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Farmers and the U.S. Congress: rethinking basic institutional assumptions about agricultural policy

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Abstract

An assumption shared by most agricultural economists is that, as farm numbers decline in a democratic government, farm policy attention from rule-makers will decline as well. This assumption – despite important work to the contrary in institutional economics – is often voiced in federated governing units, especially the U.S., where constituents are locally organized and the commitment of rule-makers to nationwide policy is limited. While significant theoretical literature challenges that majoritarian view from the perspective of interest-group theory, this is the first empirical test and explanation of the behavior of rule-makers.

The findings of this analysis indicate that classic majoritarian expectations are not met in the U.S. Congress. Instead, unexpectedly large numbers of legislators seek favorable policy action for farmers as distinct minorities within their districts. However, these same legislators balance their attention to farmers by also taking policy action in agriculture on behalf of other types of constituents. Legislators explain these actions as the result of their own electoral needs to satisfy vocal minorities from their political districts plus the ease with which they can marginally adjust a large base of U.S. farm programs. Thus, a kind of neo-majoritarianism emerges.

These results are especially important given the growing attention to federated governance in the European Union, East Europe, in North America through free trade agreements, and with the GATT. They indicate that farmers will continue, despite shrinking numbers, to be influential in those governing structures that have historically strong farm programs and the capacity to diversify from that policy base.

Those who study U.S. agricultural policy find themselves troubled by what many see as paradox. Abler (1991, p. 11) expressed the paradox and perplexity well: "Most of the influential farm groups have significant membership in only a small number of districts in the U.S. Congress, and yet they receive sizable political favors." Some agricultural policy analysts are perplexed by what they observe of continuing farm power because they, with few exceptions, tend to assume that declining farm numbers will mean declining farm policy favors *if* government rule-makers behave legitimately.

Both Cochrane (1958) and Hathaway (1969) warned of this impending decline in farmers' political standing decades ago and their comments are oft repeated. The usual expectation is that only the most rural legislators should or can be expected to attend to farm program benefits.

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Accordingly, because of the time-honored status of this prediction, the assumption of a single and direct relationship between farm numbers and farmers' political standing has become conventional wisdom, albeit of a subdisciplinary sort among the mainstream of traditional agricultural policy economists and rural sociologists.

However, the assumption may well be misplaced in contrast to not yet being fulfilled. We indeed believe that it is a mistaken assumption and that there exists no paradox. The assumption is too simplistic to explain policy change or stability and it totally disregards institutional impact. Scholars have neither tested the assumption by examining the behavior of *rule-makers* nor thought through other assumptions that underlie the major premise [1]. Nonetheless, despite a paucity of empirical data, we base our suspicions on relevant research that focuses suggestively on the demand for particularistic rules as opposed to an analysis of the rule-makers who supply them.

For example, the growing institutional economics literature on interest groups, which are but one of the sources of policy demands on rule-makers, includes work relevant to agricultural policy analysis. In particular, numerous theorists contribute to the conclusion that such factors as variable group size bring with them additional resources that must be taken into account in explaining political influence (Gardner, 1987; Rausser and Zusman, 1992). This work rests on a foundation first provided by Olson (1965) who explained that small groups, not plagued by free-rider problems of the magnitude of large groups, can effectively sustain political influence. Peltzman models group size and political impact to make even stronger statements against majoritarian views (Peltzman, 1976; Peltzman, 1984). Others have modeled the effects of vote trading, voting costs, representative and voting rules, and imperfect information on effective minority representation (Becker, 1983; Farquharson, 1969; Stigler, 1974; Riker, 1962; Rae, 1971). Also, we have observations that detail how farmers as a majority are highly taxed in some countries while, in others, they are subsidized as a distinct minority (Bates, 1981; Anderson and Hayami, 1986). But, as Gardner (1992) also observes about such analytical starting points, "the underlying political economy of these events is still not well understood." In particular, we lack empirical evidence of rule-makers' regard or disregard for the farm sector. Certainly no one, for any policy area, has ever tested the exact linkage between the characteristics of congressional districts and legislative initiatives.

In this paper, we undertake that task as the fairest possible test we can conceive for the Cochrane-Hathaway prediction and its impact on rule-makers. Then we follow through with a related, though more expansive, explanation of agricultural policy making. Our purpose – and as proponents of Olson (1965) we do find it necessary – is to dismiss the Cochrane-Hathaway prediction and get on with the construction of theories of rule-making and representation that are not so plagued by perceived paradox.

These theories, after all, will be of importance in understanding public policy responses in the European Community and in Eastern Europe as well as the U.S. and North America. The time will come repeatedly when policy makers, under federated rules, confront the need to assemble common policies in the face of diverse constituencies where agriculture has variable numbers of independent voters. We need to understand far more about the likelihood of policy successes and failures under differing institutional rules of representation. Hillman's analysis took a first step in systematizing that knowledge about the varying effects of institutional settings (Hillman, 1989) and we want to add to it.

Some obvious flaws in the majoritarian view suggest that more complex theory building is overdue. There are two underlying assumptions in the Cochrane-Hathaway prediction, or what we call classic/rigid majoritarianism, that its pro-

[1] This seems a most unusual oversight, since as Harold Breimyer (1991) observes of the agriculture economics profession and its members' common bond: "They see themselves ... dedicated to the scientific principle" (p. 243). As he goes on to note, however, theoretical shortcomings have not been an anomaly. The point is that we need to look at far more variables and relationships in the policy process than so far has been done.

ponents must understand as especially hard to satisfy. First, the Decline-in-Favors Prediction is based entirely on the *rules of public policy process*, or procedure. It disregards that the policy process is moved by an assessment of substantive rather than procedural policy need [2]. Second, that prediction also is based on the view that those *process rules* which allocate substantive policy benefits are determined *solely*, rather then only partially, by some form of majoritarian principles: non-farm constituencies will elect non-farm legislators who in turn will produce non-farm policy, unless of course farmers and other minorities can coalesce to create an emergent congressional majority. There exists no thought within that assumption that minorities may have other means than majoritarian political coalitions for gaining attention and legitimately winning policy favors.

Beyond these two assumptions, there exists a third problem. Notably omitted in majoritarianism is *any* consideration of legislator (or rule-maker) choice as a factor influencing the simple decision of acting on behalf of farmers. That is, rule-makers may have the procedural capacity to judge on their own and accept or reject from among such variables as efficient and economic policy, interest-group pressure, or any of myriad other often competing sources of influence. Ours is not an ad hoc judgement in offering these critiques. Scholars who have studied the effects of rule changes of the 1970s in creating a postreform U.S. Congress provide us our rationale. Shepsle (1989), Smith (1989), and Rohde (1991) explain the emergence of a modern Congress where individual members all have greater flexibility to act on their own, generate whatever issues they decide are appropriate and do so on behalf of their district constituents. That is, these members can determine for themselves whatever representative strategics are most applicable. This, these scholars suggest, produces more involvement by more members for more beneficiaries than under old rules of representation.

1. Modified and complex majoritarian model

Placing these additional assumptions that show policy determined by majoritarian procedural rules into model form with the initial Cochrane-Hathaway prediction is useful in better understanding the individual variables and their linkages. Modeling allows us to specify those variables that appear to affect decisions made in any rule-making body, in this case the postreform U.S. Congress. It also lets us determine an appropriate test to see if either classic/rigid or fluid (postreform) majoritarian rules prevail there. We, therefore, propose the following modified majoritarian model as a way of understanding rule-maker response. In our model, if D represents a single legislator's (rule-maker's) decision, the initial Cochrane-Hathaway majoritarian assumption specifies that it be made after examining the farm and farm dependent population, f, as part of the total voting constituency within the district, p (note that we are talking about farm sector influence, not that of individual farm interest groups):

$$D = f/p$$

Yet decisions matter only because procedural rules, as added policy determinants, or r, allow them to be seen as consequential once legislators are elected and leave the district for Washington. This is the variable identified by Hillman (1989), Shepsle (1989), Smith (1989) and Rohde (1991). Rules of procedure, as opposed to substantive rules or policy outcomes, specify terms of interaction between legislators and what they can do to affect policy. The notation, r, would actually be a subset of procedural rules governing, in turn, introduction of bills by rule-makers that allocate farm favors, committee deliberations where bills are marked up or oversight takes place, commit-

[2] Again, given the bounded rationality approach so common to agricultural economic thought, it is unusual that things seem to be explained apart from the assumption of policy need. But appearances are deceiving. Agricultural economists are preoccupied with what they see rationally as policy faults, or errors of judgment. These faults and errors are explained as de facto process results and blame for irrationality is attached to governing institutions in often unspecified ways (Bonnen and Browne, 1989). This explanation ignores that, in lawmaking, economy and efficiency are not values shared by all of those who articulate visions of 'good' public policy.

tee votes, leadership intervention, floor votes, and conference committee action between the Senate and House of Representatives as the two chambers of Congress. Thus, the legislator's decision becomes a function of a broader relationship that links district impact, in stages, to Washington work (Fiorina and Rohde, 1989).

$$D = f/p, r_1, \ldots, r_6$$

But, as we and Abler (1989) noted, distinct sets of minorities can coalesce to form majorities, which if majority rules of procedure indeed do govern would be the only way a farm minority could generate farm favors through the Congress (Ferejohn, 1986). This means we have the analytical need to specify other sets of minorities, m, within the voting population with whom farmers can trade support.

Since all minorities are not alike in their interests, and their compatibility or incentives to act with farmers differs among groups, we need to specify trades that legislators make on behalf of various interests on specific issues, t, and their likely relationship to procedural rules. Not all trades would be allowed or made probable because such rules by their nature, specify and therefore limit appropriate exchanges. Exchanges, however, are not limited by rules of procedure in terribly extensive ways. This allows trades to be made widely throughout the whole Congress rather than just on the agriculture and other committees (Shepsle, 1989). Given the type of farm favor a legislator wants to award (which may be variable), the number and the specific selection of other minorities for trading purposes will vary as will the actual content of the trades made to assemble a majority. Not all proposals are equally appealing to everyone. So we have in the end the more complex model:

$$D = (f + m_x, \ldots, m_y)/p, (r_1, \ldots, r_6)(t_x, \ldots, t_y)$$

Or, in plain English, a legislator's policy decision under the modified and complex majoritarian model is a function of the proportion of farm and other minority constituents in his or her district, given a set of rules of procedure that allow trades to be made between farmers and other minorities before action is taken on anyone's behalf.

In our model, if Cochrane and Hathaway were correct, members of Congress will, as substantive rule-makers, only propose to do things for farmers when majority-sized coalitions of any and all possible minorities can be assembled. But even a majority will be insufficient in explaining the action taken by the legislator. More of a determinant will be necessary. House and Senate procedural rules of a postreform Congress will also determine the legislator's decision, based primarily on whether those rules make both possible and probable the trades between legislators on behalf of distinct sets of minorities needed to form a majority. It should be clear from the above discussion that the classic Cochrane-Hathaway majoritarian model is a very constraining one, without much flexibility. Flexibility is impossible *unless* the procedural rules which govern institutional choices made among legislators are very fluid or elastic, ones that allow a great deal of personal freedom as they appear to in the postreform Congress (Shepsle, 1989). Thus, what we have the prospects of identifying is a neo-majoritarian model – one in which that elasticity is critical. Under neo-majoritarianism, a rule-maker can select from a huge number of minorities to form a combined majority view. Moreover, the legislator can construct the combination in a multitude of ways using the vast number of procedural opportunities in the modern Congress.

2. Applying the model

There are no easy ways to test the modified model and determine whether it rather than classic/rigid majoritarianism prevails. All options have some obvious flaws. Even the choice of relevant decisions, D, as the dependent variable is difficult. On which decisions do we focus? For example, committee votes are unavailable as recorded indicators of who did what. Floor votes, on the other hand, are often prearranged and are not reflective of how members view the farm sector. Thus, they are not the ultimate test of member interest. A farm district legislator may vote against a farm program because it does too little for his or her particular constituents; or an

urban legislator may vote for the same program because the leadership recommends it. Moreover, there are numerous unrecorded votes on the floor, usually for strategic reasons. At this late point in the process, r is a culmination of many interactions and just too much an unknown factor. Aggregating data on voting and drawing conclusions about what motivates legislators from it, when the alternatives are so numerous, produces at best only good guesses.

For those reasons, this analysis depended on asking questions of legislators in the absence of a clear and definitive vote count. But they were not asked about their votes. It was judged better to begin earlier in the process at a stage when the effects of procedural rules should be more limited and thus similar, or held more constant, from decision to decision. Also, the intent was to focus on things that mattered *most* to each legislator. Votes on each bill will have had variable importance ranging from great to nearly none from one legislator to another. In contrast, an issue that is accorded an extensive amount of attention in getting other members' agreement at least had some high degree of office saliency for the initiating legislator. Avoidance of hard questions about voting respected as well the desire of legislators to seek confidentiality – and provide misinformation – as they frequently do by preferring unrecorded voice votes.

As a consequence, a random stratified sample of legislators disproportionately from outside the agriculture committees, was questioned. Members of Congress were sampled randomly in three groups: 20 from the House and Senate agriculture committees or on appropriations subcommittees for agriculture, 60 on committees that had significant impacts on agricultural programs and agriculture related issues, and 40 who served on none of the above. Congressional staff helped select the committees seen as most closely linked to agriculture. Agriculture-related committees included: in the Senate, standing committees on Budget; Commerce, Science and Transportation; Energy and Natural Resources; Environment and Public Works; Finance; and Small Business. In the House, they included Budget; Energy and Commerce; Interior and Insular Affairs; Merchant Marine and Fisheries; Rules; Small Business; Ways and Means; and the select committee on Hunger. Respondents represented their respective houses well (within 10%) in partisan identification, leadership status, seniority in Congress, region, and race.

Interviews were conducted in 1991 with some follow-up through 1993, all personally and almost all by the senior author. Legislators were allowed to offer staff surrogates as respondents, as long as the surrogates were directly involved in issue selection, prioritization, and information gathering and assessment for the member. Since offices are run as small, collective enterprises – and because no questions were asked about the private involvement of the members – this practice still provided the comparable data we needed. Multiple respondents were included in several offices: 54 respondents were members, 133 were staff personnel with responsibility for one or more parts of agricultural and rural policy. Members and staff responded alike. Due to specialized staff assignments, it was sometimes necessary to interview two and even three respondents in each office to get complete interviews. Complete interviews were held with 112 offices, one partial interview was done. Most of the missing interviews resulted because members and their staff had left Congress and were hard to find. Only three requests for interviews were denied [3] All respondents were promised absolute confidentiality and anonymity with no attribution of information sources.

Legislators were asked to identify all of the personally important issues in agricultural policy (more than just farm favors) that they had initi-

[3] The high rate of response can be attributed to superior help in securing access to members of Congress and to Browne's flexible schedular. Former secretaries of agriculture Bob Bergland and Richard Lyng wrote each member a letter about the project and the importance of responding. George E. Rossmiller of the National Center did the same. David Hadwiger worked full-time for many weeks to play telephone tag, to schedule and reschedule meetings, and to get the principal interviewer to the right place at the right time. All deserve thanks, as does Noelle Schiffer who was busily formatting and entering data.

ated which consumed extensive staff time in their own offices over the "past few years," a period that they were comfortable in remembering [4]. These important issues – as our *dependent variables* – were defined as discrete proposals to be attained as substantive rules by the initiating legislator through a single bill, an amendment, a component of either, a regulatory change, or investigation and oversight. That is, these issues could be reached through (and for analysis disaggregated from) numerous policy vehicles that gave them institutional status as substantive rules, – if, that is, the vehicle succeeded. In practice, 63% of these issues were proposals for the 1990 farm bill.

Respondents were told to think of agricultural policy as broadly encompassing: farm price programs, other benefits for farmers such as conservation and farm credit assistance, farm and food related environmental legislation, any food or nutrition programs including consumer and welfare legislation, related trade policy, other initiatives taken with agribusiness in mind, agricultural research and administration, animal welfare, and all rural issues. This allowed us to summarily list all of those issues that these legislators had addressed in the very broad policy domain of agriculture. We were then able to extract from that summary those policy initiatives that were indeed farm favors. Many of the total obviously were 'anti-farm issues' in that they had negative economic consequences for farm operations. Such anti-farm agricultural issues were excluded from our farm-favor typology and analysis, as were other issues that favored non-farm constituents.

Respondents were specifically asked to identify priorities within these types of issues that may have fallen outside as well as inside the jurisdiction of the agriculture committees on, for example, issues of public lands use, rural education, and commerce. Thus, decisions about legislative priorities (what substantive rules to work for) were considered to require major investments of office resources that in almost all instances had to be advocated somewhat openly within the Congress. Decisions, however, were freed of institutional restrictions that would have been imposed if legislators had been asked about only the work of traditional agriculture committees and their recognized farm policy bias (Jones, 1961; Boynton, 1989; Bonnen and Browne, 1989). This meant, as far as possible, that these were decisions made across the widest possible range of congressional members. This allowed us to explore majoritarian responses at their most likely extreme, uncloistered from the parochialism often seen to be characteristic of the agriculture committees and, therefore, responsive to the broadest set of constituents (Boynton, 1989; Weber, 1989). That is, legislators as issue initiators could be responding to anyone, not just farmers as a recognized clientele of a specific committee.

Legislators also were asked: (1) to explain the reasons why they had selected the issues which they had initiated, (2) to name those information sources that mattered most in selecting each of the issues which they had contested in Congress, and (3) to explain the extent to which each issue was deliberated over in the member's office before its prioritization. These questions were asked to elicit insight into, first, the services (trading arrangements) each rule-maker's office provided to even small groups of constituents (minorities) and, second, the process (rules) by which trade-offs were made either within the home district or within Congress. This information, was to be available if needed to generate aggregate data on rules (r) and trade-offs (t). We could use it later in either a more complete test of the model or in drawing conclusions about the effects of minority populations.

In other words, we chose first to test a *not fully specified* model, waiting until after we confirmed the initial, or central, population assumption in the Cochrane-Hathaway prediction before – if necessary – going on to test for the effects of procedural rules and trades. From this data, we specifically wanted to know for whatever later analysis was needed whether r was, as our model

[4] These were not sponsored bills, since sponsorship often entails no personal interest other than some desire to posture for constituents, interests, or other members. Respondents, on average, saw the time frame as about a one and one-half year period.

suggested, held constant at the issue-selection stage of the policy process and if t was a direct function – or made on behalf – of f and m. Later analysis of a fully specified model shows that the introduction of the remaining variables does not change these results (Browne, 1995).

Therefore, our test of majoritarianism began first by examining the independent effects of district characteristics. If indeed r was generally constant for all legislators in selecting issues and if t truly reflected f and m, the relationship between these latter two variables was likely to have the greatest effect on the legislator's decision (d). This set of relationships meant that our modified or neo-majoritarian model, as applied, now predicted that legislators who wanted to propose and obtain public policy favors for farmers were most likely to come from certain types of districts. On the other hand, legislators who wanted to initiate trades with farm district members were likely to come from still other types of districts. If this worked out, then we could go on to fully specify r and t in our model to test their effects on legislator's decisions.

3. District test

Literature on agricultural policy in Congress strongly supported the demographic-based logic, including the parsimonious two-stage testing (Peters, 1978; Peters, 1982). Abler (1989), even in floor voting, found commodity-by-commodity trades being district related. Ferejohn (1986), despite greater observed difficulties in getting inter-interest agreement, found the same district relationships for trades made between encompassing sets of urban legislators on behalf of food stamp recipients and similar sets of rural members who supported farm programs (see also Hansen, 1991). Interest group strategies, as identified by Browne (1988), were directed to facilitating both of these sets of trades. Legislators simply were engaged, with the consent of their colleagues, in legitimate political opportunism on behalf of those constituents whom they represented in a federated governing structure (Ruppel et al., 1991).

Districts, for the test, were classified according to a three-dimensional spatial measure. The three-dimension variables were analytically unrelated to one another, with very low to low degrees of collinearity between them [5]. They were identified and chosen based on the work of the above and other researchers who dealt with population demographics as policy determinants. One of the three variables that constituted this measure was the most obvious one given the central majoritarian assumption, percentage of farm and farm dependent workers in the district. The higher the percentage, the more likely a legislator would do farm favors. The second variable, which reflected the ease of negotiating trades as cited above, was an urban/rural one, based on population density within the district. Rural legislators, with generally more farm-compatible ties, would be most likely to make deals with farm proponents.

The less obvious third variable was the ratio of blue- to white-collar workers in the district, an inclusion suggested in Milbrath and Reichelderfer's work based on the likelihood of trades (Milbrath, 1984; Reichelderfer, 1990). Given the more recent inclusion of costly environmental, consumer, and other third-party externality issues in agricultural policy, minority supporters can be differentiated according to their willingness and ability to pay [6]. Blue-collar workers, such as those who manufacture farm implements, should be most compatible with farmers for trades. Indeed the cooperation between organized labor and farm groups goes back to the 1950s. Blue-collar workers also work upstream and downstream, or very proximately, to farming. Thus, the interests between the two are more easily bridged than white-collar and farm interests, much the same as when competing growers of various commodities

[5] Measures of collinearity were all between 0.19 and −0.26. The multicollinearity problem tends not to become pronounced until the correlation exceeds 0.5. We also obtained unbiased estimates of all coefficients and precise estimates of all coefficients for the relatively uncorrelated variables.

[6] By 'minority supporters', we mean all grouped political minorities (sets) in terms of their voting strength, not just racial or ethnic minorities. For all purposes, there are no *majority* interest groups.

cooperate in supporting farm programs. White-collar workers, in contrast, should be a minority with whom it is less easy to make acceptable trades. Their greater disposable income makes them more likely supporters of environmental and other public interest causes.

So, as tested, our theory of majoritarian coalition building *hypothesized* that farm-favor proponents would be (1) relatively small in number within Congress, and (2) likely to cluster in but one subset of districts: those that are ranked highest in percentages of farm employment (f), lowest in population density (m_1), and lowest in percentage of white collar workers (m_2) [7]. In other words, using the initial assumption of the Cochrane-Hathaway prediction as a guide, farm favors seemed likely to be initiated from districts where a majority of the population came closest to equaling $f + m_1 + m_2$.

When legislators proposed to obtain program benefits or satisfy policy claimants in some other facet of agricultural policy, they would most likely represent districts that fell outside our favors-for-farmers cluster. Those hypothesized differences are represented in the three-dimensional Fig. 1, where only a narrow range of legislators are expected to do farm favors. We have, so our readers can visually compare theory and results, suggested the narrowness with which farm favor legislators would cluster if they constituted approximately 25% of our sample.

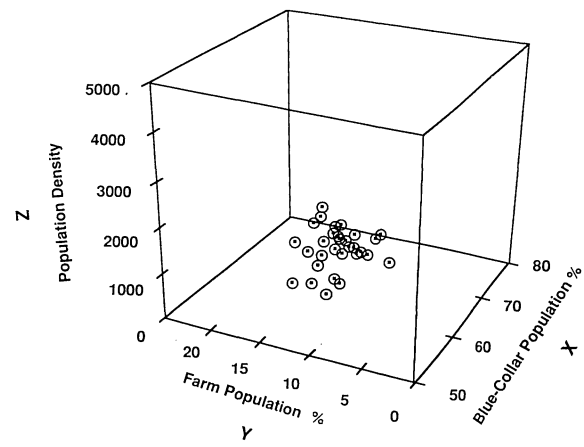

Fig. 1. Hypothesized spatial plotting of legislators likely to do farm favors, by district characteristics.

4. Testing the model

Legislators were categorized according to the proposals they attempted to obtain through bills and other procedural vehicles such as regulatory review and budgetary authorizations. Because no legislator gave more than five priority decisions for all of agricultural policy, typing was relatively simple. Each respondent was first typed as either 'farm favor' or 'non-farm favor' in his or her issue-selection decisions in the broad range of agricultural programs, depending on whether or not that legislator worked at least once on behalf of a farmer as policy beneficiary or not. That is, we identified all the farm-favor types. Then a single logit analysis was performed to locate and identify a space on the multi-dimensional scale, from which spatial plotting of farm-favor legislators could be done by district to compare with our expectations in Fig. 1 (Pindyck and Rubinfeld, 1981).

Clusters of each type were then aggregated for comparison. Additional descriptive analysis, without clustering, was done to differentiate legislators who proposed favors only for farmers, those who proposed favors for farmers which also met other purposes (co-beneficiary), those who were only interested in non-farmer goals, and those who proposed nothing in this particular policy domain or arena. The following very rigid decisional rules for mutually exclusive categorization were applied. A farm favor, while a flip term, is nonetheless just that. Legislators were credited with doing a farm favor if they proposed an issue that: (1) was intended to provide economic gain to farmers, either through direct payments, indirect cost savings, or increased commodity sales through any avenue of public policy; (2) was advocated by one or more farmers or their repre-

[7] Since blue-collar plus white-collar employees do not quite equal 100% of total employment in any congressional district, we ran only the single blue-collar variable as a measure of occupational mix.

sentatives as in their own interest; and (3) was *not* advanced or sold as serving other *specified* agricultural policy goals. These other goals did not include the *ideal* of farm policy goods contributing to a sound economy or society. When one respondent noted that to be the purpose for initiating benefits for farmers, his response was still typed as a farm favor since it favored no one else directly. Co-beneficiary issues had: (1) the same economic gains to farmers; (2) the same farm advocates; (3) other policy goals in agriculture added to them, such as environmental quality, less expensive food, or improved animal welfare; and (4) other, non-farm policy advocates who identified a different clientele than farmers as recipients of some policy goods from the decision at hand. Issues 'for other purposes' were just that, seen as neither: (1) to the economic gain of farmers or (2) advocated by them. To underscore, categorization reflected the *legislator's intent* rather than an economist's view of whether that decision would really help either the sector or farmers in a district.

The dependent variable of interest for testing majoritarianism was the number of those doing only farm favors from among all agricultural issue initiators. These financially rewarding, farmer-advocated issues, it must be reaffirmed, were not necessarily tied to farm price support programs. Rather they reflected the broad range of programs that actually allocate a substantial array of benefits to producers as well as such advantageous substantive rules as those that provide farm tax benefits or cost-competitive restrictions on foreign imports. Farm favors also included legislator initiatives aimed at such things as favorable rulings from the Secretary of Agriculture or a favorable report from the General Accounting Office – as long as these were intended for the economic benefit of farmers. The results of that analysis follow.

5. Data: Who worked for what

Our findings are presented in two stages, a simple aggregation of data in four tables and then, in the next section, the spatial representation of the majoritarian test from the logit analysis. Also included is the logit analysis for non-farm favors. Both sets of data are important because they reveal a diversity of rule-maker interest in farm issues that challenges the central tenet of declining farm support in Congress as a necessary and direct function of population change. In short, as the data will show, there appears to be no paradox. The conventional wisdom of agricultural policy observers about the relationship between farm policy and farm numbers missed something about the elasticity of evolving congressional rules of procedure in being able to break with majoritarian expectations.

What was missed, or at least unexpected, was the resiliency of Congress and its policy performance in being able to hold on to an old constituency despite its increasingly minority status; or, perhaps to the same effect, the old constituency holding on to Congress. That resiliency, as a salient commitment to farmers, can be seen first by looking at the *types of issues* legislators initiated by beneficiary. As can be seen in Table 1, 113 respondents worked to obtain 256 proposals, or an average of 2.25 per office, that were directly tied to what they saw as that encompassing array of agricultural issues. These proposals covered the entire range of issues discussed with each respondent at the onset of the interview.

However, contrary to our first majoritarian hy-

Table 1
Issues selected as priorities, by beneficiary/claimant

Total number of issues [a]	Number of issues which allocate policy benefits (with percentages)		
	To farmers	To co-beneficiaries	For other purposes
256	112 (44%)	31 (12%)	113 (44%)

[a] All selections, including overlap.

Table 2
Legislators who prioritized issues, by beneficiary/claimant

Total number of legislators	Number of legislators who worked on an issue (percentages of all respondents in parentheses)		
	For farmers [a]	For co-beneficiaries [a]	For other purposes [a]
113	84 (74%)	22 (19%)	71 (63%)

[a] Includes overlapping categories as legislators prioritize more than one issue.

pothesis about who does farm favors, most benefits were provided for farmers, either as favors just for them or for them as co-beneficiaries with some other constituency. A typical farmers-only favor, for example, was directed at raising the price of an inexpensive imported product in a select region. Others wrote new benefits into specific commodity programs. Co-beneficiary proposals, in contrast, did such things as induce environmental compliance through payments to producers. While numerous other intended purposes prompted the selection of a wide range of such non-farm (and even anti-farm) benefit issues as food labeling and farm animal welfare, farmers were clear beneficiaries in 56% of all agricultural issues selected as important to initiate by legislators and their congressional offices. This high percentage certainly suggests that farmers can generate high levels of support through their minority status. It also indicates, however, that agricultural policy has expanded and that non-farm beneficiaries also get nearly the same support as farmers.

The same high levels of support can be seen in the *number of legislators* who worked on farmers' behalf. Agricultural policy observers also seem to have missed the willingness of legislators from distinctly non-farm districts to be active on a farm matter, or for that matter any agricultural issue. As seen in Table 2, an astonishingly high 74% of all respondents worked on at least one farm favor from among the very small number of agricultural issues that each prioritized. Only slightly fewer, 63%, worked on an agricultural issue that did not allocate benefits to farmers. Because of the overlap of these two sets, we found that only 21% of our sample did *not* perform a farm favor, a number nearly three times smaller than all farm-favor legislators. This even more clearly refutes the central feature of the classic/rigid majoritarian assumption as we hypothesized it. Farmers continue to get support, even as non-farm beneficiaries have gained support.

However, the high percentages of legislators who targeted priorities for both farm favors and other purposes suggests the importance of the neo-majoritarian model in which minorities are combined by rule-makers. To wit, members of Congress can still do favors for farmers as a shrinking minority *as long as* they – or most of them – also become involved personally in broadening the definition of issues appropriate to agricultural policy. This is not quid pro quo trading; rather, it is an attempt at a very general balance between the traditional beneficiaries of agricultural legislation and more recent beneficiaries and claimants. As indicated in Table 2, 19% of members pursued at least one issue that benefitted both farmers and the demands of other policy beneficiaries and claimants, such as environmentalists or agribusinesses, in the *same proposal.*

Table 3 is even more convincing as to the

Table 3
Who works for what, by chamber

Number of legislators by chamber	Number of legislators who work for (with percentages)			
	Only farm favors	Co-beneficiaries or mix	Only other purposes	Nothing
House of Representatives (84)	23 (27%)	42 (50%)	12 (14%)	7 (8%)
Senate (29)	3 (10%)	21 (72%)	3 (10%)	2 (7%)
Total (113)	26 (23%)	63 (56%)	15 (13%)	9 (8%)

necessary prevalence of strategies intended to serve, through perceptions of balanced attention, the wants of more than one minority policy beneficiary or claimant. As seen in column four, only a surprisingly small number of representatives and senators (8%) pursued no issues in the agricultural arena. Moreover, only 36% of members worked only on issues for farmers *or* only on issues for non-farm claimants. That is, only a few stayed out of this policy domain; and only a few appeared to be either for just farmers or for just what might be seen as competing policy interests. In contrast, and as we noted, 56% of congressional members either worked on behalf of co-beneficiary initiatives, did at least one favor for a farm beneficiary and another for another beneficiary or claimant, or pursued both types of mixed strategy. Thus, while about one-fifth of our sample worked only on farm favors in agricultural policy, nearly three times as many served farmers while also serving others within this same policy domain. Quite clearly, members of Congress are not terribly constrained by the central feature of the Cochrane-Hathaway majoritarian assumption, mostly because they have found other issue-based means of appearing, as individuals, more broadly responsive to the rest of society.

Moreover, these are forms of behavior that characterize the entire Congress. Again it was incorrect to assume, a la classic/rigid majoritarianism and its underlying assumption about the farm population, that only small pockets of farm supporters have survived. House and Senate similarities also can be seen in Table 3, with 50% of representatives and a considerably higher percentage of senators (72%) following the mixed-beneficiary approach. The effect of committee seats is also revealing. As seen in Table 4, members of the agriculture committees nearly all do farm favors, but only one-third of them worked on behalf of only a single interest or purpose in agricultural policy matters. However, a slightly higher percentage of members did the same who sit on committees that can be thought of as sharing some jurisdiction for agricultural problems. Yet, in a considerable departure from expectations about who gives parochial service, it is not committee assignment alone that leads to personal intervention in agriculture policy or the creating of farm favors. Ninety-seven percent of members who had no committee seat linked to agriculture were active in initiating at least one issue, usually for farmers as either beneficiaries or co-beneficiaries.

What seems evident instead of classic/rigid majoritarianism is the propensity for *most members* to represent more than a single client on agricultural policy issues, even if farmers get the bulk of their total attention. Apparently, the goal of representing farmers' interests in Washington, as deserving minorities, is an acceptable one for a great many members of Congress, as long as they appear balanced in their perspective. The best way to appear balanced in one's representation of farmers, however, is to work for something for someone else within the same legislation or policy setting. This is not the stuff of majority-focused congressional log-rolls, with their institution-wide emphasis on dividing up congressional turf across regional and organizational lines.

What we see here, from a farm perspective, is far more an accommodative Congress than one weighted against sector policies. That explains why, as Ferejohn (1986) suggested, successful log-rolls (encompassing trades) are so rare while nevertheless, as we are all aware, farm programs

Table 4
Who works for what, by committee assignment

Number of legislators by committee type	Number of legislators who work for (with percentages)			
	Only farm favors	Co-beneficiaries or mix	Only other purposes	Nothing
Agriculture (20 members)	6 (30%)	12 (60%)	2 (10%)	0
Agriculture-related (56 members)	16 (29%)	24 (43%)	8 (14%)	8 (14%)
Non-agriculture (37 members)	4 (11%)	27 (73%)	5 (14%)	1 (3%)
Total (113)	26 (23%)	63 (56%)	15 (13%)	9 (8%)

Table 5
Likelihood of congressional district characteristics predicting farm favors, logit results

	Estimated coefficients				
Constant	Farm population	Population density	Blue-collar population	X^2	Percent predicted correctly
1.817	0.164 [a]	0.000	-0.023	7.7	74
(1.914)	(0.069)	(0.000)	(0.030)	(P>0.1)	

[a] Significant at 0.05 alpha level.

remain so very much alive. It also explains why it is often hard for those who insist on internal consistency to say that the U.S. even has an agricultural policy. Rather this behavior seems likely to produce uncoordinated groupings of programs which in various ways – dependent on legislative choices – give commodity rules, conservation rules, environmental rules, animal disease rules, and whatever seems germane to advancing neo-majoritarian congressional strategies.

6. Data: District effects

The logit analysis shows the same procedurally elastic behavior relative to the effects of a legislator's state or district. Since we have discrete dependent variables, a logit analysis was used to analyze legislators' decisions on a given farm-favor issue. This method was chosen over OLS (Ordinary Least Squares) for a number of reasons, primarily our desire to employ a binary dependent variable [8]. Logit analysis produces an S-shape curve bounded by 0 and 1. The underlying logic of logit analysis is that: (1) the true Y is continuous, but we can only measure it in discrete fashion where there is an unknown cutoff point which classifies the data into dichotomous groups (0 = not doing farm favors; 1 = doing farm favors); and (2) we would like to estimate the probability of obtaining each dependent outcome from a given set of independent properties.

To analyze how a legislator is typed, the logit analysis takes the following form, using our previously explained variables:

$$L_i = \log \frac{\text{Prob(farm)}}{1 - \text{Prob(farm)}}$$
$$= B_0 + B_1 f + B_2 M_1 + B_3 M_2$$

where L_i is the logit or the log of the odd ratio, and where 'Prob (farm)' represents the probability of a legislator doing a farm favor. As noted, f and m are the legislator's district characteristics: f represents the percent of farm employment, m_1 is the population density index, and m_2 is the percent of blue-collar population. Since our observations are of individual legislators and not grouped data, the logit analysis was estimated using a nonlinear maximum-likelihood procedure. The results of the logit analysis for those who do farm favors are displayed in Tables 5 and 6.

As can be seen, the logit analysis is statistically significant at the 10% level and essentially confirms our second hypothesis on clustering. That means that a broad clustering of legislators exist who are likely to do farm favors. That cluster relates to the combined effects of the three di-

[8] OLS assumes a linear relationship. If the dependent variable measures a probability that an individual will display one or the other value, it makes no sense to assume that a unit change in Xs will always have the same effect on Y. In addition, for the dichotomous dependent variable, which takes the values of 0 and 1, there are two possible error terms for each case. It is most likely that error terms are heteroskedastic, which would produce biased coefficient variances. See Hanushek and Jackson (1977, pp. 179–216) for more detailed discussions of the above drawbacks of OLS.

Table 6
Likelihood of logit model explaining farm favors of legislators

	Favored	Did not favor
Model says favor	84	0
Model says did not favor	29	0

mensions of the model [9]. Furthermore, farm-dependent population is significant in its own right, which indicates that within the effects of the three-dimensional model farmer presence is especially important to increasing the likelihood of doing a farm favor. However, the significance of the logit model, given noncollinearity, is what matters more for our purposes than the significance of the individual variables. Our descriptive data show the same. The 15 rule-makers who did not do a farm favor but who did initiate another agriculture issue all came from or beyond the higher population density, higher white-collar, and low farm population reaches of the cluster. This was a weak tendency, as determined by a second logit analysis. They did not cluster in statistically significant fashion nor was their relationship to any of the three variables significant [neither were co-beneficiaries (Browne, 1995)]. In fact, all but five of these legislators were from inside the resulting farm cluster. Six of the nine non-players, in contrast, were from outside and beyond the farm favor cluster.

The importance of the farm-favor logit clustering can be seen by comparing it to data presented elsewhere (Browne, 1995). A logit analysis for doing all non-farm favors for all legislators (two dependent types of legislators) showed no significant relationships. However, four types of issues constituted 67% of the non-farm favors: trade, environmental, food/nutrition, and rural initiatives. When these were subject to analysis (five dependent types of legislators), environmental issues clustered at a significance level of 0.1 while the other three were significant at 0.05. Miscellaneous issues were insignificant for the cluster and for individual variables. Only environmental issues were significantly and conversely related to farm population. Thus, there is only the most nominal support for the existence of a base of legislators who are antagonistic to the farm sector; or, that is, primarily moved by majoritarian values.

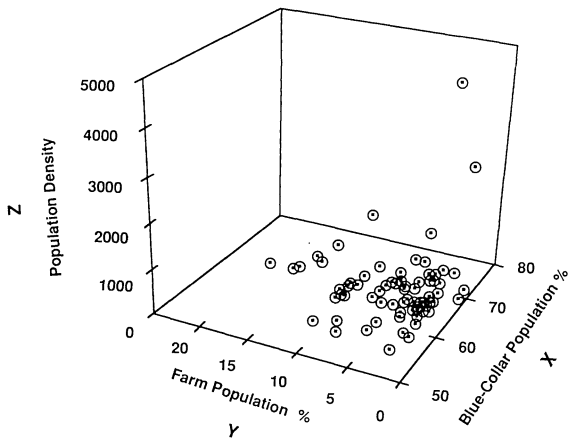

Fig. 2. Spatial plotting of legislators who did farm favors, by district characteristics.

This can best be represented spatially by returning to farm favors. The farm-favor cluster did not look like the classic/rigid majoritarian model or our second hypothesis would suggest. To demonstrate the contrast between the small expected range of who we hypothesized would do farm favors and our actual findings, we spatially plotted Fig. 2 as a comparison to our hypothesized Fig. 1 (Cressie, 1991). Fig. 2 shows the wide range of legislators who acted on farmers' behalf, as measured against each of our three district characteristics. It graphically illustrates, even if we were harsh in suggesting the limits of our earlier hypothetical parameters for Fig. 1, that there exists but a marginally significant relationship between doing farm favors and representing a specific demographic mix of our three population defining dimensions. This is *not* because the presumed alliances for trades were assessed incorrectly. On the contrary, nearly any population mix tied to these variables, *except the near absence of farmers*, produces substantive rule-making on behalf of farmers. With only slight exaggeration, nearly everyone does it. Farm representation in Washington, in contrast to classic/rigid majoritarian expectations, remains alive and well because of great elasticity in procedural rules of representation.

[9] For those who might not view the blue vs. white-collar variable as worthwhile, we also ran tests of significance on farm favors and just the other rural variable by itself. It was not a significant relationship. Pearson's r for urban density was 0.422.

7. Conclusions

Our data refute the simple logic that suggests that farm policy survives only on the shaky foundation of a declining farm population. To policy makers, their decisions are not seen as part of a zero-sum game. Rather, members of Congress are looking for win-win decisions and they do so by turning to their own districts. Thus, our key findings are that a majority of legislative rule-makers are still willing to act on behalf of farmers – near regardless of their congressional district – *but only if they can do a favor for another constituency group* interested in agriculture. For this reason, the trade, nutrition, and rural issue clusters fall entirely within the farm favor cluster (Browne, 1995). This idea of an individually-balanced – rather than collective – response seems central to understanding modern agricultural policy making and its increasing separation from only a farm focus.

We can only conclude, therefore, that observers of agricultural policy in any federated system should examine other variables than population in seeking to explain stability and change in substantive rule-making. Even our test of a not fully specified model shows that the effects of majoritarianism are slow and limited by adding agricultural policy benefits for non-farmers. A neo-majoritarian model based on the assumed determinative effects of the relationship between sets of minority constituents, trades made between them, and congressional rules seems of likely value if we test rules directly. We support the postreform expectations of Shepsle (1989), Smith (1989) and Rohde (1991) as Hillman (1989) sees them operative in a representative democracy. The rule-makers, in this analysis, were the ones who strategized and, thus, created in their constituents' eyes the perceptions of broadly responsive legislators. Rule-makers collectively did not want, it appears, to be seen as bifurcated amongst themselves, with farm members perceived to be against non-farm members of Congress. A model with predictive power, our analysis shows, must make room for greater latitude of choices in the judgements (i.e. the games they play to appear balanced) of legislators as these individuals broker (or interact with) the effects of our initial variables. Elsewhere, we have tested further for what *sets* of groups rule-makers select for their other rewards and why they chose them. Our evidence there shows that in a graduated and nondichotomous world of policy types, legislators almost always choose to do farm favors because these anchor the entire policy domain and its many issues (Browne, 1995).

There also is another point central to the initial concern of this paper. The assumption that rigid majoritarian rules, if we only wait long enough, will eventually win out and overwhelm the political influence of farmers seems to have an important basis in fact. Benefits for non-farmers in agricultural policy equal those for farmers. The rate of decline for farm influence has been far slower than majoritarians hypothesize because benefits have been extended elsewhere. Watching for majoritarianism is like an academic version of *Waiting for Godot*. All we can really say is that the direction of policy does not favor farmers as some kind of exclusive beneficiary.

8. Rule-makers elaborate

That is not our conclusion alone, based only on the evidence presented above. Our legislative respondents, in commenting on congressional rules and their own involvement with them, agreed with that conclusion. Aggregate data are always somewhat suspect when subject to interpretation. For that reason, as mentioned earlier, we will return, for interpretative purposes, to the information on representative rules of procedure that we collected from respondents. Especially important are the reasons as to why they selected some issues over others for their personal attention. Their reasons point more to the effects of institutional capture of the legislative game than to the dynamic nature of interests within the electorate as factors influencing rule-makers' judgements. What follows is a summary of responses.

Legislators and their staffs – even those opposed to doing farm favors – agreed that farmers

and ranchers remain the chief beneficiaries of agricultural policy, and legitimately so in their opinion given the procedural rules of district representation that members of Congress must follow. They noted three major reasons as constants which explain the persistence of farm influence over policy and programs. First, farmers are seen as incredibly well-organized and vocal, from the grassroots and into Washington circles. Not only are farmers effectively organized into groups. The groups and, increasingly, single individuals are deeply integrated into the entire range of relevant discussion points in national politics – local communities, congressional activities at the district level, personal arrangements with congressional offices in Washington, and almost all policy deliberations on the broad range of agricultural and related issues. This integration makes farmers a de facto part of the deliberative process.

Second, farmers as a well-organized and vocal minority cannot be ignored without most members of Congress assuming the risk of bearing a high electoral cost. To ignore farm interests creates considerable *local and national* noise, which is seen by respondents as being communicated to the larger community as irresponsible congressional action on behalf of what is perceived to be a major component of the district and national economy. To neglect that noise costs votes in elections, but not just farm votes. In short, these are not matters of just numbers of farmers, but rather historical ones of organization and perceived socio-economic importance, or the long-term institutionalization of farmers into national policy decision-making. Explicit trades, as a consequence, are not always necessary for a legislator to make before doing a farm favor, at least *within* the Congress. While the food stamp program was a necessary trade for broad urban support for commodity programs in the 1970s, a contemporary legislator does not need to find another member to barter with before he or she can do something for the Tennessee walking horse industry.

Institutionalization also explains the third reason why farmers defy majoritarian expectations and receive disproportionate policy attention. Respondents noted that farmers are easily served through the procedures of lawmaking and agency oversight. In contrast, other policy beneficiaries and claimants usually are rewarded only with much greater difficulty, and member priorities are less frequently won on such issues [10]. Members and staff explain the relative cost differences of these transactions in one way: farmers already have an extensive range of policies and programs (as substantive rules) in place; moreover, no one else can match that total array. This means, that to serve farmers, members of Congress need only marginally adjust whichever one of many programs can be best and most easily redirected to an identifiable farm favor for a clamorous farmer constituent. Usually this does not change basic distribution patterns of policy benefits for most other farm constituents. Opportunities to do the same for non-farmer beneficiaries and claimants without adversely affecting at least farmers are rare, however.

This means that farmers get considerable credit for political influence through the relatively low-cost, or easy, congressional action of a legislator helping one or more of them. The member may be helping an otherwise resource-poor group because it is easy to do so, not because of group power. In our data, a legislator was equally likely to do a favor for cherry growers and producers of ornamentals as for milk producers and sugar growers. The key was simply being producers of a well-recognized crop within the district, and being able to link the desired issue to an existing program.

From the perspective of developing a model of legislative decision-making, such behavior underscores the importance of examining more carefully, and with more variables, the judgements and choices made by rule-makers. It seems especially important to take into account such factors as the depth and degree of support legislators give to each set of constituents. Interest-group

[10] Our analysis of the data on whether members of Congress successfully pursued the issues they initiated confirms that conclusion. The rate of success was nearly 70% overall (Browne and Paik, 1993).

analysis by itself is insufficient as a means of explanation. We need also look more carefully at the political effects of institutional rules – both procedural and substantive – on later decisions. These may be determining why some groups win, others are accommodated, and still others lose. For example, given the above findings, we could hypothesize that farm groups will remain strong in only those federated structures that have an equally strong base of farm programs that can be linked to non-farm agricultural programs.

These three reasons why farmers defy classic/rigid majoritarian expectations also, and probably more importantly, explain why basic farm programs change so slowly, only gradually encompassing a broader clientele for agricultural policy. Farmers, as we have seen, still are getting a great deal of attention. And such attention remains the basis for political influence (Hansen, 1991). Other than budgetary pressures that affect all policy areas, there is no evidence that farmers face imminent losses in influence and capacity to garner policy favors. As long as they are (1) especially well-organized, (2) seen beyond the capital as especially relevant in their contribution to the economy, and (3) advantaged by opportunities provided by existing law, the very constantly applied rules of institutionalization and rule-maker choice rather than classic/rigid majoritarianism will determine where rule-makers' attentions are directed. Thus, basic reforms await and depend on institutional transformations which do not necessarily have much to do with evolving electoral majorities (Bonnen and Browne, 1989).

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