Ideological Externalities, Social Pressures, and Political Parties

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Abstract

Members of political parties talk to each other often, and may thereby influence each other. For example, a liberal in a party of moderates may moderate his views. At the same time, the moderates in the party may become more sympathetic to liberal views. Voters in a district may favor such effects if they care about the ideology of officeholders in other districts. They may therefore prefer a candidate who affiliates with a party over an independent with the same position.

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1 Introduction

This paper explains why voters may prefer a candidate who joins some political party over an otherwise identical candidate who joins a different party or no party. Of course, many other papers, including those surveyed below, consider the electoral benefits of political parties. Some, but not all, of these explanations, satisfy an important criterion formulated by Krehbiel (1993). He notes that legislators who share preferences or other motivating factors will naturally show voting patterns that appear consistent with party behavior, independent of the party's existence. Thus, it is important to distinguish between "party-like" behavior and between significant changes in behavior due to parties. My approach does this.

I see a political party as a social organization, with its members influencing each other. A voter may dislike having his representative swayed by the views of other party members. But a voter may want representatives from other districts to move closer to the voter's ideology. I show that the balance of these two opposing effects can make a voter want his representative to join a party. I believe my approach makes several contributions. First, I show that a candidate may obtain electoral benefits from joining a party. Second, I have membership in parties endogenous—a candidate will join that party that would maximize his popularity within his constituency. Third, I allow the parties to form endogenously. In particular, rather than taking the ideology of parties as fixed, I show that in equilibrium two parties may form, one on the left and one on the right. Fourth, following Krehbiel (1993), I allow a political party to influence behavior, rather than merely to agglomerate like-minded officials.

2 Literature

Other researchers have of course studied the electoral benefits to a candidate of joining a political party. One approach emphasizes that a political party can commit to future policy.[1] Alesina and Spear (1988) and Harrington (1992) see parties as long-run players that discipline their candidates, whose horizons are much shorter. Alesina and Spear (1988) model a political party as an infinite sequence of overlapping generations of finitely-lived politicians, and describe a transfer scheme between a candidate and the party which allows a party's current and future candidates to commit to a moderate platform and thereby to increase electoral success. Harrington (1992) demonstrates how explicit commitment is unnecessary: a trigger strategy can allow parties to sustain moderate platforms.

The benefits of party formation in a legislative bargaining game are modeled by Jackson and Moselle (2002): if legislators propose policies in random order, then legislators who bind themselves to make proposals that benefit each other will enjoy higher expected utility than when each acts independently.

A different approach emphasizes how the membership of a party forges its ideology. Thus, Snyder and Ting (2002) view a candidate as inclined to join a party with members whose positions are similar to his. Party membership then informs voters of the candidate's positions, and therefore with risk-averse voters increases his chances of winning election. Caillaud and Tirole (2002) interpret parties as information intermediaries that select high-quality candidates. My model, complements theirs, assuming perfect

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[1]For example, Levy (2000) and Baron (1993) assume parties are constrained in their platforms, thereby increasing their power when they bargain over forming a coalition.

information about the candidates.

2.1   Peer-group effects

Social influences on an official's behavior have long been recognized. Fenno (1978) speaks of a legislator's personal constituency, which includes fellow legislators, as influencing him. Several authors examine friendship among legislators, finding that a legislator is especially likely to befriend legislators of the same party, and that friends are more likely to vote the same way on roll-calls. Thus, Arnold, Deen, and Patterson (2000) surveyed 93 members of the Ohio State Legislature in 1993. Friendship increased shared voting, even after controlling for party and shared ideology.[2]

Young (1966) argues that fraternities of congressmen nested in boarding-houses functioned as voting blocs in the early 19th century; patterns of roll call voting reflected the social networks derived from congressmen's social lives.

In the four legislatures Wahlke et al. (1962) study, members sought friendships within their own parties. And legislators who choose each other as friends tended to agree on roll calls. Similarly, Caldeira and Patterson (1987), who study the Iowa legislature in 1963, find that shared partisanship increases friendship. More generally, Kuran (1995) shows how a person's beliefs can depend on the beliefs of others, and Becker and Murphy (1988) show how preferences may be endogenous. Friedkin (2003) formulates a social networks model of mutual influences, and describes experimental evidence supporting it.

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[2]The authors' findings are, however, consistent with the reverse causality—legislators befriend others with similar political preferences.

3 Assumptions

I shall consider elected officials who have an incentive to join a party because of the influence of party membership on other party members. For convenience, I speak of voters and candidates, with candidate each desiring to maximize his popularity with the voters in his district, and therefore joining that party which the voters prefer he join. Similar analysis applies under a citizen-candidate model,[3] in which an elected official maximizes his own utility. The more detailed assumptions are given below.

3.1 Voters

A voter's preferences are single-peaked over a one-dimensional policy.[4] For simplicity, all voters in a district have the same preferences. Voters support the candidate whose position will maximize the utility of voters in his district.

3.2 Cross-district externalities

Voters in one district may care about the ideologies of Members of Congress (MCs) from other districts. Consider the Downsian model, where the legislator with an ideal point at the median casts the decisive vote. Then voters in any district would want to move the preferences of the median legislator in their direction. Or they would want to move the preferences of a legislator who is not at the median so as to change the identity of the median legislator, and thus change policy in a direction they desire. Relatedly, because of a committee's power, policy may be set by members of a committee on

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[3]See Besley and Coate (1997).

[4]The assumption of a single dimension is by no means necessary, but does simplify the exposition.

which the district's MC does not sit. Or perhaps districts may generate externalities on each other (say from pollution) and so need MCs who see each other often or who understand each other. Membership in the same party promotes that.

Thus, a voter's utility depends on the induced preferences of his own MC and of other MCs, though he may care more about his own MC. More specifically, let the total number of MCs be $n+1$. Let $w > 0$ be a parameter indicating the weight a voter places on the gap in ideologies between his MC and other MCs. Then the utility of a voter in district k is

$$U_k = (V_k - V_{k1})^2 + w \sum |V_k - V_{j1}|, \tag{1}$$

where V_{j1} is the induced ideal point of the MC from district j.

3.3 Candidates

Each candidate, say i, has an innate ideal point, V_{i0}. For simplicity, the issue space is one-dimensional. The members of party j are indicated by $j\epsilon P_j$; the number of members is n_j. A candidate can commit to join a particular party; the only effect of party membership is to create mutual influences among its members.

Candidate i with initial ideal point at V_{i0} who belongs to party j has induced ideal point $V_{i1} \equiv \lambda V_{i0} + (1 - \lambda) \sum_{k\epsilon P_j} V_{k0}/n_j$. This formulation, which has induced ideology a weighted average of initial ideology and of the the ideologies of other party members, closely follows the formulation used by sociologists in Social Network Influence Theory (see Friedkin (2003)).

I could generalize by making λ a function of n_j and of the distances between the ideal points of the MCs. This generalization would allow, for example, stronger influences within a small group than within a large group.

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A candidate joins whichever party will generate a set of induced positions for all MCs which most appeals to the voters in his district.

4 Equilibria

4.1 Bimodal voters

If an MC's membership in a party generates only small movements in his ideology, the voters in a district are certain to benefit from the MC joining a party. A small move away from a voter's ideal point has a second-order effect on that voter's utility. But a small move in another district has a first-order effect on the voter's utility. The result that voters in a district would benefit from their MC joining a party consisting of MCs with initial ideal points sufficiently close to their own immediately suggests how parties may form. Suppose voters in some districts are liberal, with little difference across these districts. Then voters in these districts would want their MCs to join a party of liberals. And voters in conservative districts would want their MCs to join a conservative party. Moreover, if voters in a district suffer large disutility if their MC moves more than a little from their ideal point, the voters in a liberal district would oppose an MC who intends to join the conservative party. In short, when the distribution of voters' ideologies is bimodal, an equilibrium can have two parties.

4.2 Disparate voters

Centrists in a party gain the most from membership. They gain from changing the positions of other MCs toward the center in the party. But they suffer little from their own ideological change: centrists are pulled in opposite directions, and so their induced ideology is close to their initial ideology. Such

incentives could lead to the formation of a party composed of centrists, with MCs at the extremes joining no party.

More challenging, and interesting, is showing that with an even distribution of preferences the equilibrium can have two, ideologically distinct, parties. To see how this separation can arise, let the ideal points of the 10 MCs lie at $1, 2, ..10$. I will verify the existence of a Nash equilibrium in which MCs $1..5$ constitute one party ("Democrats") and MCs $6..10$ constitute the other party ("Republicans").

Notice that voters in a district who care much about the ideology of MCs in other districts may want their MC to join a party whose members have ideologies far different from the ideal point of voters in the district. In particular, with quadratic disutility from the ideology of a different MC, voters in a district may be desperate to move the ideology of MCs in other districts. To avoid such behavior, which appears rare, I assume that disutility from deviation by one's own MC is quadratic, but the disutility from the ideology of other MCs is linear.

At such an equilibrium the induced ideology of a Democrat with initial ideology i is

$$V_D^{5D5R}(i) = \lambda i + (1 - \lambda)(-i + \sum_{j=1}^{5} j)/4 \qquad (2)$$

The induced ideology of a Republican with initial ideology i is

$$V_R^{5D5R}(i) = \lambda i + (1 - \lambda)(-i + \sum_{j=6}^{10} j)/4 \qquad (3)$$

The utility of a voter in district k (for $k = 1..5$) when MCs $1..5$ are Democrats, and MCs $6..10$ are Republicans, is

$$U_D^{5D5R}(k) = -(v_D^{5D5R}(k)-k)^2 - w\sum_{i=1}^{5}|V_D^{5D5R}(i)-k| + w|V_D^{5D5R}(k)-k| - w\sum_{i=6}^{10}|V_R^{5D5R}(i)-k|. \qquad (4)$$

To check for a Nash equilibrium we must consider the two options for a party member. He can join the other party, or he can work as an independent (joining neither party). In either case, the Democratic party will consist of four members instead of five. The ideology of a Democratic party member i when MC k no longer belongs to the Democratic party is

$$V_D^{4D6R}(i,k) = \lambda i + (1-\lambda)\frac{(\sum_{i=1}^{5} j) - i - k}{3} \tag{5}$$

The utility of a voter in district $i = 1..5$ when his MC is an independent is therefore[5]

$$U_0^{4D5R}(k) = -w\sum_{i=1}^{5}|V_D^{4D6R}(i,k)-k| + w|V_D^{4D6R}(k,k)-k| - w\sum_{i=6}^{10}|V_R^{4D5R}(i)-k|. \tag{6}$$

The last case to consider is an MC who was initially in the Democratic party but moves to the Republican party. The induced ideology of this MC, k, will now be

$$V_R^{4D6R}(k) = \lambda k + (1-\lambda)(\sum_{j=6}^{10} j)/5. \tag{7}$$

Now that MC k is a Republican, the ideology of Republican MC i is

$$V_R^{4D6R}(i) = \lambda i + (1-\lambda)(k - i + \sum_{j=6}^{10} j))/5. \tag{8}$$

The utility of a voter in district k, with an MC who is now a Republican, is

$$U_R^{4D6R}(k) = -(v_R^{4D6R}(k,k) - k)^2 - w\sum_{i=1}^{5}|V_D^{4D6R}(i,k)-k| \tag{9}$$

$$+w|V_D^{4D6R}(k,k)-k| - w\sum_{i=6}^{10}|V_R^{4D6R}(i)-k|.$$

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[5]I assume for simplicity that an independent, a loner, influences no one. That is an extreme assumption. A less extreme assumption is that voters do not know with whom an independent will associate, so can poorly predict the mutual influences, and may believe that on average the independent's induced ideology is close to his initial ideology.

The conditions for two symmetric parties to exist in equilibrium are that each member prefers to belong to his party than to work alone, and that none wants to join the other party. For a member of the Democratic party, these conditions are $U_D^{5D5R}(k) > U_0^{4D5R}(k)$ and $U_D^{5D5R}(k) > U_R^{4D6R}(k)$.

These conditions need not always hold. Thus, for $\lambda = 1/2$ and values of w which make the MC with ideal point at 5 satisfied with membership in the Democratic party, the MC with ideal point at 1 would gain from joining the Republican party—he would thereby shift the induced ideal points of the Republicans sufficiently far to the left as to outweigh his own shift to the right.

But a separating equilibrium can exist. Suppose $\lambda = 95/100$, and $0.125 < w < 1.53$. Then the equilibrium can consist of one party on the left and one on the right, though districts are evenly distributed along the ideological spectrum.

4.3 Strategic voting

If voters care much about the preferences of MCs in other districts, then they may gain from electing an extremist, who will cause the other members of the party to evolve toward the elected MC's positions. That is, liberal voters may vote for extreme liberals. This result contrasts with the standard Downsian model—if the liberal is to the left of the median, then it does not matter how liberal he is. And my approach can generate results that may look like expressive voting.[6]

There is an additional complication. Suppose MCs A and B belong to the

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[6]Expressive voting rests on the idea that an individual who realizes that his vote will not be decisive may instead vote as an act of expressive behavior, and so can support a candidate whose policies he would not want implemented. For a discussion of expressive voting, see Schuessler (2000).

same party, so that each moves his ideology toward $(A + B)/2$. If this point is a permanent position, then voters in district A may gain from replacing the incumbent with someone whose ideal point is at A rather than toward $(A + B)/2$. On the other hand, an old-time incumbent may exert more influence, moving other MCs toward his position. And so voters will favor re-electing incumbents.

5 Implications

The basic approach discussed above can be extended in several directions. First, the mechanism I discuss will apply beyond political parties; it can also apply to membership on congressional committees: a district may want its congressman to join a committee because he can thereby affect the ideologies of other members of the committee.

Second, my model predicts that an MC will avoid joining a party or a coalition consisting of ideologically rigid members—socializing with them won't change their opinions. Maybe that is why the Communists rarely joined coalitions. Third, a voter's concern about the ideology of MCs in other districts will be greater the more likely he is to move. Indeed, a voter who knows he will move doesn't care about the MC's ideology in the current period. So the United States, with high mobility, will have a few, large, parties.

Fourth, members of a party may prefer not to join a coalition which would force them to interact with members of other parties. For example, in 1924 Leon Blum and his Socialist party in France supported the Radical government of Edouard Herriot, but refused to become members of the cabinet. Such behavior appears to contradict standard assumptions—politicians seek

power, whether for its own sake or to influence policy. But the behavior can make sense under my approach. The party members outside the cabinet may fear that the members who do join the cabinet will change their preferences.

Fifth, risk aversion and uncertainty about an MC's ideology can lead voters to favor candidates who commit to joining a party. To see this, suppose voters in $n + 1$ districts have the same ideal point, say 0. Let voters be uncertain about the initial ideal point of each candidate, with the distribution of a candidate's ideal point having mean 0 and variance σ^2. The mean initial ideology of other MCs is then normally distributed with mean 0 and variance σ^2/n. With a weight of λ on own ideology in determining induced ideology, the expected value of induced ideology is 0. The variance of induced ideology is $\lambda^2\sigma^2 + (1-\lambda)^2\sigma^2/n$, which for $0 < \lambda < 1$ is necessarily less than σ^2. Party membership reduces variance, and so makes a candidate more attractive to risk-averse voters.

6   Conclusion

In discussing how party membership changes a legislator's ideology, I argued that the concern by voters for ideology in other districts may make voters favor a candidate expected to join a party. But even if this incentive is not dominant, my approach can prove useful. For suppose parties form for other reasons—commitment, signalling, cost sharing, etc. The mutual ideological influences can then shape the composition of parties, and the incentives to join them. For example, the main incentive for a candidate to join a party may lie with the economic efficiencies it provides. But in deciding which party to join, the effects I highlight may be important. Relatedly, parties will better signal ideology if peer pressures strengthen the ideological coherence

of the party.

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7 Notation

n Number of districts

V_i Ideal point of voter in district i

C_{i0} Initial ideal point of candidate i

C_{i2} Induced ideal point of candidate i

λ Weight affecting MC's induced ideal point

w Weight in voter's utility function reflecting externality from MC's ideologies in other districts.

P_j Membership of party j