THE PERSISTENCE OF THE ASSET EFFECT

DURING FRENCH PRESIDENTIAL ELECTIONS

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In a pioneering study thirty years ago, Jacques Capdevielle and Élisabeth Dupoirier¹ revealed the existence of an asset effect that made a significant contribution to explaining the electoral behavior of French people during the legislative elections of 1978. The general conclusion of these authors was that the ownership of assets – movable assets and real estate – distinctly increases the tendency of a voter to support a right-leaning party.

The contributions of this study are situated at many levels. Let us turn first to the theoretical level. The authors underscored the importance of taking into account both income and assets to adequately account for the material situation of households. Moving next to a political analysis, the results presented in the book showed that owning a variety of assets exerts an autonomous impact on voting beyond the *significant variables* – class, occupation, income, religion, and ideology – (Nonna Mayer and Pascal Perrineau; Daniel Boy and Nonna Mayer; Bruno Cautrès and Anne Muxel)² that tend to structure the electoral behavior of the French. Finally, this new insight – and this is what makes this work such an academic breakthrough – is remarkable for its prophetic aspect. The amplitude and the diversity of the portfolios of household assets have increased sharply in developed economies over the past few decades, and much research by economists has documented this

^{1.} Jacques Capdevielle, Élisabeth Dupoirier, "L'effet patrimoine", in Jacques Capdevielle, Élisabeth Dupoirier, Gérard Grunberg, Étienne Schweisguth, Colette Ysmal (eds), *France de gauche, vote à droite* (Paris: Presses de Sciences Po, 1981), 169-227.

^{2.} Nonna Mayer, Pascal Perrineau, Les comportements politiques (Paris: Armand Colin, 1992); Daniel Boy, Nonna Mayer, "Que restent-ils des variables lourdes?", in Daniel Boy, Nonna Mayer (eds), L'électeur a ses raisons (Paris: Presses de Sciences Po, 1997), 101-38; Bruno Cautrès, "Old wine in new bottles? New wine in old bottles? Class, religion and vote in the French electorate: the 2002 elections in time perspective", in Michael S. Lewis-Beck (ed.), The French Voter: Before and After the 2002 Elections (Basingstoke: Palgrave Macmillan, 2004), 74-92; Bruno Cautrès, Anne Muxel, Comment les électeurs font-ils leurs choix? (Paris: Presses de Sciences Po, 2009).

trend.¹ The use of indicators allowing for the measurement of this phenomenon and of the evaluation of its effect on political behavior is thus more pertinent than ever.²

Despite its impact, studying the asset effect has recently generated less interest, at least in France. Élisabeth Dupoirier, for example, suggested in a recent study that the asset effect does not significantly contribute to explaining the 2002 vote when we also take into account the occupations of individuals.³ Bruno Cautrès presented the link between wealth and vote cast in this same presidential election without commenting on it.4 In an excellent edited collection on the presidential election of 2007,5 the question of the asset effect was not addressed.6 That there has been a decline in interest in the concept is also perceptible in the reduced attention paid to it in French electoral surveys. While the 1978 study included nine indicators of wealth, the 2007 study included only four, of which only one – share ownership - allows for the measurement of risk-based wealth. This decline in academic interest in the asset effect is all the more paradoxical given that the wealth of French people has increased in varied and increasingly complex forms. However, Viviane Le Hay and Mariette Sineau have revisited Jacques Capdevielle's original approach in a study of the asset effect during the 2007 presidential elections and undertaken a descriptive analysis of political behaviors of the rich and the non-rich by measuring the likelihood of voting for Nicolas Sarkozy based on levels of wealth. This important study confirmed the existence of the asset effect observed by Nadeau, Foucault, and Lewis-Beck⁸ during the legislative elections of 1978, 1988, and 2002 and proposed refining the measurement of wealth by distinguishing between wealth from income and inherited wealth. The results obtained by Le Hay and Sineau confirmed the existence of an asset effect on a range of political attitudes (participation, political orientation, whether or not an individual voted for Sarkozy, and interest in politics). Their approach rested, however, on including wealth as an explanatory variable without proposing a theoretical justification allowing them to explain the link between wealth strategies and voting patterns in the presidential election. By moving beyond the bi-variant analysis of the original 1978 study and by suggesting a new typology of wealth assets, this article proposes to open up a theoretical and empirical debate around pertinent measures of the asset effect and thus to revise the original work on the relationship between the possession of wealth and voting patterns.

^{1.} For the French case, see Thomas Piketty, "Income inequality in France, 1991-1998", *Journal of Political Economy*, 111(5), 2003, 1004-42. For the United States, see Thomas Piketty and Emmanuel Saez, "Income inequality in the United States, 1913-1998", *Quarterly Journal of Economics*, 118(1), 2003, 1-39.

^{2.} For a similar argument for the case of the United States, see Michael S. Lewis-Beck, Richard Nadeau, "Economic voting theory: testing new dimensions", *Electoral Studies*, 30(2), 2011, 288-94 (accessed online 19 September 2010).

^{3.} Élisabeth Dupoirier, "Dynamique de l'espace social et vote", in Bruno Cautrès, Nonna Mayer (eds), *Le nouveau désordre électoral. Les leçons du 21 avril 2002* (Paris: Presses de Sciences Po, 2004), 193.

^{4.} B. Cautrès, "Old wine in new bottles?...", 88-9.

^{5.} B. Cautrès, A. Muxel, Comment les électeurs font-ils leur choix?

^{6.} In their study of electoral sociology from over twenty years ago, G. Michelat and M. Simon established that owning wealth was in some way an implicit function of regular Catholic religious observance, and concluded that "the effect of ownership on voting, by controlling for religious integration, is higher when we look at property investments" (Guy Michelat, Michel Simon, "Déterminations socio-économiques, organisations symboliques et comportement électoral", *Revue française de sociologie*, 26, 1985, 32-69).

^{7.} Viviane Le Hay, Mariette Sineau, "Effet patrimoine': 30 ans après, le retour?", Revue française de science politique, 60(5), 2010, 869-900.

^{8.} Richard Nadeau, Martial Foucault, Michael S. Lewis-Beck, "Patrimonial economic voting: legislative elections in France" West European Politics, 33(6), 2010, 1261-77.

The general goal of this article is to show that the asset effect still constitutes today an important dimension of electoral behavior in France. The use of comparable measures even leads us to believe that this effect, far from being diminished, has perhaps increased in importance over recent French presidential elections. Although our theoretical (risk-based and non-risk-based wealth) and empirical (taking into account the presidential elections of 1988, 1995, 2002, and 2007) approach differs from that adopted by Viviane Le Hay and Mariette Sineau, our results confirm that the asset effect must be recognized as a variable that is still as "significant" in French electoral sociology. It could be expedient, in this context, to position this variable once again at the forefront in future electoral surveys in France and to revisit how it is measured, both theoretically and empirically.

The first part of the article reviews how taking wealth into account fits into the literature focusing on economic voting. The second part presents the evolution of wealth in France. The third proposes a distinction in wealth in terms of investors' aversion to risk. We describe our methodological approach in the fourth part of the article. The fifth part analyzes the effects of wealth on voting for the right in France since the presidential elections of 1988. Finally, the sixth part, dedicated to the presidential elections of 2007, empirically demonstrates the importance of the asset effect, despite reduced efforts to measure wealth in French electoral surveys.

The economic vote

ince the seminal work of Downs and Key in the 1950s and 1960s,¹ the economic vote has seen many refinements and extensions within two "families" of models: the prospective voting model and the retrospective voting model. The first, defended by Downs, posits that the citizen-voter "sees elections uniquely as a way to select the most advantageous government for himself. Each citizen evaluates the utility he believes each party would bring him if it were in power in the future. [...] He votes for the party that guarantees him the highest level of utility." Here, voting thus clearly has a long-term dimension since voters vote for the candidate supposedly assuring them the maximum utility in the future. Inversely, the retrospective model developed by V. O. Key takes the opposite track from the Downs model by trying to find an alternative to the high costs of information that voters would have to accept in order to evaluate the future benefits of an elected government. This is why Key emphasizes voters' evaluations of the past record of officials, by clarifying that "voters, in their anger, kick out the worthless ones".³

The original formulation of the paradigm of the economic vote rests on the trade-off between voter sanctions and rewards of the economic policies of governments. A vast number of works have sought to test this hypothesis regarding the influence of general economic conditions on the electoral results of the incumbent candidate. In so doing, two supplementary hypotheses are to be found in the literature: the first seeks to establish whether the voter

^{1.} Vladimer O. Key, *The Responsible Electorate* (New York: Vintage, 1966); Anthony Downs, *An Economic Theory of Democracy* (New York: Harper and Row, 1957).

^{2.} A. Downs, An Economic Theory of Democracy, 138.

^{3.} Vladimer O. Key, Public Opinion and American Democracy (New York: Alfred A. Knopf, 1961).

^{4.} For a review of important studies of this hypothesis, see Michael Lewis-Beck, Mary Stegmaier, "Economic models of voting", in Russell J. Dalton and Hans-Dieter Klingemann (eds), *The Oxford Handbook of Political Behavior* (Oxford: Oxford University Press, 2007), 518-37.

votes in favor of an incumbent once his personal economic position has improved (egotropic vote) and the second privileges a vote for the incumbent if the economic situation of society as a whole has improved (sociotropic voting).

Overall, empirical studies that tested these four forms of economic models in different countries and institutional contexts teem with results converging toward the domination of the sociotropic retrospective vote. Since the goal of this article is not to review these models, we will simply underline the difficulties linked to the selection and to the measurement of the economic position of voters in the framework of estimating the retrospective egotropic model. Very often, empirical works have emphasized individual salaries (or that of the household) as a variable characterizing the material situation of voters. But the revenue variable often turns out to be misleading in statistical analyses undertaken particularly in the United States,¹ in France,² in Canada,³ or even in the UK,⁴ since it does not constitute a significant determining variable in voter choice. In the wake of this failure, few researchers have tried to explore other paths to measure and to characterize the wealth of a voter beyond salary alone. This is why we argue in this article for accounting for wealth from a new angle, that of asset ownership.

Measurements of wealth

ealth is measured by the possession of financial and non-financial assets owned by institutional sectors. As a general rule, the measurement of wealth is limited to households, non-financial companies, financial companies, and to public administrations. In this article, we concentrate solely on household wealth. Net wealth⁵ includes the primary residence, income-generating property (rental income), financial assets, and professional assets. Observing over time how wealth is allocated across institutional sectors⁶ reveals a slow decline in the percentage of household wealth within French national wealth. In fact, Figure 1 (dotted-line curve, scale on the right) indicates that in 1978, over 38% of national economic wealth was held by households, as opposed to 33% in 2008. This movement is accompanied by another structural and more recent trend: the rise in importance, starting in the early 2000s, of non-financial assets in the wealth of households. In other words, buying property and owning land represent the major part of non-financial assets. The value of this wealth has also substantially increased, since it represented 7.5 years' worth of available salary in 2004 as opposed to 4.4 years' worth on average from 1978-2007. Evidently, this rise in the value of non-financial wealth is linked more to the revaluation of the real estate market and of the price of land observed since the beginning of the 2000s, than to a gross increase in real estate holdings.

^{1.} Michael S. Lewis-Beck, William G. Jacoby, Helmut Norpoth, and Herbert F. Weisberg. *The American Voter Revisited* (Ann Arbor: University of Michigan Press, 2008).

^{2.} B. Cautrès, A. Muxel, Comment les électeurs font-ils leur choix?

^{3.} André Blais, Elisabeth Gidengil, Richard Nadeau, and Neil Nevitte, *Anatomy of a Liberal Victory* (Peterborough: Broadview Press, 2002).

^{4.} Harold D. Clarke, David Sanders, Marianne C. Stewart, Paul Whiteley, *Political Choice in Britain* (Oxford: Oxford University Press, 2004).

^{5.} Net wealth takes into account household debt.

^{6.} Statistics produced by the Banque de France and Insee under the heading "Comptes nationaux" [national accounts] (2000 database).

^{7.} Nathalie Couleaud, and Frédéric Delemarre, "Le patrimoine économique national de 1978 à 2007", *Insee Première* 1229 (March 2009).

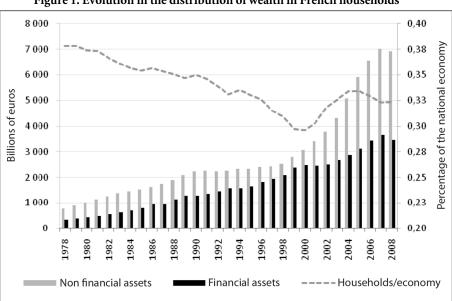


Figure 1. Evolution in the distribution of wealth in French households

Source: Insee, national accounts (2000 database).

During the same period, French preferences for financial investments remained stable at an average annual rate of increase of around 8%, despite the two economic crises that occurred in 2001 (the speculative bubble in technology) and 2008 (speculative housing bubble). Among their strategies of financial wealth accumulation, the French clearly privilege two forms of assets: non-risk assets (bank deposits and cash in the form of savings accounts or checking accounts, life insurance) and risk-based assets (company shares, shares, and OPCVM deeds).¹ Over a period of 30 years, owning shares and securities remained the most volatile but also the most globally attractive wealth acquisition strategy for French households (Figure 2). Although life insurance was the preferred financial investment for French people in 2008 (ahead of bank deposits), the level of risk associated with this asset is clearly distinguished from shares and securities, since the management of such assets is delegated to specialized organizations whose goal is to guarantee a return for little or moderate risk. The deregulation and decompartmentalization of the French financial market from 1984, and the establishment of more attractive fiscal policies throughout the 1990s contributed to the success of this investment.²

^{1.} OPCVM are "Organismes de placement collectif en valeurs mobilières" (Undertakings for Collective Investment in Transferable Securities, UCITS, European Union directives governing collective investment schemes). Among the most frequent types of collective investment schemes in France are FCPs (Fonds Communs de Placement, an open-ended investment fund which is neither trust nor company law based, and in which the investor has no voting rights) or SICAVs (Sociétés d'Investissement à Capital Variable, public limited companies in which the investor is a shareholder).

^{2.} Céline Blondeau, "Banque, assurance, bancassurance, assurfinance, lignes de partage: une spécificité française?", Entreprises et histoire, 39, 2005, 91-114.

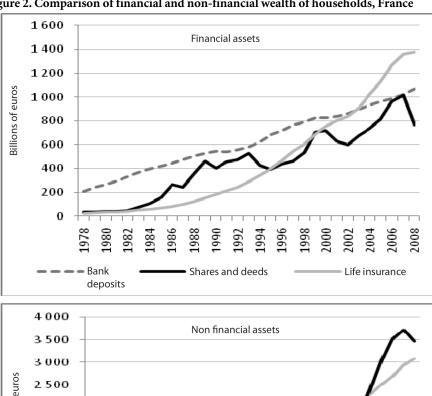
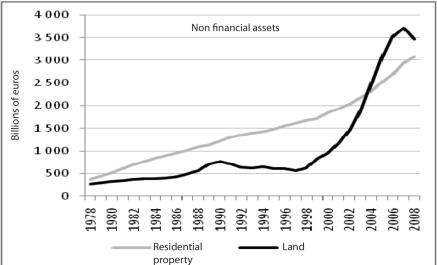


Figure 2. Comparison of financial and non-financial wealth of households, France



Ultimately, the average value of wealth in France in 2004 measured in this way was 220,500 euros with a median value of 118,000 euros. The distribution of this wealth is characterized by clear inequality, since the gross wealth of the poorest 10% of households (in terms of wealth) is below 2,110 euros, whereas that of the richest 10% is greater than 450,060 euros. In terms of concentration of wealth, nearly half of French wealth (46%) is held by 10% of households.¹

^{1.} Marie Cordier, Cédric Houdré, Catherine Rougerie, "Les inégalités de patrimoine des ménages entre 1992 et 2004", Insee Données sociales, 2006, 455-64.

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This brief presentation of the value of French wealth and how it is split between financial and non-financial assets does not give a precise indication of how the composition of wealth might be explained in terms of the characteristics of households. While the accounting definition of wealth is very old, the qualitative observation of household wealth is itself more recent. It dates back to the mid-1980s and an Insee survey on "financial assets" in 1986, which aimed to measure the rate of household ownership of different financial assets and to understand the mechanisms of wealth formation. Since that first survey, Insee has replicated and enriched the same model in 1991-1992, 1998, 2004, and 2009-2010. Taking the survey of 2004 as a starting point, it is possible to construct an exhaustive portrait of the distribution of wealth in France taking into account social, demographic, and psychological parameters. But the political dimension is still absent from Insee's qualitative surveys of wealth. Only the electoral surveys by Cevipof have integrated, in undeniably patchier fashion over time, the wealth dimension in their material categorization of respondents.

Finally, the evolution of French wealth is marked by an acceleration in its value in the middle of the 1990s (under the impetus of a rise in land ownership and life insurance policies). But, paradoxically, it was from the presidential election of 1995 that the Cevipof survey reduced the number of questions which measured levels of wealth, and finally only kept four questions in the 2007 survey. Table 1 offers an insight into the changes in the questions focusing on wealth in the Cevipof surveys for the last four presidential elections.

Table 1: Disappearance of questions measuring wealth	Table	1:	Disapp	pearance	of	questions	measuring	wealth
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	1988	1995	2002	2007
Nature of asset:				
Livret A savings account (with the Caisse	✓	✓	✓	✓
d'Épargne, or La Poste)				
Mortgage-based savings account	✓	✓		
Own home	✓	✓	✓	/
Second home	✓	✓	✓	✓
Company, business or land	✓	✓	/	
Securities (shares, mutual funds, etc.)	✓	✓	✓	✓
Rental properties	✓	✓	✓	

The complexity of French wealth accumulation strategies over the past 30 years begs for a more detailed statistical treatment of this question, taking into account, for example, individual determining factors motivating savings, as well as macroeconomic contextual data as part of multi-level analyses.

Varieties of wealth and aversion to risk

→ here are many different ways of measuring wealth. Jacques Capdevielle and Élisabeth Dupoirier, 1 for example, focused on income-generating wealth and their principal analyses were undertaken on the basis of a scale measuring the number of categories

^{1.} J. Capdevielle, É. Dupoirier, "L'effet patrimoine".

of assets held by households. This measurement strategy presents certain advantages; in particular it takes account of the range of elements which make up family wealth. More recently, Viviane Le Hay and Mariette Sineau have amended this measure of the diversification of wealth by combining the wealth effect and the asset effect via a standard-of-living indicator which allows them to place individuals in two categories: those above the poverty line (established at 900 euros) and those below this line. This classification allows for the observation of how elements of wealth are distributed for each of these two economic categories. Even if this approach is thus more robust for estimating the asset effect while controlling for the effect of (individual) income, this combination nevertheless does not allow for the elaboration of the logic or the strategy of wealth accumulation. This approach is the same as intuitively assuming a link between electoral behavior and level of wealth, without determining its theoretical foundations. In a series of recent studies focusing on French legislative and presidential elections, Richard Nadeau, Martial Foucault, and Michael Lewis-Beck¹ proposed a theory of wealth accumulation strategies which distinguishes between types of wealth according to the level of risk and the costs of information associated with each one. Assets corresponding to a riskier wealth accumulation strategy, such as owning a business or securities (shares, bonds, etc.), produce more uncertain returns and force owners into relatively high information costs to insure proper management.² So-called low-risk wealth, such as owning one's own home or a secondary residence, or holding a savings account, do not make the same demands of individuals in terms of vigilance or of information collecting, and thus of access.

The difference between low-risk wealth, measured by owning a savings account, family home (house or apartment) or a secondary residence, and high-risk wealth, measured by the ownership of a company, securities, or rental properties seems robust from a theoretical point of view. Analyses focusing on surveys undertaken for presidential (1988, 1995, and 2002) or legislative (1978, 1988, 2002) elections for which these data are available confirm the relevance of this distinction. As expected, holders of the two types of wealth presented different profiles³ and displayed different attitudes regarding the role of the state.⁴

In the original work by Jacques Capdevielle and Élisabeth Dupoirier, political orientation is linked to how electors' wealth is structured, via a double effect: 1/ an effect aligning "the rich" with political leanings to the right, and "the poor" with left-leaning political views; and 2/ for those who do not possess any wealth, a tendency to lean to the left. However, it is not possible to conclude from these results a stable relationship between voting and wealth, since the methodological approach adopted by the authors confined itself to breaking down in percentage terms how individuals in these wealth categories voted in the first round of the legislative elections of 1978. A methodological alternative would be to measure the

^{1.} R. Nadeau, M. Foucault, M. S. Lewis-Beck, "Patrimonial economic voting: legislative elections in France", and "Assets and risk: a neglected dimension of economic voting", *French Politics*, 9(2), 2011, 97-119.

^{2.} Shlomo Benartzl, Richard H. Thaler, "Myopic loss aversion and the equity premium puzzle", *The Quarterly Journal of Economics*, 110(1), 1995, 73-92; Olof Dahlback, "Saving and risk taking", *Journal of Economic Psychology*, 12(3), 1991, 479-500; Chi-Fu Huang and Robert H. Litzenberger, *Foundations for Financial Economics* (New York: Elsevier Science Publishing Company, 1988).

^{3.} Luc Arrondel, André Masson, and Daniel Verger, "Préférences individuelles et disparités du patrimoine", Économie et statistiques, 374-375, 2004, 129-48.

^{4.} Cf. R. Nadeau, M. Foucault, M. Lewis-Beck, "Patrimonial economic voting: legislative elections in France"; and "Assets and risk: a neglected dimension of economic voting". See also the classic study by Herbert McClosky and John Zaller, *The American Ethos: Public Attitudes towards Capitalism and Democracy* (Cambridge: Cambridge University Press, 1984).

marginal effect on voting of possessing one or the other type of wealth, taken in isolation or in combination. In fact, to the best of our knowledge there is no theoretical framework in the literature which justifies combining voting and wealth, or establishing a causal link between a political phenomenon and an economic situation.

To fill this gap, we propose to divide the declared wealth of electors into two categories: risk-based wealth and non-risk-based wealth. This distinction is not new. It is now included in Insee surveys on the wealth of French households. The theoretical logic drawing on studies by micro-economists on strategies of wealth accumulation - consists in associating savings choices (and thus choices regarding wealth accumulation) with individual risk preferences. The primary result observed by many economists2 based on French data recognizes that the rate of accumulation of the most "riskophile" households is weaker: the most "riskophile" households (those belonging to the most adventurous quartiles of the population) have global (generally financial) wealth which is 20% lower than other people's. This link between preference for risk and wealth accumulation strategy fundamentally amounts to acknowledging that that those individuals who are the most risk-averse opt first (all other things being equal) for the least risky forms of wealth in terms of returns. For example, holding a savings account or a Codevi account (COmpte pour le DÉVeloppement Industriel - now Livret de Développement Durable - a highly regulated product) does not constitute a risk, since the return is guaranteed and known in advance. Conversely, creating wealth from securities (deeds or shares) implies a greater risk not only in terms of the expectation of returns but also in terms of the cost of information linked to understanding such financial products. Thus, Francisco Gomes and Alexander Michaelides³ showed that the existence of monitoring or transaction costs linked to the management of such assets - costs of information and/or of qualification, and costs in terms of time necessary to effectively manage a portfolio - might explain the decision not to invest in risky assets. By combining this result with the socioeconomic structure of households, Luigi Guiso, Michael Haliassos and Tullio Jappelli⁴ showed that the households that are the least rich and the most risk-averse are likely to choose not to hold such assets.

The contribution of our approach is to establish a relationship between voting and the nature of wealth possessed, which is itself characterized by the degree of aversion to risk exhibited by savers. Electoral behavior cannot simply be explained by the variety of assets possessed. In fact, owning diversified assets does not provide a real indication of voting. On the other hand, aversion to risk is likely to influence wealth-accumulation choices. At the same time, voting for a political party is determined by the preference for risk *through* the identification of values associated with risk. This amounts to saying that a voter with "risk-based" assets is more likely than a left-leaning voter to vote on the right because of the "market" and "business-friendly" values underlying the act of risk-taking in order to increase the return

^{1.} Stéphane Lollivier, "L'Insee et les enquêtes de patrimoine", Économie et statistique, 374-375, 2004, 2-7.

^{2.} Luc Arrondel, André Masson, *Inégalités patrimoniales et choix individuels* (Paris: Economica, 2007); and Luc Arrondel and Hector Calvo Pardo, "Les Français sont-ils prudents? Patrimoine et risque sur le marché du travail", *Économie et statistique*, 417-418, 2008, 27-53.

^{3.} Francisco Gomes and Alexander Michaelides, "Portfolio choice and liquidity constraints", *International Economic Review*, 44(1), 2003, 143-77; and "Optimal life-cycle asset allocation: understanding the empirical evidence", *Journal of Finance*, 60(2), 2005, 869-904.

^{4.} Luigi Guiso, Michael Haliassos and Tullio Jappelli, Household Portfolios (Cambridge: MIT Press, 2001).

of an asset. Many authors¹ have already demonstrated that right-leaning governments tend to favor policies for the liberalization and deregulation of the markets rather than interventionist solutions, in order to bring themselves closer to the preferences of voters on the right.² Market-based solutions are favored by "riskophile" investors or savers because they can anticipate a higher return as a result of the competing structures of the market.

The survey data used in this article do not allow us to formally measure³ respondents' aversion to risk, but it is possible to associate with the two forms of wealth the propensity of electors to vote for the right if they have faith in the market and to vote for the left if they prefer guaranteed and monitored financial investments.

Methodology

hat is the effect of owning these two types of wealth on the ideological positioning of respondents and on their electoral choices? Has this impact declined over time? Before answering these questions, we will briefly present the data we have used, the variables we retained and our statistical approach, then proceed to regression analyses. The reason for studying a number of presidential elections relates to our initial goal, namely to ascertain whether the asset effect has persisted over the course of the last twenty years in France. As we have previously noted, the Cevipof survey model has substantially evolved, restricting the number of questions asked about the possession of wealth. As a result, we adopted the most extensive approach possible by retaining six common indicators of wealth held for the elections of 1988, 1995, and 2002, then we limited our analysis to four indicators for the 2007 elections. Table 2 presents the distribution of responses to the four Cevipof studies undertaken after the presidential elections. It is interesting to note a form of stability in the distribution of assets possessed, with the exception of savings accounts. To understand this evolution, which could lead us to believe that there was a lack of interest in France's preferred savings product, we must take into consideration the nature of the questions

^{1.} Carles Boix, "Partisan governments, the international economy and macroeconomic policies in OECD countries, 1964-93", World Politics, 53(1), 2000, 38-73; Alberto Alesina and Howard Rosenthal, Partisan Politics, Divided Government, and the Economy (Cambridge: Cambridge University Press, 1995).

^{2.} In the French case, Nadeau, Foucault and Lewis-Beck have shown that voters who possess risk-based wealth are more likely to oppose state intervention than voters wary of risk. In similar fashion, these same voters are less favorable to socialism and to nationalizations but display preferences for the market, profits, and privatizations. See R. Nadeau, M. Foucault, M. S. Lewis-Beck, "Assets and risk: a neglected dimension of economic voting".

^{3.} Factoring in risk aversion has been used in political science to explain split-ticket voting (Alberto Alesina and Howard Rosenthal, *Partisan Politics, Divided Government, and the Economy* (Cambridge: Cambridge University Press, 1995)); Walter R. Jr. Mebane, "Coordination, moderation, and institutional balancing in American presidential and house elections", *American Political Science Review*, 94, 2000, 37-57, to explain sanction votes against ambiguous candidates (Kenneth A. Shepsle, "The strategy of ambiguity: uncertainty and electoral competition", *The American Political Science Review*, 66, 1972, 555-68; Larry M. Bartels, "Issue voting under uncertainty: an empirical test", *American Journal of Political Science*, 30, 1986, 709-28; R. Michael Alvarez, *Information and Elections* (Ann Arbor: University of Michigan Press, 1997)); or else to measure the preferences of American voters between 1972 and 1996 in their political choices (Adam Berinsky and Jeffrey B. Lewis, "An estimate of risk aversion in the U.S. electorate", *Quarterly Journal of Political Science*, 2, 2007, 139-54).

^{4.} In 2009, the cumulative value of *Livret A* holdings reached 153 billion euros (as opposed to 75 billion in 1982), with an asymmetrical distribution of deposits in this type of savings account. In 1998, 26 million people (55% of holders) deposited 152 euros or less in their *Livret A*, 15 million (32% of holders) deposited between 152 euros and 7,622 euros, and finally, 5.6 million people (11.9% of holders) deposited more than 7,622 euros. In total, the average value in 2009 was 2,590 euros.

formulated in 1988 and 2007. In fact, the surveys from 1988 and 1995 ask respondents if they have "a Caisse d'Épargne [a specific savings bank] savings account, or other savings book account" while the 2002 and 2007 surveys modified the question by asking if the respondents have "a *livret A* [deposit account] savings account held with the Caisse d'Épargne or La Poste [post office]." Even if the aim on each occasion was to measure the percentage of people who held a regulated savings account, the surveys from 2002 and 2007 necessarily excluded those respondents who had a savings account not held at the Caisse d'Épargne or La Poste (the other possible establishment being the Crédit mutuel bank) and ignored those who had savings accounts destined for mortgage purposes, or savings account specifically for young people. For these reasons, the variation (Table 2) in the number of people with savings accounts from 80% to 58% is more a reflection of the bias of question formation than a representative trend in the evolution of the number of people with savings accounts in France. As Marie Cordier, Cédric Houdré, and Catherine Rougerie¹ remind us, the percentage of people with savings accounts has oscillated between 80% and 85% since 1986, despite variable returns.

Table 2. Distribution of assets (by percentage of people declaring one of these elements of wealth)

	1988	1995	2002	2007
Savings account*	80	78	61	58
Own home	58	59	60	68
Second home	10	9	11	10
Rental property	10	12	9	-
Securities	29	29	23	21
Company, business, or land	19	16	11	-
Respondents	3,974	3,996	4,025	4,006

Source: Cevipof surveys

Note: 80% of people questioned in 1988 claimed to have a savings account, compared with 58% in 2007.

Taking into account asset ownership and left/right positioning over time yields rich findings. First, having a savings account and having a primary residence (which is the most frequent form of wealth) does not initially appear to allow us (Table 3, part A) to identify a strong tendency in terms of political positioning in presidential elections. Among those who have a savings account and own their own home, we see a slight preponderance of voters who voted for the right between 1988 and 2007. For example, in 1988, among the voters who selected a candidate on the right, 85% had a *livret A* (as opposed to 82% of voters on the left). But if we change focus (Table 3, part B) and study the division of votes based on having a *livret A*, we note that among the holders of a *livret A*, 46% of them supported a candidate on the right, and only 41% of those who did not own such a savings product voted for the right (as opposed to 59% on the left). While the victory of François Mitterrand in 1988 provides a preliminary explanation of this tendency, the victory of Jacques Chirac in 2002 suggests that those savers who voted for the left in the first round of this election were

^{*} For 1988 and 1995, the questions were for all types of savings accounts, and for 2002 and 2007 for *livret A*-type savings accounts

^{1.} M. Cordier, C. Houdré, C. Rougerie, "Les inégalités de patrimoine des ménages entre 1992 et 2004".

proportionally higher than the amount of electors with a *livret A* who supported a winning candidate on the right in 1995 and 2007. In other words, owning non-risk-based assets indicates greater instability in terms of left/right positioning than does risk-based wealth.

Table 3. Distribution of holders of risk-based and non-risk-based wealth between 1988 and 2007

	Savings	account*	Own	home	Rental p	oroperty	Secu	rities	
	Left	Right	Left	Right	Left	Right	Left	Right	
1988	82	85	56	67	7	16	13	28	
1995	80	81	59	64	10	15	26	34	
2002	64	65	60	64	9	13	23	35	
2007	56	60	65	71	-	-	15	26	
Vata for									
- vote ioi	1	e first round o	,						
- vote ioi	1	e first round o account*	,	l elections (%) home		property	Secu	rities	Overal
- vote ioi	1		,			oroperty <i>Yes</i>	Secu <i>No</i>	rities Yes	Overal
1988	Savings	account*	Own	home	Rental ;	' '			Overal
	Savings No	account* Yes	Own <i>No</i>	home Yes	Rental p	Yes	No	Yes	
1988	Savings No	account* Yes 46	0wn <i>No</i> 39	home <i>Yes</i> 50	Rental p No 43	Yes 64	<i>No</i> 39	<i>Yes</i> 59	45

Source: Cevipof surveys

To support this finding, in Table 3 we need only note the distribution of holders of securities and of rental properties and to compare that with the assets of electors on the right. For the four presidential elections studied here, we can see a systematic predominance of holders of risk-based wealth voting on the right with a higher predicted gap for 1995 and 2007 (when presidents from the right won). In fact, the polarization on the right never reached such an intensity for holders of securities in 2007, simultaneously encouraged by a continuous improvement in returns on financial products since the crisis of 11 September 2001 and by a candidate, Nicolas Sarkozy, who hoped to "rehabilitate the idea of money, and social success for those who enjoy it".¹

At the same time, these results are of a descriptive nature and do not allow us to determine directly and satisfactorily the influence of wealth on voting. In fact, estimating the probability of voting on the right (left) on the basis of asset ownership would be an approach which was biased in terms of the importance of the ideological positioning of voters. Put more simply, does a voter vote for the right because he has a portfolio of securities, or does he vote for the right because his ideological preferences initially place him on the right, and thus lead him to a strategy of accumulating more risk-based wealth that a government on the right will protect with an accommodating public policy? We will address this question in the following section by distinguishing between the direct and indirect effects of wealth on voting for the right before measuring the total effect.

^{*} Savings accounts in 1988 and 1995, livret A in 2002 and 2007.

^{1.} V. Le Hay, M. Sineau, "'Effet patrimoine': 30 ans après, le retour?", 885.

Risk-based wealth: a decisive effect on voting for the right

he first step in our methodological approach consists of isolating the asset effect on ideological positioning and voting for the right in the first round in 1988, 1995 and 2002, since we are looking at years for which our indicator for risk-based versus non-risk-based wealth is the most comprehensive (as noted in section 2). The results of these analyses are presented in Table 4 and were obtained with the help of multivariate models that linked the ideological orientation of respondents (whether they identified with the right; models 1) or their electoral choice (whether they supported a candidate on the right for the first round; models 2) for the first (1988) and last French presidential election (2002) for which the available data allows us to demarcate, with the help of appropriate scales (see annex), holders of risk-based and non-risk-based wealth.

Two primary findings come out of this analysis. First, having low-risk wealth does not seem to have an impact on either the ideological orientation of individuals or on their electoral choices. This is not the case for risk-based wealth, where holding it is significantly linked to an ideological positioning on the right and to support for candidates from this political family. The effect of this variable is both important and systematic, as demonstrated by the relative size and stability over time of the coefficients associated with it. The effect of riskbased wealth on electoral behavior does not show a significant decline between these two dates: the importance of the coefficients of this variable between 1988 and 2002 (0.90 and 0.86 for ideology; 1.29 and 1.10 for voting) remains essentially unchanged. These results, combined with those from the following section that focus on a more prevalent form of wealth accumulation today, holding securities, strongly suggests that the asset effect is still an important determinant of political behavior in France. In this sense, our results confirm those of Le Hay and Sineau for 2007 but are differentiated by the theoretical distinction that we make between risk-based and non-risk-based wealth. In the end, it is not so much the accumulation of different types of asset that dominates, but rather the nature of the wealth held.1

Among the control variables we retained (age, gender, level of education, socioprofessional status, line of work, religion, income), only religion and then, in some senses, the line of work and socioprofessional status have a recurring explanatory power on voting for the right. A Catholic voter who attends church regularly is more likely to position himself and vote on the right. A voter is more likely to vote for the right if he or she works in the private sector. And finally, in terms of socioprofessional statuses, being a blue-collar worker satisfactorily explains a vote for the left (a negative score, and significant in Table 4). Given that the goal of this article is not to identify or measure the impact of these different variables, it was indispensable not only to introduce them as control variables in our analysis but also to introduce them into the simulated analysis of the total effect of wealth on voting, as presented in the next section.

^{1.} To reinforce our argument, we were able to introduce a supplementary variable for risk-based wealth for 1988. The 1988 survey added a pertinent question, formulated as: "Have you or a member of your household bought private shares?" We coded answers in the form of a dichotomous variable with the value 1 (yes, from one company/yes, from two companies/yes, from three companies) or the value 0 (none). In this way, we were able to isolate risk-based assets (shares from private companies) with respect to the ensemble of securities that voters might have. The use of this supplementary variable substantially augmented the effect of risk-based assets on voting for the right in 1988, characterized by a significant rise in the coefficient associated with this variable which then rose from 1.29 (see Table 4, column 2) to 1.56.

The asset effect in 2007: a decline in interest but not in impact

hat was the impact of the asset effect for the presidential election of 2007, when Nicolas Sarkozy said he wanted to make France a "country of home owners"? It is not really possible to answer this question by directly comparing the results of this election with previous ones. In fact, the electoral survey questionnaire for the French elections of 2007 only includes four indicators measuring wealth, namely three elements of non-risk-based wealth and only one for risk-based wealth (securities ownership).

In this context, the only way to measure the evolution of the asset effect between 1988 and 2007 is to use the same indicators, in other words the scale of non-risk-based wealth and securities ownership (as the only measure of risk-based wealth). The results of these analyses are illustrated in Table 5 and present coefficients of logistical regression obtained through estimating models made up of the same dependent variables and of the same sociodemographic control variables as those previously used (Table 4).

Two findings are clear from Table 5. First and foremost, it seems that the strength of the link between the nature of respondents' assets and their ideological positioning has grown over time to reach a high-point in the 2007 elections (part A). The coefficient of this variable is two times greater for this election than it was 20 years previously (0.54 as opposed to 0.27). This result is all the more interesting because the coefficient of the variable for non-risk-based wealth became significant for the first time during this election.

The second result focuses on voting as such and shows that the relationship between electoral choices and risk-based asset ownership has remained relatively stable over time,² with the possible exception of the 1995 election (coefficients of 0.42, 0.21, 0.47, and 0.38 for the years 1988, 1995, 2002, and 2007; see part B). But what about the total effect of wealth on voting, when we take into account both its direct effect on ideology and its direct effect on voting?

To answer this question, we first added an ideology variable to the model explaining voting (part C). We then measured the impact of risk-based wealth on voting while taking into account both its indirect effect through the intermediary of ideology and its direct effect on voting in a model including this last variable. The methodological approach to reach these results requires some explanation. Before doing so, it is useful to clarify that such an approach draws on a recursive model, or path analysis, since our model is a system of two equations from which we calculate the total effect of assets on voting (Table 5D).³

^{1.} During the political debate aired on Wednesday 2 May 2007 between Ségolène Royal and Nicolas Sarkozy, Sarkozy declared: "My ambition would be to make France a country of home owners. One in two French people own their own home, 80% of Spaniards own their own home, 76% of British people own their own home. There are 12 million French families who would like to be home owners but are not."

^{2.} An attentive reader might wonder about the conditions on the basis of which we allow ourselves to compare estimated coefficients from one election to another. Some authors have preferred to pool the data from presidential elections (Gregory B. Markus, "The impact of personal and national economic conditions on presidential voting, 1956-88", American Journal of Political Science, 36, 1992, 829-34.) In our analysis, we have good reasons to treat these four studies separately, given their differences in terms of sample size, date of survey, instrumentation, and particularly of possible violations of the pooling hypothesis (namely a slope of similar origin from one election to another). On the one hand, our decision is based on the fact that we are looking at non-standardized coefficients coming from a non-linear regression (logit estimates) that reduces the risks of a bias linked to size; on the other hand, the standard deviation of the dependent variable is similar for the four elections with an identical estimated structure.

^{3.} The general principle of a measure of total effect is based on a recursive model founded on a unidirectional causality and the absence of a correlation of errors between equations. In this, we follow the approach of David Kaplan, *Structural Equation Modeling: Foundations and Extensions* (Thousand Oaks: Sage, 2000).

First, we sought to understand changes in the probability of voting for the right resulting from variation in assets owned. The logarithmic estimation allows us to formulate that the probability of an event Y (dependent variable) happening (here, voting for the right) is an inverse logarithmic function, $P(Y=1) = [\exp(\ln P/P-1)]/[(1+\exp(\ln P/P-1))]$. To determine the change in the probability of voting for the right (as a function of the variation of one unit of an independent variable, here wealth), it is appropriate not just to think in terms of calculating the derivative of P, or $\delta P/\delta x = \beta P(1-P)$. In fact, as Petersen¹ and Zelner² demonstrated, variation in probability brings about an estimated slope between the changes in probability (ΔP) and changes in covariance for the independent variable (ΔX). As a result, it is possible that the slope is larger than 1 and thus produces predicted changes in probability outside the [0, 1] interval. When the dependent variable is continuous, this difficulty does not exist. But with an independent dichotomous variable (which is the case for our wealth variable), it is appropriate to use the following transformation: $\Delta P = [\exp(\beta 1)/(1+\exp(\beta 1))] - [\exp(\beta 1)/(1+\exp(\beta 1))]$.

We thus aim to determine if the fact of owning shares has a significant effect on the probability that an elector identifies with the right. To this end, we use a scenario of a voter pulled between the left and the right (we will use the term *simulation* to characterize this scenario). The "initial" probability that this voter identifies with the right is at 0.50, or one out of two (in this case, $\beta 0 = 0$).³ The question thus consists of determining if owning shares increases this probability. The gap between the initial probability of identifying with the right, established for the purpose of this simulation at 0.50, and this probability after we have taken into account the effect linked to the ownership of shares, is termed ΔP ideology (ΔP_{ID}). The formula allowing us to calculate this effect is represented by equation (1)

(1)
$$\Delta P_{ID} = [\exp(\beta 1)/(1 + \exp(\beta 1))] - 0.5 \text{ since } [\exp(\beta 0 = 0/(1 + \exp(\beta 0 = 0)))] = 0.5$$

with $\beta 1 = \beta 0 + \beta i = 0,27$ where βi corresponds to the estimated coefficient of the logarithmic regression of voting for the right on securities (see part A of Table 5).

Once $\beta 1$ has been established, it becomes easy to determine the change in probability of voting for the right by formulating $\Delta P_{\rm ID} = [\exp(0.27)/(1+\exp(0.27))] - 0.5$. Thus, for 1988, we get an effect of 0.07, meaning that a person torn between a position on the left or right will see his probability of changing his position (to the right) increase by 7 percentage points if he owns securities. The simulation of the same change in probability for the years 1995, 2002, and 2007 respectively gives effects of 6, 9, and 13 percentage points. The presidential election of 2007 is thus characterized by a strong likelihood that holders of risk-based assets will move to the right.

This measurement constitutes the first step in our approach to evaluating the total effect (indirect + direct) of risk-based asset ownership on voting for the right. The indirect effect corresponds to the interaction between the effect of risk-based wealth on ideological positioning (or $\langle SY \rangle \langle CF180 \rangle D \langle RY \rangle P_{ID}$) and the effect of ideological positioning on voting measured by the regression coefficients presented in part C of Table 5 (β j). For its part, the direct effect corresponds to the effect of risk-based wealth on voting in models including

^{1.} Trond Petersen, "A comment on presenting results from logit and probit models", *American Sociological Review*, 50, 1985, 130-1.

^{2.} Bennet A. Zelner, "Using simulation to interpret results from logit, probit, and other nonlinear models", *Strategic Management Journal*, 30(12), 2009, 1335-48.

^{3.} Since $\ln (p/1-p) = \ln (0.5/1-0.5) = 0$.

ideology (β k). By basing our work on a scenario similar to the one previously adopted, namely that of a voter torn this time between the act of voting for the left or the right (initial probability of 0.50), we are now able (since we know the values of ΔP_{ID}) to calculate the total effect of wealth on voting by solving the following equation:

(2)
$$\Delta PVote = \left[\exp(\beta 1)/(1+\exp(\beta 1))\right] - \left[\exp(\beta 0/(1+\exp(\beta 0))\right]$$

with $\beta 1 = \beta 0(\Delta P_{1D} \times \beta j + \beta k)$.

Thus for 1988, we can establish that the total effect of owning securities on voting for the right is established at 16 percentage points. The coefficients obtained for ideology $(\Delta P_{ID} \times \beta j)^1$ and securities $(\beta k)^2$ variables for the years 1988, 1995, 2002, and 2007 were 3.73, 3.72, 3.72, 3.24, and 3.78 for the first variable and 0.41, 0.04, 0.31, 0.18 for the second (Table 5, part C).

The results of this simulation are presented in the fourth part of Table 5. These results are clear. When we compare similar indicators (securities), it appears that the impact of the wealth variable on presidential elections has not declined over time, with the total effect of this variable in 2007 (0.16) being equal to that observed in1988. Additionally, if we also take into account in our simulation the significant effect of non-risk-based wealth on ideological positioning for the 2007 election – an effect perhaps attributable to Nicolas Sarkozy's campaign – this effect has actually increased over time. The probability that a voter torn between the right and the left (thus with a 0.50 probability of voting for the right) will lean to the right if he has assets increases in a very significant way (an increase of 24%) if we take into account the combined effect of risk-based and non-risk-based wealth for this election.³

By taking care to simulate the total effect of owning securities (by breaking down the direct and indirect effect), we offer a convincing illumination of the persistence of the asset effect on voting since 1988. The extent of the total effect nevertheless varies from one election to another. Thus, for the 1995 presidential election, a voter undecided between the left and the right had a 55% probability of voting for the right if he owned a portfolio of securities. This probability reached 66% in 2007 and up to 74% if we also take into account the effect of non-risk-based wealth that was specific to this occasion. The impact of owning assets on voting thus reached an unprecedented scale. This result illustrates the two fundamentally different contexts of the presidential campaigns. In 1995, Jacques Chirac made the social divide a central theme of his campaign. Twelve years later, Nicolas Sarkozy firmly placed the question of wealth and assets at the center of his campaign. Before we sum up, one methodological question could be raised about the reach of these results concerning how far we have sought to explain voting for the right in a comprehensive way, namely by taking into account the vote for the Front National. In a work entitled *Les élections présidentielles*. *Le vote des Français de Mitterrand à Sarkozy* (Presidential Elections: French Voting from

^{1.} β i is the estimated coefficient from a logarithmic regression of voting for the right explained by different control variables and by ideological positioning.

^{2.} β j is the estimated coefficient of the effect of possessing securities on voting. Coefficients are presented in part B of Table 5.

^{3.} It is important to underline here that the absence of significance for the coefficients linked to owning non-risk-based wealth in 1988, 1995, and 2002 implies that owning risk-based wealth dominates the asset effect, with the exception of the 2007 election, when we took into account non-risk-based wealth (because it was significant).

Mitterrand to Sarkozy),¹ we show that, by excluding the Front National from our analyses, the influence of risk-based wealth on voting for the (moderate) right is not only confirmed but even stronger than that presented in Table 5. Thus there exists a fruitful direction for research to explore different varieties of the asset effect: by candidate, by election, and by country.

* *

This article started with the observation that the asset effect had lost its luster in French political analysis over the past thirty years. The attention devoted to this dimension of electoral behavior was in freefall. While the French electoral survey of 1978 included nine elements measuring wealth, the number of indicators was reduced to eight in 1988, to six in 1995 and 2002, and finally to four, of which only one was an indicator of risk-based wealth (share ownership) in 2007.

Despite this trend, the concept of an asset effect, a major contribution by French political science, seems just as pertinent today as at the time of its first academic dissemination in 1981. In fact, this idea seems more pertinent than ever today. The results of this short study suggest that owning assets (particularly risk-based ones) had an equal, if not greater, impact in the 2007 election than for that of 1988. The transformation and the diversification of household assets in modern economies suggests moreover that the relevance of this concept is not limited to the French case and that it could beneficially be applied in other democracies.²

Our article thus concludes that renewed, rather than reduced, attention should be paid to measuring wealth in subsequent French electoral surveys. Not only is the asset effect a powerful explanatory factor for voting on the right, but its importance did not diminish even when the model for measuring wealth was itself reduced to four questions in 2007. It is reasonable to assume that more developed arrays of indicators than those used up until now would allow us to expose even more significant effects and to refine our analysis. It seems plausible that the innovative idea of the asset effect still has much to yield. Among the many conceivable avenues of research, undertaking an array of tests to measure respondents' aversion to risk would unquestionably be an advantage for understanding the asset effect. Moreover, despite the methodological difficulties and the sincerity of responses, it is essential to consider how we take into account levels of wealth (just as levels of income are already recorded), rather than just focusing, as we currently do, on the existence and nature of assets owned. Finally, an ever-richer research seam in political science focuses on economic inequalities (primarily of incomes) as an explanatory factor for political participation and for voting choices. Looking at our results, a consideration of one or several measures of wealth inequalities (risk-based versus non risk-based, inherited or not, cash or not, etc.) would undoubtedly contribute to a better knowledge of economic determinants of voting in France. In this sense, dynamic awareness (intergenerational transmission) of the accumulation of wealth and of its simultaneous effects on ideological positions and voting should

^{1.} Cf. chapter 3 in Richard Nadeau, Éric Bélanger, Michael S. Lewis-Beck, Bruno Cautrès, and Martial Foucault, Les élections présidentielles. Le vote des Français de Mitterrand à Sarkozy (Paris: Presses de Sciences Po, 2011). 2. See in particular work by Lewis-Beck and Nadeau on the 2008 American election: Michael S. Lewis-Beck and Richard Nadeau, "Economic voting theory: testing new dimensions", Electoral Studies, 30(2), 2011, 288-94.

offer a very rich research agenda for the community of political scientists specialized in political sociology.¹

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Annex

Sources

The data for this study come from four national electoral surveys produced under the supervision of Cevipof (Centre de recherches politiques de Sciences Po) in 1988, 1995, 2002, 2007. These data are available at the following site: http://cdsp.sciences-po.fr/>.

Variables

Presidential vote = 1 if the respondent supported a party on the right for the first round of the presidential election, 0 otherwise.

Ideology = 1 if the respondent places himself in the 5, 6, or 7 range on the scale of ideological self-positioning between left-right, 0 otherwise.

Savings account = 1 if the respondent or a member of his household possesses a savings account, 0 otherwise.

Own home = 1 if the respondent or a member of his household owns his house or apartment, 0 otherwise.

Secondary residence = 1 if the respondent or a member of his household possesses a secondary residence, 0 otherwise.

Company, business, or land = 1 if the respondent or a member of his household owns a company, business, or land, 0 otherwise.

Rental properties = 1 if the respondent or a member of his household possesses rental properties, 0 otherwise.

Securities = 1 if the respondent or a member of his household possesses securities (shares, deeds), 0 otherwise.

Level of non-risk-based wealth = Average of the savings account, own home, and secondary residence variables.

Level of risk-based wealth = Average of the company, business, or land; rental properties, and securities variables.

Age = Age recoded from 0 to 1.

Gender = 1 for men, 0 for women.

Schooling = Level of education, recoded from 0 to 1.

Income = Total household income, recoded from 0 to 1.

Management = 1 if the respondent is a manager or a [high-level?] professional, 0 otherwise.

White collar = 1 if the respondent is a white-collar worker or a service professional, 0 otherwise.

Blue collar = 1 if the respondent is a blue-collar worker, 0 otherwise.

Private sector = 1 if the respondent works in the private sector, 0 otherwise.

Religion = 1 if the respondent is Catholic and goes to mass at least once per month, 0.67 if he is Catholic and goes to mass less than once per month, 0.33 if his religion is any other faith, 0 otherwise.

Table 4. An analysis of the asset effect on ideological positioning and voting in the French presidential elections of 1988 to 2002

	198	1988		95	200	2002	
	(1) Ideology	<i>(2)</i> Vote	(1) Ideology	<i>(2)</i> Vote	(1) Ideology	(2) Vote	
Ago	.58**	.06	.04	.53*	70	01	
Age	(.23)	(.23)	(.22)	(.24)	(.31)	(.31)	
Cav	.14	.15	.03	35**	.01	01	
Sex	(.09)	(.09)	(.09)	(.09)	(.12)	(.12)	
Cabaallaa	.03	.18	36**	03	73**	59**	
Schooling	(.17)	(.17)	(.15)	(.17)	(.21)	(.22)	
Management	.22	.19	.23*	.57**	.43**	.27*	
Management	(.14)	(.14)	(.12)	(.14)	(.16)	(.16)	
WI 21 U	.19	.02	.03	.09	.08	01	
White collar	(.14)	(.13)	(.12)	(.13)	(.18)	(.18)	
D/ //	32**	61**	63**	30*	01	24*	
Blue collar	(.15)	(.14)	(.13)	(.14)	(.14)	(.14)	
D: 1 1	.39**	.50**	.44**	.61**	.18	.49**	
Private sector	(.10)	(.09)	(.09)	(.10)	(.13)	(.13)	
	2.00**	1.58**	1.34**	1.87**	1.49**	1.78**	
Religion	(.20)	(.16)	(.15)	(.17)	(.20)	(.20)	
_	.80**	.64**	.07	1.23**	13	41	
Income	(.27)	(.28)	(.25)	(.29)	(.34)	(.36)	
	08	.17	.06	06	03	18	
Non-risk-based wealth	(.19)	(.19)	(.17)	(.19)	(.24)	(.24)	
						1.10**	
Risk-based wealth	.90**	1.29**	.84**	.60**	.86**	(.27)	
	(.19)	(.19)	(.17)	(.19)	(.25)		
Pseudo R ²	.08	.10	.07	.11	.06	.10	
N	3,087	2,643	3,165	2,636	1,573	1,333	

* p .05, ** p \leq .01, unilateral tests. Source: Cevipof 1988, 1995, 2002. Note: The dependant variable is valued at 1 if the respondent placed himself on the right on a left-right scale or if he supported a candidate on the right in the first round of the presidential election. The data in the table are non-standardized coefficients of logarithmic regression. Information about the variables used is presented in the annex.

	rship on ideological positioning		
	Non-risk-based wealth	Securities	
1988	01	.27***	
1995	.13	.25***	
2002	.03	.37***	
2007	.35***	.54***	
B. Direct effect of asset owne	rship on voting (not including ideology)		
	Non-risk-based wealth	Securities	
1988	.27	.42***	
1995	05	.21***	
2002	11	.47***	
2007	.19	.38***	
C. Direct effect of asset owne	rship on voting (including ideology)		
	Non-risk-based wealth	Securities	
1988	.27	.41***	
1995	05	.04	
2002	11	.31**	
2007	.19	.18*	
D. Total effect (direct and ind	irect) of owning securities on voting		
	Securities	Total effect of wealth	
1988	.16	.16	
1995	.05	.05	
2002	.15	.15	
2007	.16	.24	

^{*} p \leq .10, ** p \leq .05, *** p \leq .01, bilateral tests.

Source: Cevipof 1988, 1995, 2002, 2007.

Note: The data from parts A, B, and C of the table are non-standardized coefficients of logarithmic regression obtained from models including variables presented in Table 4. The variables used in the analyzed models, or non-risk-based wealth and owning securities, are presented in Table 4. Information about the variables used is presented above in the annex. Only the significant variables with a threshold of 90% and above were used in the simulations.

The detailed results of these estimations are available upon request from the authors.