
Research Article

Assets and risk: A neglected dimension of economic voting

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Abstract Economic voting studies have been dominated by the classic reward–punishment paradigm, in which 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, in which 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 assets, high-risk assets 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 and 2002. This assets effect well exceeds other economic effects tested, and does so under strong statistical controls.

French Politics (2011) **9**, 97–119. doi:10.1057/fp.2011.5

Keywords: voting behavior; economic voting; France; presidential elections; assets and risk

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.¹ One may join in with those who celebrate these ‘cumulative efforts at scientific achievement’.² 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.³

In general, the valence approach to the study of economic voting has much to commend it, as a lengthening list of investigations shows.⁴ Instead of a valence issue, however, the economy can also be conceived of as a ‘position’ issue.⁵ That is, there may be a wide range of voter opinion on the preferred economic policies to follow, for example, 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, as 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,⁶ 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’. Although this observation still largely holds today, there is some change on that front.⁷

The perspectives described above – on valence and position – leave out the possibility that the voter’s location in the economic structure itself influences policy preference, and thus party preference.⁸ 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.⁹ More recently, it has also appeared in investigations of the relationship between income and vote.¹⁰

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. This 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, assets. We propose that voters with different types of assets – stocks, houses, land, savings, for example – will favor different policy positions. Specifically, those with high-risk assets will favor parties



advocating free-market economics, whereas those with low-risk assets will favor parties advocating more government protection. Up until now, this dimension, which we call ‘risk-assets’ to better distinguish it from other types of economic voting, has been almost completely ignored.

Below, we develop this idea, first establishing the two types of assets, high-risk and low-risk. We hypothesize that high-risk assets 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 assets. 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 asset item batteries. But for France, another much studied country, the situation is different. 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, and estimate it over the 1988, 1995 and 2002 elections. (The 2007 election data, lamentably, cannot be added.)¹¹ As shall be seen, the regression coefficients clearly demonstrate the strong impact of high-risk assets on presidential vote choice.

Assets: A Description

It is important to define ‘assets’ conceptually. Assets can be defined as the cumulated tangible holdings (without taking debt into account) of a person or a household.¹² In 2004, as an example, the average gross cumulated assets of French households were about US\$190 960, the median about \$121 750. Still, 10 per cent of the richest households in France hold 46 per cent of the available assets.¹³ French households, like elsewhere, own two main types of assets: financial (for example, saving accounts, stocks) and non-financial (for example, houses, apartments, land, rentals). Since the early 1980s, saving accounts form the main source, followed by home and stock ownership. According to the French statistical agency, INSEE, the annual assets growth rate has been declining: 1986–1992 = 5 per cent; 1992–1998 = 2 per cent; 1998–2000 = 1 per cent.¹⁴

The data of Table 1 depict the structure of assets 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 assets in France are savings accounts (64 per cent), homes (64 per cent) and stocks (26 per cent).

Table 1: The structure of asset accumulation in France (2002)

Savings account	0.64
House/apartment	0.64
Country House	0.11
A business, farm or piece of land	0.10
Rental properties	0.10
Stocks	0.26

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).

Theory: Low-Risk and High-Risk Assets

Assuming that people vote as a function of their assets is not unrelated to the idea that income influences the vote. Further, at least in United States studies, income has been shown to relate to presidential vote choice.¹⁵ We do explore these conventional income links in the data at hand. However, we take a step beyond, in examining the broader concept of cumulated individual assets, gathered from both labor income and capital income. Consequently, our argument begins with sorting the nature of assets according to the risk that people are willing to take to increase their holdings.

Assets can be divided into low-risk versus high-risk. Such a distinction assumes that each component is subject to future evaluation by individual actors. Indeed, assets accumulation can be considered to follow a stochastic process according to a specific probability, which differs according to whether it is, for example, fixed saving or stocks. Consequently risk, not uncertainty, is the key element in the assets accumulator's strategy.¹⁶ Theoretically, three basic types of risky decision-making present themselves: risk-averse, risk-neutral and risk-loving.¹⁷ The data we use do not allow us to assess directly the respondent's particular risk-attitude vis-à-vis assets 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.

The theoretical logic behind such an argument is largely inspired from microeconomic studies that have relied on saving and preferences for risk. In France, for example, Arrondel,¹⁸ followed by Arrondel and Calvo Pardo,¹⁹ showed using a large INSEE survey that risk-averse people hold an overall assets portfolio 20 per cent smaller than risk-loving individuals. This is not a surprising result. Risk-averse people adopt non-risky strategies of assets accumulation, ones guaranteeing a certain (lower) rate of return. The role of associate information costs becomes crucial in such strategies.



Our typology of assets distinguishes two sets; risky versus non-risky. They differ crucially in the structure of information costs required. For example, a savings account with a fixed return can be considered non-risky, as it does not generally require extensive and continuous information monitoring. This same reasoning prevails for other kinds of assets, 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 assets accumulation strategies of business investment, rentals and stocks.²⁰ In sum, attitudes toward risk are likely to explain choices for the assets portfolio.

On the basis of the above reasoning, we classified six asset 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'. It is important to realize that these scales are constructed by adding simple 'yes–no' dichotomies. That is, they indicate whether something is or is not owned, not the amount owned. Scale I, then, measures Low-Risk assets, while Scale II measures High-Risk assets.²¹

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 low correlation between household income with each scale. Interestingly, income is only modestly correlated with either scale, regardless of year. This finding reinforces the argument that assets and income are by no means measuring the same thing, even if they are both tapping the personal economic situation. Instead, it is the types of investments a person has – whether the investments are the less risky and fairly common versus the riskier investments that require detailed knowledge and continuous attention – that will influence the policy preferences.

Social Determinants of Assets

Before examining the assets–vote relationship, it is worth validating the assets measures themselves. First, we explore the social structure of assets accumulation. To do this, we begin with a series of multivariate analyses (ordered probit²²), appearing in Table 3. These social structure variables consist of age, gender, education, occupation (professional, white collar, blue collar, private

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

	<i>Low-risk</i>	<i>High-risk</i>
<i>A. 1988</i>		
Income	0.28	0.26
Home	0.75	—
Savings Account	0.62	—
Country house	0.48	—
Business ownership	—	0.64
Rentals	—	0.62
Stocks	—	0.74
<i>B. 1995</i>		
Income	0.33	0.30
Home	0.75	—
Savings Account	0.63	—
Country house	0.51	—
Business ownership	—	0.63
Rentals	—	0.68
Stocks	—	0.75
<i>C. 2002</i>		
Income	0.27	0.29
Home	0.71	—
Savings Account	0.67	—
Country house	0.50	—
Business ownership	—	0.60
Rentals	—	0.66
Stocks	—	0.78

For details about the items and the scales, see the Appendix.

Source: CEVIPOF (1988, 1995, 2002).

sector), religion and income. (The measures themselves appear in the Appendix.) Two results stand out. For one, age and income emerge as key determinants of assets accumulation, regardless of the level of risk. Nevertheless, the impact of these variables (particularly age) appears relatively less important for High-Risk assets 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 assets accumulation.²³ Thus, they offer reassuring indications about the quality of the asset indicators used in this study. (Note that the low fit statistics for the equations are also consistent with the results of previous studies, and suggest the value of exploring the attitudinal components of assets accumulation, which we do below.).



Table 3: Social determinants of asset accumulation (ordered probit regressions, French electorate 2002)

	<i>Low-risk</i>	<i>High-risk</i>
Age	1.69 (0.14)**	0.34 (0.16)*
Gender	0.07 (0.06)	0.16 (0.07)**
Education	0.11 (0.10)	0.16 (0.11)
Professionals	0.02 (0.07)	0.69 (0.08)**
White collars	0.12 (0.08)	-0.07 (0.10)
Blue collars	-0.10 (0.07)	-0.31 (0.08)**
Private sector	-0.09 (0.06)	0.18 (0.07)**
Religion	0.23 (0.09)**	0.25 (0.10)**
Income	1.62 (0.16)**	1.35 (0.18)**
Pseudo- R^2	0.08	0.11
N	1657	1653

* $P \leq 0.05$; ** $P \leq 0.01$; two-tailed tests.

The dependent variables averages 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.

Source: CEVIPOF (2002).

Assets and Political Preferences

Why would those with more assets tend to favor right parties? Right-wing governments are more inclined to decrease taxation and deregulate labor and financial markets.²⁴ They tend to favor free-market solutions over state intervention, which squares with the preferences of right-wing voters.²⁵ 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.

First, these national election studies ask respondents to take a position on a series of political economy issues, that is, state regulation, social security, unions, socialism, trade, nationalization, profits and privatization. (Measurement details appear at the bottom of Table 4.) 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 assets and income variables (plus a set of socio-economic controls, as in Table 3). In Table 4, the logistic coefficients of these independent variables are

Table 4: Economic policy attitudes as a function of assets and income (logistic regressions, French electorate 1988, 1995, 2002)

	(1)	(2)	(3)	(4)	(5)
<i>A. State regulation during crises? (1988, 2002)</i>					
	1988 (No)	2002 (No)			
Income	0.54 (0.28)*	0.16 (0.23)	—	—	—
Low-risk assets	0.18 (0.19)	-0.21 (0.15)	—	—	—
High-risk assets	1.23 (0.21)**	0.74 (0.18)**	—	—	—
	<i>Socialism</i> (Negative)	<i>Stock Market</i> (Positive)	<i>Nationalizations</i> (Negative)	<i>Profits</i> (Positive)	<i>Privatizations</i> (Positive)
<i>B. Attitudes toward markets and State (1988)</i>					
Income	0.34 (0.27)	0.68 (0.30)**	-0.10 (0.27)	1.27 (0.27)**	0.70 (0.27)**
Low-risk assets	-0.19 (0.19)	-0.06 (0.20)	-0.13 (0.18)	0.08 (0.18)	0.16 (0.16)
High-risk assets	0.94 (0.18)**	0.63 (0.20)**	1.19 (0.19)**	0.71 (0.19)**	1.00 (0.19)**
	<i>Nationalizations</i> (Negative)		<i>Profits</i> (Positive)		<i>Privatizations</i> (Positive)
<i>C. Attitudes toward markets and State (1995)</i>					
Income	0.50 (0.25)*		0.11 (0.24)		0.49 (0.26)*
Low-risk assets	-0.38 (0.16)**		-0.09 (0.16)		-0.04 (0.17)
High-risk assets	0.39 (0.17)**		0.43 (0.17)**		0.55 (0.18)**
			<i>Profits</i> (Positive)		<i>Privatizations</i> (Positive)
<i>D. Attitudes toward markets and State (2002)</i>					
Income		0.52 (0.22)**			0.59 (0.23)**
Low-risk assets		-0.13 (0.15)			0.02 (0.16)
High-risk assets		0.73 (0.18)**			0.84 (0.20)**

* $P \leq 0.05$; ** $P \leq 0.01$; two-tailed tests.

All the dependent variables in this table are dichotomized and recoded in the right-wing direction (for example, positive feelings toward profits, privatizations, negative feelings toward socialism, nationalizations and so on). 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.

Source: CEVIPOF (1988, 1995, 2002).

reported, and can be compared. For example, High-Risk voters are much more likely to oppose state regulation than Low-Risk voters (see panel A of Table 4). 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 panel B of Table 4). While these attitudes are most fully documented in 1988,



they repeat themselves in the available data from 1995 and 2002 (see, respectively, panels C and D of Tables 4).

What is more important for explaining a voter's position on these economic policy issues – income or assets? Clearly, assets dominate. All 12 of the high-risk assets coefficients are in the expected direction, and are statistically significant, compared to only 8 for the income variable. Further, the magnitude of the income coefficient is lower (9 out of 12 times) than the high-risk coefficient, with statistical comparison of effect strength made possible because the variables are scaled to the same metric. As well, the superior strength of high-risk assets over income cannot be attributed to a fluke of collinearity induced by the multivariate model specification. For evidence, examine the average bivariate correlations of the high-risk assets and income variables with the 12 policy attitudes of Table 4; for high-risk assets $r = 0.16$, for income $r = 0.08$. Overall, it is high-risk assets that make the difference. (The low-risk assets coefficient, by way of contrast, is significant only once, and that time in the wrong direction, suggesting someone actually less likely to hold the pro-right attitude).

Clearly, assets influence economic policy preferences among the French electorate. We have made the inference that these links from assets to policy preferences pass through to party choice, with the pro-marketers favoring right parties, the protectionists favoring left parties. But this argument is open to challenge, on the particularly French ground that the dominant, 'Gaullist' right is not neo-liberal. Rather, the argument goes, it is *dirigiste* in its economic policies, as is the left, implying pro-market voters could not meaningfully choose between the right and the left. Before testing this 'Gaullist objection', relevant critical literature merits consideration. First, there is the contention that Gaullist voters (the RPR) do not distinguish themselves sociologically or ideologically from other main right tendencies, such as the UDF. As Lancelot concludes, the Gaullists are simply part of the general 'conservative electorate'.²⁶ Later, Haegel and Sauger refine the point, declaring that 'it is difficult to distinguish two electorates within the moderate right'.²⁷ In addition to the notion that the Gaullists have essentially the same moderate right clientele, they appear to have had the same neo-liberal economic policies, at least since the early 1980s. Beaudouin, in his outstanding essay, shows that the RPR, beginning in 1979, moved to embrace the 'great mythology of neo-liberalism that seems to have spread itself throughout Western societies'.²⁸ As if to underline this point, Denord writes of how 'the French right has become liberal'.²⁹

Of course, these commentaries may not withstand rigorous statistical challenge. If indeed, the Gaullist objection holds sway, then the asset variables should fail to impact on party choice. Put another way, the chance of a right party preference would be unaffected by a voter's assets portfolio. Is this

demonstrable? To answer, we regress party identification (right or not) on our asset variables, in the context of a fully specified model. These results are the logistic estimates of Table 5, on a pool of the three election surveys – 1988, 1995 and 2002. In column 1, party identification stands as a function of low-risk and high-risk assets, plus an extensive series of control variables (on age, gender, education, religion, income, class, issues and election year dummies. For measurement details, see the Appendix).

The findings match the expectations of Table 4. Low-risk assets have no significant impact on party identification. Income manages a significant impact, as does high-risk assets. Moreover, the impact of high-risk assets is about one-and-one-half times as large as that of income (for example, $0.95/0.64 = 1.48$; see column 1). Thus, voters with holdings in business, rentals or stocks are unambiguous supporters of parties on the right. Put another way, we observe that Gaullism, however it may be operating in terms of *dirigisme*, does not serve to blunt the impact of pro-market attitudes on party preferences.

Table 5: The impact of assets on party identification, ideology and presidential vote (logistic regressions, French presidential elections, 1988, 1995, 2002)

	<i>Party identification</i>	<i>Ideology</i>	<i>First-round vote</i>	<i>Second-round vote</i>
Age	-0.21 (0.14)	-0.33* (0.14)	-0.56** (0.22)	-0.70** (0.24)
Gender	0.08 (0.06)	0.00 (0.06)	-0.00 (0.09)	-0.33** (0.10)
Education	0.40** (0.10)	0.14 (0.10)	-1.4 (0.16)	-0.14 (0.17)
Religion	1.18** (0.10)	1.13** (0.10)	0.50** (0.14)	0.81** (0.16)
Income	0.64** (0.16)	0.64** (0.16)	0.61* (0.25)	0.19 (0.27)
Professionals	0.25** (0.07)	0.17* (0.07)	0.23* (0.12)	0.17 (0.13)
White collars	-0.04 (0.07)	-0.02 (0.07)	0.09 (0.11)	-0.04 (0.12)
Blue collars	-0.45** (0.07)	-0.52** (0.07)	-0.06 (0.11)	-0.17 (0.12)
Private sector	0.37** (0.06)	0.34** (0.06)	0.24** (0.09)	0.10 (0.10)
Low-risk assets	-0.03 (0.11)	-0.13 (0.11)	-0.21 (0.17)	0.04 (0.19)
High-risk assets	0.95** (0.12)	0.80** (0.11)	0.52** (0.18)	0.85** (0.20)
Issues index	5.05** (0.15)	5.18** (0.17)	3.16** (0.21)	2.38** (0.24)
Ideology	—	—	1.45** (0.11)	2.28** (0.11)
Party identification	—	—	3.05** (0.10)	3.29** (0.10)
Pseudo- R^2	0.20	0.17	0.53	0.61
N	8798	9026	7197	7061

* $P \leq 0.05$; ** $P \leq 0.01$; two-tailed tests.

The dependent variable takes the value of 1 if respondents identify with a right-wing party (column 1), define themselves as rightist (column 2) or support a right-wing candidate in the first round (column 3) or the second round (column 4) of the presidential election in 1988, 1995 and 2002, and 0 otherwise. Entries are unstandardized logistic regression coefficients. For details about the data and variables, see the Appendix. Dummy variables and their coefficients for 1995 and 2002 not shown.

Source: CEVIPOF (1988, 1995, 2002).



These pro-market voters exercise their preferences by continuing to support right parties. (The second column of Table 5 reinforces these conclusions, estimating the same equation, but with the dependent variable of right *ideology*, instead of right *party*. Again, the impact of assets is sharp and clear, with a significant coefficient = 0.80).

Assets and the Vote

Direct assessment of the effect of assets on vote choice is now in order. To precisely estimate the risk-assets vote, we need to embed our assets measures in a properly specified model, estimated across these French national election surveys. Although 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 and short-term forces at work.³⁰ That core model reads thusly,

$$\text{Vote} = f(\text{social cleavages, partisanship, issues}) \quad (1)$$

Key social cleavage measures are class and religion, ‘the heavy variables’, *les variables lourdes* as they are called. These factors, alongside a standard demographic battery (age, gender, education, income), ‘continue to sketch the contours of the French electoral landscape’.³¹ The first essential, then, is to show that assets sustain statistically significant, and substantive important, effects in the face of this array of socio-demographic controls.

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 variable as ‘party identification’, operating in the tradition of the Michigan model.³² Others define this key variable as left-right ‘ideological identification’.³³ A middling group stresses both types of identification, saying that each is important, depending in part on institutional conditions.³⁴ A difficulty with including both in a single vote equation is that the model falls prey to ‘overcontrolling’, because 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, as it encompasses (or is at least correlated with) many contemporary issues, perhaps acting as a ‘superissue’ itself.³⁵ Nevertheless, in the interest of firmly establishing the impact of assets, we go ahead with the ‘double-control’ on party identification and ideological identification. In the face of such strong controlling, a statistically significant signal from the asset variables would be noteworthy.

In addition to consideration of long-term forces, there is the short-term force of particular issues. Different issues, at different times, have stood high on the agenda of the French voter.³⁶ Given the comparative, pooled nature of our research design, we must identify issues in the different elections under study. We located as many issues as possible, built an ‘issue index’ from these issues and introduced this combined issue index as a control. (The seven issues are immigration, the national economy, the death penalty, the environment, French national identification, homosexuality and private schools. The wording of these items appears in the Appendix. The details on construction of this issue index appear in the footnote).³⁷

The logistic regression estimates of these vote equations appear in Table 5 (columns 3 and 4), for the first and second rounds of the presidential contest.³⁸ Note first, that the full model specification yields high fit statistics, despite the pooled nature of the data. The pseudo- R^2 exceeds 0.50 for the first round, and for the second round actually reaches 0.60. Moreover, the general theory of the French presidential vote, represented in equation (1), receives strong support. The long-term and short-term forces operate in the hypothesized ways. Social cleavage variables count, especially the ‘heavy ones’ of religion and class (see professional and private sector coefficients, first round). In addition, income manages a statistically significant effect, at least in the first round. With respect to partisanship, both ideology and party strongly influence the vote, as expected. Finally, issues easily exercise statistically significant independent effects, especially in the first round of voting.

Given the comprehensiveness and scope of the general model, one might suppose that the asset variables do not have room left to move. And such seems to be the case, at least for low-risk assets, which fail to register statistical significance in either the first or the second rounds. On the one hand, this is consistent with its null findings from earlier Table 4, where they failed to make a mark on the voter’s economic policy attitudes. On the other hand, it might seem anomalous that something as important individually as home ownership would actually fail to record at the French ballot box.³⁹ Its absence in these data is nevertheless a clear statistical finding, a fact supported in both rounds of voting. ‘Why’ this absence of effect? We believe this null result comes from the ambiguous, ‘populist’ nature of the French assets of a home and a bank account. To not have them, of course, is a source of worry, but to possess them is regarded as something of a ‘social right’ (*droit social*). Nearly everyone, in fact, has them, or is ‘owed’ them; this leaves open very little political space for other points of view. Both voters and parties, regardless of stripe, accept the value and necessity of this ‘*bourgeois*’ consensus.

In the face of the statistical controls imposed thus far, the assets effects have stood secure, at least with respect to high-risk assets. However, a specification



concern may still be raised, in part due to the pooled nature of the data. It may be that the substantive variables have a different impact, depending on the election year. For example, high-risk assets might be stronger (or weaker) in 1995. It may also be the case that other substantive variables in the model, for example income, have a differential impact from year to year. Thus, there is the possibility of parameter estimation bias, because of omitted variables. A straightforward solution comes from entering interaction terms into the model, that is, interacting each substantive variable with a year dummy, as is done in Table 6.

In Table 6, these interaction terms, 104 in all, are added to the models of Table 5. Several things are worth noting. First, the goodness-of-fit for the models, as measured by the pseudo- R^2 , are essentially unchanged. These interaction terms taken together do not manage, then, to add empirically to the models' accountability. Second, few of the interactions are statistically significant. Indeed, only 17 out of the 104 are significant (0.05, two-tail), which is about one in six. Third, for those variables where there are three or more significant interactions – religion, income, party identification – the suggestion is that these variables have had a declining impact over time, for example, the effect of religion appear less in 2002 than in other years (see the -0.79 coefficient for the 2002 first round vote). Fourth, and most importantly for our purposes, the interactions for the high-risk assets variables never reach significance, and the interactions for the low assets variables reach significance only once. This implies no general trend in assets impact, from one election to the next. Fifth, the main effects coefficients of the high-risk assets variable actually tend to be a bit greater here than in Table 5. (That is, for Table 6 the high assets coefficients, reading across the row, are as follows: 1.03, 0.80, 0.75, 0.96; these magnitudes compare favorably to the row values from Table 5: 0.95, 0.80, 0.52, 0.85). All and all, these interaction tests suggest that the specification of Table 5 is robust. Therefore, we stay with those assets coefficients in the interpretation that follows.

The Relative and Absolute Effects of High-Risk Assets

With these considerations as a framework, we turn to the central question about the role of high-risk assets. This assets measure manifests statistically significant, and substantively promising, effects. On the first round, its impact is close to that of income, according to their comparable regression coefficients (respectively, 0.52 versus 0.61). On the second round, the high-risk impact increases, absolutely and relatively. That is, it remains significant and goes up to 0.85, while the income coefficient drops dramatically (to 0.19) and ceases to be significant.

**Table 6:** Interaction effects from assets on party identification, ideology and presidential vote (1988, 1995, 2002)

	<i>Party ID</i>	<i>Ideology</i>	<i>First-round vote</i>	<i>Second-round vote</i>
<i>Age</i>	0.04 (0.27)	-0.51 (0.27)	-0.19 (0.43)	-0.32 (0.46)
Age ('95)	-0.49 (0.36)	0.30 (0.36)	-0.88 (0.58)	-0.09 (0.61)
Age ('02)	-0.16 (0.36)	0.22 (0.36)	-0.15 (0.54)	-0.80 (0.61)
<i>Gender</i>	0.17 (0.10)	0.05 (0.11)	0.01 (0.17)	-0.43* (0.18)
Gender ('95)	-0.15 (0.14)	-0.01 (0.14)	0.22 (0.22)	0.19 (0.24)
Gender ('02)	-0.11 (0.14)	-0.11 (0.14)	-0.21 (0.21)	0.15 (0.24)
<i>Education</i>	0.54** (0.19)	0.32 (0.19)	0.03 (0.32)	-0.70* (0.33)
Education ('95)	-0.02 (0.26)	-0.10 (0.26)	0.01 (0.43)	0.31 (0.45)
Education ('02)	-0.36 (0.25)	-0.35 (0.25)	-0.45 (0.40)	1.10* (0.45)
<i>Religion</i>	1.98** (0.22)	1.73** (0.23)	0.96** (0.32)	0.86* (0.36)
Religion ('95)	-1.05** (0.27)	-0.90** (0.28)	-0.23 (0.40)	-0.01 (0.45)
Religion ('02)	-0.95** (0.26)	-0.65* (0.27)	-0.79* (0.38)	-0.12 (0.43)
<i>Income</i>	1.47** (0.30)	1.12** (0.30)	1.22** (0.48)	0.81 (0.52)
Income ('95)	-0.96* (0.41)	-0.99** (0.41)	-0.92 (0.68)	-0.21 (0.73)
Income ('02)	-1.31** (0.39)	-0.41 (0.39)	-0.83 (0.61)	-1.25 (0.68)
<i>Professionals</i>	0.05 (0.15)	0.17 (0.15)	0.12 (0.25)	0.02 (0.27)
Professionals ('95)	0.33 (0.21)	-0.04 (0.21)	-0.07 (0.35)	0.20 (0.37)
Professionals ('02)	0.28 (0.19)	0.03 (0.19)	0.15 (0.30)	0.01 (0.34)
<i>White collars</i>	-0.07 (0.15)	0.11 (0.15)	-0.14 (0.24)	-0.54* (0.26)
White collars ('95)	0.06 (0.20)	-0.15 (0.20)	0.23 (0.32)	0.48 (0.34)
White collars ('02)	-0.11 (0.19)	-0.29 (0.19)	0.19 (0.29)	0.92** (0.32)
<i>Blue collars</i>	-0.65** (0.16)	-0.41* (0.16)	-0.46 (0.25)	-0.69* (0.28)
Blue collars ('95)	0.10 (0.21)	-0.36 (0.22)	0.35 (0.34)	0.38 (0.37)
Blue collars ('02)	0.43* (0.19)	0.02 (0.20)	0.53 (0.30)	0.71* (0.33)
<i>Private sector</i>	0.50** (0.11)	0.35** (0.11)	0.14 (0.17)	0.04 (0.18)
Private sector ('95)	-0.17 (0.15)	0.05 (0.15)	0.26 (0.23)	0.41 (0.25)
Private sector ('02)	-0.19 (0.14)	-0.05 (0.15)	0.08 (0.22)	-0.21 (0.24)
<i>Low-risk assets</i>	-0.17 (0.21)	-0.14 (0.21)	0.04 (0.33)	0.64 (0.36)
Low-risk assets ('95)	0.22 (0.28)	0.04 (0.28)	-0.47 (0.45)	-0.68 (0.49)
Low-risk assets ('02)	0.17 (0.27)	0.01 (0.27)	-0.22 (0.42)	-0.94* (0.47)
<i>High-risk assets</i>	1.03** (0.21)	0.80** (0.21)	0.75* (0.33)	0.96** (0.36)
High-risk assets ('95)	-0.33 (0.28)	-0.05 (0.28)	-0.61 (0.46)	-0.20 (0.48)
High-risk assets ('02)	0.04 (0.29)	0.06 (0.29)	-0.15 (0.46)	-0.34 (0.53)
<i>Issues index</i>	4.70** (0.27)	4.88** (0.30)	3.04** (0.39)	2.10** (0.45)
Issues index ('95)	1.05** (0.39)	0.76 (0.43)	0.67 (0.55)	0.59 (0.61)
Issues index ('02)	0.00 (0.38)	0.19 (0.41)	-0.25 (0.52)	0.31 (0.62)
<i>Ideology</i>	—	—	1.73** (0.22)	2.22** (0.21)
Ideology ('95)	—	—	0.02 (0.30)	-0.06 (0.29)
Ideology ('02)	—	—	-0.47 (0.27)	0.37 (0.29)
<i>Party ID</i>	—	—	3.64** (0.19)	3.59** (0.18)
Party ID ('95)	—	—	-0.53* (0.27)	-0.53* (0.24)
Party ID ('02)	—	—	-1.06** (0.24)	-0.37 (0.26)
Pseudo- R^2	0.20	0.18	0.54	0.61
<i>N</i>	8798	9026	7197	7061

* $P < 0.05$; ** $P < 0.01$; two-tailed tests.

Entries are unstandardized logistic regression coefficient. Dummy variables and their coefficients for 1995 and 2002 not shown.



We can speak more generally about the relative effects of high-risk assets, compared to other economic measures – income, occupation and sector of employment. Direct comparisons of coefficients are meaningful, as these relevant independent variables are measured with the same, 0–1, metric. Consider the first round voting coefficients, ranked in magnitude from strongest to weakest, respectively: income (0.61*), high-risk assets (0.52*), private sector (0.24*), professional (0.23*), low-risk assets (–0.21), white collar (0.09), blue collar (–0.06). (These coefficients, and those in the next sequence, are taken from Table 5; the asterisks indicate statistical significance.) The impact of high-risk assets here is comparable to income, and is double that from the significant occupation variables. Its impact appears still stronger in second-round voting, shown in this ranking: high-risk assets (0.85*), income (0.19), professional (0.17), blue collar (–0.17), private sector (0.10), low-risk assets (0.04), white collar (–0.04). The high-risk assets effect here is the only one of that is statistically significant. These highly favorable direct comparisons with the other rival economic measures underline the relative strength of the risk-assets effect. Clearly, it is a neglected dimension of economic voting, one that merits more attention.

These high-risk assets coefficients record direct effects, in terms of a change in the log odds ratio of the vote-dependent variable, given an assets change score from 0 to 1. But this comparison leaves out two other useful pieces of information. First, these independent variable changes can have indirect, as well as direct, effects. Recall columns 1 and 2, Table 5, show the impact of assets on the partisanship measures of party and ideology. These indirect effects from assets to the vote via either partisan or ideology measures need to be taken into account in considering the overall impact of assets on the vote. Postulation of such a multi-equation system (with the first set of equations represented by columns 1 and 2, Table 5, and the second set of equations by columns 3 and 4, Table 5) permits assessment of total effects.⁴⁰ These total effects for high-risk assets (the sum of the indirect impact of party and ideology plus their direct impact on the vote) are easily calculated using the CLARIFY program.

Second, CLARIFY allows focus on the probability of a right party vote, when the high-risk assets variable changes. Thus far, we have examined change for this variable simply in terms of a shift from 0 to 1. This change goes from one extreme to the other, comparing someone with no high-risk assets (scored 0) to someone with all three high-risk assets (scored 1). But having all three assets represents an extreme score in the French context. Here is the frequency distribution of high-risk assets for these data: 0 high-risk assets = 61 per cent, 1 high-risk assets = 29 per cent, 2 high-risk assets = 9 per cent, 3 high-risk assets = 2 per cent. We see that although many French voters have at least one high-risk asset (29 per cent + 9 per cent + 2 per cent = 40 per cent), few have all three. Therefore, it is useful to examine realistic scenarios, when

Table 7: The effect of high-risk assets on the presidential vote (French elections, 1988, 1995, 2002)

<i>Variation for high-risk assets</i>	<i>First round</i>	<i>Second round</i>
0.33	0.11	0.14
0.50	0.17	0.22
0.67	0.23	0.30
1.00	0.33	0.44

The total impact for High-Risk Assets was calculated by setting all the independent variables of the equations at their mean value except for party identification, ideology and high-risk assets, in order to account for the indirect and direct effects of Assets on the vote. The simulations were performed using the software CLARIFY version 2.1 developed by Tomz, Wittenberg and King (2003).

we wish to calculate the changes in probabilities. In Table 7, four scenarios are provided, representing varying degrees of change.

The first scenario (set value = 0.33) posits a modest change in a voter's assets portfolio, from having no high-risk assets to one high-risk asset. The second scenario (set value = 0.5) still poses a relatively modest change. It is an especially interesting one because it implies the mythical average owner has somewhat more than one asset, a situation close to the US case. In the third scenario (set value = 0.67), the voter unambiguously owns two of these high-risk assets, say stocks and a rental. With the final scenario (set value = 1), the voter has a full assets endowment. Under these scenarios, the vote probability shifts, respectively, from 0.11 to 0.33 for the first round, and from 0.14 to 0.44 for the second round. These probability shifts in the right vote, induced by modest or 'realistic' changes in a voter's assets portfolio, are clearly not small. The middle value of 0.5, for example, induces respective vote probability changes of 0.17 and 0.22.

Overall, the results suggest that assets accumulation (or depletion) can have considerable electoral potency, in France or 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 household assets in this country, represents another question worth exploring.⁴¹

Conclusions

The dominant economic voting paradigm views the economy as a valence issue, with voters rewarding or punishing the incumbent accordingly. The view of the 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 to be theoretically more potent – risk-assets. We classify assets into two basic kinds: high-risk (that is, business, rentals, stocks) and low-risk (for example, 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. As such policies are commonly associated with parties on the right, they will tend to vote right.

To test the risk-assets hypothesis, we examined the impact of assets 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 ‘assets effect’ is strong, stronger than that from certain other socio-economic measures such as income and occupation. Although 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 assets. Fortunately, we are currently collecting such data on other advanced industrial nations. Certainly, the dimension of risk-assets economic voting deserves further study in other democratic settings. Assets and risk may well become part of the standard electoral vocabulary in modern democracies.

Notes

- 1 Duch and Stevenson (2008), Lewis-Beck and Stegmaier (2007), Lewis-Beck and Stegmaier (2008), Nannestad and Paldam (1994), Norpoth (1996).
- 2 Lewis-Beck *et al* (2008).
- 3 The idea of ‘sociotropic economic voting’ was launched by Kinder and Kiewiet (1981).
- 4 See especially Clarke *et al* (2004), and their employment of this perspective in the British case.
- 5 See Stokes (1963) and Stokes and Dilulio (1993) on the original distinction between ‘valence’ and ‘position’ issues.
- 6 Kiewiet (1983, Chapter 2, p. 13).
- 7 A current example comes from the US 2008 presidential election study by Lewis-Beck and Nadeau, who find that voter preferences on progressive tax policy strongly influenced Obama support: Lewis-Beck and Nadeau (2009).
- 8 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.
- 9 Abramson *et al* (2003, pp. 113–115), Cautrès and Heath (1996), Evans and Norris (1997), Flanagan and Zingale (2006, pp. 115–118), Franklin *et al* (1992).
- 10 Bartels (2008), Stonecash (2000).



- 11 Historically, the French National Election Study has been fielded irregularly. However, from 1988, there has reliably been a presidential election survey. Unfortunately, the 2007 survey, although now released for general use, is of relatively little value with respect to the risk-assets economic voting hypothesis, because it has so few relevant items. For a full discussion of this problem, and its explication for the 2007 election, see Foucault *et al* (forthcoming). There are some asset items in French legislative surveys (1978, 1988, 2002), and these are being explored in Nadeau *et al* (2010).
- 12 Lollivier and Verger (1987).
- 13 Piketty (2003), Piketty and Saez (2003).
- 14 Rougerie (2002).
- 15 Bartels (2008), Stonecash (2000).
- 16 Knight (1921).
- 17 Bergman (2004), To (1999).
- 18 Arrondel (2002).
- 19 Arrondel and Pardo (2008).
- 20 Benartzi and Thaler (1995), Dahlback (1991), Huang and Litzenberger (1988).
- 21 A caveat of the present study is that assets are not measured in terms of the quantitative amount owned by households. One may conjecture that such a measure would have produced even stronger results. In addition, more detailed batteries of asset 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 increases the coefficient when estimated on this survey. All these remarks reinforce the importance of paying more attention to the impact of assets on political preferences in future election studies.
- 22 See Kennedy (2008).
- 23 Arrondel *et al* (2004), Cordier *et al* (2006), Lavigne *et al* (2001).
- 24 Alesina and Rosenthal (1995), Boix (2000).
- 25 McClosky and Zaller (1984).
- 26 Lancelot (1981).
- 27 Haegel and Sauger (2007).
- 28 Beaudouin (1990).
- 29 Denord (2007). See also Denord (2008).
- 30 Boy and Mayer (1993), Lewis-Beck (1993, pp. 167–186), Pierce (1995).
- 31 Boy and Mayer (1993, p. 174), Cautrès (2004).
- 32 Converse and Pierce (1986), Pierce (1995).
- 33 Haegel (1993), Fleury and Lewis-Beck (1993).
- 34 Lewis-Beck and Chlarson (2002), Evans (2004).
- 35 Lewis-Beck (1993), Inglehart (1984).
- 36 Mayer and Tiberj (2004), Sauger (2009), Whitten (2004).
- 37 The strategy, one of linear transformation, allows the efficient combination of a relatively large number of variables into one index. Our issue Index, I , is built from the following steps, using what amounts to a quasi-instrumental variables approach (see Kennedy, 2008, Chapter 9). Say the vote dependent variable for 1988, V_{88} , is regressed on the seven issues, and a predicted V , call it $V_{88\text{-hat}}$, created. The same is done for V_{95} and V_{02} , to create predicted V variables for those years. Each of these V -hat variables are centered, by subtracting its mean, for example, $V_{88\text{-hat}} - \text{mean } V_{88\text{-hat}} = I_{88}$. The same procedure is followed to create I_{95} and I_{02} . This I score stands as a combined issue index, for assessing the impact of issues in that election year.
- 38 Reported vote is used for 1988 and 1995. Vote intention is used in 2002 to account for the Le Pen candidacy and to balance the sample sizes for the three elections (34, 34 and 32 per cent of the total sample, respectively).



- 39 It has done so in Britain, for example; see Clarke *et al* (2004, Table 4.3, p. 98).
- 40 It is worth recalling that the notion of total effects (that is, 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).
- 41 Bélanger and Lewis-Beck (2007).

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Appendix

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 (see Cautrès, 2004). Data are available at the following website: <http://cdsp.sciences-po.fr/>.

Variables

Presidential vote = 1, if respondent supports a right-wing candidate in the presidential election, 0 otherwise (vote reported for 1988 and 1995, vote intention in 2002 because of the Le Pen candidacy).

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, 0.67 if Catholic and attending church less than once a month, 0.33 if other religions, 0 otherwise.

Immigration = 1, if the respondents strongly agree 'there are too many immigrants in France', 0.67 if somewhat agree, 0.33 if somewhat disagree, 0 if strongly disagree.

Economics = 1, if 'no risk of unemployment' in 1988, 'economy better' in 1995, 'unemployment not a priority' in 2002; 0.5 if 'small risk of unemployment' in 1988, 'economy same' in 1995, 'unemployment not a second or third priority' in 2002; 0 if 'high risk of unemployment' in 1988, 'economy worse' in 1995, 'unemployment first priority' in 2002.

Homosexuality = 1, if respondents 'strongly agree' that homosexuality is morally condemnable, 0.67 if somewhat agree, 0.5 if no opinion, 0.33 if somewhat disagree, 0 if strongly disagree in 1988; 1 if 'strongly disagree' homosexuality is an acceptable way of living one's sexuality, 0.67 if somewhat disagree, 0.5 if no opinion, 0.33 if somewhat agree, 0 if strongly agree, in 1995 and 2002.

French identity = 1, if respondents 'strongly agree' they are proud of being French, 0.67 if somewhat agree, 0.5 if no opinion, 0.33 if somewhat disagree, 0 if strongly disagree, in 1988; 1 if respondents feel French only, 0.5 if they feel more French than European, 0 otherwise in 1995 and 2002.

Death penalty = 1, if respondents 'strongly agree' death penalty should be reinstated, 0.67 if somewhat agree, 0.5 if no opinion, 0.33 if somewhat disagree, 0 if strongly disagree.

Environment = 1, if respondents are willing to support an association for the defense of environment, 0 otherwise in 1988; 1 if environment is graded 8, 9 or 10/10 on a scale of problem importance in 1995, 0 otherwise; 1 if environment is identified as the most or second most important problem in 2002, 0 otherwise.

School = 1, if respondents find 'very serious' the abolition of the free choice between public and private school, 0.67 if somewhat serious, 0.5 if no opinion, 0.33 if not very serious, 0 if not serious at all in 1988; 1 if respondents perceive private school as 'very positive', 0.67 if somewhat positive, 0.5 if no response, 0.33 if somewhat negative, 0 if very negative in 1995 and 2002.