



## Economic voting theory: Testing new dimensions

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### ABSTRACT

Classical economic voting theory has received considerable empirical support. Voters reward the incumbent for good times, punish it for bad. But the success of this paradigm, which views the economy as strictly a valence issue, has crowded out testing of other theoretical dimensions. In particular, positional and patrimonial economic voting have hardly been examined. The former concerns the different preferences voters have on economic policy issues, such as progressive taxation. The latter concerns the place of voters in the economic structure itself, not merely as members of a social class but as actual property owners. Through analysis of a special battery of economic items, from a 2008 US presidential election survey, we demonstrate that the economy was important to voters in three ways: valence, position, and patrimony. Taken together, these dimensions go far as an explanation of vote choice, at least with respect to the short-term forces acting on this political behavior.

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Classic economic voting theory argues that in good economic times voters reward the incumbent, in bad economic times they punish the incumbent. This crisp, but compelling, argument has received strong observational support, in test after test. [Most recently, see Duch and Stevenson, 2008; Lewis-Beck and Stegmaier, 2007, 2008.] Perhaps no more need be said, other than a declaration of the proposition's canonical status in the political behavior literature. But, more could be said. Extant work has been dominated by the valence paradigm, with the economy the valence issue par excellence (Stokes, 1963). The economy, as an issue, is one of consensus. All voters want a good economy, no voters want a bad economy. No distribution of opinion occurs. Everyone values prosperity. When they see prosperity, they vote for the ruling party, otherwise not.

The valence idea, powerful as it is, restricts the economic issue space. Economics can also be thought of as a position issue, in two senses. First, there is a citizen's selected position from a set of alternatives on an economic policy question. For

example, where citizen X stands on government economic intervention, as compared to citizen Y, a distribution of opinion occurs, with some favoring more intervention, some less. Does the different economic policy position of voters impact their vote? Little is known on this question of policy position, beyond a few scattered studies. Second, there is a citizen's acquired position in the economic system, beyond simple class standing. Further, this economic position involves more than personal financial standing, real or perceived. It concerns not what you earn, but what you hold. Some have called this wealth, we call it patrimony, e.g., stocks, bonds, houses, other forms of property. Does patrimony influence vote? Even less is known about this question of patrimony.

Below, we explore the electoral impact of the economic issue – as valence, position, and patrimony. First, we review the theoretical considerations which separate the types. Then, we discuss the data, which include a special battery of economic voting items, administered in a national survey prior to the 2008 US presidential election. Subsequently, multiple tests are run. In the face of vigorous controls, offering a demanding model specification, different logistic regression results demonstrate strong valence effects on the

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Obama choice, as expected. Surprisingly, however, strong positional and patrimonial effects also reveal themselves. Taken together, these economic factors play a powerful role in vote choice, increasing the probability of going Obama by as much as fifty percent, depending on the particular dimensional combination. The implication is that economic voting models which neglect the second and third dimensions – position and patrimony – will markedly unreport the overall impact of the economy.

### 1. Theory: valence, position, patrimony

In electoral behavior studies, identification of the economy as an issue first appears in *The American Voter* (Campbell et al., 1960, chap. 14, entitled “The Economic Antecedents of Political Behavior.”). [See the discussion of this curiously forgotten chapter in Lewis-Beck and Stegmaier (2009a).] Campbell et al. (1960, 397) pose the fundamental question: “Is a person’s economic outlook associated with his partisan choice between presidential candidates?” Going further, Stokes (1963, 373) equates “valence issues,” to the

“issues of economic well-being ...as close as any to being pure ‘valence’ issues. If we conceive of economic issues in dimensional terms, the electorate is not spread along a continuum of preference extending between good times and bad; its beliefs are overwhelmingly concentrated at the good times end of such a continuum” (Butler and Stokes, 1969, 390).

This valence issue ties itself to the vote in the following way: “the electorate’s response to the economy is one under which voters reward the government for the conditions they welcome and punish the government for the conditions they dislike” (Butler and Stokes, 1969, 392; see Clarke et al., 2009, for a recent and thorough treatment of the impact of valence issues in UK elections).

The above provides key elements of traditional economic voting theory: the electorate sees the economy as a valence issue, and rewards or punishes the incumbent according to whether that valence is positive or negative. In other words, voters stand in judgment of the government’s economic performance. As V.O. Key (1966, 62) observed more generally, the electorate acts in its “perhaps principal, role as an appraiser of past events, past performance, and past actions.” That is, as Fiorina (1981, 6, 26) explains, “citizen’s vote *retrospectively*... as referenda on the incumbent administration’s handling of the economy.” Finally, their economic evaluation is more sociotropic (about the national economy) than pocketbook (about their personal financial circumstances). [Kinder and Kiewiet (1981), were the first to appreciate these distinctions.]

From the 1980s, consolidation of the study of the American economic voter, in political behavior terms, finds representation in Kiewiet’s (1983) pivotal volume. That work contains these elements of classical economic voting theory, empirically supported by extensive statistical testing. [See also Lewis-Beck (1988).] This, and subsequent survey research on US presidential elections, has demonstrated that economic voters are retrospective and sociotropic. For example, when they see that last year’s national economy has worsened, they tend to vote against the president’s party.

[See the recent review of this survey-based literature in Lewis-Beck and Stegmaier (2007).] In sum, the economy as a valence issue matters. If there has been boom (which everyone wants), in-party candidates win votes; if there has been bust (which nobody wants), they lose votes. Elsewhere Lewis-Beck and Nadeau (2009, 480) report the continued potency of the valence notion, in the 2008 McCain-Obama contest: “The traditional relationship continues to hold, then, with worsening economic perceptions associated with a heightening of the anti-incumbent vote.”

What about economics as a policy position issue? To quote Stokes (1963, 373) again, “Let us call ‘position issues’ those that involve advocacy of government actions from a set of alternatives over which a distribution of voter preferences is defined.” An example might be government policies to regulate the economy, redistribute income, or change welfare payments. We would expect voters to take different positions on such issues. To illustrate, most voters might want welfare payments to stay where they are, while a minority at both ends of the spectrum might want, respectively, decreases or increases. The welfare issue, then, might move some voters toward the Democrats (seen as the party of welfare), and some voters toward the Republicans (seen as the party against welfare).

Note that with positional economic voting, voters select the party nearest their own policy position. Because the vote has a policy aim, it directs itself toward the preferred party, irrespective of whether that party holds power. Kiewiet (1983, chp. 2) calls these economic voters *policy-oriented*, rather than *incumbency-oriented*. Because certain policy positions may persist over time, for voters and for parties, some voters may ignore the incumbency status of their preferred party. In a standard example, voters preferring lower unemployment always vote Democratic, even with a Democratic president presiding over rising unemployment; these voters believe Democrats will always do better on the unemployment issue. Kiewiet (1983, 13) commented that “Unlike the incumbency-oriented hypothesis, the policy-oriented hypothesis has not been subjected to a large amount of empirical testing.”

This comment, noting the dearth of research in this area, still rings true. The number of papers testing the standard incumbency-oriented, valence hypothesis of economic voting has been estimated at over 400 (Lewis-Beck and Stegmaier, 2007). But, after conducting an extensive search for papers testing the policy-oriented, positional hypothesis of economic voting, we came up with only four candidates. One treats the impact of the US budget deficit in the 1988 US presidential election (Bratton, 1994). Another considers the impact of favoring tax cuts on the 1996 presidential vote choice (Alvarez and Nagler, 1998). The other two assess the effect of increased taxation on voting in local American elections (Kone and Winters, 1993; Niemi et al., 1995). Perhaps we are mistaken, but none of these papers appear to directly assess the distribution of voter opinion on these policy questions, and the consequences of that distribution for national vote choice, our major concern here.

What about economics as a patrimony issue? In some ways, the idea has an ancient pedigree. A citizen’s standing in the economic structure shapes policy preference and, in

turn, party preference. Voters see their political interests differently, depending on their particular configuration of economic goods. Most often, this idea has been reduced to the class voting hypothesis (Abramson et al., 2003, 113–115; Flanagan and Zingales, 2006, 115–118). Also, it has appeared, in somewhat different guise, as the link between income and vote (Bartels, 2008; Stonecash, 2000). Socio-demographic characteristics, such as occupation or income, are important control variables for any model of voting behavior. However, the patrimony idea is really about something more than social class, as traditionally understood.

The notion that location in the economic structure makes a difference to electors traces its origins back to the social theories of Marx. For him, the encompassing idea was the individual's relationship to the means of economic production (Popper, 1945). For example, workers owned nothing but their labor, while owners held the factories. This relationship, between those who had property and those who did not, provided the political motor of the system. Contemporary measures of class – be they subjective or objective measures of income, occupation, or education – only *partially* capture the ownership variable. [For a review of contemporary measures of class and the vote, see Lewis-Beck et al. (2008, chp. 12).] We propose measuring what we believe to be the larger variable of economic structure – property ownership, or *patrimony*. We believe patrimony has an impact on the vote well beyond that of traditional class measures. Voters with a greater accumulation of wealth – stocks, houses, land – will advocate different policies, and favor different parties. In particular, they will be more supportive of free-enterprise, market-oriented parties. For the United States, that suggests a tendency to vote Republican. However, this hypothesis on the American voter has never been put to the test before now.

## 2. The data and measures

The data compose a national 2008 US presidential election survey – the Comparative Campaign Analysis Project (CCAP) – carried out in October (Simon Jackman and Lynn Vavreck, directors). The questionnaire was administered via the Internet, and the responses weighted in order to render it representative of the American voting public. A unique battery of economic evaluation items was fielded (as part of the University of Iowa Research Component, total  $N = 975$ ). There were valence items (sociotropic and egotropic, retrospective and prospective), positional items (wage policy, government economic intervention, progressive taxation, worker v. management pay, macroeconomic policy priorities), and patrimonial items (ownership of home, apartment, country house, business, land, farm, stocks, savings, rental properties). While certain of these items may have occasionally appeared in other surveys, it is worth noting that this is the only survey extant where all three types – valence, positional, patrimonial – are gathered in one place.

Thus, these three dimensions of economic voting are uniquely measured. With a parsimonious cut, we focus on a leading measure of each dimension: for valence, the sociotropic retrospective measure; for position, progressive tax policy; for patrimony, an index of owning a house, stocks, a business, or rentals. In Table 1, the wording on these

items is provided along with the response distribution, and the relation of those responses to the Obama–McCain vote.

The valence question asks, in standard fashion, for a sociotropic retrospective evaluation of the nation's economy over the past year. Not surprisingly, most respondents perceived considerable economic worsening (Table 1, panel A, column 1). Further, they appear to have translated that negative perception into a strong pro-Obama vote intention (Table 1, panel A, column 2). Those who saw the economy as “much worse” were almost seven times as likely to vote for Obama, as those who saw it as “better, same.” Overall, the bivariate correlation ( $r$ ) between the two variables is large, at .44. This valence result parallels that of other scholars using other data, so providing additional validation of the survey's quality, as well as continued confirmation of the standard valence hypothesis of economic voting (Abramson et al., 2010; Clarke et al., forthcoming).

With respect to positional items, survey standards are in development. The item used here was first reported in Lewis-Beck and Nadeau (2009, 479–480), where it was described as “very clearly distributional, for it deals with tax equity.” Respondents are asked how much rich people should be taxed, as compared to poor people. Policy positions on this item are widely scattered (see Table 1, panel B, column 1). Clearly there is great disagreement, making it in some ways a quintessential anti-valence issue. These different policy preferences coincide, tellingly, with big vote preference differences (Table 1, panel B, column 2). Interestingly, those who think the rich should be taxed

**Table 1**

Valence, positional and patrimonial economics and the 2008 presidential vote.

	(1)	(2)
Panel A. Valence (national economic perceptions)		
Better, same	6	10
Worse	31	24
Much worse	63	68
Panel B. Positional (taxation policy)		
Rich 60 and poor 10	13	80
Rich 50 and poor 20	21	79
Rich 40 and poor 30	12	54
Rich 30 and poor 30	39	20
Don't know, not sure	15	61
Panel C. Patrimony (ownership)		
0 item	10	73
1 item	26	62
2 items	40	48
3 items	17	41
4 items	8	42

Entries for column 1 represent the distribution of answers for the valence, positional and patrimonial variables. Entries for column 2 represent the percentages supporting Obama. Question wordings: *Valence*: “Would you say that over the past year the nation's economy has gotten much better, gotten better, stayed about the same, gotten worse, or gotten much worse?” *Positional*: “Suppose a rich person has one dollar, and a poor person has one dollar. How much tax should be paid on that dollar? Rich person pays 60 cents, poor person pays 10 cents; rich person pays 50 cents, poor person pays 20 cents; rich person pays 40 cents, poor person pays 30 cents; rich person pays 30 cents and poor person pays 30 cents.” *Patrimony*. Do you (or a member of your family) own any of the following? Yes or No. House or apartment? A rental property? A business, a piece of land or a farm? Stocks?”

more than the poor are always for Obama, even if their level of progressivity is limited. In contrast, those who think the rich and poor should be taxed at an equal rate (“a flat tax” approach) are very much in the McCain camp. The correlation between the two variables (excluding the “don’t knows”) is quite strong,  $r = .50$ .

The patrimonial variable has never been constructed from US survey data, so far as we know. [However, it has been constructed, to good effect, in French election surveys (Boy and Mayer, 1997; Capdevielle et al., 1981; Nadeau et al., 2010; Foucault et al., forthcoming).] Respondents are simply asked whether they (or anyone in their family) own any of the following items, yes or no? (See the exact wording at the bottom of Table 1). From these responses, we create an additive index, summing the following 0–1 ownership dichotomies: home/apartment + rental property + business/farm + stocks. Observe, in Table 1 (panel C, column 1) that very few own none of these things, or all of these things. The modal category is “2 items,” e.g., a home and stocks. Indeed, “home and stocks” would be the most likely combination, according to the distribution of each separate component, as follows: home/apartment = .85, rental = .16, business/farm = .30, stocks = .65; average = .49.

The component correlating most heavily with the index is stocks, at .67. The income variable, included separately in the model, correlates with the index at only .43. This lower correlation underlines that income, while perhaps one sort of class measure, is in itself different from a wealth measure. Patrimony does relate to Obama support (Table 1, panel C, column 2), with those owning more being less likely to declare a vote for him. At one extreme, those owning nothing register 73 percent support for Obama, whereas those who own the maximum of four items register only 42 percent support. Overall, the  $r = -19$ .

### 3. Models and estimates

To assess the impact of these different economic voting dimensions, collectively, we estimate a series of logistic regression equations. We begin with the least familiar

dimension, that of patrimony. It seems essential, as a first step, to demonstrate that patrimony has an effect, independent of other socio-demographic variables, in particular those that are common stand-ins for class. That is, unless income, education, and other class surrogates are controlled for, any significant effect from patrimony could be held spurious (a simple product of its role as a class measure). Thus, in terms of “the funnel of causality” that flows to the vote, we begin with a model whose variables are farthest away from the funnel tip, i.e., socio-demographics plus patrimony (Campbell et al., 1960, chp. 2; Lewis-Beck et al., 2008, chp. 2). This distant placement of these variables seems sound, in that they are essentially exogenous.

$$\text{vote} = f(\text{age}, \text{gender}, \text{race}, \text{education}, \text{income}, \text{class}, \text{patrimony}). \quad \text{Eq. 1.}$$

The logistic estimates for this model, predicting Obama v. McCain vote intention, appear in Table 2, column 1. (The measurement and coding of each variable is described at the bottom of the table). We observe that all coefficients but one (subjective social class) are statistically significant (at .05 or more), and in the expected direction. Especially interesting, for our purposes, is the significant effect of patrimony. The more property the voters own, the less likely they are to vote for Obama. This effect holds, independent of income, which has its own significant effect. Moreover, the impact of patrimony compared to income, as judged by comparison of the slope coefficients, suggests they exercise the same force (i.e.,  $-.99$  and  $-1.00$ ). Further, the impact of patrimony is significant independent of other SES measures that might serve as class measures, such as education and subjective social class. This statistical independence of patrimony, in the face of these controls, indicates that the ownership variable captures more than typical class-related measures can.

But Table 2, column 2, suggests the story is not over. Once the model controls for party identification, as is proper, patrimony no longer has an effect. Its coefficient is cut in half, and it ceases to be significant. Party loyalty

**Table 2**  
Logistic regressions on the 2008 presidential vote.

	(1)	Sig.	(2)	Sig.	(3)	Sig.	(4)	Sig.	(5)	Sig.
Age	-1.10 (.39)	**	-1.03 (.55)	*	-1.09 (.64)	*	-.31 (.66)		-.48 (.74)	
Female	.32 (.18)	*	.30 (.25)		.04 (.29)		.29 (.30)		.17 (.33)	
Race	3.98 (1.28)	**	3.37 (1.33)	**	3.58 (1.36)	**	3.73 (1.45)	**	4.23 (1.46)	**
Education	1.24 (.32)	**	.83 (.44)	*	.44 (.51)		.22 (.51)		.04 (.57)	
Soc. class	.12 (.47)		.49 (.67)		.07 (.74)		.21 (.76)		-.22 (.81)	
Income	-1.00 (.45)	**	-.93 (.64)		-.87 (.72)		-1.49 (.73)	*	-1.66 (.79)	*
Patrimony	-.99 (.37)	**	-.44 (.51)		-.16 (.59)		-.16 (.59)		.05 (.66)	
Party ID	-		4.92 (.38)	**	4.50 (.42)	**	3.34 (.43)	**	3.07 (.46)	**
Ideology	-		-		-		8.29 (1.03)	**	7.23 (1.08)	**
Valence	-		-		2.42 (.50)	**	-		2.17 (.59)	**
Positional	-		-		2.37 (.36)	**	-		2.05 (.41)	**
Ps.-R <sub>2</sub>	.10		.47		.58		.60		.66	
N	624		621		602		607		588	

\*\* $p < .01$ , \* $p < .05$ , one-tailed tests.

Dependent variable = 1 if voting intention for Obama, 0 otherwise. Party ID = 0 for Republicans, .5 for Independents, 1 for Democrats. Patrimony = 0 for no assets, .25 for one item, .50 for two items, .75 for three items, and 1 for four items (home/apartment, rental, business/farm and stocks). Valence = 0 for much better, better and same, .5 for worse, 1 for much worse. Positional = 0 for 30/30 share, .5 for 40/30 and Dks, and 1 for 50/20 and 60/10. Control variables: Age (in years), Gender (Female), Education (seven categories, scaled 0–1), Income (14 categories, scaled 0–1), Social class = Scale ranging from 0 (upper) to 1 (working), Race (Black), Ideology = Scale ranging from 0 (very conservative), to 1 (very liberal; Dks = .5). The pseudo-R<sub>2</sub> is McFadden.

trumps property ownership, apparently absorbing its impact. The implication that indirect effects operate from patrimony through party is inescapable. We return to this implication at an appropriate later point.

How do valence and position economics fare, when introduced into this more demanding model? In Table 2, column 3, the model is so estimated. The model accounts for over half the variance in vote choice. Moreover, valence and position economics easily attain significance. With regard to the former, those who perceived the economy had worsened clearly favored Obama, repeating the standard result. With regard to the latter, those favoring a more progressive tax structure favor Obama more. This effect, it should be remarked, is independent of the valence effect. The suggestion is that they form separate dimensions. Further, given their coefficients have the same metric (i.e., a 0–1 scale), we can compare relative effects. Interestingly, the two exercise almost exactly the same impact on the vote (i.e., 2.42 v. 2.37). As important as valence economics is, positional economics appears equally so.

Also, we see illustrated the two kinds of economic voting, in terms of targets. First, there is incumbency-oriented voting triggered by valence economics. Second, there is policy-oriented voting triggered by positional economics. Both types can effectively reinforce the incumbent vote, i.e., someone who sees the economy worsening (and tends to an incumbency-oriented vote for the Democratic challenger) and who wants more progressive taxation (and tends to a policy-oriented vote for the Democratic challenger). When these two strains of economic voting – incumbency-oriented and policy-oriented – are combined in one citizen, probability of a Democratic challenger vote reaches its highest level. Here, neglect of the policy-oriented strain clearly would understate the likelihood of an Obama vote.

One difficulty with the findings thus far, concerning positional economic voting, is they might be spurious, a product of the absence of an ideological control. Placement on the policy dimension of progressive taxation, from more

to less, sounds suspiciously like a left-to-right, or liberal-to-conservative, scale. Hence, it seems imperative to consider the voter’s own ideological self-placement as a control. This is done in Table 2, column 4, which adds liberal–conservative ideology to the model (without valence or positional economic evaluations). Clearly, ideology boosts model fit, and has a strong influence on vote choice. The question, at this point, is what, if anything, the economic evaluations can add. Do their coefficients wash out, with the formidable presence of ideology? No. Table 2, column 5, shows that valence and position economics sustain coefficients of essentially the same magnitude and significance. Taking ideology into account makes virtually no difference for them. This orthogonality is perhaps surprising in the case of positional economics. Also, note that the inclusion of these economic evaluations jumps the pseudo-R-squared by 6 points.

The model, now a mix of long-term and short-term forces, offers a rather comprehensive specification, reading in summary as follows:

$$\text{Vote} = \text{age, gender, race, education, income, class, party identification, ideology} + \text{patrimony, valence, and positional economics.} \tag{Eq.2}$$

#### 4. Calculating the economic effects

What are the effects of changing economic evaluations on the vote choice (using the estimates for Eq. (2))? There are different ways to assess the question. Suppose the valence economic evaluation shifts fully, from “better” (0) to “much worse” (1). Then, the probability increase for an Obama vote would be .40 (assuming a dependent variable base of .5). A comparable shift in the positional economic evaluation, from “no tax progressivity” (a 30–30 distribution) to “maximum tax progressivity” (a 60–10 distribution) would, equivalently, boost the Obama probability by .39. These are large effects, and perhaps unrealistic, because they imply complete shifts in evaluation, from end-to-end on the spectrum. A more reasonable assessment comes from simply imagining a one standard deviation change in the economic evaluation. By that scenario, probability shifts in the vote for Obama, respectively, would be .16 for

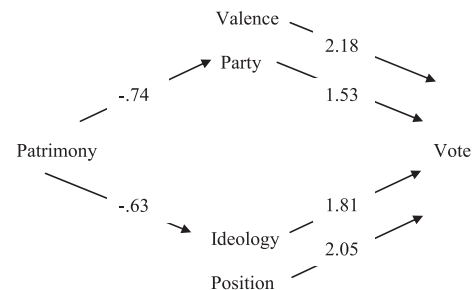
**Table 3**  
Logistic regressions on party identification, on ideology, and on the 2008 presidential vote in a block-recursive system.

	Party ID (1)	Sig.	Ideology (2)	Sig.	Vote (1)	Sig.
Age	-.41 (.49)		-1.08 (.55)	**	-.47 (.75)	
Female	.33 (.20)	*	.35 (.19)	*	.17 (.33)	
Race	1.38 (.42)	**	.93 (.37)	**	4.17 (1.03)	**
Education	.95 (.35)	**	1.29 (.32)	**	.03 (.55)	
Soc. class	-.21 (.52)		-.10 (.45)		-.22 (.81)	
Income	-.62 (.49)		-.17 (.49)		-1.65 (.85)	*
Patrimony	-.74 (.36)	**	-.63 (.34)	*	.06 (.63)	
Party ID	–		–		3.06 (.25)	**
Ideology	–		–		7.24 (.28)	**
Valence	–		–		2.18 (.61)	**
Positional	–		–		2.05 (.41)	**

$\chi^2(25) = 505.80 (p < .001)$   
N = 648

\*\*p < .01, \*p < .05, one-tailed tests.

Entries are maximum likelihood parameter estimates with robust standard errors and sampling weights, computed with Mplus 6th edition (Muthén and Muthén, 2010). The  $\chi^2$  was calculated from the formula:  $-2 (\text{loglikelihood for null hypothesis} - \text{loglikelihood for alternative hypothesis})$  corrected with a scaling correction factor for MLE analysis.



**Fig. 1.** Presidential vote: a block-recursive model. The coefficients from patrimony to party and ideology are, respectively, from Table 3, columns 1 and 2. The coefficients from valence, party, ideology, and position to the vote are from Table 3, column 3.

**Table 4**  
Probability changes in presidential vote, from direct and indirect economic effects.<sup>a</sup>

Valence (direct effect on vote)	.16
Positional (direct effect on vote)	.20
Patrimonial (indirect effects on vote through PID and ideology)	.36
Valence + positional (combined direct effects on vote)	.32
Valence + positional + patrimonial (combined direct and indirect effects on vote)	.46

<sup>a</sup> The calculations are based on the following formula:  $\Delta P = \exp(B1/1) + \exp(B1 - \exp(B0 - \exp(B0/1) + \exp(B0))$ . If  $P$ , the mean of the dependent variable is .5, then  $B0 = \ln(P/1 - p) = 0$ . So,  $B1 = B0 + B_j$ , where  $B_j$  is the logistic regression coefficient for a given variable. From this, the simulations were performed. As an example, here is the valence calculation.  $B_j$  for valence = 2.18 (slope for that variable)  $\times$  .30 (standard deviation for that variable) = .65.  $B1$  for valence =  $0 + .65 = .65$ .  $\Delta P$  for valence =  $\exp(.65/1) + \exp(.65) - \exp(0)/\exp(0) = .66 - .50 = .16$ , the probability increase of an Obama vote. The same logic is used to calculate the other probability changes. The signs for patrimonial effects (–.74 and –.63, see Table 3, columns 1 and 2) are reversed to calculate the total impact of valence, positional and patrimonial effects on the probability for an Obama vote.

the economic valence variable, and .20 for the economic position variable. Either of these, taken alone, are far from trivial changes.

Can we calculate the patrimony effect? If we restrict ourselves to Eq. (2) we are forced to conclude there is none. It would be assumed to have no impact, because its coefficient is not significant, not even close (see Table 2, column 5). Operating in this single-equation world, patrimony exercises no vote influence. But that seems too restrictive. Given its exogenous status, and its theoretical breadth and weight, the influence of patrimony could pass indirectly to the vote, through the dependent party identification and ideology variables. In column 1 (Table 3) party identification does appear influenced by patrimony, with those who own more attaching themselves more closely to the Republican party. In column 2 (Table 3), we see the same sort of attachment to the political right, with those of property adhering more closely to the conservation stance. In column 3 (Table 3) is the full vote equation again, showing the direct effects of party and ideology, thereby allowing transmission of the patrimonial effect.

The equations are here estimated as a system, using MLE and robust standard errors (computed with Mplus). The three regressions are considered within a single path analysis, in a model where patrimony's indirect effect is mediated through party identification's and ideology's direct effect on vote. Formally, these three equations may be viewed as a block-recursive system, with errors allowed correlated within blocks, but uncorrelated across blocks (Kmenta, 1997, 660). Block 1, patrimony (exogenous) leads to party (endogenous) and ideology (endogenous). In Block 2, the variables of party and ideology (now effectively exogenous) influence the vote. Thus, there are indirect structural paths, from patrimony via party and ideology, on to the vote. (Respectively, these indirect paths are  $-.74 \times 3.06$  and  $-.63 \times 7.24$ .) In addition, there are direct structural paths to the vote – from party, ideology, economic valence, and economic position. (Respectively, these direct paths are 3.06, 7.24, 2.18 and 2.05.) These various paths are sketched in the diamond-shaped arrow diagram of Fig. 1.

Suppose we total these effects, direct and indirect, in terms of probabilities. By means of simulation, we calculate the changes in probabilities, for a standard deviation change in the economic variables. As an example, the direct probability impact of valence economics on the vote = .16. [The calculation follows. Set the dependent variable at .5. Multiply

the slope times its standard deviation:  $(2.18 \times .30) = .65$ . Then exponentiate. These steps are fully explicated at the bottom of Table 4.] The direct impact of positional economics on the vote = .20. Thus, we see that reasonable changes in valence and positional economic evaluations lead to comparable, and at least moderate, changes in the vote probability. What about patrimony effects? A similar, one standard deviation, change in a voter's ownership status produces, albeit indirectly, a .36 probability change in the vote. This effect is large, and owes itself to the powerful influences of party and ideological identification, which patrimony helps shape. Taking all the economic dimensions together, if each were altered by one standard deviation, the net impact on vote probability would rise to .46. Clearly, the economy, in these various manifestations, matters greatly in the vote decision. All these effects are summarized in Table 4.

## 5. Summary and conclusions

A voluminous research literature has established that the economy counts in the democratic voter's calculus. Voters punish the incumbent for bad economic times, and reward it for good economic times. Paradoxically, the strong confirmation of this finding has limited the scope of the economic voter hypothesis, because of its exclusively valence perspective on the incumbent. The fact that the voters all seek economic prosperity has blinded analysts to the notion that they do not all seek the same economic policies. While voters take the same position regarding the value of national economic well-being, they do not take the same position on the means of achieving that national economic well-being. Some want more taxes, some less. Some want more regulation, some less. Some want more welfare, some less.

These differences over policy, what we call positional economic evaluations, can lead to different vote choices, as we have demonstrated here. Positional economic voting is policy-oriented, with voters selecting the party closest to their preferences. If the incumbent party favors their policy position, they will tend to vote for it. However, that is not an incumbency-oriented economic vote, as it is with valence issues. Instead, it is policy-oriented, and that vote is targeted at the party delivering the policy, regardless of whether it is in office. In our data on the 2008 US presidential election, we observe that those who saw a deteriorating national economy voted against the incumbent, in

classic valence fashion. However, many also voted against the incumbent on economic policy grounds, namely on the issue of tax fairness. These two strands – valence and position – worked heavily in Obama's favor. To ignore one or the other would be to deemphasize the economic vote.

In addition, there appears to be patrimonial economic voting. This hitherto neglected dimension addresses the voter's place in the structure of the economy, beyond the usual measures of social class. To the extent that voters are owners of property, they develop certain political preferences. Generally, having more – a house, a business, other properties, stocks – predisposes voters to favor conservative, Republican ideas, which in turn breed a Republican vote. Conversely, those with scarce amounts of wealth tend to turn to the “have-not” Democrats. All together, these three economic dimensions – valence, position, and patrimony – appear to have contributed considerably to the likelihood of an Obama vote. It has been said that Obama won the election because of the economy (Lewis-Beck and Stegmaier, 2009b). These results suggest the fuller meaning of that conclusion, revealing the multiple and independent facets of economic vote calculation.

The prominent place of economic issues in the 2008 election may be atypical. After all, the economic collapse going into the contest was without modern precedent. In a more “normal” year, perhaps the effect would not appear so great. We doubt this contention, in the sense that we believe positional and patrimonial economics are always operating on the voter, along side the usual valence forces. Of course, this proposition is open to test, on other data sets, from other times and other countries. This is the next logical step in the research agenda.

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