## The determinants of vote intentions in Portugal\*

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#### Abstract

This paper offers additional insights on the interactions between economics and politics in Portugal. We use an unexplored data set consisting of monthly polls on vote intentions for the main political parties in Portugal, since 1986. Results indicate that: (1) socialist governments had less electoral support than social democratic governments; (2) social democratic governments enjoyed a honeymoon period with the electorate while socialist governments did not; (3) vote intentions for incumbent parties tend to decrease with time in office; (4) voters hold incumbents responsible for the evolution of the economy; (5) the socialists are more penalized for rises in unemployment than are the social democrats.

JEL classification: H80, E31, E60

Keywords: voting functions, responsibility hypothesis, Portugal, vote intentions.

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Abstract

This paper offers additional insights on the interactions between economics and politics in

Portugal. We use an unexplored data set consisting of monthly polls on vote intentions for

the main political parties in Portugal over the interval from 1986 to 2001. Results indicate

that: (1) other things equal, socialist governments had less electoral support than social

democratic governments; (2) social democratic governments enjoyed a honeymoon period

with the electorate while socialist governments did not; (3) favourable vote intentions for

incumbent parties tend to decrease with time in office; (4) incumbents are held responsible

for the evolution of the economy; (5) voters are retrospective but it is not possible to

conclude whether they are egotropic or sociotropic.

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#### Introduction

Although the literature analysing the interactions between economics and politics is quite extensive and has become one of the most active research areas in the last decades,<sup>1</sup> the number of studies investigating the Portuguese case is extremely small.<sup>2</sup> With this paper we try to add information on this case by investigating the determinants of vote intentions for the main parties in Portugal.

We use an unexplored data set consisting of monthly polls on vote intentions from 1986 to 2001. Empirical results suggest that (1) other things held equal, socialist governments had less electoral support than social democratic governments; (2) honeymoon effects existed for social democratic governments but not for socialist governments; (3) longer time in office decreases vote intentions favouring the governing party; (4) economic outcomes, specially inflation and unemployment, negatively affect vote intentions on the governing party, providing evidence in favour of the responsibility hypothesis; (5) there is clear evidence that voters are retrospective but it is not possible to conclude whether they are *egotropic* or *sociotropic*.

The paper consists of five parts. The first provides some background on political parties in Portugal. The second describes the data set and the third models the determinants of vote intentions. The fourth presents the empirical results and, finally, the last part reports the conclusions.

## **Political parties in Portugal**

The military coup of April 25, 1974 re-established democracy in Portugal. It was followed by a two-year period of severe political instability during which the Junta of National Salvation and six temporary governments ruled the country. Following its approval, the new Constitution came into effect on April 25, 1976, and legislative elections where held in the same day. Since then, four political parties have dominated the Portuguese political life. The Socialist Party (PS) and the Social Democratic Party (PSD) have always been the two major political parties, and have alternated in power since 1976. The Communist Party (PCP) and the Social Democratic Center / Popular Party (CDS/PP) have contested the third position and have always been in the opposition, except for a four-year period (1979-83) in which CDS/PP participated in a government coalition led by PSD. Vote shares of these four political parties in legislative elections are shown in table 1. A brief description of their history follows.

[Insert table 1 about here]

Portuguese Socialist Party (Partido Socialista Português - PS)

This center-left party, founded in 1875, was declared illegal during the dictatorship (1926-74). In the first legislative elections for the Assembly of the Republic held in April 1976, the Socialist Party secured a plurality, with 34,98% of the votes. Mário Soares led the first Constitutional Government, and the following two, all of which came short of completing their terms.

In July 1985, Mário Soares decided to run for the Presidency. In October, the PSD won the legislative elections and the PS became part of the opposition.<sup>3</sup> The party remained in the opposition until 1995, when it got 43,85% of the votes in the legislative elections. António Guterres, the party leader since 1992, became prime minister of a PS minority government. In the 1999 balloting PS had its best result ever, with 44% of the votes, which gave the party exactly 50% of the deputies in Parliament.

#### Social Democratic Party (Partido Social Democrata - PSD)

This center-right party, founded in May 1974 as the Popular Democratic Party (PPD), adopted its current name in 1976. It remained in the opposition until 1979, when it formed the Democratic Alliance (AD) with the CDS and the Monarchic Popular Party (PPM). The AD won 42,24% of the votes in that year, getting an overall majority in Parliament. Sá Carneiro, leader and founder of PSD, became the prime minister in January 1980. In the October 1980 elections the AD renewed its overall majority of deputies but, two months later, Sá Carneiro died in an airplane accident and Pinto Balsemão was elected head of PSD and became Prime Minister.

In the 1983 legislative elections, PSD ran alone and gained the second-largest vote total. It then formed a coalition government with PS. In May 1985, Cavaco Silva was elected head of the Party and in June the PSD broke the coalition with PS and called for earlier elections. The President dissolved the Assembly and called for elections on October, in which PSD gained the largest share, with 29,79% of the votes. Cavaco Silva formed a minority government, which ended in April 1987 following a no confidence vote.

In the legislative balloting of July 1987, the PSD won the first one-party overall majority since the end of the dictatorship (with 50,15% of the votes), which was renewed in October 1991. In February 1995, Cavaco Silva abandoned the PSD leadership, and since the October 1995 elections the party has remained in the opposition.

Social Democratic Center-Popular Party (Centro Democrático Social-Partido Popular/CDS-PP)

This right-wing party, founded in 1974 as Democratic Social Center (CDS), added the designation of Popular Party (CDS-PP) in 1993. In July 1979, it formed an electoral front with the PSD and the PPM called Democratic Alliance (AD). This alliance won the 1979 and 1980 elections, giving CDS the opportunity to be part of the government. Since 1983, the CDS has remained in the opposition. In the January 1986 presidential balloting, the CDS candidate and former leader of the party, Diogo Freitas do Amaral, won 46% of the votes in the first round of voting. He was, however, defeated in the runoff by Mário Soares (PS). Paulo Portas has led the party since March 1998.

#### Portuguese Communist Party (Partido Comunista Português - PCP)

The Portuguese Communist Party was founded in 1921. It was banned in 1926 and legalized again in 1974. Between 1979 and 1986 the PCP formed the Popular Unity Alliance (Aliança Popular Unida - APU) with the small Portuguese Democratic Movement (MDP/CDE). In 1987, the PCP formed a new alliance, known as Unitary Democratic Coalition (Coligação Democrática Unitária - CDU) with dissidents of the MDP, independent leftists and the Green-Ecologist Party (PEV). Since 1991 the PCP has run with

PEV. Alvaro Cunhal was the leader of the party from the later years of the dictatorship until December 1992, when Carlos Carvalhas replaced him. The PCP was never a member of a constitutional government.

#### The data

The period analysed in this paper begins in June 1986 and ends in June 2001. It includes three terms of social democratic governments and two terms of socialist governments. Table 2 describes the winning parties of legislative elections since the balloting of October 1985.

## [Insert table 2 about here]

Vote intention data was obtained from a weekly national journal called *Expresso*. The source data is from polls conducted on a monthly basis by *Euroexpansão* employing a representative sample of about 600 Portuguese adults and conducted by telephone interviews. Economic data consists of monthly unemployment rates, seasonally adjusted and standardized; consumer price indexes; industrial production indexes; real exchange rates; and a confidence indicator. Most were collected from OECD - Main Economic Indicators. Exchange rates were obtained from IMF - International Financial Statistics and data on the Portuguese consumers' survey was collected from the National Institute of Statistics (INE).

#### **Explaining vote intentions**

The model we propose to explain vote intentions includes the following elements: leader characteristics, time in office, measures of the incumbent performance, and partisanship. It can be summarized in the following equation:

$$VI_{t} = \boldsymbol{a} + \boldsymbol{b}(L)VI_{t-1} + \boldsymbol{f}LEADER_{t} + \boldsymbol{h}TIME_{t} + \boldsymbol{g}ECO_{t-1} + \boldsymbol{d}\left(PARTY*ECO\right)_{t-1} + u_{t}$$
(1)

Where  $VI_t$ , the dependent variable, is the percentage of vote intentions for the incumbent party at time t, and  $(L)VI_{t-1}$  are lags of the dependent variable.

Leader characteristics are taken into account by including a vector of dummy variables for the party leaders (*LEADER*). In this way, we control for personality factors that may influence vote intentions. In fact, electoral scholars commonly accept that more popular leaders increase party vote intentions.<sup>4</sup> Table 3 describes the parties' leadership positions during the period under consideration.

[Insert table 3 about here]

Time in office (TIME) can influence vote intentions in several ways. First, recently elected parties may benefit from a honeymoon period with the electorate. We control for honeymoon effects by including a variable that takes the value of six in the first month of each term, declines to one by the sixth month and takes the value of zero thereafter. Second, ruling is costly in terms of popularity and, therefore, we expect vote intentions to

decline with time in office. This is controlled by including a variable measuring the number of months in office or dummy variables for each term in office.

According to the responsibility hypothesis, vote intentions depend on voters' evaluations of the incumbent's performance. His/her ability to successfully manage the economy is therefore, the object of evaluation. The vector of variables (*ECO*) we use to measure economic conditions includes, among others, the unemployment rate, the inflation rate, and the confidence indicator.<sup>5</sup> All variables are one month lagged since it takes time for economic data to be released and for individuals to recognize changes in economic conditions.

Because individuals' vote intentions may depend upon *partisan considerations* (Swank, 1993), the economic variables are interacted with dummy variables indicating which party was in office. The underlying idea is that since left-wing incumbents concentrate in improving real conditions, while conservative parties are more concerned with controlling inflation (Hibbs, 1977), the demand for the type of policies each party advocates increases when the economic variables they are more concerned with worsen. Therefore, we expect left-wing oriented parties to benefit from increases in unemployment and right-wing parties to gain support when inflation rises.

Finally, we investigate whether individuals judge incumbents' performance based on the evolution of their own economic situation (*egotropic*) or on national economic conditions (*sociotropic*). Numerous papers have discussed this issue, with the last hypothesis receiving more empirical support.<sup>6</sup> We also try to determine if vote intentions depend on retrospective or prospective evaluations of economic performance. On this matter, the results found in the literature are less consensual. According to Nannestad and

Paldam (1994, p. 228) "it appears that past events work almost the same as expected future ones in explaining vote decisions." The above-mentioned hypotheses are tested by adding to the previous equation a set of variables (*CS*) that consist of the responses to seven questions of the Portuguese Consumer Survey (see appendix 1). The equation used is, therefore:

$$VI_t = \mathbf{a} + \mathbf{b}(L)VI_{t-1} + \mathbf{f}LEADER_t + \mathbf{h}TIME_t + \mathbf{g}ECO_{t-1} + \mathbf{q}CS_t + u_t$$
 (2)

#### **Results**

In this section we present OLS estimations of the model described above. We start by considering as dependent variable the vote intentions for the governing party. Then, we consider the government lead over the main opposition party and, finally, the vote intentions for the opposition parties.<sup>7</sup>

#### Vote intentions for the governing party

Since June 1986, our first observation, only two parties have been in power (the PSD, from 1985 to 1995; and the PS, since 1995), and all governments were single party. Results for our first set of estimations, which uses as dependent variable the percentage of vote intentions for the party in government, are shown in Table 4.

[Insert Table 4 about here]

In the estimation reported in column 1, we use as independent variables the first lag of the dependent variable  $(VI\_GOV)$ , and that takes the value of one when Guterres is Prime Minister and zero otherwise, two variables accounting for honeymoon effects for the two parties  $(H\_PS)$  and  $H\_PSD$ , the number of months in office  $(Time\_Gov)$ , and the one-month lagged values of the inflation rate (Inflation), the unemployment rate  $(Un\_Rate)$ , and the confidence indicator  $(Conf\_Indicator)$ . Results show that vote intentions for the party in office are positively affected by their value in the last month and by honeymoon effects (only for the PSD). They also suggest that vote intentions are smaller when Guterres is Prime Minister (PS is in office), and that they tend to decrease with time in office and with increases in inflation or unemployment. Results regarding inflation and unemployment clearly support the responsibility hypothesis. As the confidence indicator does not seem to influence vote intentions, it was excluded from the following estimations. The support is a support to the responsibility hypothesis.

We then use alternative variables to control for the effects of time in office. Separating time in office for the PS and the PSD (*Time\_Gov\_PS* and *Time\_Gov\_PSD*) reveals that vote intentions for both governing parties declined with time in office, with the latter party being more severely penalized (column 3). When using dummy variables for terms in office (column 4), there is clear evidence of vote intentions decreases over consecutive terms, and that both PS mandates were less popular than the first two PSD mandates.<sup>11</sup>

Partisan effects are taken into account in the estimation of column 5 by multiplying the economic variables by a dummy variable that takes the value of one when PS is in office.<sup>12</sup> Results indicate that voters do not tend to distinguish between PS and PSD

governments when penalising them for higher inflation or unemployment, since the interaction terms are never statistically significant. Therefore, we do not find support for Swank's partisan (1993) hypothesis.<sup>13</sup>

## Government lead over the major opposition party

Table 5 shows the results of four estimations using as dependent variable the difference between the percentage of vote intentions for the party in office and that for the major party in the opposition.

#### [Insert table 5 about here]

Results further confirm those reported in table 4. As before, there is strong evidence supporting that of the lagged dependent variable and the honeymoon variable for the PSD have positive effects on government lead. Furthermore, the government lead is lower when Guterres is prime minister and tends to decrease with time (months) in office, inflation, and unemployment. Further, the honeymoon variable for the PS governments and the confidence indicator<sup>14</sup> are not statistically significant.

When controlling for partisan effects (columns 3 and 4), there is strong evidence that the government lead decreases more during socialist governments than during social democratic incumbencies when unemployment rises. These results contradict Swank's partisan (1993) hypothesis. Alternatively, we think that since the socialist political program attributes higher priority to improvements in real economic conditions than the social democratic program, Portuguese voters interpret a rise in the unemployment rate during a

socialist government as revealing more government incompetence than if it had occurred during a social democratic incumbency. Concerning price increases or the confidence indicator, voters do not seem to discriminate between PS and PSD governments.

## Vote intentions for the opposition parties

Finally, we decided to analyse vote intentions for the opposition parties. First, using as dependent variable the vote intentions for the major opposition party<sup>15</sup> and as explanatory variables those used in the estimations reported in Table 4. As expected, the significance of the variables was the same as for vote intentions for the governing party, and the signs of the estimated coefficients were symmetrically opposite.<sup>16</sup>

Then, we performed estimations for the other two important opposition parties, CDS/PP and PCP. Recall that these two parties were never in office during the period under analysis. Therefore, their vote intentions were modelled as functions of previous values of the vote intentions, leader characteristics, and economic variables. Results are shown in table 6.

#### [Insert table 6 about here]

Two main conclusions are suggested by the analysis of these estimations. First, vote intentions for CDS/PP and PCP do not seem to be affected by their leaders' personalities. Second, both parties get higher vote intentions when the economy gets worse: the CDS/PP benefits from decreases in the confidence indicator, while the PCP gains from inflation and unemployment increases. These results provide some additional evidence in favour of the

responsibility hypothesis. Voters blame incumbent parties for bad economic results and, therefore, during economic hardships, opposition parties' proposals receive more support.

## Vote intentions using INE's Consumer Survey

In this section, we investigate some microeconomic aspects of the vote intentions function, namely, whether voters are *egotropic* or *sociotropic*, and whether they are prospective or retrospective. As far as we know, these issues have never been investigated for the Portuguese case. We use for this purpose, the National Institute of Statistics's (INE) monthly Consumer Survey that consists of twelve questions. Data from seven of those questions will be used in our estimations. They are related to the past and expected future economic situation of the household or country, inflation, and unemployment. A complete description of these variables is given in appendix 1.

Since the economic situation of the households tends to be highly correlated with that of the country, and most people have rather static expectations, it is not surprising that there is very high correlation between some of the variables resulting from the Consumer Survey (see the correlation matrix in appendix 2). This makes it impractical to include more than one variable concerning the past or expected economic situation of the country/household in the same estimation, since it would lead to serious problems of multicollinearity.

The empirical results are presented in table 7. We started by testing whether voters are prospective or retrospective. The estimation of column 1 combines inflation and unemployment, representing past economic performance, with the economic situation of the country expected for the next 12 months.<sup>17</sup> Since the first two are statistically

significant while the latter is not, there is evidence in favour of a retrospective evaluation of the economy. Exactly the same happens in the estimation of column 2, where inflation is replaced by the perceived price increases in the last 12 months.<sup>18</sup>

## [Insert table 7 about here]

In column 3, inflation and unemployment are combined with the price increases and unemployment expected for the next 12 months. Again, the first two are statistically significant while the variables representing expectations are not. The same happens in column 4, where inflation is replaced by the perceived price increases in the last 12 months. The estimation of column 5 includes the economic situation of the country in the last 12 months, together with expected inflation and unemployment. Once again, the variable representing past performance is statistically significant while those related to expectations are not. Thus, we can safely argue that there is clear evidence of retrospective evaluations of economic performance.

In the last three estimations reported in table 7 we try to determine whether Portuguese voters are *egotropic* or *sociotropic*. The estimation of column 6 includes perceived price increases in the last 12 months and the unemployment rate, representing the situation of the country, and the economic situation of the household in the last 12 months.<sup>19</sup> The fact that the latter is not statistically significant may be interpreted as evidence in favour of *sociotropic* behaviour. Similar results are obtained when we use the expected economic situation of the household instead of the past situation (column 7). But, when we combine the past economic situation of the household with expected inflation and

unemployment (column 8), only the first is statistically significant. This indicates, at the same time, *egotropic* and retrospective behaviour.

In sum, while all estimations shown in table 7 present evidence in favour of a retrospective evaluation of the economy, it is difficult to conclude whether voters are *egotropic* or *sociotropic*. Concerning the other variables, there is again evidence of personality, honeymoon and time effects on the vote intentions on the party in government.

#### **Conclusions**

The main objective of this paper was to investigate the determinants of vote intentions in Portugal. Do they depend on who is leading the party? Do the Portuguese blame incumbents for the evolution of the economy? Does time in office influence vote intentions? Are voters retrospective or prospective, *egotropic* or *sociotropic*? These are some of the questions that provided the starting point for the research. In order to answer them, we used an unexplored data set consisting of vote intentions obtained from monthly polls performed since 1986.

Our results provide an additional light on the interactions between economics and politics in Portugal. In previous research, Veiga (1998) estimated popularity functions for the main political entities in Portugal. She found strong evidence in favour of the responsibility hypothesis, with unemployment, and to a lesser extent inflation, affecting popularity levels. Results found in this paper corroborate this conclusion: vote intentions in the incumbent party increase when the economy is performing well, while vote intentions in the opposition rise in the reverse case. Concerning partisan considerations, estimations using as dependent variable the government lead over the main opposition party suggest

that the socialists are more penalized for rises in unemployment than the social democrats, which contradicts Swank's (1993) partisan hypothesis.

According to the survey of Nannestad and Paldam (1994), most studies conclude that voters are *sociotropic* but there is no clear pattern on whether voters are prospective or retrospective. On the contrary, our results reveal that Portuguese voters are retrospective, but it is not possible to determine if they are *sociotropic* or *egotropic*.

Our analysis also reveals that: (1) PS governments had less electoral support than PSD governments; (2) PSD governments enjoyed a honeymoon period with the electorate during the first months of incumbency while PS governments did not; (3) vote intentions in incumbent parties tend to decrease with time in office.

<sup>&</sup>lt;sup>1</sup> See Nannestad and Paldam (1994) for a survey on vote-popularity functions and Person and Tabellini (2000) for a recent survey on political economics.

<sup>&</sup>lt;sup>2</sup> Veiga (1998) estimated popularity functions for the Portuguese President of the Republic, Prime Minister, Government and Parliament.

<sup>&</sup>lt;sup>3</sup> In February 1986, Mário Soares won the second runoff of the most closely contested presidential election so far. He become the first civilian President of the Republic since 1974 and was elected President for a second term in 1991. In 1996, Jorge Sampaio, also a former PS leader, succeeded him in the Presidency.

<sup>&</sup>lt;sup>4</sup> See Lanoue and Headrick (1994) for a study focusing on Great Britain.

<sup>&</sup>lt;sup>5</sup> The confidence indicator is the average of consumer responses to a set of five questions regarding personal and national, present and future, economic conditions, extracted from the Portuguese Consumer Survey. These questions and the construction of the confidence indicator are explained in Appendix 1.

<sup>&</sup>lt;sup>6</sup> Refer to Kinder and Kiewiet (1979) for the U.S. and Lewis-Beck (1988) for comparative results of Britain, France, Germany, Italy and the U.S. Nannestad and Paldam (1995) is a clear exception. They argue that, in Denmark, the *egotropic* effect on vote is stronger than the *sociotropic* one.

<sup>&</sup>lt;sup>7</sup> Unit-root tests performed for these series indicate that all of them are stationary.

<sup>&</sup>lt;sup>8</sup> The number of lags of the dependent variable was chosen according to their statistical significance, in order to minimize the Schwarz Bayesian Information Criterion (SBIC), and to avoid problems of autocorrelation.

<sup>&</sup>lt;sup>9</sup> The inflation rate is defined as the percentage change in the Portuguese consumer price index since the same month of the previous year (homologous inflation rate).

<sup>&</sup>lt;sup>10</sup> When the confidence indicator is excluded from the estimation of column 1, t-statistics for the other variables and the F-statistic of the equation rise and the SBIC falls (see column 2).

<sup>&</sup>lt;sup>11</sup> The term left out of the regression was PSD's first (*Term1\_PSD*). The dummy variable *Guterres* was not included in this estimation because it is equal to the sum of *Term1\_PS* and *Term2\_PS*.

<sup>&</sup>lt;sup>12</sup> The resulting variables are: (Inflation\*PS), (Unemp\_Rate\*PS), and (Conf\_Indicator\*PS).

- <sup>16</sup> Since results are very similar to those of table 4 (with the inverse signs), they are not reported here. They are, however, available from the authors upon request.
- <sup>17</sup> It is not possible to put the *Econ. Sit. Country (last 12 months)* and *Econ. Sit. Country (next 12 months)* in the same estimation because the correlation between these variables is very high (85,3%).
- <sup>18</sup> Since the INE's Consumer Survey does not include a question on perceived unemployment, we kept the unemployment rate in the set of explanatory variables.
- <sup>19</sup> It is not possible to join the economic situation of the country with that of the household in the same estimation because that would lead to problems of multicollinearity. The correlation between the variables reflecting the last 12 months is 93,3% and that for the expectations for the next 12 months is 95,7%. That is, the situation and expectations for the households are very similar to those of the country.

<sup>&</sup>lt;sup>13</sup> Other economic variables, for which monthly data is available, such as the change in the industrial production index or in the real exchange rate, were added to the estimations. Results, not reported here, did not change significantly.

<sup>&</sup>lt;sup>14</sup> As in table 4, when the confidence indicator is excluded from the estimation of column 1, t-statistics for most of the other variables and the F-statistic of the equation rise and the SBIC falls (see column 2).

<sup>&</sup>lt;sup>15</sup> From 1986 to October 1995, the Socialist Party and, since then, the Social Democratic Party.

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Table 1: Legislative electoral results

	PS	PPD/PSD	CDS/PP	AD	PCP
1976	34,98%	24,03%	15,89%	-	14,5%
1979	27,43%	-	-	42,24%	18,96% <sup>(2)</sup>
1980	27,13% <sup>(1)</sup>	-	-	44,4%	16,92% (2)
1983	36,35%	27,04%	12,38%	-	18,2% <sup>(2)</sup>
1985	20,82%	29,79%	9,74%	-	15,55% (2)
1987	22,3%	50,15%	4,34%	-	12,18% <sup>(3)</sup>
1991	29,25%	50,43%	4,38%	-	8,8% <sup>(4)</sup>
1995	43,85%	34%	9,09%	-	8,61% <sup>(4)</sup>
1999	44%	32,3%	8,4%	-	9% <sup>(4)</sup>

Notes: PS – Socialist Party; PPD/PSD – Popular Democratic Party / Social Democratic Party; CDS/PP – Social Democratic Center / Popular Party; AD - Democratic Alliance (PSD + CDS + PPM - Monarchic Popular Party); PCP – Portuguese Communist Party.

<sup>(1)</sup> Socialist Revolutionary Front (FRS): PS + small socialist parties.

<sup>(2)</sup> Popular Unity Alliance (APU): PCP + MDP/CDE (Portuguese Democratic Movement).

<sup>(3)</sup> Unitary Democratic Coalition (CDU): PCP + dissidents of MDP + PEV (Green-Ecologist Party).

 $<sup>^{(4)}</sup>$  PCP + PEV

Table 2: Legislative elections and parties in government

Dates of elections	Winning party	Share in Parliament	Prime Minister	Form of government
October 5, 1985	PSD	34%	Cavaco Silva	One party, minority
July 19, 1987	PSD	59%	Cavaco Silva	One party
October 6, 1991	PSD	58%	Cavaco Silva	One party
October 1, 1995	PS	48%	António Guterres	One party, minority
October 10, 1999	PS	50%	António Guterres	One party

Note: PSD – Social Democratic Party; PS – Socialist Party.

Table 3: Party leaders since June 1986

PS		PSD		CDS/PP		PCP	
Leader	Period	Leader	Period	Leader	Period	Leader	Period
Victor Constâncio	6/86 - 12/89	Cavaco Silva	5/85- 1/95	Adriano Moreira	10/1985- 1/1988	Álvaro Cunhal	Until 11/92
Jorge Sampaio	1/89- 1/92	Fernando Nogueira	2/95- 3/96	Freitas do Amaral	2/88- 10/91	Carlos Carvalhas	12/92- present
António Guterres	2/92 - present	Marcelo Rebelo de Sousa	4/96- 3/99	Adriano Moreira	11/91- 2/92		
		Durão Barroso	4/99 - present	Manuel Monteiro	3/92- 2/98		
				Paulo Portas	3/98- present		

Table 4: Vote Intentions for the Party in Government

	1	2	3	4	5
Constant	32.21 (5.74)***	32.32 (6.01)***	32.49 (6.05)***	22.98 (5.26)***	34.52 (5.39)***
VI_GOV (-1)	.53 (9.92)***	.53 (9.96)***	.52 (9.67)***	.64 (14.06)***	.50 (8.88)***
Guterres	-5.10 (-2.91)***	-5.15 (-3.18)***	-6.42 (-3.42)***		-4.10 (-1.08)
H_PS	11 (45)	11 (45)	08 (34)	03 (14)	09 (39)
H_PSD	1.19 (5.47)***	1.19 (5.63)***	1.25 (5.80)***	1.39 (6.09)***	1.23 (5.61)***
Time_Gov.	08 (-4.03)***	08 (-4.81)***			09 (-4.70)***
Time_Gov_PS			05 (-2.32)**		
Time_Gov_PSD			08 (-5.00)***		
Term2_PSD			, ,	-3.05 (-2.72)***	
Term3_PSD				-5.50 (-3.75)***	
Term1_PS				-4.67 (-2.45)**	
Term2_PS				-6.45 (-2.81)***	
Inflation (-1)	62 (-3.38)***	62 (-3.43)***	63 (-3.51)***	38 (-2.15)**	71 (-3.19)***
(Inflation*PS) (-1)	` ,	` ,	,	, ,	.39 (.81)
Unemp_Rate (-1)	70 (-2.21)**	71 (-2.75)***	59 (-2.14)**	47 (-1.78)*	62 (-1.90)*
(Unemp_Rate*PS) (-1)	` '	,	` '	` '	54 (-1.60)
Conf_Indicator (-1)	.002 (.07)				, , , , , , , , , , , , , , , , , , ,
Adjusted R <sup>2</sup>	.77	.77	.77	.75	.77
# Observations	175	175	175	175	175

Sources: OECD-MEI, Expresso, and National Elections Commission.

Notes: - t-statistics are in parentheses;

- significance level at which the null hypothesis is rejected: \*\*\*, 1%; \*\*, 5%, and \*, 10%; - models estimated by OLS.

Table 5: Government lead over the major opposition party

	1	2	3	4
Constant	30.16	27.33	30.31	32.22
	(4.48)***	(4.50)***	(4.08)***	(4.26)***
Gov_Lead (-1)	.56	.56	.50	.48
	(10.29)***	(10.56)***	(8.71)***	(8.06)***
Guterres	-8.53	-7.43	-3.97	-4.75
	(-3.33)***	(-3.23)***	(74)	(88)
H_PS	48	49	49	35
	(-1.35)	(-1.36)	(-1.38)	(96)
H_PSD	1.61	1.53	1.68	1.70
	(5.08)***	(5.00)***	(5.35)***	(5.09)***
Time_Gov.	15	13	16	17
	(-4.84)***	(-5.27)***	(-5.44)***	(-5.30)***
Inflation (-1)	-1.02	-1.96	-1.14	-1.25
	(-3.81)***	(-3.69)***	(-3.59)***	(-3.81)***
(Inflation*PS) (-1)			.73	.02
			(1.04)	(.02)
Unemp_Rate (-1)	-1.66	-1.37	-1.15	-1.17
	(-3.39)***	(-3.52)***	(-2.42)**	(-2.22)**
(Unemp_Rate*PS) (-1)			-1.33	-1.45
			(-2.70)***	(-2.91)***
Conf_Indicator (-1)	05			.02
	(97)			(.39)
(Conf_Indicator*PS) (-1)				20
				(-1.58)
Adjusted R <sup>2</sup>	.80	.80	.81	.81
# Observations	175	175	175	175

Sources: OECD-MEI, Expresso, and National Elections Commission.

Notes:

- T-statistics are in parentheses;Significance level at which the null hypothesis is rejected: \*\*\*, 1%; \*\*, 5%, and \*, 10%;
- Models estimated by OLS;
- Government lead was defined as the difference between the vote intentions for the party in government and the major party of the opposition.

Table 6: Vote Intentions on CDS/PP and PCP

	CDS/PP	CDU
Constant	1.39	1.54
	(1.28)	(2.96)***
Vote Int. (-1)	.56	.18
	(7.08)***	(2.53)**
Vote Int. (-2)	.09	.33
	(1.30)	(4.71)***
Leader1	15	35
	(11)	(70)
Leader2	04	
	(05)	
Leader3	.11	
	(.12)	
Leader4	42	
	(77)	
Inflation (-1)	03	.15
	(43)	(2.69)***
Unemp_Rate (-1)	.06	.15
	(.34)	(2.14)**
Conf_Indicator (-1)	05	.02
	(-2.78)***	(1.63)
Adjusted R <sup>2</sup>	.65	.60
# Observations	172	172

Sources: OECD-MEI, Expresso, and National Elections Commission.

Notes: - T-statistics are in parentheses;
- Significance level at which the null hypothesis is rejected: \*\*\*, 1%; \*\*, 5%, and \*, 10%;
- Models estimated by OLS.

Table 7: Vote Intentions using INE's Consumer Survey

	1	2	3	4	5	6	7	8
Constant	30.03 (5.22)***	23.92 (5.99)***	32.84 (5.56)***	27.46 (6.21)***	15.42 (6.73)***	28.63 (4.86)***	24.66 (6.36)***	16.30 (6.99)***
VI_GOV (-1)	.57 (10.23)***	.61 (12.36)***	.57 (10.23)***	.59 (11.8)***	.64 (12.99)***	.56 (10.26)***	.61 (12.34)***	.64 (12.85)***
Guterres	-5.07 (-2.83)***	-2.53 (-2.40)**	-5.15 (-2.96)***	-3.71 (-3.47)***	.55 (.90)	-4.77 (-2.67)***	-2.75 (-2.91)***	.18 (.33)
H_GOV	.57 (3.60)***	.53 (3.34)***	.57 (3.77)***	.51 (3.41)***	.53 (3.48)***	.58 (3.97)***	.55 (3.50)***	.53 (3.43)***
Time_Gov.	07 (-3.50)***	03 (-2.73)***	07 (-3.86)***	05 (-3.94)***	01 (-1.31)	06 (-3.03)***	04 (-3.32)***	02 (-1.65)*
Inflation (-1)	60 (-3.17)***		56 (-2.88)***			57 (-3.02)***		
Unemp_Rate (-1)	61 (-2.12)**	42 (-1.78)*	95 (-2.28)**	74 (-1.88)*		38 (-1.05)	48 (-2.03)**	
Econ. Sit. Country (last 12 months)					.06 (2.53)**			
Econ. Sit. Country (next 12 months)	.02 (.85)	007 (22)						
Price increases (last 12 months)		10 (-3.40)***		-1.14 (-3.63)***			10 (-3.62)***	
Price increases (next 12 months)			04 (-1.06)	.03 (.70)	03 (-1.01)			03 (-1.20)
Unemployment (next 12 months)			.008 (.39)	.03 (1.54)	.02 (1.46)			.03 (1.61)
Econ. Sit. Household (last 12 months)						.08 (1.33)		.15 (2.26)**
Econ. Sit. Household (next 12 months)							03 (66)	
Adjusted R <sup>2</sup>	.75	.75	.75	.75	.74	.75	.75	.74
# Observations	174	174	174	174	174	174	174	174

Sources: OECD-MEI, Expresso, National Elections Commission, and INE.

Notes: - t-statistics are in parentheses;

- significance level at which the null hypothesis is rejected: \*\*\*, 1%; \*\*, 5%, and \*, 10%;

- models estimated by OLS.

## Appendix 1

The seven questions from the National Institute of Statistics's (INE) monthly Consumer Survey that we use in this paper are the following:

- 1. In your opinion, during the last 12 months, your household's (family) economic situation...
  - a. improved a lot
  - b. improved a little
  - c. did not change
  - d. worsened a little
  - e. worsened a lot
  - f. does not know
- 3. In your opinion, during the last 12 months, the general economic situation of the country
  - a. improved a lot
  - b. improved a little
  - c. did not change
  - d. worsened a little
  - e. worsened a lot
  - f. does not know
- 5. In your opinion, during the last 12 months, prices...
  - a. increased a lot
  - b. increased
  - c. increased a little
  - d. did not change
  - e. decreased a little
  - f. does not know
- 7. In your opinion, during the next 12 months, national unemployment...
  - a. will increase a lot
  - b. will increase a little
  - c. will not change
  - d. will decrease a little
  - e. will decrease a lot
  - f. does not know

- 2. In your opinion, during the next 12 months, your household's (family) economic situation...
  - a. will improve a lot
  - b. will improve a little
  - c. will not change
  - d. will worsen a little
  - e. will worsen a lot
  - f. does not know
- 4. In your opinion, during the next 12 months, the general economic situation of the country...
  - a. will improve a lot
  - b. will improve a little
  - c. will not change
  - d. will worsen a little
  - e. will worsen a lot
  - f. does not know
- 6. In your opinion, having the current situation in mind, do you think prices, during the next 12 months...
  - a. will increase more rapidly
  - b. will increase as much as now
  - c. will increase less rapidly
  - d. will stay the same
  - e. will decrease slightly
  - f. does not know

For each question, the result is the weighted difference of the percentages of positive and negative answers, using the following equation:

$$Q_i = (a+0.5b)-(0.5d+e)$$
 (3)

where a,b,d and e are the percentages of respondents choosing the respective options.

#### **Confidence Indicator:**

The Confidence Indicator corresponds to the simple arithmetic average of the results obtained for five questions of the Consumer Survey: questions 1 to 4, shown in the previous page, and the following question:

- 8. Do you think that, for people in general, this is a good time to buy important durable goods, such as furniture, washing machines, TV sets, VCRs, computers, etc.?
  - a. Yes, it is a good time
  - b. It is neither a good nor a bad time
  - c. No, it is not a good time. Those acquisitions should be postponed
  - d. does not know

The result for this question is the difference between the percentage of respondents choosing option a and option c. That is:

$$Q_8 = a - c \tag{4}$$

Then, the Confidence Indicator is obtained using the following equation:

$$CI = (Q_1 + Q_2 + Q_3 + Q_4 + Q_8)/5 \tag{5}$$

# Appendix 2

## **Correlation Matrix**

# **Data on the first seven questions of the Consumer Survey**

	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7
Q1	1.00000						
Q2	0.85369	1.00000					
Q3	0.93390	0.89532	1.00000				
Q4	0.80934	0.95718	0.91517	1.00000			
Q5	0.02153	0.10747	0.04071	0.02650	1.00000		
Q6	-0.04375	-0.28544	-0.17452	-0.40850	0.51535	1.00000	
Q7	-0.83320	-0.66293	-0.72650	-0.62785	-0.08003	-0.04018	1.0000