indicators such as unemployment and aggregate income. Reading's analysis lent no support to the stated goals of reform, but he did find support for the idea that economic recovery was a motivating factor, driving the New Deal allocation pattern across states.

The second classic study in this New Deal literature, Wright (1974), built on the analysis of Reading to investigate a potentially political motive behind the New Deal. Specifically, Wright added a number of political variables to the dataset created by Reading. In particular, Wright constructed a political productivity index, intended to capture the possibility that the Roosevelt administration systematically favored potential swing states in order to secure reelection for himself

¹These values are taken from Wallis (1985) and Wallis (1998).

²The attacks have come from the left as well as from the right, on a number of different topics and from a number of different angles. Among many others, the New Deal has been criticized by Zinn (1966) and Bernstein (1968) for being essentially conservative, by Powell (2003) and Cole and Ohanian (2004) for prolonging the Great Depression, by Libecap (1998) for instigating a lasting system of state intervention in agricultural markets, and by Flynn (1934) for being basically fascist.

and to secure a Democratic majority in the Congress. Wright did find support for the idea that there was a political motivation behind the New Deal allocation, and that this political motivation was non-negligible; his political variables did a better job in explaining the spending pattern than the variables reflecting the economic concerns related to relief, recovery and reform.

These two studies, and in particular the conclusion in Wright (1974) regarding the political motivation behind the New Deal, generated a significant amount of following research. Recently, Anderson and Tollison (1991) included a number of variables intended to capture the role of Congress in the determination of the New Deal allocation, and concluded that the New Deal was primarily driven by political concerns, both by the Roosevelt administration and individual Congress members.

The studies discussed above suggest that the implementation of the New Deal, or at least the distribution of the major programs, might have been politically rather than economically motivated. However, in a series of papers, John Wallis (1984, 1985, 1998) derives results that depart from this view. According to Wallis, both economic and political concerns were important to the New Dealers, and these different motives interacted in ways that are not perfectly captured by the other studies. In his papers, Wallis takes the position that the distribution of New Deal funds was primarily motivated by economic concerns, but that political concerns mattered too, and that the economic reasons behind the programs interacted with political motives. Most recently, in joint work with Price Fishback and Shawn Kantor, Wallis argues that:

Roosevelt's successful reelections were based on developing specific programs for a broad range of constituents, delivering on his stated goals, but also spending more at the margin for political purposes. [Fishback, Kantor and Wallis, 2003]

To summarize, previous studies provide support for the idea that political purposes probably influenced the spending pattern of the New Deal. However, there is no consensus regarding the relative influence of political motives and economic concerns. A serious challenge for the authors in this literature, as pointed out by Wallis, is the interaction between economic and political concerns. If some states were both economically sound and politically favorable targets for the President, the different possible motives behind the distribution of funds is difficult to disentangle. All of the studies described above attempt to control for characteristics that might contaminate their estimates of the relevant parameters. However, none of the papers mentioned above provide a formal model, neither for the game between the President and the Congress members, nor for the intra-Congress bargaining. Hence, the exact meaning of the parameter estimates in the studies by Reading, Wright, Anderson and Tollison, Wallis and others is still not perfectly clear. We believe that a formal treatment of this topic can provide some additional structure helpful for the interpretation of the differing and sometimes non-comparable results.³

³There are a few papers, such as Fleck (1999, 2001) and Strömberg (2004), that do develop formal models in order to interpret various aspects of the New Deal spending. These papers, however, differ significantly from ours in their methodological approach and/or their posed question. Fleck *assumes* that the President was trying to maximize his reelection probability, derive predictions and then test these predictions. His findings broadly support the idea that

Specifically, in this paper we provide a formal model of the interaction between the President and the Congress during the implementation of new spending programs. We model the resulting allocation of funds as a function of the President’s preferences and of the distribution of seats in Congress. We estimate the relevant parameters of the model using data from New Deal programs.

Our model accounts for what we believe to be the key features of the President-Congress bargaining game. We wish to stress, however, that we do not attempt to capture the full richness of the previous studies on this topic, as the computational limitations implied by the formal modeling approach makes this impossible. Most importantly, we limit ourselves to try to understand the roles of the President and the Congress, while leaving the execution of the programs unmodeled. Hence, this paper should appropriately be viewed as a complement, not a substitute, to the existing empirical literature on the determinants of the allocation of New Deal funds.

In addition to the contribution it hopefully makes to the New Deal debate, this paper can be viewed as an attempt to place models of legislative bargaining in a more concrete setting. The bulk of theoretical (formal) political economy research on legislative bargaining is highly abstract,⁴ and while research in this tradition has provided valuable insights about the general nature of the role constitutions and agenda-setting power for the outcome of legislation, it provides limited guidance for understanding the outcome of particular legislative sessions or specific periods of major reform. Instead of a general theory of legislative bargaining, our paper provides a model of a specific legislative setting.⁵ Hence, our paper can also be viewed as an alternative “case-based” or “bottom-up” approach to the formal modeling of legislatures. Hopefully, this approach can generate insights that would not trivially follow from more general theoretical models.

In the rest of the paper, we first describe extensively our modeling approach and the preferences of the players involved. We then formally describe our theoretical setup and derive a number of propositions that characterize the outcome of the interaction between the President and Congress. Two simple examples illustrate how the equilibrium of our formal model can be found and characterized, under different assumptions on the New Dealers motivations. The theoretical part is followed by an empirical part, where we describe the data, the empirical approach and the resulting parameter estimates. The final section concludes and discusses interesting venues for future research.

2 States, Regions and Goals

As mentioned in the introduction, the focus of this paper is on the interaction between the President and the Congress, with specific attention paid to the role of Congress in shaping legislation

political (reelection) concerns did matter. He is, however, not able to assess the relative importance of this and other motives. Strömberg, on the other hand, does estimate the structural parameters of his model. The model, however, is confined to an analysis of the impact of media on the spending of one particular program (FERA) - i.e. he does not attempt to say anything about the aggregate distribution of New Deal funds.

⁴Notable contributions to this literature include Baron and Ferejohn (1989), Baron (1996) and Banks and Duggan (2000).

⁵In this regard, our paper is perhaps most closely related to the work of Knight (2004, 2005), who uses the model of Baron and Ferejohn (1989) in applied settings.

introduced by the President. With the goal of empirically estimating the relevant parameters of the model, any attempt to formally model the complex nature of congressional bargaining must restrict itself to a stylized setting. In this paper, we rely on the fact that during the period of consideration, the US was divided in several ways that correlated with broad geographic regions. After careful consideration of the data, we believe that an appropriate simplification is to divide the country into a smaller number of regions. More specifically, we believe that the optimal trade-off between simplicity and transparency on one hand, and realism on the other, is model with focus on three regions: the South, the North and the West. During the period we are interested in these regions differed significantly, both economically and politically, but the states were remarkably homogenous *within* each region. The assignment of states to regions (Table 12), together with a map showing the correlation between our classification and the political division of the country at that time (Figure 2), is shown in the Appendix.

The formal model takes into account that these regions were represented with different shares of seats in the Senate and the House of Representatives. A greater share of the seats in any of the two chambers implied a greater bargaining power, something that had to be taken into consideration by the Roosevelt administration when designing the bills for the New Deal programs.

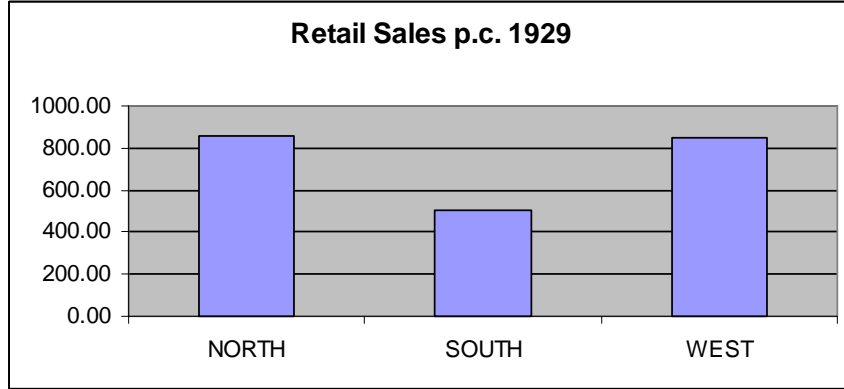
In order to distinguish the different possible motivations behind the New Deal, or more specifically the regional distribution of New Deal spending, we model the objective function of the Roosevelt administration as a combination of concerns for (i) relief and recovery, (ii) fundamental reform and development, (iii) political productivity/re-election probability, and (iv) rewarding Democrats.⁶ These four possible concerns cover the different objectives that people in the aforementioned literature on the New Deal have been ascribing to the allocation of funds. Our theoretical model maps the relative strengths of the concerns into a proposal by Roosevelt as well as a final bill passed - changed or unchanged - through the House and the Senate.

2.1 Assigning Goals to Regions

In order to justify our assignment of goals to regions, we appeal to a number of aggregate economic, political and social statistics. These statistics show significant differences among the three regions along several dimensions. We now proceed to describe the three regions.

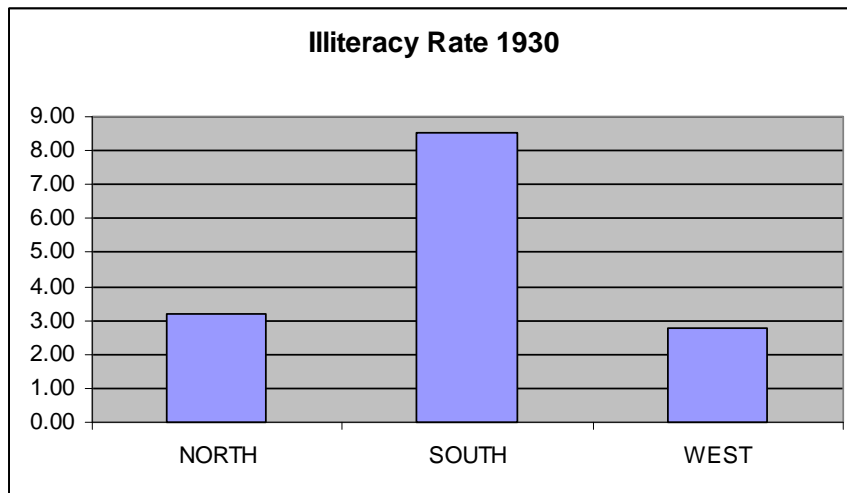
The South The first of these, the South, was the poorest region in the country during the period of the New Deal. This is best seen by looking at the level of economic activity, as reflected in retail sales (Graph 1).

⁶Of these four different motives/concerns, we consider the first two to be “economic” and the last two “political.”



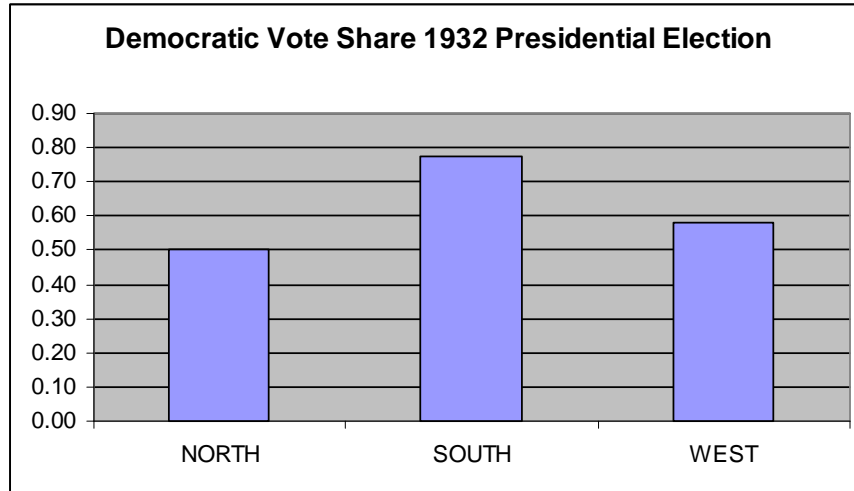
Graph 1

Furthermore, the South was the least developed region of the country according to more general criteria, such as the illiteracy rate (Graph 2).



Graph 2

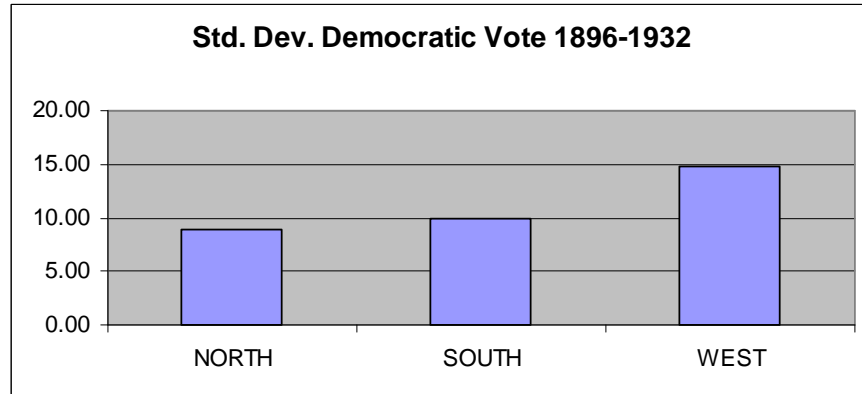
Hence, if fundamental reform and long-run development were the only considerations that went into the shaping of the New Deal, this region would have been the primary target of New Deal means. In addition to being poor, all of the states in this region were Democratic and had voted largely in support of Roosevelt in the 1932 election:



Graph 3

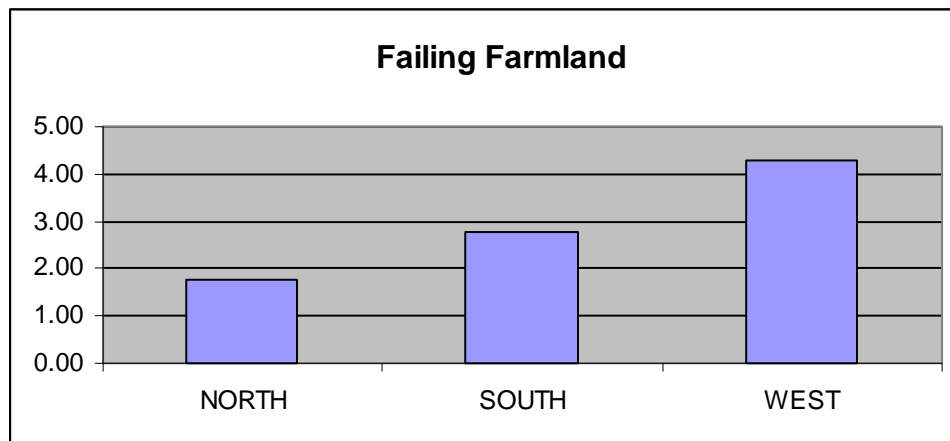
Furthermore, their support had been solid over the previous decades. Hence, one would expect that a partisan executive branch, with the objective of rewarding states in which it had received support, would have yet another reason (in addition to their economic/reform needs) to target the states in the South. However, these states were also so solid in their support for the Democratic party that any reelection motive behind the allocation of New Deal funds would have had to be to their disadvantage. Finally, their actual drop in economic performance during the Great Depression was not as significant as the drop of the other regions. Hence, if the primary motive behind the New Deal was to provide short-term relief and/or recovery, this would also have been to the disadvantage of the Southern states.

The West The second of the regions, the West, was also a largely Democratic region during the period of the New Deal implementation. Roosevelt won 58% of the popular vote in the West, and only four states had a significant republican representation in their congressional delegation. However, the states in the West were not nearly as solidly grounded in the Democratic camp as the states in the South. In fact, over the previous decades, support for the Democratic party in western states had been more volatile than anywhere else (Graph 4).



Graph 4

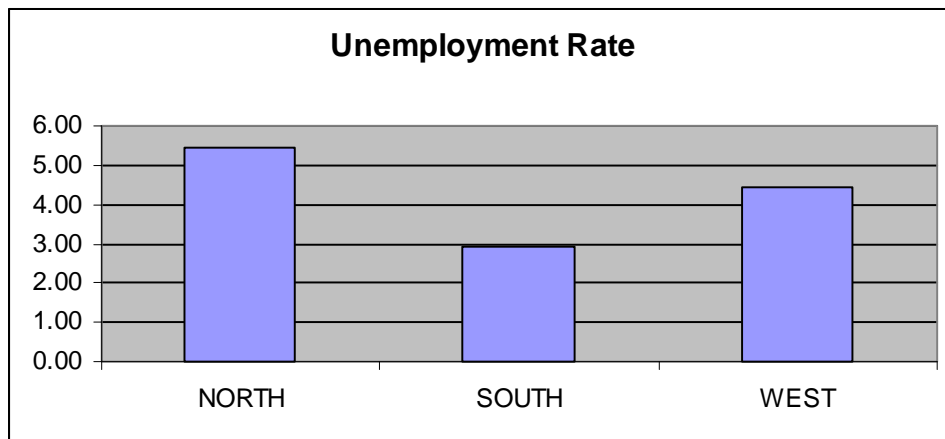
Hence, if the Roosevelt administration had political motives in mind when implementing the New Deal programs, one would expect the President to include the Western states both in attempts to reward its own base (and the Congress members from its party) and in attempts to secure electoral votes for coming elections. However, the states in the West were not as poor as the states in the South, which implies that a New Deal that was primarily motivated by fundamental economic reform would not have paid particular attention to these states. Finally, we emphasize that whether programs aiming at immediate relief and recovery would have been to the advantage of the West or not depends on what kind of program we are focusing on. Though the West was not hit as hard as the Northeast in terms of manufacturing output, it did suffer a severe drop in agricultural output. This is illustrated in Graph 5, which shows the percentage of failing farmland in the different regions.



Graph 5

Hence, farming programs, and also public works programs, for which the West was a suitable target (due to its low level of existing infrastructure and its natural resources availability), would have provided relief and recovery in this region of the country. However, more general relief programs targeted at parts of the country in which the manufacturing sector was hard-hit were unlikely to have the states in the West as targets for provision of relief and recovery.

The North The third of the regions, the North, was also richer than the South. Hence, in terms of need for fundamental reform and long-run development, one would not expect the New Deal programs to target the North. In addition, the North was largely Republican, so partisan concerns (i.e. a focus on Democratic states) would have added to the disadvantage of these states, in the sense of not being recognized and targeted for spending by the Presidential administration. The Northern states did, however, have two characteristics that potentially worked to their favor. They were not solidly Republican; FDR narrowly lost many of these states and in addition their support for the Democratic presidential contender in the recent history had been very low. Hence a reelection-motivated FDR would have had incentives to target these states with the objective of building popularity for coming elections. In addition, the industrial North was particularly hard-hit by the drop in the manufacturing sector. This is already evident in some early statistics, such as the 1930 unemployment rate (Graph 6).



Graph 6

Hence, if relief / recovery was the primary motivation behind the New Deal, programs providing general relief should have been targeted at the Northern states.

2.2 New Deal Programs and FDR's Goals

To summarize the previous description, we characterize the regions in the following way.

	South	West	North
Poor	✓		
Hard-hit		✓ ⁷	✓ ⁸
Potential swing-state		✓	✓
Democratic in previous election	✓	✓	

Table 1: Regional Characteristics

Note that Table 1 classifies the West (the North) as being Hard-hit only as far as the agricultural (industrial) sector is concerned. Based on the characteristics above, we can finally assign goals to regions. In doing this, we allow money spent in a region to serve one or more of the administration’s goals/motives. More importantly, following the classification of Table 1, we let the assignment of relief/recovery concerns to a given region depend on the type of program being considered.⁹ Table 2 illustrates this assignment. In Table 2, r denotes general relief programs, f denotes farming programs and p denotes public works programs.

	South	West	North
Reform/Development Concerns	✓		
Relief and Recovery Concerns	p	p, f	r, p
Productivity/Reelection Concerns		✓	✓
Partisanship/Rewarding Concerns	✓	✓	

Table 2: Goals-to-Regions Assignment

2.3 Preferences

Before turning to the formal model, the reader should note that we make a number of restrictions with respect to the preferences of the President and the Congress members. Some of them have been mentioned above. In addition, we do not explicitly analyze preferences over the revenue generating process. That is, we focus exclusively on the spending side of the New Deal, and therefore implicitly assume that any preferences that the President and the legislators might have had over the tax collection (and over budget deficit levels) did not interact with their preferences for the shape of the spending. This is a significant simplification, but one that is, to the very least, in line with the previous literature to which we hope to make a contribution.

Regarding the Congress members, we assume that they are “perfect representatives” of their constituencies, with preferences defined (only) over the allocation received by their states. This is also a significant simplification, and one that would be interesting to extend. In the conclusion, we discuss how this could be extended.

⁷The West is considered hard-hit when it comes to the agricultural sector.

⁸The North is considered hard-hit when it comes to the industrial sector.

⁹Regarding the assignment of relief and recovery concerns, we are agnostic about whether public works projects were used to provide relief/recovery, in addition to fundamental reform and long-run development, in the South. In the baseline model, we do include relief/recovery concerns for the South, in addition to the North and the West (who both experienced significant drops in different sectors).

Given these assumptions about the preferences, our paper should best be thought of as a model of an executive branch (with agenda-setting power) trying to implement a program with a particular allocation in mind. The executive faces an explicitly modeled “congressional constraint” generated by the need to reconcile the interests of legislators (with amending power) that represent different (and disjoint) constituencies. We do not claim that this representation captures everything that mattered during the implementation of the New Deal. However, we do believe that our setup captures some of the most important aspects that follow from the structure of the Congress and the conflict of interest between the President and the legislators. Without further excuses, we now turn to the formal model and the estimation of the parameters that capture the relative importance of the four different concerns/motives described above.

3 Theory

3.1 The Model

We model the allocation decisions within each type of program as a separate bargaining game. In this game, the President acts as an agenda setter and Congress determines the final division of a fixed amount of resources. The set of congressional players is given by the three groups of states (regions) introduced above, $I = \{West, North, South\}$. An outcome of the bargaining game is simply a division of a unit size pie among the three regions $X = (X_W, X_N, X_S) \in \Delta^2$. Each group $i \in I$ holds a fraction q_i of the total seats in the House and a fraction p_i of the seats in the Senate. No group has an absolute majority of seats in either chamber. Each group represents a fraction N_i of the total U.S. population. In line with the description of congressmen’s preferences, let the utility function of region i be given by:

$$u_i(x) = X_i \quad \forall i \in I$$

Unlike congressional players, we allow the President to assign different weights to the various objectives he can pursue through the allocation of the pie. Let α , γ , δ , and ϕ represent the weights that the President assigns to political productivity, rewarding, relief/recovery and reform, respectively. We assume that the President’s preferences are defined over the per capita shares assigned to each group, weighted by population size and the parameters pertaining to the each group’s characteristics. More specifically, we assume the President’s utility function to be given by:

$$u_{Pres}(x) = \sum_{i \in I} c_i N_i \ln x_i$$

where

$$c_i = [\mathbf{1}(i \in Productive)\alpha + \mathbf{1}(i \in Democrat)\gamma + \mathbf{1}(i \in HardHit)\delta + \mathbf{1}(i \in Poor)\phi]$$

This specification has the advantage of providing a straightforward characterization of the Presi-

dent's ideal allocation in the absence of political constraints:

$$x_i^* = \frac{c_i N_i}{\sum_{j \in I} c_j N_j}$$

For example, in the case of the general relief programs, the ideal allocation x^* is given by

$$\begin{aligned} x_W^* &= \frac{N_W (\alpha + \gamma)}{N_W (\alpha + \gamma) + N_N (\alpha + \delta) + N_S (\gamma + \phi)} \\ x_N^* &= \frac{N_N (\alpha + \delta)}{N_W (\alpha + \gamma) + N_N (\alpha + \delta) + N_S (\gamma + \phi)} \\ x_S^* &= \frac{N_S (\gamma + \phi)}{N_W (\alpha + \gamma) + N_N (\alpha + \delta) + N_S (\gamma + \phi)} \end{aligned}$$

The timing of the game reflects the description of the most important steps in the legislative process previously described. First, the President proposes a split of the total resources going into a particular program, where the split is denoted by $x \in \Delta^2$. The House evaluates the proposal as follows: with an initial yes/no vote it determines whether to pass the bill on unchanged. This effectively requires two groups voting in favor of the President's proposal. If the proposal passes unchanged, the Senate takes on the proposal. Otherwise, a House member is randomly selected to renegotiate the allocation, by proposing an amendment $x \in \Delta^2$. Each member has the same probability of being recognized. Hence, groups are recognized to make a proposal with probabilities proportional to their shares of seats q_i in the House. An amendment proposal is effectively a take-it-or-leave-it offer that one group of states makes to the rest of the chamber. The House votes on the proposed amendment, a positive vote resulting in the bill being passed on to the Senate, a negative vote implying the bill is scratched. The Senate follows a similar procedure, where the text approved by the House represents the initial proposal. The bargaining process in the Senate may yield a different outcome from that of the House because groups are represented in different proportions. If the Senate approves the initial proposal, then the outcome is directly implemented. However, if the Senate modifies the initial proposal, we model the outcome of bargaining in the Conference Committee as a convex combination of the House and Senate bills.

In more precise terms, the president's strategy set consists of all possible proposals. A strategy for a congressional player is a more complicated object: *for each chamber* it consists of the following: (i) a mapping from proposals into a binary vote, (ii) a history independent amendment proposal and (iii) a function from amendments into binary votes. Note that we assume that congressman always vote for their preferred option, regardless of whether they could be pivotal.

3.2 Theoretical Results

Proceeding by backward induction, we first analyze the Senate bargaining subgame following the rejection of the House bill. At this stage, a senator is randomly selected an amender. Since the amender makes a take-it-or-leave it offer, she can propose an allocation in which her group keeps the

entire amount of resources. When a House bill (x) is introduced in the Senate, each congressional player (i) compares her payoff from voting in favor of the bill (x_i) to the expected gains from rejecting it.¹⁰ The extent of these gains is equal to the probability of a senator from group i being selected as a proposer at the subsequent amending stage. In this case, in fact, group i achieves a payoff of 1, while it obtains a payoff of zero otherwise. The probability of being recognized is in turn equal to the group's share of seats in the Senate (p_i). We summarize this discussion in Proposition 1.

Proposition 1 *The groups' continuation values in the Senate are given by their shares of seats $\{p_i\}_{i \in I}$.*

In our model, no group holds the majority of the seats in the Senate. It follows that the bills passed by the House that are also approved by the Senate are those in which at least two groups receive more than their continuation values.

The next step is to analyze the game in the House following the rejection of the President's proposal. The representative who's selected as a proposer again holds all the bargaining power within the House. Broadly speaking, the amender chooses between two options: she can either propose an allocation that will be also approved by the Senate, or she can choose a proposal that will be amended in the Senate. The amender's optimal choice in the former class consists of acquiring the support of the group with the lowest continuation value in the Senate to form a coalition. In this case, the amender obtains a payoff of $x_i = 1 - \min_{j \neq i} p_j$. The best option in the latter class is to keep the entire amount of resources ($x_i = 1$), since the outcome of the Senate renegotiation stage is independent of the initial proposal. By construction, the first type of proposal will be accepted by the Senate, while the second one will be rejected, leading to an expected outcome in the Senate of $x = p$. The Conference Committee will then determine the final bill, which gives the House amender a payoff of $x_i = \frac{1}{2}(x_i = 1) + \frac{1}{2}(x_i = p_i)$. We can therefore conclude the following:

Proposition 2 *The proposer's payoff in the House is given by*

$$\max \left\{ 1 - \min_{j \neq i} p_j, \frac{1 + p_i}{2} \right\}$$

Proposition 3 *For any distribution of seats, all Representatives propose an amendment that will be approved by the Senate.*

Proof. For any $p \in \Delta^2$ such that $p_i \neq p_j \forall i, j$, it is the case that $1 - \min_{j \neq i} p_j > \frac{1+p_i}{2}$. To see this, let the proposer be a member of group i and define $p_H := \max_{j \neq i} p_j$ and $p_L := \min_{j \neq i} p_j$. Then note that $1 - \min_{j \neq i} p_j - \frac{1+p_i}{2} = p_i + p_H - \frac{1}{2} - \frac{p_i}{2} = \frac{2p_H - 1 + p_i}{2} = \frac{p_H + (1 - p_L - p_i) - 1 + p_i}{2} = \frac{1}{2}(p_H - p_L) > 0$. ■

¹⁰As customary in this literature, we focus on undominated strategies. We assume that each player's vote on a given proposal is uniquely based on her preferences.

Therefore, following rejection of the President's proposal, the group selected as an amender targets the group that holds the smallest share of seats in the Senate and offers its continuation value. More specifically, if $p_1 > p_2 > p_3$, groups 1 and 2 target group 3, while group 3 targets group 2.

Proposition 4 *The groups' House continuation values are given by*

$$\begin{aligned} V_1 &= q_1 (1 - p_3) \\ V_2 &= q_2 (1 - p_3) + q_3 p_2 \\ V_3 &= (1 - q_3) p_3 + q_3 (1 - p_2) \end{aligned}$$

where q_i is group i 's share of seats in the House.

Naturally, the allocations passing in the House are those that provide expected utility levels $E(x_i) \geq V_i$ for at least two members. Finally, it is important to observe that, if the President's proposal is rejected by the House, one congressional group will not be allocated any resources. Given our assumptions on the President's risk aversion, we obtain the following result:

Corollary 5 *The President always proposes an allocation that is approved by the House.*

Given these results, and using the composition of Congress in 1932, the set of proposals that would be approved unchanged can be drawn as follows:

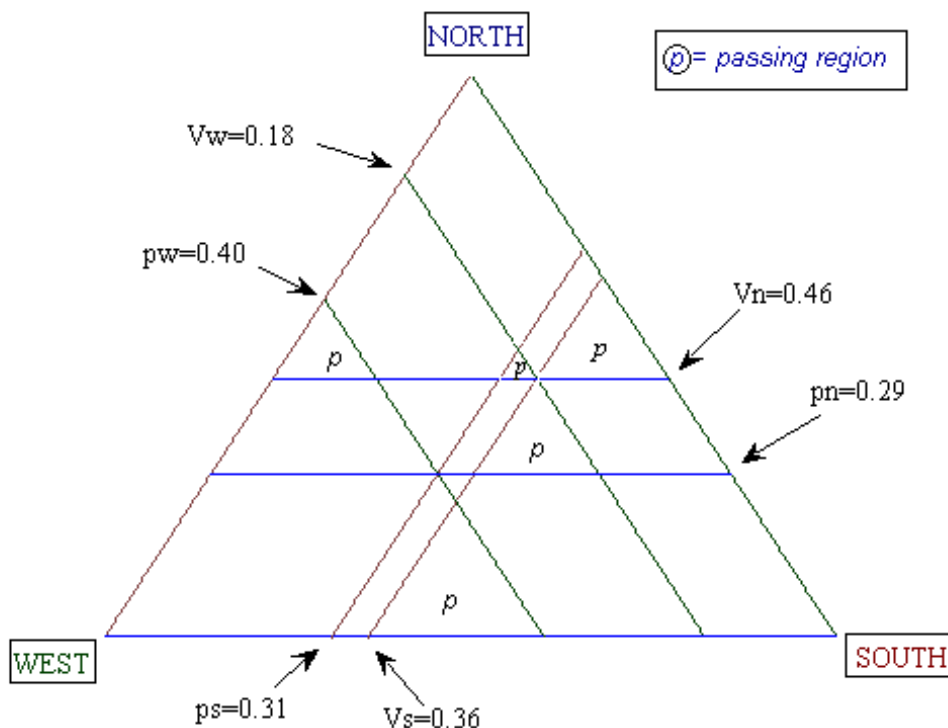


Figure 1: *Bargaining Outcomes and Congressional Constraints*

3.3 Examples

The following numerical examples illustrate the outcomes of the President-Congress bargaining game under different assumptions on the President's preferences. In particular, we maintain the composition of Congress in 1932 and consider the two cases in which the President pursues only economic goals (reform, recovery) and political goals (productivity, reform) respectively.

3.3.1 Economic Goals

Suppose the President is equally interested in reform and recovery but completely uninterested in politics. In our model's terminology, this is equivalent to assuming $\alpha = \gamma = 0$ and $\delta = \phi = \frac{1}{2}$. As an example, consider a general relief program, such as unemployment benefits. the President's

ideal allocation in this case would be given by

$$\begin{aligned} x_W^* &= 0 \\ x_N^* &= \frac{N_N}{N_N + N_S} = .57 \\ x_S^* &= \frac{N_S}{N_N + N_S} = .43 \end{aligned}$$

and it would pass since both x_N and x_S exceed $\max\{V_N, p_N\}$ and $\max\{V_S, p_S\}$ respectively.

Now, consider the case of a farming program. the President's ideal allocation is given by

$$\begin{aligned} x_W^* &= \frac{N_W}{N_S + N_W} = .45 \\ x_N^* &= 0 \\ x_S^* &= \frac{N_S}{N_S + N_W} = .55 \end{aligned}$$

This allocation would also pass, though supported by a different majority coalition.

Finally, for public works programs the President's ideal allocation would be given by

$$\begin{aligned} x_W^* &= \frac{N_W}{2N_S + N_W + N_N} = .20 \\ x_N^* &= \frac{N_N}{2N_S + N_W + N_N} = .32 \\ x_S^* &= \frac{2N_S}{2N_S + N_W + N_N} = .48 \end{aligned}$$

This allocation would pass in the House since both the West and the South would endorse it, and it would pass in the Senate, supported this time by the North and the South. Hence, we can conclude that an economic President would see the ideal allocations pass, and these ideal allocations would be given by the expressions above.

3.3.2 Political Goals

In this example, we suppose that the President only cares about political productivity and rewarding Democratic states. Formally, let $\alpha = \gamma = \frac{1}{2}$ and $\delta = \phi = 0$. Then for general relief programs, the President's ideal allocation is

$$\begin{aligned} x_W^* &= \frac{2N_W}{2N_W + N_N + N_S} = .19 \\ x_N^* &= \frac{N_N}{2N_W + N_N + N_S} = .59 \\ x_S^* &= \frac{N_S}{2N_W + N_N + N_S} = .22 \end{aligned}$$

Only the North's representatives would support this allocation, which would be therefore rejected by the House. As a consequence, the President would choose to "buy off" the South in the House

and the North in the Senate, by proposing the following allocation:¹¹

$$\begin{aligned}x_W^* &= (1 - V_S - p_N) = .35 \\x_N^* &= p_N = .29 \\x_S^* &= V_S = .36\end{aligned}$$

In this case, the ideal and constrained optimal allocations for public works and farming programs would be identical. In fact, these programs only differ with respect to the economic relief component, which receives zero weight in the current formulation of the President's preferences.

4 Empirical Part

4.1 Description of the Data

The empirical part of this study uses data collected by Fishback, Kantor and Wallis (2003) on the distribution of spending for the New Deal programs implemented immediately after Roosevelt's inauguration in 1933 (during the so called "100 Days").¹² Their original data, taken from the US Office of Government Reports (1940), is used for a more detailed (county-level) empirical study. We have aggregated their values, first to the state then to the regional level. The regional aggregation is done according to the assignment of states to regions reported in table 12.

In terms of direct/explicit relief, the two centerpieces of the Roosevelt administration's reconstruction efforts were the Federal Emergency Relief Act (FERA) and the Works Progress Administration (WPA). FERA passed in 1933 and was enacted to provide immediate grants to states for relief projects. WPA passed two years later, in 1935 (under the Emergency Relief Appropriation Act), with the purpose of providing public employment for people who were out of work. Given our focus on the "100 Days", we always include FERA (1933) in our estimations, whereas we only use WPA in some robustness checks.

In addition to FERA and WPA, in most but not all of our estimations we include in the general relief category loans from the Home Owners Loan Corporation (HOLC), set up in 1933 under the Home Owners Refinancing Act with the stated objective of lending to homeowners who were facing significant risk of defaulting on their mortgage, and insured loans given by the Federal Housing Administration (INS/FHA).¹³

Besides direct relief programs, the government used public works projects to provide relief through employment as well as through stimulation to the economy. Most importantly, the Public Works Administration (PWA) was set up in 1933, under the National Industrial Recovery Act.

¹¹Formally, one needs to verify that FDR prefers this allocation to other constrained allocations close to his ideal point. It can be shown, for instance, that he would obtain a lower utility were he to "buy off" only one region.

¹²In some extensions, we also use data from all the years 1933 to 1937.

¹³In addition to these programs/agencies, the Civil Works Administration (CWA) falls in the category of "general relief." The distribution of funds of this administration were, however, small in comparison with the other programs. We did try to include CWA funds. As it had no effect on the estimation results we have chosen not to include it here.

The PWA funded such diverse projects as airports, schools, hospital, warships, dams and bridges. Following Fishback, Kantor and Wallis, we distinguish these from general relief programs and classify them in separate category of “public works.”¹⁴

In addition to general relief and public works programs, we consider the farm programs enacted during the New Deal period as a separate category. These programs are sufficiently distinct from all the others to justify a separation. In this category, the two largest programs were the Agricultural Adjustment Act (AAA) and the Farm Credit Act (FCA), both passed in 1933. The former was enacted with the stated objective of providing immediate relief to farmers and paying subsidies to farmers for curtailing production of certain crops. The latter was intended to provide operating loans to farmers on a short-term credit basis. In addition to these two programs, a number of agencies with smaller funds, such as the Farm Security Administration and the Rural Electrification Administration, were established. As these were too small to change the estimation results, they are also omitted here.

The distributions of funds over the three regions, for the nine different programs described above, are reported in table 3.

Program Name	Program Type	Year	Total Funds (billion \$)	Region Shares		
				<i>North</i>	<i>South</i>	<i>West</i>
FERA	General Relief	1933	2.7	.50	.20	.30
WPA	General Relief	1935	6.2	.54	.19	.28
HOLC	General Relief	1933	3.1	.54	.19	.28
INS/FHA	General Relief	1934	2.7	.45	.20	.35
PWA, Federal	Public Works	1933	0.8	.41	.24	.35
PWA, Match 1	Public Works	1933	0.6	.41	.34	.23
PWA, Match 2	Public Works	1933	1.4	.44	.25	.32
AAA	Farming	1933	2.0	.03	.43	.49
FCA	Farming	1933	1.3	.12	.32	.56

Table 3: Program Details

In what follows, we use all of the 1933 programs as a baseline empirical approach, with the programs weighted by their size (total funds). In various robustness checks, we first of include all the programs from the first New Deal. We then use specifications that differ from the baseline case by using unweighted programs and by grouping programs based on their type and year.

4.2 Empirical Approach

The main goal of our empirical approach is to identify the parameter values of the President’s objective function that provide the best fit of our model’s predicted allocations to the observed data. We will refer to *theoretical allocations* as our model’s predicted allocations as a function of FDR’s preferences and of the outcome of the President-Congress bargaining game. In fact,

¹⁴Note that the activities of the PWA were divided into two different kinds of programs: federal programs and state-programs (and loans). The latter were matched with federal money but on the initiative of local authorities.

given a utility function for FDR, the equilibria of our model can essentially lead to three very different outcomes: (i) the immediate approval of bills that implement FDR’s ideal allocation, (ii) the immediate approval of bills that implement a Congress-constrained allocations different from FDR’s ideal allocation, (iii) the approval of bills that pass untouched through the House but are radically amended in the Senate.¹⁵ Discerning between the three types of outcomes in the data is a key step in determining the relevant theoretical allocations.

In the actual empirical work, we start by plotting the allocations in the simplex representing the outcomes of the bargaining game (Figure 1). We observe that almost none of these observations lie in a “passing region” (which would lead to type (i) outcomes). We then exploit the historical fact that during the “100 Days” Congress did not amend FDR’s proposals substantially (if at all).¹⁶ Therefore, we conclude that each observed allocation must correspond to a type (ii) outcome: that is, it must reflect the solution to the President’s Congress-constrained optimization problem. In other words, we conjecture that Roosevelt was aware that his ideal allocations were politically infeasible and that his proposals took congressional constraints into account. Therefore, our observations must be generated from allocations approved by Congress that lie *along* one or more constraints. We attribute any differences between the observed allocations and the (theoretical) congressional constraints to “execution error” by the federal agencies through which the funds were distributed.¹⁷

Identifying the relevant binding constraints is the hardest task in this approach. To this end, we divide programs in General Relief / Public Works / Farming. For each group, we select the constraint closest to the observed allocations and *we conjecture it was the binding congressional constraint*. We then construct the theoretical allocation for each group of programs, as the equilibrium of our model under the conjectured (constrained) group’s specific congressional constraint.

Having determined (conjectured) which constraints that were the binding ones, we proceed to the actual derivation of the model’s parameters. In general, we aim at keeping our empirical approach as simple (or, more accurately, transparent) as possible. With this in mind, we adopt an intuitive minimum distance approach, by which we try to bring theoretical and observed allocation as close as possible.¹⁸ Formally, our parameter estimates - under the above described conjecture

¹⁵Note that we do not have to consider a fourth case in which the House amends the President’s proposal, as shown in our theoretical model (Corollary 5).

¹⁶For instance, according to Patterson (1967, page 3): “*the passage of eleven key bills in 1933 took only a total of forty hours of debate in the House. The legislative process in the Senate was a bit more careful but still not slow.*”

¹⁷By these means we allow - and indeed we find - these “errors” not to have a zero mean. Not surprisingly, the observed allocations are often closer to FDR’s estimated ideal points. Note that this does not affect the Congressional bargaining game described above. It simply means that FDR, or agencies with similar objectives as FDR, probably had some ex-post influence over the spending.

¹⁸Note that we do not attempt to use the standard econometric approach (asymptotic theory) in order to obtain standard errors and perform hypotheses testing. The limited amount of data - in the baseline case nine observations, and in many specifications less than that - implies that asymptotic theory and large number approximations is simply not appropriate.

regarding the constraints - are given by the solution to the following problem:

$$\begin{aligned} \min_{\alpha, \gamma, \delta, \phi} & \sum_{i=1}^K w_i \|x_i^{OBS} - x_i^{THEORY}\|^2 \\ \text{s.t.} & (\alpha, \gamma, \delta, \phi) \geq (0, 0, 0, 0) \\ \text{s.t.} & \alpha + \gamma + \delta + \phi = 1 \end{aligned}$$

where w is a K -dimensional vector of weights containing the total size of each of the programs considered.

Finally, once we have obtained a vector of parameter estimates, we perform a number of simple checks (not hypothesis tests in the traditional sense) of the internal consistency of the results and the tightness of the parameter estimates. First and foremost, after estimating the preference parameters, we make an attempt to falsify our conjecture about slack vs. binding constraints, using the estimation results. Given the estimated parameter values, we can easily compute FDR’s ideal allocations. Then, under the conjecture of Congress-constrained allocations, if any of FDR’s ideal allocations lie in the passing regions, then our conjectured equilibrium is falsified by the data.

Obviously, for each conjectured combination of binding vs slack constraints, we can at most use this first test to conclude that the data does not falsify our model. This test will not necessarily reject a false model. Therefore, we also perform several robustness checks, in which we try a number of alternative assumptions about which constraints (if any) that were actually binding, and seek to obtain non-falsifiable conjectures. In addition, we estimate a number of settings in which we gradually relax various modeling assumptions (such as independence of voting across bills or constant bargaining powers across congressional groups) in order to control for logrolling and for the formation of tighter majority coalitions.

4.3 Baseline Estimation Results

Our baseline estimation considers the levels of the allocation of funds in the seven New Deal programs passed during the “100 Days”. In the criterion function, each program is weighted by its total size. As a theoretical allocation, we consider a scenario in which FDR’s distribution of general relief funds is constrained by the West in the Senate whereas the allocations of farming and public works funds are both constrained by the South in the House. This procedure delivers parameter estimates of

Politics		Economics	
Productivity (α)	Rewarding (γ)	Recovery (δ)	Reform (ϕ)
0.1120	0.0920	0.6029	0.1931

Table 4: Baseline Parameter Estimates

These parameters imply that FDR’s ideal allocations would have been the following:

	N	S	W
Relief	0.6739	0.2055	0.1206
Farming	0.1339	0.2607	0.6054
Pub.Works	0.3762	0.3574	0.2663

Table 5: Ideal Allocations

This ideal allocation can be viewed as a counterfactual experiment, in which we ask the question: How different would the distribution of funds have looked if the executive branch (FDR) had been unconstrained in the implementation of new government programs? We can note, for instance, the implication that FDR would have liked to give a greater share of the general relief programs to the North, had he not been constrained by the West.

Finally, in order to perform a falsification test, we derive the predictions that follow from our estimated parameters, but with Roosevelt constrained. The constrained model predicts the following allocations:

	N	S	W
Relief	0.4598	0.1402	0.4000
Farming	0.1159	0.3600	0.5241
Pub.Works	0.3747	0.3600	0.2653

Table 6: Predicted Allocations

These allocations differ from the observations by an average of 0.0582. More importantly, the conjectured scenario in which these constraints (West in the Senate for general relief programs, South in the House for the other programs) are binding is the only one under which our estimated ideal allocations would not pass through Congress untouched. In other words, our baseline conjecture is the only one in which the conjectured congressional constraints can not be falsified jointly by the data and the parameter estimates. We take this as a check of the internal consistency of the model.

4.4 Robustness Checks

Our baseline specification (reprinted as BASE in Table 7) considers the levels of the nine observed allocations separately. We now proceed to operate a series of robustness checks by means of estimating our parameters under several different specifications of the President-Congress bargaining game.

4.4.1 Minor Changes to the Estimation Approach

In this part, we present the results of several minor changes to the estimation execution. First and foremost, we estimate the model including all the nine programs (L9). We then test for congressional logrolling. Specifically, this means that we treat all allocations from any given type of program passed in the same year as a unique bill, which leaves us with five observations. The

result of this estimation is displayed in the row labeled L5. Finally, instead of assigning different weights to different programs based on their size (in total spending), we estimate the parameters assigning equal weights to all of the nine baseline program programs. The results of this exercise are labeled L9UW.

	Productivity (α)	Rewarding (γ)	Recovery (δ)	Reform (ϕ)
BASE	0.1120	0.0920	0.6029	0.1931
L9	0.1107	0.0918	0.6051	0.1924
L5	0.1539	0.0868	0.5590	0.2003
L9UW	0.1068	0.0927	0.5993	0.2012

Table 7: Minor Changes

4.4.2 Program-Specific Bargaining Powers

In the next three robustness checks (R9, R5, R9UW), we give a different interpretation to our structural error. Here, we acknowledge that our model's constraints can only represent with approximation the bargaining powers in place in Congress during the New Deal. Moreover, by requiring the President to obtain the support of two large congressional players, we are *de facto* ruling out the possibility of building smaller majority coalitions. In reality, by targeting only part of the states in a given region, FDR could potentially tend less to that region's interest and propose an allocation that is closer to his ideal point. Certainly, the historical evidence does suggest that FDR's proposals passed with large support. However, it is still possible that some of the bills' crafting and actual bargaining took place outside of the formal sessions of the Congress, implying that the voting record in Congress do not fully capture the shape of the real coalitions behind the bills. Hence, we believe that an alternative specification, with a less precise interpretation of the constraints, is a useful exercise.

More specifically, while maintaining the same conjecture regarding which constraints were binding ones, we now assume that the politically constraining regions received exactly what was necessary in each session to win their support. This is equivalent to assuming that, for each program, the constraining region were able to correctly predict the final allocation and required exactly what it eventually got in order to vote in favor of the program. Note that this is consistent with the idea that, for all the programs where the observed allocations do not fall in theoretical "passing regions" (as given in figure 1), FDR might have passed the bills with winning coalition that were smaller than the ones implied by the baseline approach.

Now note that, given our Cobb-Douglas assumption on the President's utility function, the ratio between the shares of any two regions is independent of the share received by the third one. Together with the assumption that the observed allocations directly deliver the binding constraint for each program, this implies that we are able to estimate FDR's preference parameters on the basis only of the ratios of the allocations received by the non-constraining regions.

We carry out this estimation approach for all programs separately and also under our logrolling

specification (R5). Finally, we perform the estimation placing equal weights on all nine programs (R9UW). The resulting parameter estimates are very similar to the case of varying weights. This works as a confirmation of the relative homogeneity of approved allocations across the three types of programs, which is already evident from the data.

The results of our estimation under these robustness checks are reported in Table 8:

	Productivity (α)	Rewarding (γ)	Recovery (δ)	Reform (ϕ)
BASE	0.0924	0.0960	0.5445	0.2249
R9	0.0976	0.1157	0.5728	0.2139
R5	0.1263	0.1235	0.5735	0.1767
R9UW	0.0964	0.1002	0.5685	0.2349

Table 8: Program Specific Bargaining Powers

To summarize the results of different empirical procedures, we are quite confident that our estimates lie within the following bounds:

	Productivity (α)	Rewarding (γ)	Recovery (δ)	Reform (ϕ)
min	0.0924	0.0868	0.5445	0.1767
max	0.1539	0.1235	0.6051	0.2349

Table 9: Ranges for Parameter Estimates

These preliminary estimates indicate that economic concerns, in particular providing relief/recovery, were the primary motives behind the New Deal. Political motives were also existent, but less important.

4.4.3 Continuous Goals-to-Program Assignments

As a final and somewhat different robustness check, we propose a smoothening of our assignment of goals to specific programs. Thus far, we have maintained a discrete $\{0, 1\}$ type assumption according to which money spent in a given region on a given program can either serve a specific goal, or not at all. More realistically, the allocation of funds to a given program can serve a goal to a lesser or greater extent. We use this robustness check for two reasons. First of all, we want to try to provide a more precise characterization of our assignments, say by matching some key statistical fact. Second, we want to explore the sensitivity of our estimates to minor perturbations of the criterion function. The results are quite comforting. More specifically, we try perturbing our assignment in the following ways:

We find that economic motives acquire even larger relevance when this assignment is considered. The parameter estimates are given in the following table:

	Perturbation 1			Perturbation 2		
	South	West	North	South	West	North
Reform/Dev.	0.7	0.2	0.1	0.6	0.3	0.1
	$r : 0.1$	$r : 0.2$	$r : 0.7$	$r : 0.1$	$r : 0.4$	$r : 0.5$
Relief/Recovery	$f : 0.1$	$f : 0.85$	$f : 0.05$	$f : 0.3$	$f : 0.7$	$f : 0$
	$p : 1$	$p : 1$	$p : 1$	$p : 0.5$	$p : 0.8$	$p : 0.7$
Pol. Productivity	0.3	0.8	0.9	0.5	0.7	0.8
Rewarding Dems.	0.9	0.8	0.3	0.8	0.7	0.5

Table 10: Alternative Goals to Programs Assignments

	Productivity (α)	Rewarding (γ)	Recovery (δ)	Reform (ϕ)
P1	0.0328	0.0871	0.7656	0.1146
P2	0.0261	0.1007	0.8013	0.0719

Table 11: Perturbations Estimates

5 Concluding Discussion

In this paper, we develop a theoretical model of bargaining in the US Congress, and we apply the model to the spending decisions of 1933 during the so-called “100 Days”, in the hope of improving our understanding of the objectives behind the implementation of the New Deal. In the theoretical model, the distribution of government funds across different regions of the country is the outcome of a bargaining game, in which the President acts as the agenda-setter (the proposer) and Congress bargains over the final shape of the spending bill. We take into account the two-chamber structure of the Congress, by explicitly modeling the sequential nature of the legislative process, with the House of Representatives acting before the Senate. We assume that the Congress members are sequentially rational. That is, we assume that the House members understand the Senate might alter a bill that passed through their chamber, and we assume that both the House and Senate members understand that, in the case of disagreement between the House and the Senate, the final outcome will be a convex combination decided by a conference committee. We also assume a sequentially rational President. That is, we assume that the President knows what bills will pass unchanged, and that he understands how Congress will modify the ones that do not.

For any given set of preference parameters (in the President’s utility function) and any given distribution of seats in the Congress, we can solve the model for a unique predicted outcome, i.e. a unique predicted distribution of funds across regions. This allows us to use the actual distributions of New Deal funds to estimate the preference parameters of the Roosevelt administration. We link theory to data and estimate the model’s parameters using a simple minimum distance approach. That is, we estimate Roosevelt’s preference parameters by minimizing a weighted distance between the actual distributions and the theoretical (model) expressions characterizing the equilibrium. The limited number of data points implies the standard econometric approach (asymptotic theory) for deriving standard errors and hypotheses tests is not appropriate. Hence, we are unable to assess the “tightness” of our estimated parameter values. Instead, as a robustness check, we estimate a

number of different versions of the model, controlling for possible logrolling and misspecifications of the constraints imposed on Roosevelt by the 73rd Congress. In addition, we discuss and apply some more “conceptual tests” - ways in which parameter estimates could be falsified due to internal incoherencies of the model. Our baseline estimation, though not all of the estimations presented as robustness checks, pass these falsification tests.

The baseline parameter estimates indicate that the motivation behind the New Deal was primarily economic, but that political concerns do seem to have existed as well. All of the robustness checks give a similar and reasonably coherent picture. In particular, all the specifications deliver estimates that imply a significantly greater concern for relief/recovery (one of the two motives labeled as “economic”) than for any other motive. This is broadly in line with what we perceive to be the general message of the body of research by John Wallis: that economic concerns for relief and recovery, though not necessarily for fundamental reform and development, largely drove the New Deal, and that political concerns mattered but more on the margin.

Regarding the other possible motives, political productivity (reelection concerns) appears to have been of lesser importance. The relative relevance of concerns for fundamental reform vs. reward for democratic states is unclear, as it varies across specifications. Neither of these motives appears to have been as important as relief/recovery, but for both fundamental reform and reward there are specifications in which they appear quite important. However, it is never the case that both come out as important in the same specification. Hence, we cannot fully determine the relative importance of these two motives.

Finally, we would like to stress again that this paper should be viewed as a *complement* to the existing literature on the objectives of the New Deal. Our formal approach has the advantage of delivering a precise meaning to the estimated parameters, within the context of the model. However, this comes at the obvious cost of seriously reducing the richness of the model’s institutional setting, as compared to the previous research. We can only explain the part of the spending that was determined by the President and Congress. In addition, we do not capture preferences over the tax collection or budget deficit necessary to fund the spending programs (though this is a simplification we share with previous research). Finally, the aggregation of states into regions implies we have nothing to contribute to the analysis of the local (intra-region) distribution of funds.

While recognizing these limitations, we do believe that there is scope for further research that could extend this paper in several ways. In particular, although we do perform a number of robustness checks controlling for different forms of logrolling, we do not explicitly model how (whether) funds from one type program could be used by the President to relax constraints for a different program. To do that would require introducing additional dynamic features to account for the sequential nature multiple bills, and issues of credibility would become central. We consider this extension very interesting, as it would provide a general model that could be used to analyze political logrolling. However, it would also introduce significant additional modeling complexity, and would necessarily shift the focus away from the empirical / historical aspects of this research project. Hence, it falls outside the scope of this paper, which is meant to be applied with focus on

the New Deal period.

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A Regional Classification: Tables and Maps

Northern States	Southern States	Western States
Connecticut	Alabama	Arizona
Delaware	Arkansas	California
Indiana	Florida	Colorado
Maine	Georgia	Idaho
Maryland	Kentucky	Illinois
Massachusetts	Louisiana	Iowa
Michigan	Mississippi	Kansas
New Hampshire	Missouri	Minnesota
New Jersey	North Carolina	Montana
New York	Oklahoma	Nebraska
Ohio	Tennessee	Nevada
Pennsylvania	Texas	New Mexico
Rhode Island	Virginia	North Dakota
Vermont		Oregon
		South Dakota
		Utah
		Washington
		Wisconsin
		Wyoming

Table 12: Composition of State Groups (Regions)

Northern States		Southern States		Western States	
Connecticut	Lost	Alabama	Won	Arizona	Won
Delaware	Lost	Arkansas	Won	California	Won
Indiana	Won<55%	Florida	Won	Colorado	Won<55%
Maine	Lost	Georgia	Won	Idaho	Won
Maryland	Won	Kentucky	Won	Illinois	Won
Massachusetts	Won<55%	Louisiana	Won	Iowa	Won
Michigan	Won<55%	Mississippi	Won	Kansas	Won<55%
New Hampshire	Lost	Missouri	Won	Minnesota	Won
New Jersey	Won<55%	North Carolina	Won	Montana	Won
New York	Won<55%	Oklahoma	Won	Nebraska	Won
Ohio	Won<55%	South Carolina	Won	Nevada	Won
Pennsylvania	Lost	Tennessee	Won	New Mexico	Won
Rhode Island	Won	Texas	Won	North Dakota	Won
Vermont	Lost	Virginia	Won	Oregon	Won
		West Virginia	Won	South Dakota	Won
				Utah	Won
				Washington	Won
				Wisconsin	Won
				Wyoming	Won

Figure 2: Political Support for FDR in 1932 Election

