

Extreme Political Views and Determinants of Popularity

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Abstract: In this paper, we determine an econometric model to determine variables which influence the popularity function. We focus our attention on extreme political views, this is right populist and left communist in the French case. Europe is well known to show important electoral results for extreme parts since the 1990's. The goal of this paper is to introduce new variables out of the political-economy space. So, we try to use subjective data and especially, household confidence and security variables. Our cointegration model shows significant results for these variables both for the long and short run.

Keywords: French Political System, Right Wing Populism, Left Wing Communism, Error Correction Model, Popularity.

JEL Classification: C22, D72

1. Introduction

The analysis of the French electoral results of the past twenty years has shown the growth and consolidation of movements such as right wing populism and left communism.

The first one is a far right¹ current and cannot be dissociated from its xenophobic components and its nationalistic discourse (Ivaldi, 2002). The second movement, referred to as the left communism or radical left, and it is founded on an anti-capitalist or anti-liberal culture (Raynaud, 2006).

The right wing populist is represented by the Front National (FN, National Front) and its founder, Jean-Marie Le Pen. In 1999, a clash occurring. It involved the creation of the Mouvement National Republicain (MNR, National Republican Movement), which was led by the former second in command of the Front National, Bruno Megret. However, this new party never succeeded in having the same political influence as its counterpart.

The left communism appears to be more divided, with a multitude of parties that claim to support, and gather around, variations on communist ideologies (Reynie, 2007). First, the Parti Communiste Français (PCF, French Communist Party) is the oldest having been formed at the end of World War II (national secretary: Marie Georges Buffet). The PCF draws its inspiration from Stalinism (Reynie, 2007). Then, one can distinguish two Trotskyists currents, Lutte Ouvriere (LO, Led by Arlette Laguiller²) and the Ligue Communiste Revolutionnaire (LCR, Leader: Olivier Besancenot, Revolutionary Communist League³). One can notice, the Parti Ouvrier Independent (POI, ex Parti des Travailleurs, Independant Worker Party⁴). These two currents of thoughts, resting on opposite ends in the political arena have significant electoral weight, as demonstrated by the results of the presidential elections between 1974 and 2007 (see

table 1). The analyses of the first ballot of the French presidential elections have shown the consistent progression of support for the right wing populist.

The candidate of the Front National indeed pass from 0.7% in 1974 to around 15% in 1988 and 1995 to reach 16.86% in 2002. If one counts the candidature of Bruno Megret to the head of the MNR in 2002, the far right actually gets a cumulated score of 19% of voter support.

The left communism has built itself around a double phenomenon: first, the steady decline of voter support for the PCF in the major elections, and second the PCF has been experiencing a shift from its historical communist roots to its current Trotskyist forms (Reynie, 2007). The radical left obtains a score of 17.6% in 1981, largely dominated by the PCF⁵ (taking 15.3% of the total), with the LO claiming 2%. In the 1988 election, the left communist gained 9% of voter support, while the PCF represented only 6.7%, and the LO 2.3%. However, in the 1995 and 2002 elections, the cumulated results of all of the left communist parties totaled approximately 14%. At this point, we see there was strong rise of the Trotskyist movements at the expense of the PCF.

The good electoral results of the national populist are equally observed in several Western European countries⁶, such as Denmark, Norway, the Netherlands, Austria, Italy, and Belgium. In the municipal elections of 2000, the Vlaams Blok received 33% of the vote compared to 1994 in which they received 28%. In Danemark, the Dans Folkeparti received 12% during the legislatives elections of 2001. In Norway, the elections of 2001 marks the rise of the far right party (Fremskrittspartiet) as being the third most popular party after the center right and center left. Finally, the FPO of Jorg Haider received 26.9% of the vote in the Austrian parliamentary elections of 1999. An increasing presence of the left communist can be observed at this same time. In 2003, the parliamentary elections of Scotland in 2003 revealed the growth of the Scottish Socialist Party who received 7.68%, compared to their 1.01% in 1999⁷. In Germany, the parliamentary elections have also shown the amelioration of the Partei des Demokratischen Sozialismus (PSD) from 4% in 2002, to 8.7% in 2005. In addition, the fusion of the PSD and the Wahlalternative Arbeit und Soziale Gerechtigkeit (WASG) gave birth to the party Die Linke (the left), a party that received 8.4% of the vote in one of Germany's regional elections.

Our article examines the growing importance of electorate of the communists and the populist movements, and the determinants for their increase in popularity, for the French case. Our study is divided in six sections. Following this introduction, the second section provides a literature review of the functions of popularity in economics and secondly, it offers literature to explain the importance of this current study. The third section focuses on the political and theoretical underpinnings of the popularity of these movements. The fourth section describes the data used in our application and explains the method that we have used. Subsequently, in the fifth section, we present our results and offer some interpretation. The last section concludes the article.

2. Literature Review

Many political-economic models have been developed since the 1970's. The literature has investigated the influence of economic data either on the vote⁸, or on the popularity of politicians (Goodhart and Bhansali, 1970 and Mueller 1970). The conclusions show that these

agents are responsible for economic outcomes: it is the hypothesis of government responsibility. The popularity has been studied extensively, in France and foreign countries. These studies aim to combine political popularity (either a party or a politician, usually a member of the executive) to economic variables (specifically, unemployment and inflation) to suggest that poor economic performance are associated with a decline in popularity (Borooah and Borooah, 1990 for Ireland; Neck and Karbuz, 1997, for Austria; Veiga and Veiga, 2004 for Portugal or Abrams and Butkiewicz, 1995, and Swank, 1990 in the United States).

In France, the political system is a presidential system keeping the fundamental principles of a parliamentary system. The President is elected by direct suffrage in a two ballot majority poll, and take charge the Foreign Policy and the Defense. He appoints the Prime Minister which presides the council of Ministers and decides on the policy of France. Traditionally, the President and the Prime Minister are from the same political side. When the opposite occurs, we speak about cohabitation (Auberger and Dubois, 2005, provide a large literature review about the French Political System and cohabitation).

Lewis-Beck (1980) indicates that President Giscard d'Estaing was less popular than General de Gaulle because of deteriorating economic conditions. This is supported by Lecaillon (1980). Moreover, the Prime Minister is also held responsible, but he is considered to have been a scapegoat and that he shielded the President of the Republic (Capron, 1987). According to Vasilatos and Hibbs (1983), inflation has no significant influence on the popularity of Presidents Pompidou and Giscard d'Estaing and conclude that the importance of the real economy with respect to nominal conditions. Lafay (1989) uses as an independent variable, the importance of the opposition and assumes that when the trust in the government decreases, trust in the opposition increases. This explains the failure of the socialist government in 1986 and the seizure of power of the right. Courbis (1995) and Lewis-Beck (1997) suggest that the Prime Minister is in charge of economic policy, especially during periods of cohabitation. Dubois (2005) provides an exhaustive literature review of the popularity of the prime minister; he estimates a popularity function for which only unemployment appears robust. The literature has also been interested in the right populist. These works focus on European countries where right movements have become increasingly important. Kitschelt (1995) identifies the combination of two factors: the economic policy of neo-liberalism on one hand, and socio-political and cultural nationalistic authoritarianism on another hand. Kitschelt suggests that these two variables explain the success of far right in Europe. Jackman and Volpert (1996) focus their analysis on European countries between 1970 and 1990. They retain the explanatory variables such as unemployment, electoral thresholds⁹ and the multiparty system using a Tobit approach. Their results show that high unemployment combined with multi-party systems promotes far right parties, and that their popularity is not due to high electoral thresholds. Betz (1994) notes, the success are due to structural changes affecting the global economy. Esping-andersen (1999) concludes that globalization, as a form of economic change, leads to modernization and is also likely to lead to social tension. These studies underscore the importance of economic changes in the far right vote.

In regards to France, Jerome and Jerome Speziari (2003) built a model of voting that reveals that the FN has better results in regions most affected by the economic crisis. That is, when the unemployment rate is higher in a region than the national average, scores of FN are better in that region. They also show that the electorate of conservative tends to slide to the FN because it wants to punish its policy of immigration and insecurity. Jerome and Jerome Speziari (2004) construct a model to explain the vote in 2002 presidential elections, using several variables including the change in regional unemployment rate, a dummy variable concerning regional partisan membership, popularity of the majority leader, and the results of previous elections. Nevertheless, the initial results of the authors were incorrect. The authors predicted the victory of the candidate of the left in the second ballot of the presidential election leaving no room for the candidate of the far right. Their error of prediction is partly due to the very high score of the FN during the first ballot. Indeed, part of FN voters is former left party supporters. Fauvelle-Aymar and Lewis-Beck (2005) find that the populist electorate is committed, partisan and so it overlaps a portion of the conservative right. Thus, the program of the national populist is characterized to be an extension of the radical ideas of the traditional right. Lewis-Beck and Mitchell (1993) and Elgie (2004) notes that some very conservative members of the mainstream right are closer to the ideology of the center right (UDF¹⁰).

The right populist has the power to harm the right traditional. Fauvelle-Aymar and Lewis-Beck (2005) indicate that the strategies of coalitions led by the traditional left lead to a reduction in the populist vote. However, this is not the case when the traditional right joins its strengths. The authors also suggest that some voters from left parties are attracted by the rhetoric of the far right on the defense of workers (leftist-Lepenism gaucholepenisme, Mayer, 2002). Dubois (2007) points out that the far right poses a serious challenge to models explaining the vote for the left or vote for the opposition, especially if they are used for forecasting (p . 253).

Auberger (2005) develops a model of voting in European elections using a combination economic variables and political factors¹¹. His approach is built according to the following hypothesis: people vote more for the far right if they are dissatisfied with the economic situation and vice versa. The author predictions are quite good as he anticipates 10.2% of the vote for the far right, and FN wins 10% in metropolitan France. However, the application of this method to the far left is more delicate and cannot give satisfactory results. Auberger (2008) uses the rate of change of job seekers and the rate of participation in elections. The author demonstrates that the growth in the number of jobseekers at the departmental level increases the vote for the FN, unlike the participation rate. Other models also focus on changes and political problems that have occurred in the last thirty years. The European process of integration is accused of reducing the national power in favor of strong competition (Scharpf, 1999). This process results in a wave of privatization, the abolition of public monopolies and lower tariff barriers. This combination of factors has enabled industries to relocate and opened spaces previously sheltered from international competition (Held, 1999). These major changes produce a radicalization of the electorate that gave massive benefits to the national populist current. Della Porta and Meny (1997) note that several European countries¹² have experienced corruption scandals in the 90's which led to a loss of credibility of the parties of power. Therefore, these events benefit to currents such as the Front National in France (Kitschelt, 1995; Rydgren, 2005).

In this case, voting for radical parties is more a challenge vis-a-vis the traditional parties than an actual acceptance of the ideas of these movements.

Finally, we must mention the role of immigration as a determinant of the populist vote. Knigge (1998) analyzes the evolution of six European countries from 1984 to 1993¹³. The author takes into account the economic conditions (unemployment), social (migration) and political (dissatisfaction caused by politics decisions). The results show that unemployment is not directly associated with the radical vote, in contrast to the increase of immigration and discontent concerning the politics. Thus, these movements everywhere in Europe are fed by social and political difficulties (Brug, Fennema and Tillie, 2000). Ivaldi (2002) introduces in his analysis a variable for overall criminality and brought back the variable of immigration. Criminality is not sufficient by itself to explain the development of this movement unlike immigration. Laurent (2004) notes that, the electorate of the national populist is higher in the border departments where the immigrant population is larger. Bonnetain (2004) tests the hypothesis that the electoral behavior reflects the socio-economic differences in the various departments and French cities in 2002. Bonnetain's research suggests that the radical vote is the strongest in areas where there is a high unemployment rate. He also indicates the positive impact of the increase of foreign population, and the insignificance of the crime rate. Bonnetain interprets this result in two ways: either the rate does not reflect the degree of insecurity felt by individuals or crime does not affect the electoral scores of populist parties.

3. Foundations

3.1. Political Foundations

French political life is not based on a bipartisan political system. France distinguishes the two major political parties in power, from opposing currents: on the left, the Parti Socialiste (PS); on the right (conservative part) Union pour un Mouvement Populaire (UMP), former Rassemblement pour la République (RPR). Besides these main streams, there is the a centrist party, represented by the Union des Démocrates (UDF) which has often leaned towards the right, as evidenced by the presence of centrist ministers in governments led by the RPR (1986, 1993). Les Verts and the PCF comprise part of the left wing of the political spectrum, to which we add the PRG (Parti Radical de Gauche), who have a center left tendency. The latter have agreed to participate in secondary government functions. This was the case in 1981 (PS and PCF) and 1997 (Left plural: PS, PCF and les Verts). Finally, we find the national populist with the FN and the left Trotskyist with the LO, LCR and the POI. These parties have never participated in any governmental coalition.

Ivaldi (1999, 2002) explains that the reasons for the success of the far right are due to global conditions and a combination of factors political, economic and social, where the issues relating to criminality, delinquency and urban violence have acquired a prominent place in recent years. According to Bonnetain (2004) the far right is identified by a program focusing on four primary objectives: tax burden, unemployment, crime and immigration. The author indicates that this program proposes to cut taxes, phase out the income tax and social taxes. On security¹⁴, the far right suggests the restoration of capital punishment and zero tolerance on crime. Immigration

must be stopped by strengthening border controls. It also stresses that the national populist will amend the constitution to give priority to employment, housing and healthcare for the French native people. Finally, the author shows that the electorate consists of those most economically vulnerable. They are attracted by this movement because it aims to protect the domestic market from international competition, which is regarded as the main cause of unemployment and lower wages.

For Evans and Ivaldi (2002), these movements base their economic program on liberal lines, related to the defense of national social systems. Traditional political parties have been unable to provide responses to embarrassing topics such as crime, immigration and insecurity. Thus, their political credibility has declined in favor of the far right which uses populist speeches that denounce the proposals of the center left and center right¹⁵, the demonization of which the FN leader feels aggrieved, and the struggle of the small ones against the big ones (Birnbaum, 1995). In France, the FN has never participated in any government, which inevitably defines it as a current purely rebellious party. However, this is not the case in some European countries where the national populist has held in power. This was the case in Austria with Haider's FPO and in Italy with the far right Lega Nord of Umberto Bossi and Alleanza Nazionale (ex-fascists) in the government of Silvio Berlusconi.

The electoral success of the left communist is also linked to economic, social and political conditions. This movement is nourished by the difficulties of the labor market and declining moral of French people in order to attack and weaken the government's position. It rejects modern capitalist economic structures, as well as their values and practices. It also offers a vision of an international network of workers. These different streams share a distrust of institutions coupled with an ideology that rejects capitalism and advocates for a socialist democracy. Heartfield (2003) indicates that anti-capitalism leads to anti-globalization and an international anti-imperialism. These movements base their campaign on a populist element as do their counterparts of the right, which is to denounce the exploitation of weak workers who are dominated by the capitalists (Lazar, 1997). In the communist tradition, they finally call for a better redistribution of resources and the membership to economic and social collective rights (March and Mudde, 2005). For this, they propose the reduction of working time in order to reduce unemployment and heavily tax the profits of large firms. In France, the PCF stands out from other communist currents by its alignment with the center left. Its presence in government has undoubtedly undermined its radicalism. This is surely a reason for its loss of credit in favor of revolutionary currents. It nevertheless remains the historical party.

3.2. Theoretical Foundations

The theoretical models of the popularity of political parties are generally based on optimizing the behavior of voters on the assumption that they are rational actors (Downs, 1957, Kramer 1971 and Nordhaus, 1975). The popularity of political parties is explained by all the variables that best reflect the concerns of citizens. Each agent j ($j = 1, \dots, n$) tries to maximize its utility function or minimize its disutility function in an area determined by the political and economic variables. Each voter has an optimal position in this space z_j^* is formalized such as : $z_j^* = \arg \max U_j(x)$ (Neck et Karbuz, 1997).

In order to take into account previous results of the literature and also study programs and ideology of the movements studied, we extend the analysis by introducing new variables that seem particularly crucial to the popularity of these movements. In this, lies the originality of this article. To support our argument, we first use economic and political variables (unemployment and popularity, respectively) that have been widely adopted in literature. In line with past studies, we assume that the deteriorating economic conditions favor the popularity of radical currents.

Following this, we introduce security and socio-economic data. The security data is similar to the analytical framework of Ivaldi (2002), but we do not use the same criminality variable (crimes and violent offenses) because people may confuse it with organized crime and thus not feeling directly concerned. We prefer to use a more concrete variable in its conception by individuals represented by petty crime by referring to attacks on property¹⁶. We want to examine the significance of this information in response to the results of Bonnetain (2004). We are inclined to think that insecurity is a crucial factor in the popularity of the national populist.

Finally, under the socio-economic theme, we do not use any data of immigration (Knigge, 1998) because it is difficult to obtain monthly data over a long period. Far right and Radical left exploit to their advantage the increasing social discontent. We selected a subjective variable constructed from surveys of French people moral taking into account the opinion about the standard of living, financial condition and consumption. Dubois (2007) indicates in his review of literature that the use of subjective variables are relevant in the politico-economic models.

The space z determines the optimal position of an agent according to political and economic variables, but also of socio-economic and security variables. The utility obtained by party i ($i = 1, \dots, k$) is :

$$U_j^i = f_{j(z_{e,t})} \quad (1)$$

Where $f_{j(z_{e,t})}$ is the perception function of the agent at time t , this function depends on all variables z with $e = 1, \dots, m$ designating the others variables of space z . At t , the choice of the agent for another party is made by the comparison of the utility of each camp. The agent will choose the party for whom its utility is maximized. For example, for the party i , we get:

$$U_j^i > U_j^{other\ party} \quad (2)$$

In our model, the function of popularity is based on utility functions. In this way, the popularity for the studied movement is obtained by aggregating:

$$popularity_t^i = \sum_{j=1}^n U_j^i \quad (3)$$

The decision to choose the agents for a party is not made only on the variables at a time t . They often take into account the past in their present decisions (retrospective behavior). The extension of the model is made in the dynamic framework with a continuous over a period defined in an interval $\forall t \in [0; T]$. In addition, the memory effect is introduced with a

depreciation rate of the past, $exp^{\mu t}$ (Nordhaus, 1975). In this case, the popularity of party i for the agent j becomes:

$$popularity_{j,T}^i = \int_0^T H_j(z_t, t) exp^{\mu t} dt \quad (4)$$

Where H denotes the evaluation function of the agent j at time t . We limit ourselves to this simple theoretical analysis.

The linear specification of the theoretical model provides an empirical model with the function of popularity of the party i at time t :

$$popularity_{i,t} = \lambda \cdot popularity_{i,t-1} + (1 - \lambda) [\beta_{i,0} + \sum_{e=1}^m \beta_{i,e} Z_{e,t}] + u_{i,t} \quad (5)$$

Where $i = 1, \dots, k$ the number of parties equals k ; λ the weight of the memory effect, with $0 < \lambda < 1$ and $e = 1, \dots, m$ a set of explanatory variables. Under the condition that the combined parts of the parties' popularity are 100%, three restrictions on the parameters and residuals are deducted:

$$\sum_{i=1}^k \beta_{i,0} = 100 \quad (6)$$

$$\sum_{i=1}^k \beta_{i,e} = 0 \quad (7)$$

$$\sum_{i=1}^k u_{i,t} = 0 \quad (8)$$

The demonstration is easy as soon as we make the hypothesis that the value of λ is the same for all parties. This simple theoretical framework can be extended by introducing several lags for different variables, which will be the case in our application.

4. Empirical Application

4.1. Data

The analysis period of our article begins in December 1998 and ends in April 2008. This period cannot be extended because we do not have security data before that date. Moreover, the French database for unemployment is different since 2009. Consequently, it could involve wrong results if we mix the two different bases. The frequency is monthly, which provides us with 113 observations. Let us note, however, that the number of observations is large enough that the econometric results are not distorted.

For the political variable, we consider the brute data of popularity rates¹⁷ of the FN and PCF parties (see Figure 1). These rates are provided by opinion surveys of the TNS-Sofres. Data on other left communist parties such as the LCR and LO do not exist¹⁸.

The selected economic variables in the first models in the literature are macroeconomic data such as unemployment, prices, and incomes. However, these variables are abandoned due to multi-collinearity. Subsequently, the choice is oriented on unemployment (Jerome and Jerome Speziari, 2004; Auberger and Dubois, 2003 or 2005).

Among the data set used in the literature, we choose the monthly unemployment rate from the databases of the OECD¹⁹. The unemployment rate is a variable whose interpretation is clear to agents, since they agree on the fact that it is better to have less unemployment than more²⁰.

For the socio-economic variable, we introduce the Household confidence calculated by the INSEE²¹ over a monthly period. Nevertheless, we predict that this variable reflects not only an economic reality but also social realities since living standards and consumption are indicators of the social scale and status. It is a subjective variable that provides a measure of the moral of French households; it is calculated as the difference between agents who are content in the broad sense (in the past, present and future) and those who are not. Thus, the presence of negative values is possible as suggested in Figure (2). We note a general downward trend. It is interesting to note the sharp decline from the second half of 2007 after a rebound during the presidential elections.

For the security variable, we obtain data from the Ministry of Interior on different offenses²². There are statistics on damage to property, damage to people and financial scams. Our choice is made on damage to property which is the number of complaints due to thefts, destruction or damage because it is the variable the least correlated with other variables as shown in Table (2) mean harm to individuals (PHYS) are strongly correlated with the indicator of trust and financial fraud (FIN) with unemployment. We believe that this variable has a greater impact on the perception of crime by officers. Indeed, it designates the petty crime, likely to hit all individuals. In the following analysis, DAM means damage property, UNEM the unemployment rate, CONF the indicator of household confidence, ESC scams and PHYS physical damages to individuals.

Table (3) presents the descriptive statistics of our variables. Let's note that for variable DAM, these data are in millions. FN relates the popularity of the Front National, PCF the one of the communist party. The popularity of the FN is largely below that of the PCF. This is explained by the fact that agents have on average more difficulties to declare themselves ideologically close to the national populism than from the left communism²³.

It seems also interesting to note that if the PCF has a popularity of nearly 27%, this does not reflect the results of elections (national, at least).

The Dickey-Fuller test²⁴, in level and first differences, shows the non-stationarity of the series. They are first order integrated. There may still be a doubt about the unemployment variable; therefore, we also used the tests of Phillips-Perron and KPSS (which tests the null hypothesis of stationarity of the series). The results²⁵ confirm in all cases those of the ADF test.

4.2. Empirical Model

The series have a unit root, and are therefore potentially cointegrated²⁶. We check the existence of cointegrating relationship among our variables by applying the test of the maximum eigenvalue, proposed by Johansen. The test results are compiled in Table (4).

The null hypothesis tested is $r = q$ against the alternative hypothesis $r = q + 1$ in which r is the number of cointegrating relationship.

The first row of the table tests the hypothesis that there is at most zero cointegrating relationship against the alternative hypothesis that there exists at least one of them. The null hypothesis is rejected; there is at least one relationship. The second row tests the null hypothesis that there is at most one cointegrating relationship against the alternative hypothesis that there are two. We accept the null hypothesis, there are at least and at most one cointegrating relationship²⁷.

We then estimate an Error Correction Model (noted ECM) of the following form:

$$\Delta FN_t = c_1 + \sum_{i=1}^k \beta_1 \Delta FN_{t-i} + \sum_{i=1}^k \beta_2 \Delta PCF_{t-i} + \sum_{i=1}^k \beta_3 \Delta DAM_{t-i} + \sum_{i=1}^k \beta_4 \Delta UNE_{t-i} + \sum_{i=1}^k \beta_5 \Delta CONF_{t-i} + \rho_1 \tilde{z}_{t-1} + \varepsilon_{1t} \quad (9)$$

$$\Delta PCF_t = c_1 + \sum_{i=1}^k \varphi_1 \Delta FN_{t-i} + \sum_{i=1}^k \varphi_2 \Delta PCF_{t-i} + \sum_{i=1}^k \varphi_3 \Delta DAM_{t-i} + \sum_{i=1}^k \varphi_4 \Delta UNE_{t-i} + \sum_{i=1}^k \varphi_5 \Delta CONF_{t-i} + \rho_2 \tilde{z}_{t-1} + \varepsilon_{2t} \quad (10)$$

Where $\rho_1 \tilde{z}_{t-1}$ and $\rho_2 \tilde{z}_{t-1}$ designate the terms of error correction (the one lagged residual) and ε_{1t} and ε_{2t} the errors, assumed to be uncorrelated between them.

In our model, we introduce the popularity of the PCF as predictor of FN (and vice versa) in order to study the conjunct dynamic. Indeed, election results showed a radicalization of the electorate that tends to project itself into the FN or the communist current. We want to examine if this radicalization is without (or with) ideological current distinction.

We introduce damages to the property variable in the public popularity of the PCF. This choice is justified because PCF has participated to different governments. It had had to take positions on security measures inherent in any policy. Moreover, the left communism discourse is radically opposed to the national populism on security issues, as it advocates prevention rather than the reactive actions of the far right. The PCF program is known (prevention): Is its speech relevant to the agents? Through the introduction of the indicator of insecurity, we want to answer this question.

We use the information criteria of Akaike (AIC) and Schwarz (SIC) to determine the optimal number of delays in the VAR. This is two since it is one that minimizes the information criteria (see Table 5). We can turn now to the results and interpretations.

5. Results and Interpretations

Our approach describes the long-term relationship that exists between variables since we have shown that they are linked by a cointegration relationship. The model also describes the

adjustment made to short-term relationship in order to obtain the long term relationship. This is the subject of the sub-sections below.

We begin by specifying the expected signs in our results. Thus, we have the following system:

$$FN = +/ - PCF + DAM + UNE - CONF$$

$$PCF = +/ - FN + DAM + UNE - CONF$$

Regarding the dynamics of the parties, the expected signs are difficult to predict. Those on the other variables are suggested by earlier works on unemployment and the political foundations described above for damages to property and trust (confidence).

5.1. The long-Run Relationship

5.1.1. Results

Here, we determine the equation of long-term relationship between the FN and the various exogenous variables; here we get the following equation:

$$FN = \begin{matrix} -4.185 \\ [-1.980] \end{matrix} PCF^{**} + \begin{matrix} 2 \\ [6.124] \end{matrix} DAM^{***} + \begin{matrix} -7.477 \\ [0.940] \end{matrix} UNE - \begin{matrix} -3.896 \\ [-5.044] \end{matrix} CONF^{***} \quad (11)$$

The numbers within square brackets indicate the t-stat (* indicates the significance at 10%, ** 5% and *** 1%). The long-term equation of the communist party is given by:

$$PCF = \begin{matrix} -0.239 \\ [-0.377] \end{matrix} FN + \begin{matrix} 4.785 \\ [6.24] \end{matrix} DAM^{***} + \begin{matrix} 1.787 \\ [1.080] \end{matrix} UNE - \begin{matrix} -0.931 \\ [5.995] \end{matrix} CONF^{***} \quad (12)$$

5.1.2. Interpretation

For the FN equation, we see the significance of the parameters DAM, CONF and PCF. These results are consistent with our prediction: an increase of instability (measured by the number of offenses against property), and decrease in the moral per household (symbolized by indications of confidence) reinforces the popularity of the FN. The introduction of PCF into the equation is significant at a high coefficient, but negative. This indicates that a decline of the popularity of the PCF is good for the FN. This result is consistent with the literature presented earlier (Fauvelle-Aymar and Lewis-Beck, 2005): those people who generally would vote for communist parties are attracted by the populist defenses of the worker. However, the parameter referring to unemployment is not significant, despite a high coefficient.

For the equation of the PCF, we observe that the long-term causality concerns damages to property and trust. These are the same variables as in the case of FN, which indicates that the determinants are identical for both currents. The coefficient referring to offense on property is greater for PCF than for FN. We would have expected that the security priorities of the national populist would result in a higher coefficient. However, the parameter value remains important and highly significant in both cases. We interpret this result as follows. The electorate of the far right has been stable since 1995; hence the evolution of insecurity should have a limited effect

on the popularity of FN, which confirms the partisan nature of the electorate in the line of the works of Fauvel-Aymar and Lewis-Beck (2005).

Regarding the CONF parameter, we show that the low trust of individuals has a positive and significant impact on the popularity of the two parties studied. This supports the common belief that the current of national populism and radical left feed and take advantage of social difficulties. However, the coefficient is higher for the FN than for the PCF.

We note that in the long-term, the unemployment variable is not significant for the FN and the PCF. The suggestion, usually accepted in the literature, is that deteriorating economic conditions benefit the analyzed movements. Indeed, these parties use these degradations to castigate the entire ruling political class. This result is somewhat counter-intuitive.

Except for unemployment, the results for the long-term model are consistent with commonly accepted thought. The insecurity has a positive influence on the popularity of the parties studied. Similarly, deteriorating social conditions are in favor of these currents.

5.2. The Short Run Relationship

The results of the short-term relationship are analyzed within the error correction model. We present the results of the latter in table (6). We complement these results with tests on residuals. From Table (6), Durbin-Watson statistics (DW rated) indicate that there is no autocorrelation. We check it with the test of Ljung-Box autocorrelation since the Durbin-Watson test measures only the autocorrelation of order 1. We set the value of this test as for lags greater than the number of delays retained in the model of error correction (two delays). The results of this test are given in Table (7) and indicate that there is no problem of autocorrelation for delays larger than two. The test of Jarque-Bera²⁸ (J B in the table (6)) examines the assumption of normality of residuals. In our case, we accept this hypothesis. Furthermore, the heteroskedasticity test²⁹ (ARCH with one lag) shows unambiguously that the residues have good statistical properties. We also note the significance of the term of error correction. Moreover, it takes a negative value which reflects the adjusting process towards the long term.

For the FN, we note the significance of the autoregressive process of order 2 for the endogenous variable; it validates the idea that there is a memory effect. Indeed, the variation of the popularity in t is negatively associated with the same variation in $t-1$ and $t-2$. We observe that a positive change for property damages causes a change in the same way of the popularity of the far right; however, the first lag is more significant. These results are consistent with intuition and can validate it statistically. Moreover, the household confidence variable is not significant in the analysis. Supporters of the far right grant a higher preference to insecurity than the deteriorating socio-economic in the short term. This result is explained by the period of assimilation of such damage.

The agents are victims of social illusion in the short term. However, in long term, this variable is significant, once taken into account with all social transformations. Changes in the popularity and those of unemployment are negatively related (the coefficient is nevertheless significant at

10%), which is counter-intuitive because of poor economic performance should have a positive influence on the FN.

The variation of PCF with two delays has a positive and significant impact on the variation of FN, the popularity may increase in the short-term for both parties. However, in the case of the equation of PCF, we also note the presence of the variation of FN is both significant and negative. We interpret these results as follows: individuals who are ideologically close to the far right are not likely to align with the left communism. There is an inertia expressed by a relatively constant percentage of votes for the FN leader, Jean-Marie Le Pen at presidential elections while communist supporters may turn to the other side in logic of challenge traditionally strong to these agents (Leftist-Lepenism).

The other exogenous variables also appear significant. This is applied to property damages by introducing two delays. One must note the high value of the coefficients associated with the change in unemployment for the two delays: the cumulative effect is very strong. Thus, a small change in unemployment implies a high variation of the popularity of the PCF. However, the coefficient is negative, while, as in case of FN we predicted a positive coefficient. Similarly, the coefficient associated with trust is positive on the popularity of the PCF, which is again surprising. While the analysis of long-term is rather consistent with our premonitions, those of the short term are less, at least at first sight. Indeed, we are in the presence of several counter-intuitive results whose interpretation seems complex.

5.3. Variance Decomposition

Finally, we employ variance decomposition to complete the results obtained with the ECM. Here, the goal is to compute each variable's contribution to the variance of the forecast error for a given horizon. This may give some indication about the relative weight of each variable in the explanation of the variance. This is done in tables (8) and (9). Each table indicates the percent of variance of popularity due to its own innovations and those of explanatory variables.

The variance of forecast error for both dependent variables is mainly due to their own innovation (69% for the FN's error and 84% for the PCF's error after 20 periods). This implies that the relative weight of explanatory variables is weak and in particular for the PCF's popularity. We can range the variables following the impact.

For the FN, the main variable is DAM (25% after 20 months), whereas the others have low impact. We can note the influence of PCF for the third period but it decreases quickly. This is also the case for the UNE variable. Finally, the confidence variable shows us a light impact which increases over time. These results suggest that security has as important element in determine the FN's popularity and to a lesser extent, the confidence variable. It confirms the previous results of the ECM. For the PCF, we observe that only one variable, has an immediate effect: this is the FN, but for the FN's decomposition, anyone variable has a direct impact. For the main important variable for the PCF's decomposition is the unemployment. It increases quickly over time, reaches a peak after 12 months and keeps constant after 20 months. The other variables are less important. Indeed, the FN represents near 5% after 3 periods but decreases over time. We can note the low impact of confidence of PCF's decomposition.

Finally, we remark that both decompositions are consistent with our expectations. Indeed, security is the main determiner for FN's popularity and unemployment for the PCF's popularity.

6. Conclusion: Counter-Intuitive Results or Not

In this article, we develop a model for analyzing the determinants of the function of popularity in France of the national populism on one hand and the left communist on the other hand. The French case is particularly appropriate, in view of the weight of these parties in past presidential elections. We rely on econometric modeling using the method of time series. The originality of our paper is the addition of new variables (household confidence and measure of insecurity with damage on property), appearing important in the analysis and the use of an error correcting model.

The econometric tests show that our specification is correct. The results indicate that the newly introduced variables in our model are significant in the popularity of movements studied, both in short and long term.

The long-term analysis highlights several interesting results. We confirm statistically that the rise of insecurity and the deterioration of trust are conducive to the far right and the radical left. Nevertheless, it appears that unemployment is not significant on these currents. This result is surprising but understandable. Indeed, agents do not have a sufficient trust in these parties to offer effective solutions to fight unemployment. Agents consider these movements as extreme in their economic analysis and that they propose unfeasible solutions.

Regarding the short-term analysis, we are confronted with several surprising results that can be interpreted. Firstly, when we observe a negative change in unemployment, variations of the popularity of the parties studied increase. Agents give more support to populist and communist movements when economic conditions are good because these parties are not consistent in the direction of their economic policy. Individuals do not count on these currents to solve the unemployment problem. Secondly, we note that the higher the household confidence, stronger the popularity of the PCF. This result can be explained by the fact that the vote for these movements can be considered as an electoral shift at the expense of parties of power. Indeed, agents know that the parties analyzed in this study will weigh less while the social situation is good. Thus, we are in presence of a pleasure vote or risky vote. People are happy (or scared) of voting for an extremist party while the risk of its access to power is more limited, especially when the economic and social conditions are favorable. However, during the 2002 election, many people did not vote for potential candidates of power and are transferred their voices to alternative voting left and right. Consequently, the candidate of FN was found in the second ballot of the presidential elections and the left communist parties have obtained 14% of the vote. Our results support the view that populist and communist movements are defined mainly as a protest movement. Thus, they owe their popularity to the shift of a portion (part) of the electorate.

One of the possible extensions is to consider the perception of agents in terms of trust in the parties of power. It seems that the political variable is not sufficiently understood in models of

popularity but also of votes. This would be a good indicator of the rejection of traditional parties by the voters of the extreme movements.

Endnotes

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¹ In this article, we consider the terms ‘right wing populist’, ‘national populism’ and ‘far right’ as synonyms.

² Since 2008, the party is now represented by Nathalie Arthaud.

³ In 2008, the LCR refounded itself as a news party called Nouveau Parti Anticapitaliste (NPA), New Anticapitalist Party.

⁴ The national secretaries are Daniel Glusckstein, Claude Janet, Jean Markun and Gerard Schivardi.

⁵ The weight of the PCF is way inferior to the one of the elections of 1969 during which is obtained 21.2% of the votes.

⁶ Evans and Ivaldi (2002) realize a detailed review of the electoral successes of the national populism in Europe.

⁷ March and Mudde (2005).

⁸ Dubois (2007) realizes a synthesis of models of french political economic vote results.

⁹ The electoral threshold corresponds to a minimum of voices under which the party is not represented.

¹⁰ Lets’ note that UDF is now split in two with the Nouveau Centre, which claims to be of a right center and got closer to UMP in 2007, and the MODEM founded by F. Bayrou after the past presidential election, purely centrist current.

¹¹ Especially, the popularity of the party’s leader.

¹² Italy, Belgium, Germany, United-Kingdown.

¹³ Belgium, France, Germany, Denmark, Italy and the Netherlands.

¹⁴ Important theme of the campaign of 2002.

¹⁵ The French far right has for a long time based its discourse on: Neither left, Nor right, Front National.

¹⁶ They correspond to the number of complaints about thefts, destructions and damages.

¹⁷ Traditionally, we maintain the quotient (or the difference) between satisfied people and the dissatisfied ones, but in the case of parties studies, such operation is not useful since the number of dissatisfied people is largely superior to the number of satisfied people. In addition, such transformations don't alter the nature of series, in particularly the study of stationarity.

¹⁸ The popularity of leaders is available but on a too short period to be exploited.

¹⁹ This source is only one that disposes of monthly data, with the same database. Other databases use quarterly data (for instance, International Labor Organization).

²⁰ This type of variable is designated as a valance issue.

²¹ According to the INSEE, it supplies information on consumer behavior, as well as on anticipations in matter of consumption and savings. It measures situational phenomenon as they are viewed by the households independently from the elaboration of macro-economic indicators (prices, unemployment, savings). <http://www.insee.fr/fr/indicateurs/indic conj/donnees/method idconj 20.pdf>

²² Source: www.inhes.interieur.gouv.fr; the data are available from 1998.

²³ Raynaud (2006) notes that • if the far right incarnated by the FN is since a long time the subject of general reprobation ... the different sensibilities of radical left ... are better accepted.

²⁴ The model with trend and constant is validated for the DAM variable, the model with constant for the variable UNE and the model without constant and trend for the other variables. The number of lags has been estimated with the help of information criteria (AIC and SIC) and confirmed with partial autocorrelation functions on the series in difference. It is important to note that there is no non-stationarity of deterministic nature for the endogenous variable.

²⁵ Available upon request.

²⁶ Not to take into account the possibility of a cointegration relation is dangerous. Indeed, if we deny the existence of a stable long term relationship, the use of an auto regressive vector (VAR) does not give an account of the possibilities of adjustment of these stable long term relationships. In order to avoid this, it is necessary to use an error correction model.

²⁷ Let's note that the trace test leads to the same results.

²⁸ Which follows a khi-2 equal to 5.99 at 5%.

²⁹ The ARCH test follows a khi-2 equal to 3.84 at 5%. The value calculated is inferior to the critical value : we accepted the null hypothesis of homoscedasticity.

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Table 1: first ballot of the presidential elections results

Elections	Right populism	Left communist	Global
1974	0.75%	2.7%	3.45%
1981	-	17.65%	17.65%
1988	14.38%	11.24%	25.62%
1955	15%	14.22%	29.22%
2002	19.20%	13.84%	33.04%
2007	10.5%	9%	19.5%

Table 2: Linear correlations between exogenous variables

	DAM	UNE	CONF	FN	PHYS
DAM	1	0.0332	0.4305	0.3995	-0.3949
UNE	-	1	0.1696	-0.8556	-0.5507
CONF	-	-	1	-0.1007	-0.8282
FN	-	-	-	1	0.4144
PHYS	-	-	-	-	1

Table 3: Descriptive Statistics

	FN	PCF	DAM	UNE	CONF
Mean	10.03	26.96	2.76	9.02	-14.76
Median	10	26	2.76	9	-20
Std. Dev.	2.28	4.38	2.06	0.68	12.43
Max	16	36	3.13	10.9	10
Min	6	18	2.32	7.8	-38
Skewness	0.53	0.45	-0.06	0.75	0.32
Kurtosis	2.72	2.17	2.33	3.74	1.95
ADF in level	-0.673	-0.974	-0.907	-2.979	0.385
ADF in first difference	-13.651	-16.255	-1.953	-1.995	-5.849

Table 4: Maximum eigenvalue test's results

Hypothesis	Eigenvalue	Max eigenvalue	Critical value	Prob.
$r = 0$	0.352	46.813	46.231	0.043
$r = 1$	0.264	33.061	40.078	0.248
$r = 2$	0.229	28.089	33.877	0.209

Table 5: Determination of lags in VECM

Lag	FN		PCF	
	AIC	SIC	AIC	SIC
$L = 5$	3.66	4.34	4.56	5.24
$L = 4$	3.73	4.29	4.51	5.06
$L = 3$	3.69	4.11	4.46	4.88
$L = 2$	3.61*	3.75*	4.44*	4.73*
$L = 1$	3.68	3.85	4.59	4.76

Table 6: Results of the ECM

Variable	ΔFN	ΔPCF
\tilde{z}_{t-1}	-0.007 [-1.80]	-0.021 [-3.34]
$\Delta FN (-1)$	-0.311 [-3.17]	-0.273 [-1.85]
$\Delta FN (-2)$	-0.312 [-3.25]	-0.534 [-3.59]
$\Delta PCF (-1)$	0.051 [0.826]	-0.465 [-4.94]
$\Delta PCF (-2)$	0.171 [2.763]	-0.092 [-0.992]
$\Delta DAM (-1)$	2.09 [1.95]	-0.031 [0.052]
$\Delta DAM (-2)$	1.16 [1.11]	2.97 [1.884]
$\Delta UNE (-1)$	1.059 [0.487]	-8.809 [-2.68]
$\Delta UNE (-2)$	-3.78 [-1.65]	-8.12 [-2.354]
$\Delta CONF (-1)$	-0.042 [-0.663]	-0.114 [-1.176]
$\Delta CONF (-2)$	0.074 [1.14]	0.201 [2.059]
C	0.059 [0.37]	-0.480 [-1.96]
<i>Adjusted R²</i>	0.30	0.40
<i>JB</i>	4.78	0.78
<i>DW</i>	2.01	1.85
<i>ARCH</i>	1.65	2.237

Table 7: Ljung-Box test

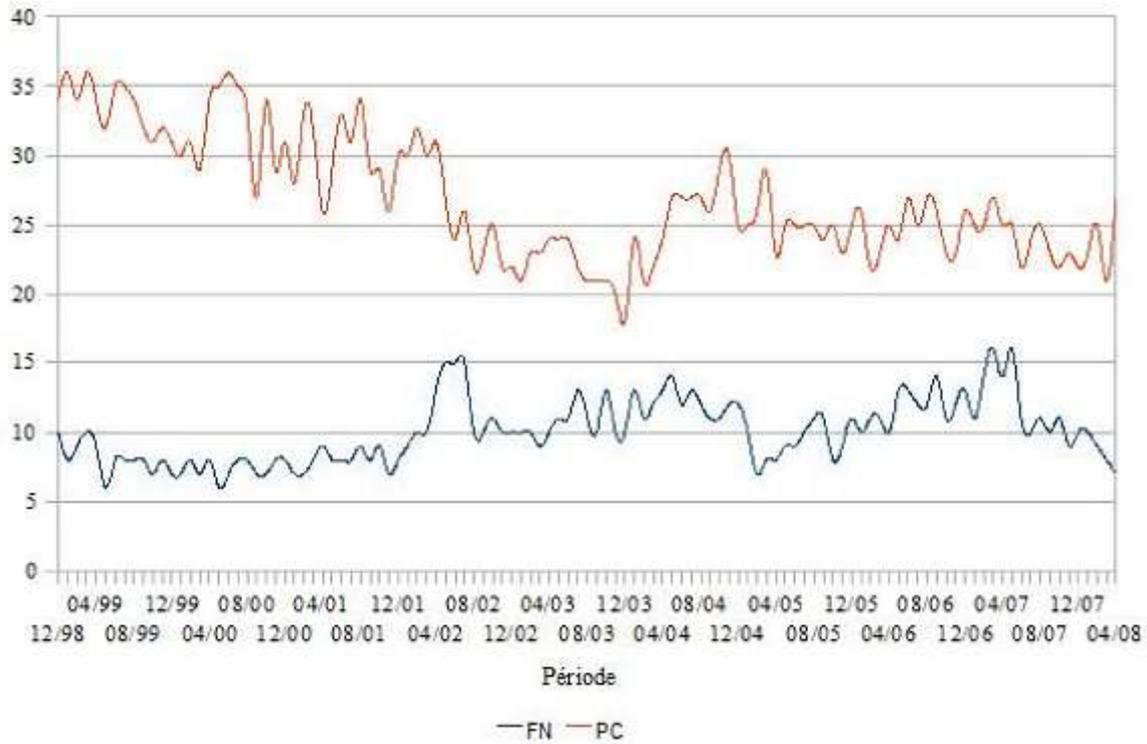
Lag	FN		PCF	
	<i>Stat Q</i>	<i>Prob</i>	<i>Stat Q</i>	<i>Prob</i>
8	12.82	0.12	6.31	0.612
12	16.41	0.17	10.55	0.567
16	18.76	0.271	12.91	0.679
20	20.28	0.44	15.41	0.752

Table 8: Variance decomposition of FN

Period	SE	%FN	%PCF	%DAM	%UNE	%CONF
1	1.400790	100.0000	0.000000	0.000000	0.000000	0.000000
2	1.729918	96.29269	0.058474	2.539863	0.167082	0.941889
3	1.948993	90.16369	3.119353	5.514335	0.441667	0.760954
4	2.166943	88.48171	2.601066	7.586680	0.524667	0.805882
5	2.388932	86.41616	2.238398	10.14382	0.441052	0.760569
6	2.607380	84.55433	2.146977	12.01569	0.393896	0.889108
7	2.812700	82.56685	1.999930	14.01076	0.339304	1.083161
8	3.002905	80.66890	1.929400	15.84131	0.303474	1.256923
9	3.190352	79.11728	1.813453	17.32643	0.283085	1.459758
10	3.372110	77.67646	1.721418	18.66959	0.274745	1.657780
15	4.187659	72.44936	1.445971	23.30237	0.290586	2.511712
20	4.886875	69.41111	1.290953	25.88847	0.327586	3.081888

Table 9: Variance decomposition of PCF

Period	S.E.	%FN	%PCF	%DAM	%CHOM	%CONF
1	2.117369	2.977366	97.02263	0.000000	0.000000	0.000000
2	2.425297	3.002036	90.58520	0.067637	5.105168	1.239955
3	2.870993	4.728380	84.42965	0.130232	9.146549	1.565189
4	3.081228	4.116419	84.85994	0.495254	9.167943	1.360445
5	3.278925	3.650076	84.77609	0.464386	9.902801	1.206646
6	3.534073	3.404800	85.26058	0.469441	9.821467	1.043708
7	3.728961	3.209975	84.92667	0.494809	10.42907	0.939477
8	3.913604	3.094407	84.85038	0.497161	10.70445	0.853607
9	4.084776	2.949315	84.94032	0.522391	10.79128	0.796691
10	4.246306	2.846871	84.94826	0.526564	10.91244	0.765868
11	4.403414	2.783542	84.97155	0.527930	10.96414	0.752847
12	4.549306	2.727166	84.96765	0.528309	11.00884	0.768026
13	4.688775	2.683878	84.97392	0.523698	11.01415	0.804357
14	4.822766	2.648619	84.97924	0.517322	10.99004	0.864777
15	4.951371	2.622972	84.96602	0.508140	10.95532	0.947544
16	5.075488	2.605083	84.94380	0.497323	10.90356	1.050235
17	5.195172	2.591506	84.90956	0.485462	10.84003	1.173439
18	5.311146	2.582500	84.86380	0.472644	10.76594	1.315124
19	5.423796	2.577239	84.80596	0.459337	10.68322	1.474245
20	5.533352	2.575102	84.73527	0.445775	10.59434	1.649513

Figure 1: Popularity rates' evolution of FN and PCF**Figure 2: Household confidence**