

# Patrimonial Economic Voting: A Neglected Dimension.\*

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## Abstract

Economic voting studies have been dominated by the classic reward-punishment paradigm, where voters vote for the incumbent under good economic performance, but against under bad. This paradigm works well when the economic issue is a valence issue, such as prosperity. However, it leaves out positional economic voting, where the voter's place in the economic structure influences policy preference and, thus, party preference. More precisely, we suggest that the better the economic location of voters in terms of wealth (or patrimony), high-risk wealth in particular, the more they will vote right, because the right promises a better return on their investments. We demonstrate this effect in French presidential election data, from three national surveys – 1988, 1995, 2002. The patrimonial effect well exceeds other economic effects tested, and does so under strong statistical controls.

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# 1 Introduction

The ruling economic voting hypothesis stands confirmed: voters reward the incumbent for good economic performance, and punish it for bad. This connection asserts itself strongly, election after election, in country after country, according to a voluminous literature (Duch and Stevenson, 2008; Lewis-Beck and Stegmaier 2007, 2008; Nannestad and Paldam, 1994; Norpoth, 1996). One may join in with those who celebrate these “cumulative efforts at scientific achievement.” (Lewis-Beck, Nadeau, and Elias, 2008). One may even conclude no more need be said on the subject. We do not go that far. There are key areas of economic voting that remain rather unexplored. This neglect comes from the exclusionary nature of the reigning paradigm, with its restrictive definitions of the “economic issue.” The prevailing view holds the economy to be a “valence” issue. That is, among voters, there is consensus on the value to the country of a vigorous economy. When they perceive that the national economy is doing better, they offer up electorate support to the government. The vote choice essentially becomes one for or against the ruling party (coalition). Survey-research based studies reliably demonstrate support for this sociotropic hypothesis, as it is commonly called. [The idea of “sociotropic economic voting” was launched by Kinder and Kiewiet (1981).]

In general, the valence approach to the study of economic voting has much to commend it, as a lengthening list of investigations shows. [See especially the book by Clarke et al. 2004, and their employment of this perspective in the British case.] Instead of a valence issue, however, the economy can also be conceived of as a “position” issue. [See Stokes (1963) and Stokes and Dilulio 1993), on the original distinction between “valence” and “position” issues]. That is, there may be a wide range of voter opinion on the preferred economic policies to follow, e.g., regarding taxation, regulation, intervention, welfare. Here the voter makes a spatial judgment, favoring the party that lies closest to his or her preferred policy position. Further, since the vote choice is policy-oriented it targets the proximate party, regardless of whether it is incumbent. For example, a US voter who favors the Democrats on unemployment policy, irrespective of the party’s White House presence, would be such a policy-oriented voter. Kiewiet (1983, chp.2, p.13), who first drew the distinction between these two economic voting orientations, observed that “Unlike the incumbency-oriented hypothesis, the policy-oriented hypothesis has not been subjected to a large amount of empirical testing.” This observation still largely holds today.

The perspectives described above leave out the possibility that the voter’s position in the economic structure influences policy preference and, thus, party preference.<sup>1</sup> That is, individual voters may see their personal electoral stakes differently, depending on their place in the economic system. Traditionally, this idea has been confined to studies of class voting (Abramson, Aldrich, and Rohde, 2003; 113-115; Cautrès and Heath, 1996; Evans and Norris 1997; Flanagan and Zingale 2006, 115-118; Franklin, Mackie, and Valen 1992). More recently, it has appeared also in investigations of the relationship between income and vote (Bartels, 2008; Stonecash 2000).

But the economic location idea is broader than the effects of occupation or income, as was Marx’s original theory. Marx defined the individual’s place in the economic system according to his or her relationship to the means of production. That relationship dictated their political behavior. While many refinements of this relationship have been proposed in the sociological literature, the essential economic variable was property ownership or, more broadly, wealth. We propose that voters with different types of wealth – stocks, houses, land, savings, for example – will favor different policy positions. Specifically, those with high-risk wealth will favor parties advocating free-market economics, while those with low-risk wealth will favor parties advocating more government protection. Until now, this dimension, which we call “patrimonial economic voting”, has been almost completely ignored.

Below, we develop this idea, first establishing the two types of wealth, high-risk and low-risk. We hypothesize that high-risk wealth holders, in particular, will be more likely to vote for parties on the right. Further, we believe such findings would hold for virtually any advanced democracy. However, data to test this hypothesis are scarce, with precious few national surveys adequately measuring respondent wealth. For example, election surveys from the two nations that have been studied most extensively in terms of economic voting – the United States and the United Kingdom –do not have wealth item batteries. But for France, another much studied country, the situation is different. The three recent French presidential election surveys offer adequate measures on these variables, as well as others necessary for full model specification. Thus, we formulate a presidential vote equation, including strong control variables,

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<sup>1</sup>One may argue that pocketbook voting represents a type of positional economic voting. True, good performance from my pocketbook is certainly not a valence issue.

But egotropic perceptions measure the evolution of a household economic situation compared to itself across time. As such, they do not form an indicator of a voter’s place (compared to others) in the economic structure at one point in time.

and estimate it over the 1988, 1995, and 2002 elections.<sup>2</sup> As shall be seen, the regression coefficients clearly demonstrate the strong impact of patrimony on presidential vote choice.

## 2 Wealth: a description

It is important to define “wealth” conceptually. In general, wealth (patrimoine) can be defined as the cumulated assets held by a person or a household (Lollivier and Verger 1987). Usually, it is limited to tangible assets, without taking debt into account. In 2004, as an example, the average gross wealth of French households was about \$190,960, the median about \$121,750. Inequality of wealth in France is less than the United States. Still, ten percent of the richest households in France hold 46 percent of the available wealth (Piketty 2003; Piketty and Saez 2003). French households, like elsewhere, own two types of wealth: financial wealth (e.g., saving accounts, stocks) and non-financial wealth (e.g., houses, apartments, land, rentals). Since the early 1980s, saving accounts form the main source of wealth, followed by home and stock ownership. According to the French statistical agency, INSEE, the annual growth rate of wealth has been declining: 1986-1992 = 5 percent; 1992-1998 = 2 percent; 1998 – 2000 = 1 percent (Rougerie 2002).

The data of Table 1 depict the structure of wealth accumulation at the time of the 2002 national elections, in terms of six components: savings accounts, home or apartment, country house, land, rentals, stocks. These numbers confirm, not surprisingly, that the most common types of wealth in France are savings accounts (64 percent), homes (64 percent), and stocks (26 percent).

[TABLE 1 ABOUT HERE ]

## 3 Theory: Low-risk and High-risk wealth

The six distinct components of wealth, as measured, can be divided into low-risk versus high-risk assets. Such a distinction assumes that each component is subject to future evaluation by individual actors. Indeed, wealth accumulation can be considered to follow a stochastic process according to a specific probability,

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<sup>2</sup>Historically, The French National Election Study has been fielded irregularly. However, from 1988, there has reliably been a presidential election survey. At the time of this writing, the 2007 survey was not yet available to us.

which differs according to whether it is, for example, fixed saving or stocks. Consequently risk, not uncertainty, is the key element in the wealth accumulator’s strategy (Knight 1921). Theoretically, three basic types of risky decision-making present themselves: risk-averse, risk-neutral, and risk-loving (Bergman 2004; To 1999). The data we use does not allow us to assess directly the respondent’s particular risk-attitude vis-à-vis wealth accumulation choices. Hence, we make the assumption that people select high-risk versus low-risk assets according to the information level required to make an efficient choice.

These two types of assets differ crucially in terms of associated information costs. For example, a savings account with a fixed return can be considered non-risky, since it does not generally require extensive and continuous information monitoring. This same logic prevails for other kinds of wealth, such as housing (whether home or country). In such cases, the information costs, and the accompanying risks of ownership appear weak when compared to the wealth accumulation strategies of business investment, rentals, and stocks (Benartzi and Thaler, 1995; Dahlback 1991; Huang and Litzenberger 1988).

Based on the above reasoning, we classified the six wealth items, available in three French national election studies (1988, 1995, 2002) into two scales. Each scale is simply an additive index, with the contained items dichotomized, then averaged. (See the Appendix for coding and measurement details on these and other variables). To illustrate, for 2002, Scale I averages the scores on “savings accounts,” “house or apartment,” and “country house;” Scale II averages the scores on “business,” “rentals,” and “stocks.” (See bottom, Table 1). Scale I, then, measures Low-Risk assets, while Scale II measures High-Risk assets. In Table 2, one observes the correlation (Pearson’s  $r$ ) of the component-items with the overall scale. The results are quite similar across the three years. In each, the Low-Risk scale is dominated by home ownership, while the High-Risk scale is dominated by stock ownership. Note, further, the correlation of household income with each scale. Interestingly, income is only modestly correlated with either scale, regardless of year. This finding reinforces the argument that wealth and income are by no means measuring the same thing, even if they are both tapping personal economic situation.

[TABLE 2 ABOUT HERE]

## 4 Social determinants of wealth

Before examining the wealth-vote relationship, it is worth validating the wealth measures themselves. First, we explore the social structure of wealth accumulation. To do this, we begin with a series of multivariate analyses (ordered probit, see Kennedy, 2008), appearing in Table 3. Two results stand out. For one, age and income emerge as key determinants of wealth accumulation, regardless of the level of risk. Nevertheless, the impact of these variables (particularly age) appears relatively less important for High-Risk wealth accumulation. The profile of the High-Risk group is more complex, including influences from occupation, gender, schooling, and private sector involvement, none of which were significant for the Low-Risk group. These findings are largely consistent with other studies on wealth accumulation (Arrondel et al 2004; Cordier et al. 2006; Lavigne et al 2001). Thus, they offer reassuring indications about the quality of the wealth indicators used in this study. (Note that the low fit-statistics for the equations is also consistent with the results of previous studies, and suggests the value of exploring the attitudinal components of wealth accumulation, which we do below).

[TABLE 3 ABOUT HERE]

## 5 Wealth and political preference

Why would those with more patrimony tend to favor right parties? Right-wing governments are more inclined to decrease taxation and deregulate labor and financial markets (Alesina and Rosenthal 1995; Boix 2000). They tend to favor free-market solutions over state intervention, which squares with the preferences of right-wing voters (McClosky and Zaller, 1984). Market solutions favor risk-takers, who can derive larger profit opportunities from competitive structures. But risks incur the possibility of loss, as part of the market game. Hence, as compensation, risk-takers prefer higher returns whereas the risk-averse will be attracted by protectionist policies. From these considerations, we assume that High-Risk voters will be more likely to prefer market-oriented policies and parties, when compared to Low-Risk voters. Fortunately, the data at hand offer multiple tests of this hypothesis.

These national election studies ask respondents to take a position on a series of political economy issues, i.e., state regulation, social security, unions,

socialism, trade, nationalization, profits, and privatization. We simply code each of these dependent policy variables as dichotomous (where 1 = pro-right, 0 = pro-left), and regress them, in turn, on our wealth and income variables (plus a set of socio-economic controls; see Table 3). In Table 4, the logistic coefficients of these independent variables are reported, and can be compared. For example, High-Risk voters are much more likely to oppose state regulation than Low-Risk voters (see Table 4 A). Similarly, they are much more likely to be against socialism and nationalization, and to have positive feelings about the stock market, profits and privatization (see Table 4B). While these attitudes are most fully documented in 1988, they repeat themselves in the available data from 1995 and 2002 (see, respectively, Tables 4C and D).

[TABLE 4 ABOUT HERE]

What is important for explaining a voter’s position on these economic policy issues – income or wealth? Clearly, it is not income. While 10 of the income coefficients are correctly signed, only 8 are statistically significant. Further, the magnitude of the income coefficient is systematically lower than the high-risk coefficient (comparison of effect strength is possible because the variables are scaled to the same metric). Overall, it is high-risk wealth that makes the difference, i.e., all 12 of its coefficients are correctly signed and statistically significant. In contrast, nine of the coefficients for low-risk wealth are negatively signed and only one is significant (making them actually less likely to hold the pro-right attitude).

## 6 Wealth and the vote

To estimate precisely the effect of the patrimonial vote, we need to embed our wealth measures in a properly specified model, estimated across these French national election surveys. While scholars of French electoral behavior fail to agree completely on the presidential equation specification, from study to study, they do share a common set of independent variables, representing the long-term forces at work (Boy and Mayer, 1993; Lewis-Beck, 1993; Pierce, 1995). That core model reads thusly,  $\text{Vote} = f(\text{social cleavages, partisanship})$ . Key social cleavage measures are class and religion, “the heavy variables”, *les variables lourdes* as they are called. These factors, inside a standard demographic battery, “continue to sketch the contours of the French electoral landscape” (Boy and Mayer, 1993,

174; Cautrès, 2002, 90). The first essential, then, is that our wealth variable sustains statistically significant, and substantive important, effects in the face of this array of SES controls.

This we see in Table 5, where presidential vote (right v. left, first-round) is logistically regressed on a host of social cleavage variables, plus patrimony. Note, first, the persistent effects of religiosity, which sharply moves voters to the right, regardless of the election. Moreover, the size of its coefficient reveals no sign of a diminishing impact over time. Next, observe that class, measured by occupation, has the expected effect. For example, blue-collar workers (professionals) are less (more) likely to vote for the right, while those who work in the private sector are always significantly more likely to vote for the right. Considering the economic situation variable of income, it is in the expected direction (positive) twice, and is statistically significant once. This is the usual finding for household income, which tends to show weak effects in the French electorate (Cautrès, 2002).

[TABLE 5 ABOUT HERE]

What about our wealth measures? Low-risk assets never exert a statistically significant effect, as expected. Apparently, having a home or a savings account are such routine, pervasive conditions that they provide no electoral signal. However, high-risk assets do, in every election. Moreover, these effects appear strong. The situational economic variables of income and high-risk assets are measured with the same metric (0-1); a comparison of their coefficients shows that the high-risk variable always has a magnitude at least twice that of income. The more the French voter owns, in terms of profit-generating holdings, the more likely they are to vote right. Impressively, that effect persists, even after imposition of heavy controls on other social variables. Clearly, there appears to be an *effet patrimoine*, in the phrase of an early French scholar (Capdevielle et al, 1981).<sup>3</sup>

Telling as they may be, the social cleavage variables are not the whole story. The other major long-term force shaping French political behavior is partisanship. Here there is controversy. Some researchers view this social-psychological

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<sup>3</sup>In an early investigation, on the 1978 French legislative elections, Capdevielle and his colleagues (1981) explored such an effect. They showed, in simple cross-tabulations, a relationship between financial investments (savings, stocks) and vote declaration for the right. Later, Boy and Mayer (1997, 118-123), followed up this work, adding residential ownership to the mix. In a bivariate way, they relate an additive index (0-4) of *patrimoine* to vote. These measures of patrimony are not the same as ours, for they exclude, most notably, property investments; further, they are one-dimensional, rather than two. Nevertheless, the basic empirical findings they reveal encourage us to pursue the theory and measurement issues developed here, in the context of the broader economic voting paradigm.

variable as “party identification,” operating in the tradition of the Michigan model (Converse and Pierce, 1986; Pierce, 1995). Others define this key variable as left-right “ideological identification” (Haegel, 1993; Fleury and Lewis-Beck, 1993). A middling group stresses both types of identification, saying that each are important, depending in part on institutional conditions (Lewis-Beck and Charlson, 2002; Evans, 2002). A difficulty with including both in a single vote equation is that the model falls prey to “overcontrolling,” since acting together these anchors tend to drive down the true effects of other structural variables, even to the point of insignificance. In particular, ideology is famously accused of “controlling away” the effects of issues, since it encompasses (or is at least correlated with) many contemporary issues, perhaps acting as a “superissue” itself (Lewis-Beck, 1993, 8-9; Inglehart, 1984, 36-37).

Cognizant of this potential for overcontrol, we proceed cautiously, first looking at the potential impact of wealth on these partisanship measures, treated as dependent variables in their own right. This allows for the possibility of wealth effects flowing indirectly, on their way to the vote, as well as directly. In Table 6, we relate the foregoing social cleavage variables, including wealth, to ideology and party, respectively, for each election. A pattern similar to that of Table 5 emerges. Low-risk asset holding is never significant, while high-risk asset holding always is. Further, income effects are mild, significant for only two of six equations. In contrast, high-risk assets exercise a relatively strong impact on partisanship; that impact is always statistically significant and substantively larger (usually considerably so). Further, its effects, on party or on ideology, are roughly equivalent, i.e., the high-risk assets coefficient on party identification and ideology is the same (1995) or nearly so (1988, 2002). In sum, there exists a case for indirect effects from wealth to the vote, via either partisan measure.

[TABLE 6 ABOUT HERE]

These considerations take us to our main analytic question: the direct impact of wealth on the vote, under conditions of strong statistical control from both measures of partisanship. The results appear in Table 7. We go forward step-by-step, in order to expose what happens under increasing levels of control. Further, for parsimony and clarity, we do not present a myriad of other SES control variables (see tables 3 and 5 for the list; complete results are available upon request). Observe column 1, Table 7, which simply compares income to wealth, in terms of impact on the vote. The pattern is consistent. Low-risk assets have null effects and income has weak effects. High-risk assets have

statistically significant, and substantively promising, effects. This basic conclusion continues, in most cases, once ideology, then party, then both ideology and party, are introduced as independent variables. Examine column 4, Table 7, where the controls are full strength. The models captures over half the explained variance, with party identification having more leverage than ideological identification (see their respective coefficients), as would be expected in first-round presidential voting (Lewis-Beck and Chlarson, 2002, 501-506). And, high-risk wealth has about twice the impact of income, judged by comparison of coefficients, e.g., the clearest example is 1988 where the income coefficient = .44, the high-risk coefficient = .98.

[TABLE 7 ABOUT HERE]

We observed previously that there exists a case for indirect effects from wealth to vote. Table 8 provides a summary of vote effects, direct and indirect, from two sources, income and patrimony.<sup>4</sup> Look first at Table 8A, where the impact of an income change is compared to a comparable high-risk assets change, with respect to the shift in the probability of voting right. Income exercises a direct effect on ideology and party, i.e., in 1988 it increases the probability of holding a right-wing ideological and party identification by 16 percent. But, income has no direct effect on the vote, meaning at best it can operate only indirectly. High-risk wealth, by way of contrast, exercises a direct effect on ideology, party, and vote. Again take the 1988 example. It shifts the probability of a right-wing ideology or party about equally, 18 percent and 21 percent, respectively. Further, it shifts the probability of a right vote by 10 percent. In Table 8B, the total effects (i.e., indirect effects plus direct effects) of income and high-risk wealth are assessed.<sup>5</sup> We observe that the total effects of income are weak, but those of high-risk wealth are not.

[TABLE 8 ABOUT HERE]

Specifically, when the high-risk wealth variable changes from its lowest value (no such assets) to its highest value (three such assets), the average shift in the

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<sup>4</sup>In order to simplify the estimation of indirect effects, we used dichotomous versions of party identification and ideology (see the appendix). Using continuous versions produce nearly identical results for our key variables. These additional results are available upon request.

<sup>5</sup>It is worth recalling that the notion of total effects (i.e., direct effects plus indirect effects) derives from the path analysis approach, and rests on the traditional recursive modeling assumption of one-way causality and uncorrelated errors across equations. For a current assessment of the technique, within the structural equation framework, see Kaplan (2000).

probability of a right vote is .19 (with a range of .11 to .25). How strong is this effect? In an absolute sense, it is clearly not small. Further, in a relative sense, it appears rather large and greater than a comparable change in the retrospective sociotropic judgment on the economy, at least as we are able to observe them in other analyses.<sup>6</sup>

Overall, the results suggest that wealth accumulation (or depletion) has the potential to become an important electoral issue in France and elsewhere. Nicolas Sarkozy’s emphasis on making France “a nation of owners” in his bid for the French presidency in 2007 seems indicative of this trend. The possible link between the emergence of the right as the new partisan majority in the French mass electorate, and the changes in the size and the nature of households’ wealth in this country represents another question worth exploring (Bélanger and Lewis-Beck 2007).

## 7 Conclusion

The dominant economic voting paradigm views the economy as a valence issue, with voters rewarding or punishing the incumbent accordingly. The view of the

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<sup>6</sup>Comparing the impact of patrimonial and traditional economic voting is complex and involved many opportunities and difficulties. Consider the classic “funnel of causality” explanation of political behavior from *The American Voter* (Campbell et al. 1960, 24-32). Patrimony would be far back in the causal chain, along with socio-demographic variables. As such, it has the opportunity to exercise indirect as well as direct effects on the vote. In contrast, sociotropic retrospective economic evaluations represent issues near the tip of the funnel, so exercising an immediate direct impact. Besides its different location in the causal structure, the impact of patrimony on the votes rests on a different decision-making process. Patrimony generates spatial judgments favorable to right-wing parties. Sociotropic perceptions lead to reward-punishment votes that are contextual, in terms of governance. The impact of both variables comes together when a right-wing prime minister holds office at the time of a presidential election (1988 and 1995), but separates when a left-wing PM is in charge (2002). Relatedly, one may argue that patrimony helps in predicting the general orientation (left or right) of the vote, whereas economic perceptions merely predict a vote for or against the ruling coalition. The data available to address all these issues are scarce. The FNES in 1988 and 2002 do not contain the usual battery of valence economic perception items – sociotropic and egotropic, prospective and retrospective – in common use elsewhere. Nevertheless, results from the only FNES survey (1995) including retrospective judgments about the economy (better, same, or worse) are reassuring. For instance, including it in the “heavy variables” model leaves the coefficient for the high-risk variable nearly identical (.63 compared to .65, see Table 5; however, the coefficient for the sociotropic variable is lower, at .40). Though no more than illustrative, it suggests that total effects from the patrimony variable would exceed that from the sociotropic variable (given that the sociotropic variable would have only direct effects, while the patrimony variable would have indirect as well as direct effects). In general, the studies of economic voting from surveys other than the FNES (Lewis-Beck, 1983; 1988; 1996; Lewis-Beck and Nadeau, 2000) report effects for sociotropic judgments on presidential voting that appear lower than the effects of wealth reported in Table 8. We conclude from the preceding remarks that the impact of high-risk wealth on the vote is robust and that there are good reasons to believe that it is (at least) comparable to that of traditional economic voting.

economy as a positional issue, with voters favoring different policies and parties, regardless of incumbency, has been downplayed. Here we bring back an old argument, descended from Marx, that location within the means of production has political consequences. Traditionally, this has been examined in terms of occupational status or, more recently, household income. Here we focus on another measure, which we believe theoretically more potent – patrimony. How much does the voter own? How do those assets differ? We classify wealth into two basic kinds: high-risk (i.e., business, rentals, stocks) and low-risk (savings, homes). Those with more high-risk assets, we argue, are more likely to favor policies that will give them a better return on their business investments. Since such policies are commonly associated with parties on the right, they will tend to vote right.

To test the patrimony hypothesis, we examined the impact of wealth on voters in French presidential elections (1988, 1995, 2002). After a variety of experiments, and under the imposition of strong statistical controls, we are able to conclude that the “patrimonial effect” is strong, stronger than that from other measures of economic location – class and income. While these results appear robust, at least for the French case, they do represent the analysis of a single case. France has served as an important laboratory for economic voting work, but it is far from the only one. The difficulty, in extending the research elsewhere, is the paucity of national surveys with the necessary items on voter wealth. Fortunately, we are currently collecting such a data-set on the United States. Its analysis will be valuable, in that it is perhaps the pivotal case in the economic voting literature. Certainly, the dimension of patrimonial economic voting deserves further study in other democratic settings.<sup>7</sup> Wealth and risk may well become part of the electoral vocabulary in modern democracies.

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<sup>7</sup>A caveat of the present study is that wealth is not measured in terms of the amount of assets owned by households. One may conjecture that such a measure would have produced even stronger results. Also, more detailed batteries of wealth items could be imagined which would produce even stronger effects for this kind of variable. For instance, adding a fourth item (only available for the 1988 survey)– owning shares from privatized industries – in the high-risk battery brings the coefficient for this variable in the “overcontrol” equation from .98 to 1.23, increasing its total impact on the vote from 25 to 30 percentage points (see Table 7A, column 4 and Table 8B, first row). All these remarks reinforce the importance of paying more attention to the impact of wealth on political preferences in future election studies.

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## 8 Appendix 1

### 8.1 Sources

Data come from three national surveys performed under the supervision of the CEVIPOF (Centre d'études de la vie politique française) in 1988, 1995 and 2002 (Cautrès 2002). Data are available at the following website: <http://cdsp.sciences-po.fr/>

### 8.2 Variables

*Presidential vote* = 1 if respondent supports a right-wing candidate in the first-round of the presidential election in 1988, 1995 and 2002, 0 otherwise.

*Party identification* = 1 if respondent identifies with a right-wing party, 0 otherwise.

*Ideology* = 1 if respondent locates on points 5, 6, or 7 on a left-right scale, 0 otherwise.

*State regulation* = 1, if respondent thinks that the State should not regulate private firms more tightly in times of economic difficulties, 0 otherwise.

*Socialism, nationalizations, stock market, profits, privatizations* = 1 if respondent expresses negative views about the first two terms and positive views about the last three, 0 otherwise.

*Savings account* = 1 if respondent owns a saving account, 0 otherwise.

*House/apartment* = 1 if respondent owns his or her house/apartment, 0 otherwise.

*Country House* = 1 if respondent owns a country house, 0 otherwise.

*A business, farm, or piece of land* = 1 if respondent owns a business, a farm or a piece of land, 0 otherwise.

*Rental properties* = 1 if respondent owns a rental property, 0 otherwise.

*Stocks* = 1 if respondent owns stocks, 0 otherwise.

*Low-risk scale* = Average of Saving accounts, House/apartment and Country House.

*High-risk scale* = Average of Business, farm, or piece of land, Rental properties and Stocks.

*Age* = Age rescaled from 0 to 1.

*Gender* = 1 if male, 0 if female.

*Education* = Level of education attained, rescaled from 0 to 1.

*Income* = Household total income, rescaled from 0 to 1.

*Professionals* = 1 if senior manager or professional, 0 otherwise.

*White collars* = 1 if white collar, 0 otherwise

*Blue collars* = 1 if blue collar, 0 otherwise

*Private sector* = 1 if working in the private sector, 0 otherwise.

*Religion* = 1 if Catholic and attending church at least once a month, .67 if Catholic and attending church less than once a month, .33 if other religions, 0 otherwise.

Table 1. The structure of wealth accumulation in France (2002)

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Savings account	.64
House/apartment	.64
Country House	.11
A business, farm, or piece of land	.10
Rental properties	.10
Stocks	.26
Scale I: Low-risk assets (savings, home/apartment, country house)	.47
Scale II: High-risk assets (business, rental properties, stocks)	.16

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Entries for specific items represent the proportion of households owning a particular asset. For details about the items and the scales, see the appendix. Source: CEVIPOF 2002.

Table 2. Bivariate correlations among economic variables (1988, 1995, 2002)

	<b>Low-risk</b>	<b>High-risk</b>
<b>A. 1988</b>		
Income	.28	.26
Home	.75	
Savings Account	.62	
Country house	.48	
Business ownership		.64
Rentals		.62
Stocks		.74
<b>B. 1995</b>		
Income	.33	.30
Home	.75	
Savings Account	.63	
Country house	.51	
Business ownership		.63
Rentals		.68
Stocks		.75
<b>C. 2002</b>		
Income	.27	.29
Home	.71	
Savings Account	.67	
Country house	.50	
Business ownership		.60
Rentals		.66
Stocks		.78

For details about the items and the scales, see the appendix. Source: CEVIPOF 1988, 1995, 2002.

Table 3. Social Determinants of Wealth Accumulation (Ordered probit regressions, French Electorate 2002).

	Low-risk		High-risk	
Age	1.69	(.14) **	.34	(.16) *
Gender	.07	(.06)	.16	(.07) **
Education	.11	(.10)	.16	(.11)
Professionals	.02	(.07)	.69	(.08) **
White collars	.12	(.08)	-.07	(.10)
Blue collars	-.10	(.07)	-.31	(.08) **
Private sector	-.09	(.06)	.18	(.07) **
Religion	.23	(.09) **	.25	(.10) **
Income	1.62	(.16) **	1.35	(.18) **
Pseudo R <sup>2</sup>	.08		.11	
N	1 657		1 653	

The dependent variables average the scores on “savings accounts,” “house or apartment,” and “country house” (Low-risk), and the scores on “business,” “rentals,” and “stocks.” (High-risk; see bottom, Table 1). Entries are unstandardized ordered probit coefficients. For details about the data and the variables, see the appendix. \*p ≤ .05; \*\* p ≤ .01; two-tailed tests. Source: CEVIPOF 2002.

Table 4. Economic Policy Attitudes as a Function of Wealth and Income (Logistic regressions, French Electorate 1988, 1995, 2002)

	(1)	(2)	(3)	(4)	(5)
<b>4A. State regulation during crises? (1988, 2002)</b>					
	1988	2002			
	(No)	(No)			
Income	.54 (.28)*	.16 (.23)			
Low-risk assets	.18 (.19)	-.21 (.15)			
High-risk assets	1.23 (.21)**	.74 (.18)**			
<b>4B. Attitudes towards markets and State (1988)</b>					
	Socialism	Stock Market	Nationalizations	Profits	Privatizations
	(Negative)	(Positive)	(Negative)	(Positive)	(Positive)
Income	.34 (.27)	.68 (.30)**	-.10 (.27)	1.27 (.27)**	.70 (.27)**
Low-risk assets	-.19 (.19)	-.06 (.20)	-.13 (.18)	.08 (.18)	.16 (.16)
High-risk assets	.94 (.18)**	.63 (.20)**	1.19 (.19)**	.71 (.19)**	1.00 (.19)**
<b>4C. Attitudes towards markets and State (1995)</b>					
	Nationalizations	Profits	Privatizations		
	(Negative)	(Positive)	(Positive)		
Income	.50 (.25)*	.11 (.24)	.49 (.26)*		
Low-risk assets	-.38 (.16)**	-.09 (.16)	-.04 (.17)		
High-risk assets	.39 (.17)**	.43 (.17)**	.55 (.18)**		
<b>4D. Attitudes towards markets and State (2002)</b>					
	Profits	Privatizations			
	(Positive)	(Positive)			
Income	.52 (.22)**	.59 (.23)**			
Low-risk assets	-.13 (.15)	.02 (.16)			
High-risk assets	.73 (.18)**	.84 (.20)**			

All the dependent variables in this Table are dichotomized and recoded in the right-wing direction (e.g., positive feelings towards profits, privatizations, negative feelings towards socialism, nationalizations, etc). Entries are unstandardized logistic coefficients derived from multivariate models also including the set of socio-economic variables in Table 3. For details about the data and the variables, see the appendix. \*p ≤ .05; \*\* p ≤ .01; two-tailed tests. Source: CEVIPOF 1988, 1995, 2002.

Table 5. The Impact of Wealth on Vote, Controlling on the “Heavy Variables” (Logistic regressions, French presidential Elections, 1988, 1995, 2002)

	1988	1995	2002
	(1)	(2)	(3)
Age	.06 (.23)	-.67 (.23) **	-.01 (.31)
Gender	.15 (.09)	-.01 (.12)	-.01 (.12)
Education	.18 (.17)	-.61 (.18) **	-.59 (.22) **
Professionals	.19 (.14)	.31 (.17) *	.27 (.16) *
White collars	.02 (.13)	.19 (.12) *	-.01 (.18)
Blue collars	-.61 (.14) **	-.20 (.12)	-.24 (.14) *
Private sector	.50 (.09) **	.61 (.20) **	.49 (.13) **
Religion	1.58 (.16) **	1.73 (.15) **	1.78 (.20) **
Income	.64 (.28) **	.35 (.29)	-.41 (.36)
Low-risk assets	.17 (.19)	-.13 (.18)	-.18 (.24)
High-risk assets	1.29 (.19) **	.65 (.19) **	1.10 (.27) **
Pseudo R <sup>2</sup>	.10	.08	.10
N	2 643	2 647	1 365

The dependent variable takes the value of 1 if respondents support a right-wing candidate in the first-round of the presidential election in 1988, 1995 and 2002, and 0 otherwise. Entries are unstandardized logistic regression coefficients. For details about the data and the variables, see the appendix. \* $p \leq .05$ ; \*\*  $p \leq .01$ ; two-tailed tests. Source: CEVIPOF 1988, 1995, 2002.

Table 6. The Impact of Wealth on Ideology and Party Identification (logistic regressions, French presidential elections, 1988, 1995, 2002)

	1988		1995		2002	
	(1) Ideology	(2) Party ID	(3) Ideology	(4) Party ID	(5) Ideology	(6) Party ID
Age	.63 (.23) **	.42 (.22) **	-.01 (.21)	-.20 (.21)	-.70 (.31) **	-.27 (.29)
Gender	.12 (.09)	.22 (.08) **	.02 (.08)	.01 (.08)	.01 (.12)	.11 (.12)
Education	.01 (.17)	.33 (.16) **	-.44 (.17) **	-.25 (.17)	-.73 (.21) **	-.44 (.20) **
Professionals	.22 (.14) *	.17 (.13)	.16 (.15)	.35 (.15) **	.43 (.16) **	.37 (.14) **
White Collars	.19 (.14)	.10 (.12)	.11 (.11)	.14 (.11)	.08 (.18)	-.11 (.17)
Blue Collars	-.32 (.15) **	-.52 (.14) *	-.48 (.12) **	-.31 (.12) **	-.01 (.14)	-.21 (.13)
Public Sector	.39 (.10) **	.49 (.09) **	.37 (.17) **	.32 (.17) *	.18 (.13)	.49 (.12) **
Religion	1.70 (.18) **	1.55 (.15) **	1.38 (.15) **	1.55 (.14) **	1.49 (.20) **	1.75 (.19) **
Income	.88 (.28) **	.74 (.26) **	.12 (.26)	.39 (.25)	-.13 (.34)	-.19 (.32)
Lw-risk assets	-.90 (.19)	.03 (.18)	.03 (.17)	.13 (.17)	-.03 (.24)	-.04 (.22)
Hg-risk assets	.90 (.18) **	.95 (.18) **	.83 (.17) **	.83 (.17) **	.86 (.25) **	1.10 (.25) **
Pseudo R <sup>2</sup>	.07	.08	.07	.08	.06	.09
N	3 087	3 030	3 181	3 151	1 573	1 615

The dependent variables take the value of 1 if respondents identify with a right-wing party or define themselves as rightist on a left-right scale, and 0 otherwise. Entries are unstandardized logistic regression coefficients. For details about the data and the variables, see the appendix. \*p ≤ .05; \*\* p ≤ .01; two-tailed tests. Source: CEVIPOF 1988, 1995, 2002.

Table 7. The Impact of wealth on Presidential Vote, Double-Controlling on Partisanship and Ideology (logistic regressions, French presidential elections, 1988,1995, 2002)

	(1)	(2)	(3)	(4)
<b>7A. 1988</b>				
Income	.64 (.28)**	.21 (.34)	.52 (.41)	.44 (.44)
Low-risk assets	.17 (.19)	.37 (.23)	.17 (.28)	.21 (.29)
High- risk assets	1.29 (.19)**	1.16 (.23)**	.98 (.28)**	.98 (.29)**
Ideology	-	3.81 (.19)**	-	2.30 (.22)**
Party ID	-	-	4.14 (.15)**	3.44 (.16)**
Pseudo R <sup>2</sup>	.08	.34	.49	.53
N	2 647	2 615	2 567	2 544
<b>7B. 1995</b>				
Income	.35 (.29)	.35 (.37)	-.16 (.42)	-.02 (.45)
Low-risk assets	-.17 (.18)	-.37 (.27)	-.08 (.27)	-.09 (.28)
High-risk assets	.65 (.19)**	.24 (.24)	.21 (.28)	.04 (.30)
Ideology	-	3.74 (.16)**	-	2.03 (.19)**
Party ID	-	-	4.30 (.16)**	3.33 (.16)**
Pseudo R <sup>2</sup>	.08	.37	.49	.53
N	2 647	2 615	2 601	2 581
<b>7C. 2002</b>				
Income	-.41 (.36)	-.11 (.44)	-.67 (.52)	-.33 (.55)
Low-risk assets	-.18 (.24)	-.21 (.30)	-.01 (.34)	-.24 (.37)
High-risk assets	1.09 (.27)**	1.16 (.23)**	.80 (.39)**	.72 (.42)*
Ideology	-	3.35 (.21)**	-	2.02 (.25)**
Party ID	-	-	3.77 (.18)**	3.20 (.19)**
Pseudo R <sup>2</sup>	.10	.34	.47	.53
N	1 365	1 333	1 350	1 320

The dependent variable takes the value of 1 if respondents support a right-wing candidate in the first-round of the presidential election in 1988, 1995 and 2002, and 0 otherwise. Entries are unstandardized logistic coefficients derived from multivariate models including the set of socio-economic variables in table 3 and 5. For details about the data and the variables, see the appendix. \*p ≤ .05; \*\* p ≤ .01; two-tailed tests. Source: CEVIPOF 1988, 1995, 2002.

Table 8. The Effect of Income and High-Risk Wealth on the Presidential Vote (French Elections, 1988, 1995, 2002).

**8A. Impact of a unit change in income and high-risk wealth**

	Impact of income			Impact of high-risk wealth		
	<i>Ideology</i>	<i>Party ID</i>	<i>Vote</i>	<i>Ideology</i>	<i>Party ID</i>	<i>Vote</i>
1988	.16	.16	ns	.18	.21	.10
1995	ns	ns	ns	.18	.19	ns
2002	ns	ns	ns	.18	.24	.08

**8B. Total impact (direct and indirects) of income and high-risk wealth on the vote (variation of the mean)**

	Income	High-risk wealth
1988	.09	.25
1995	ns	.11
2002	ns	.21

The original sample means for the dependent variable, the reported vote in the first round of the presidential election, were .48, .55 and .48 for 1988, 1995 and 2002, respectively. The total effect is calculated by estimating the variation of these sample means when the values of the income and high-risk wealth variable are set to their minimum and maximum values. The simulated means for the different years are: .45 and .66 for 2002 (effect of +21), .54 and .65 (effect of +11) and .45 and .70 for 1988 (effect of +25). Adopting the current values of the sample means as the comparative point, leads to similar estimates (+18 for 2002, +9 for 1995 and +22 for 1988). All the simulations were performed with Stata (version 9).