Partisan Politics Theory and stock market performance: Evidence for Spain [*]

Política partisana y comportamiento del mercado bursátil: evidencia para el caso español

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ABSTRACT This paper examines the influence of Spanish major political events on stock market performance by testing the empirical implications of the existing theories focused on the connection between politics and stock exchanges. On the one hand, our findings give support to the partisan politics theory, since stock returns behave differently depending on the political orientation of the government, not only on the day of the national election but also during their tenure of office. On the other hand, the analytical results demonstrate that there are no abnormal positive returns during the second half of the government's term, which contradicts the opportunistic political business cycle theory. Finally, according to Brown *et al.*'s (1988) Uncertain Information Hypothesis, volatility of stock returns is shown to increase following the arrival of unexpected information.

KEYWORDS Politics; Excess returns; Stock market performance.

RESUMEN Este trabajo examina la influencia de la política en el comportamiento del mercado bursátil español mediante el contraste de las implicaciones empíricas de las teorías actuales sobre la conexión entre los eventos políticos y las plazas bursátiles. Por un lado, nuestros resultados son consistentes con la teoría partisana, dado que los rendimientos de las acciones exhiben un comportamiento distinto dependiendo de la ideología del gobierno, no solamente el día de las elecciones sino también durante el período en el que un determinado partido está en el poder. Por otro lado, analíticamente se demuestra que no hay rendimientos anormalmente positivos durante la segunda mitad de la legislatura, contradiciendo la teoría oportunista del ciclo político. Finalmente, se verifica la hipótesis de información incierta de Brown *et al.* (1988), de acuerdo con la cual, la volatilidad de los rendimientos de las acciones se incrementa con la llegada al mercado de información no esperada.

PALABRAS CLAVE Política; Rendimientos anormales; Comportamiento del mercado bursátil.

1. INTRODUCTION

Since Niederhoffer *et al.* (1970) analyzed stock market movements in the days and weeks surrounding US presidential elections, the study of the relationship between politics and the stock market has generated much research of interest. Thus, a great number of studies have analyzed several topics such as the influence of economic events on election voting, the relationship of the expected stock return with economic factors, the link between stock market performance and political election dates, and the explanatory power of political risk in emerging and developed markets [1].

Recently, some studies have provided new empirical evidence that has boosted the interest in this type of financial literature. This is the case of the event study by Pantzalis *et al.* (2000) which examines stock market behavior around election dates on an international scale (33 countries) and observes that index returns are generally positive and significant in the two weeks prior to the election week. They find that this abnormal return is strongest for elections with the highest degrees of uncertainty, in particular, in countries with low rankings of political, economic, and press freedom, and elections in which the incumbent loses. Both Foerster and Schmitz (1997) and Wong and McAleer (2009) show that US stock prices fall during the first half of a Presidency, reach a trough in the second year, rise during the second half of a Presidency, and reach a peak in the third or fourth year. Furthermore, Allivine and O'Neill (1980), Huang (1985) and Booth and Booth (2003) report that the US stock market tends to perform better in the second half of the presidential term. Similar results are obtained for the Canadian equity market from 1951 to 2006 (Chrétien and Coggins, 2009).

Regarding the relationship between the political orientation of government and stock market returns, Santa-Clara and Valkanov (2003) and Booth and Booth (2003) show that US stock market returns are higher during Democratic than during Republican presidencies. The same conclusion is achieved by Chrétien and Coggins (2009) for the Canadian equity market. Booth and Booth (2003) also find excess returns under Democratic presidents for a small-cap stock portfolio, while large-cap stock excess returns are not significantly different from each other during the 1926-1996 period. Vuchelen (2003) focuses on the Belgian market and concludes that when a centre-left coalition takes office after an election, stock prices slightly increase, whereas a centre-right coalition would push stock prices down. In contrast to previous literature, Leblang and Mukherjee (2005) show that the incumbency or even the anticipation of a left-wing (right-wing) party holding the office of the chief executive significantly decreases (increases) the mean and volatility of stock prices in the United States and Britain. Following the same line, Cahan *et al.* (2005) show that in New Zealand stock market returns are lower when the left-leaning Labour party is in power than under National party governments, while Füss and Bechtel (2008) find that in the 2002 German federal election overall stock performance of small German firms

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(1)   See Chen *et al.* (2005), Bohl and Gottschalk (2006), Döpke and Pierdzioch (2006), He *et al.* (2009) and Imai and Shelton (2011), among others, for a comprehensive review of different studies that have analyzed the empirical relationships between stock markets and politics.

was positively linked with the probability of a right-leaning coalition winning the election, with no significant effects of expected government partisanship on mid- and large-sized enterprises. Bialkowski *et al.* (2007) has fuelled even more controversy on this topic. In a comprehensive analysis that takes into account 24 stock markets and 173 different governments, they do not observe statistically significant differences in returns between left-wing and right-wing executives.

Finally, Bialkowski *et al.* (2008) investigate a sample of 27 OECD countries to test whether national elections induce higher stock market volatility. Their empirical findings indicate that investors are still surprised by the ultimate distribution of votes. Stock prices react strongly in response to this surprise and temporarily elevated levels of volatility are observed. Leblang and Mukherjee (2005) focusing on the US and British stock market, and Füss and Bechtel (2008) looking at the 2002 German federal election, analyze empirically the effects of different parties holding office on volatility and find that increasing electoral prospects of a right-leaning coalition trigger volatility increases. Furthermore, the former show that higher uncertainty about the electoral outcome increases market volatility as opposed to the latter who find contrary evidence.

The rationale behind these studies is the theory of the Political Business Cycle (PBC) that was pioneered by Nordhaus (1975) who pointed out that «within an incumbent's term in office there is a predictable pattern of policy, starting with relative austerity in early years and ending with the potlatch right before elections» (see Nordhaus, 1975: p. 187). In the PBC literature, we find two schools that try to explain how the political process induces cycles in stock market performance. On one hand, the «opportunistic» PBC theory argues that the incumbent governments use expansionary policy measures to improve the economic situation just before an upcoming election with the main aim being to increase stock prices and therein to win votes. The existence of these government cycles, also known as presidential cycles in the case of the USA, would imply that significant and positive returns should be observed in the months preceding an election. On the other hand, the «partisan» PBC theory argues that a «partisan» cycle is detectable in stock market returns because left-wing governments, unlike right-wing governments, focus more on expansionary policies, while right-wing governments are more worried about controlling inflation. Therefore, differences in the ideological composition of governments will be reflected in economic policies and, as a consequence, in stock price behavior.

It is worth noting that the «opportunistic» PBC implies that policy-makers systematically aim for a rise in stock prices preceding elections. Following Vuchelen (2003), this fact leads to comparable empirical implications as the Uncertain Information Hypothesis (UIH) proposed by Brown *et al.* (1988, 1993). The UIH assumes that investors set prices before an event takes place. In responding to the increased uncertainty, investors set stock prices below their fundamental values. An upward corrective trend in security prices will then follow as the election result becomes more certain. As election-induced uncertainty is reduced, the risk-adjusted expected return should fall and stock prices should rise. Mehdian *et al.* (2008) suggest that the greatest degree of uncertainty

resolution and thus the highest observed returns should be expected in the time period immediately preceding the election date as this is when media coverage and campaigning are at their peak.

The aim of this paper is to study the link between politics and the Spanish stock exchange by testing both the empirical implications of the schools of the Political Business Theory and the Uncertain Information Hypothesis. As far as we know, this is the first study that analyzes all these topics for the Spanish stock exchange at a country level[2].

The remainder of the paper is structured as follows. Section 2 describes the financial and electoral data used in the study. Section 3 is concerned with testing the empirical implications of the Political Business Cycle theory. In section 4, the analysis of the stock market performance in terms of mean returns and volatility around election-related events is carried out. Finally, section 5 summarizes with some concluding remarks.

2. DATA

The financial data have been obtained from *MSCI Barra* and cover the period from January 1976 to October 2008. We utilize daily stock return data for MSCI Spain Index and MSCI World Index. These indices are free float-adjusted market capitalization weighted indices and both of them are expressed in US dollar terms. The MSCI Spain Index is comprised of Spanish equities listed in Spain, while the MSCI World Index is designed to measure the equity market performance of the most developed markets. Panel A of Table I presents the descriptive statistics of returns on MSCI Spain Index and MSCI World Index. The sample period consists of 7726 observations. Both series of returns are slightly skewed (skew$_{\text{MSCI SPAIN INDEX}}$ = -0.23 and skew$_{\text{MSCI WORLD INDEX}}$ = -0.51) and leptokurtic (kurtosis$_{\text{MSCI SPAIN INDEX}}$ = 8.67 and kurtosis$_{\text{MSCI WORLD INDEX}}$ = 13.05). Accordingly to these values, the Bera-Jarque test show substantial departures from normality in both indices[3].

Political election details have been obtained from the website of the Spanish Ministry of Interior (www.mir.es). Democracy in Spain was reinstalled following the death of Dictator Francisco Franco in 1975, who had governed since the end of the Spanish Civil War in 1939. The first election in the democratic transition took place in June 1977 and the winner was the party *Unión de Centro Democrático* (UCD) whose leader was Adolfo Suárez. The Spanish Constitution, approved in 1978, established Spain as a parliamentary monarchy, with the President of the Government and a Spanish Congress of 350 members elected every four years. The evolution of the number of seats obtained by each party in the Spanish General Elections from the democratic transition until 2008

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(2)   It should be noted that Pantzalis *et al.* (2000) and Bialkowski *et al.* (2008) included six and seven general elections in Spain in their respective event studies; however, they were aimed at identifying the determinants of a reaction of the stock market to elections (respectively in terms of returns and volatility) at an international level, and, by mixing countries with different types of elections (presidential and parliamentary), failed to go into the relationship between elections and stock market performance individually.

(3)   See further details regarding the methodology about index definitions at www.mscibarra.com (last accessed March 2011).

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TABLE I

SUMMARY STATISTICS

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Panel A displays some descriptive statistics of the MSCI Spain index and the MSCI World index returns series. Panel B shows the results of the Augmented Dickey-Fuller (ADF) test. The critical values of the ADF test for the rejection of the null hypothesis of the existence of a unit root is -3.96 for the series in levels, and -3.4336 for the series in compound returns at the 1% significance level. *   denotes statistical significance at the 1% level.

Panel A. Descriptive Statistics		
	MSCI Spain Index returns	*MSCI World Index returns*
Mean (%)	0.020	0.031
Median (%)	0.003	0.054
Standard Deviation (%)	1.335	0.813
Minimum	-0.118	-0.104
Maximum	0.092	0.081
Skewness	-0.225	-0.514
Kurtosis	8.673	13.053
Bera-Jarque	10424.71	32876.95
(p-value)	(0.0000)	(0.0000)

Panel B. ADF Test				
	MSCI Spain Index		*MSCI World Index*	
	In levels	*In returns*	*In levels*	*In returns*
ADF Statistic	-2.39	-78.75*	-1.98	-59.35*

is represented in figure 1. After a short period of unstable UCD governments, the *Partido Socialista Obrero Español* (PSOE) led by Felipe González got the absolute majority in October 1982 and ruled for the next thirteen years. In March 1996, the *Partido Popular* (PP) of José María Aznar obtained a relative majority that implied a change from a left-wing government to a right-wing government. The PP governed during eight years until the 2004 elections in which the PSOE and its leader, José Luis Rodríguez Zapatero, won the elections and repeated their victory in the 2008 elections.

It is important to point out that the Spanish Constitution of 1978 allowed for the creation of regional governments. In March 1980, the first regional elections were held in the Basque Country and Catalonia, and since then in the rest of the seventeen regions that constitute Spain. It is worth noting that independent parties in both regions have had a significant presence in the regional and national governments and they have been of some importance for the stability of the national government when the winning parties did not get an absolute majority (less than 176 seats), something that has occurred in seven out of ten elections, and especially when they even needed to form a coalition in order to become president, as happened in the 1993 and the 1996 elections. For these reasons, we have also considered in our study the effects of the regional elections that have taken place in the above mentioned regions since 1980. On the whole, the election information that we have selected includes the election date and the election outcome of ten national elections, sixteen regional elections, five European elections, four general referendums, and the corresponding dates of investiture of national elections.

SEAT EVOLUTION IN SPAIN

Evolution of the number of seats obtained by party in the Spanish General Elections from the democratic transition until 2008. The figure represents the evolution of the number of seats won by the *Partido Socialista Obrero Español* (PSOE) and the *Partido Popular* (PP), and the sum of seats won by all independent parties from Catalonia and Basque Country. The Spanish Congress has 350 members; therefore the absolute majority is reached with 176 seats. Source: Spanish Ministry of Interior.
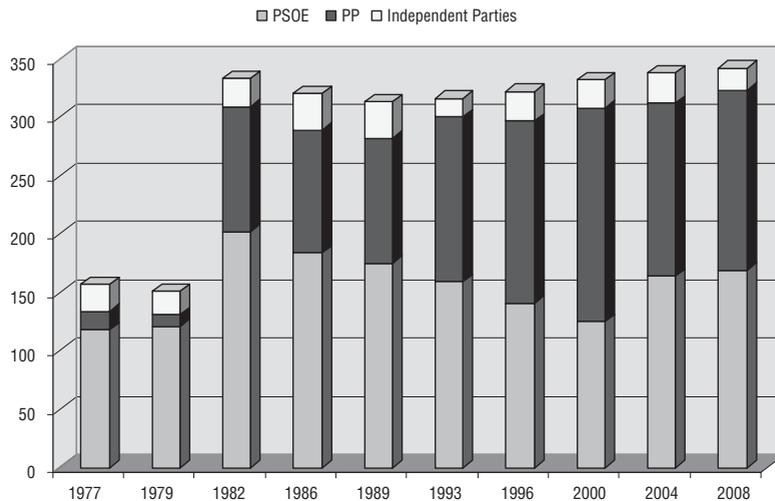
3. POLITICAL BUSINESS CYCLE IN THE SPANISH STOCK MARKET

Two theories try to explain how politics affect stock market performance. On the one hand, according to the «opportunistic» PBC theory, the incumbent president may use monetary and/or fiscal policy in a cyclical manner to help his party maintain power in the next election. Public spending would be increased in the latter years of an election cycle enhancing the economy as a whole. Policies will be expansionary prior to elections (in order to appear, at least temporarily, competent to their electorate) and contractionary afterwards. However, economic agents not anticipating a recurrent behavior by incumbent governments would have been making the same valuation errors based on sentiment cycle after cycle, which is far from rationality in an efficient market sense. With rational investors, however, the influence of such a political cycle on the stock exchange disappears.

On the other hand, the «partisan» theory maintains that the ideology of a government also matters, since differences in ideology will lead to policy differences and will consequently have a different impact on stock prices. According to Hibbs (1977), left-wing governments tend to give priority to the well-being of their working class electorate by combating unemployment while right-wing governments address their efforts to control inflation, which is feared by higher income groups. However, stock prices only change to the extent that the election outcome is unexpected. Otherwise, such effects would be anticipated by the market before the elections took place.

Furthermore, effects may be temporary and disappear once election results are known (rational party models), or permanent over the term of the government (traditional party models).

To test empirically whether these hypothesis hold for the Spanish case, we use a model based on the International Market Model (IMM) within a GARCH (1,1) framework to test the empirical implications of the model. GARCH models are especially suitable for analyzing daily data with leptokurtosis and volatility clustering (Bollerslev, 1986; Engle, 1982). The IMM model allows us to remove the global influences from the local return series since it proposes a single-factor return-generating process in which returns of the country are sensitive to movements in a world market index. The return on the MSCI World Index is used as a proxy for the market portfolio. The IMM can be modeled with the following model:

$$RS_t = \alpha + \beta \cdot RW_t + \varepsilon_t$$
$$h_t = \gamma_0 + \gamma_1 \cdot h_{t-1} + \gamma_2 \cdot \varepsilon_{t-1}^2$$

(1)

where RS_t is the return on the Spanish index at time t and RW_t is the return on the World Index at time t. The time series of returns are computed directly from the logged differences in the levels of the MSCI Spain Index and MSCI World Index, respectively. ε_t is the residual Spanish return at time t, and ht is the conditional volatility of ε_t. γ_0 denotes the long term mean or unconditional variance, γ_1 reflects the dependence of the current volatility upon news about volatility from the previous period and γ_2 reflects the dependence of the current volatility on the conditional variance of the previous period. Finally, $\gamma_1 + \gamma_2$ indicates the degree of volatility persistence.

Before undertaking the estimation, both series of compound returns were tested for stationary using the Augmented Dickey-Fuller stationarity (ADF) test. The use of returns, as in Model (1), is helpful to transform the underlying series into stationary. Indeed, as shown in Panel B of table I, the ADF statistic value is -2.39 (-1.98), which is greater than the critical value at the 1% levels, so that the unit-root hypothesis cannot be rejected for the MSCI Spain Index (MSCI World Index) series in levels. However, both the MSCI Spain Index and the MSCI World Index series in compound returns are stationary processes, with ADF statistic values of -78.75 and -59.35, respectively.

It should be noted that the returns on the Spanish and the World Index are measured contemporaneously, assuming that the explanatory variable is available on a timely basis and has an immediate influence over the return series. This assumption follows prior literature and is consistent with the timely incorporation of price information in financial markets [4] (see Pantzalis *et al.*, 2000 and Bialkowski *et al.*, 2008).

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(4)   To be precise, fifty percent of stocks that make up the MSCI World Index are available at the same time as those of the MSCI Spanish Index, while the remaining (mostly non-European) fifty per cent keeps on being traded after the Spanish Market closing (17:35 Madrid time). We would like to note that we have regressed the MSCI Spanish Index return on the one-lagged MSCI World Index return and the estimation result does not improve in accordance with the adjusted *R-squared*, the minimized Akaike information criterion (*AIC*), and the Schwartz criterion (*SC*). This result is not surprising at all, merely reflecting the fact that Spanish stocks are more correlated with European stocks than with those from American markets.

Additionally, given that the majority of the elections have been held on weekends [5], we have taken into account the results found in Peiró (1994) for the Monday effect in the Spanish Market. Specifically, Peiró (1994) found that Spanish stock returns exhibited daily seasonality with positive Monday returns being especially marked due to the clearing procedure employed until 25 November 1991. Indeed, the so-called Monday effect stopped playing a role in determining Spanish returns once the clearing procedures changed. A dummy variable called M_t designed to capture such an effect is included in the model, taking the value 1 whenever t is any Monday before the mentioned date, and 0 otherwise.

$$RS_t = \alpha + \beta \cdot RW_t + \delta \cdot M_t + \varepsilon_t$$
$$h_t = \gamma_0 + \gamma_1 \cdot h_{t-1} + \gamma_2 \cdot \varepsilon_{t-1}^2$$

(2)

Estimation results of Model (2) are presented in table II. The coefficient on the market portfolio is significant and positive, revealing the strong relationship between the Spanish Index returns and the World Index returns. The coefficient on the Monday effect is also significant and positive, which is consistent with Peiró (1994) findings. However, the model still shows large serial correlation via Durbin-Watson and LJung-Box Q-statistics. Also, the standardized squared residuals for lags 1 and 2 are not uncorrelated and, according to the Jarque-Bera test statistic, are highly non-normal, caused mainly by excess kurtosis (see panel B of table II). In a second step, the AR (1) component of the mean equation of the return is aimed at controlling for serial correlation. Furthermore, the model, Model (3), is estimated under the hypothesis of Student-t error distribution (instead of assuming normally distributed residuals):

$$RS_t = \alpha + \beta \cdot RW_t + \chi \cdot RS_{t-1} + \delta \cdot M_t + \varepsilon_t$$
$$h_t = \gamma_0 + \gamma_1 \cdot h_{t-1} + \gamma_2 \cdot \varepsilon_{t-1}^2$$

(3)

A potential problem in the estimation of Model (3) is the possible correlation among the explanatory variables. However, the correlation matrix of the explanatory variables indicates that there is no cause for concern [6]. As can be observed from Panel B of table II, the Ljung-Box Q-statistics lead us to not reject the null hypothesis of no serial correlation in the standardized residuals and in the squared standardized residuals. The fact that the standardized squared residuals are uncorrelated suggests that the GARCH model has adequately captured the persistence in the variance of returns.

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(5)   It is the case of all national elections from 1986 onward and of every regional election with the only two exceptions being the 1980 and 2006 Catalan regional elections.
(6)   Specifically, the correlations for each pair of explanatory variables are World return/one-lagged Spanish return (0.05), World return/Monday (-0.02) and one-lagged Spanish return/Monday (0.003).

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Table **II**

ESTIMATES OF MODELS 2 AND 3

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Panel A presents the estimates of Model (2) and Model (3). RS_t is the return on the Spanish Index at time t, RW_t is the return on the World Index at time t, M_t is a dummy variable capturing the Monday effect on Spanish returns before 25 November 1991. T-dist. DOF denotes degrees of freedom of Student-t's distribution. Panel B reports the Adjusted R2, the Akaike Information Criteria (AIC), the Schwarz Criteria (SC), the Durbin-Watson statistic (D-W), the Jarque-Bera test statistic for standardized residuals (J-B. test) and the Ljung-Box Q-statistic for standardized (Ljung-Box Q1) and standardized squared residuals (Ljung-Box Q2) with the p-values in parenthesis. * denotes statistical significance at the 1% level.

Panel A	Model 2		Model 3	
Variable	Coefficient	t-statistic	Coefficient	t-statistic
α	-7.61E-05	-0.6940	-0.0001	-0.9813
RW_t	0.8711*	82.451	0.8170*	59.647
RS_{t-1}	–	–	0.0643*	6.8397
M_t	0.0028*	6.7429	0.0033*	6.9796
γ_0	1.66E-06*	11.1303	3.38E-06*	6.3386
h_{t-1}	0.9218*	349.82	0.8837*	93.143
ε_{t-2}^2	0.0680*	22.68	0.0916*	11.461
T-dist. DOF			6.88*	17.38

Panel B	Model 2		Model 3	
Adjusted R^2	25.65%		26.47%	
AIC	-6.25		-6.32	
SC	-6.25		-6.31	
D-W	1.87		1.99	
J-B. test	5390.58 (0.0000)		10815.29(0.0000)	
	Ljung-Box Q 1	Ljung-Box Q 2	Ljung-Box Q 1	Ljung-Box Q 2
Lag(1)	31.625 (0.000)	6.2961 (0.012)	1.3779 (0.240)	1.0349 (0.309)
Lag(2)	32.077 (0.000)	6.9316 (0.031)	1.4970 (0.473)	1.1696 (0.557)
Lag(3)	33.194 (0.000)	7.0926 (0.069)	2.6754 (0.444)	2.0207 (0.568)
Lag(4)	33.562 (0.000)	7.2032 (0.126)	3.1391 (0.535)	2.1168 (0.714)
Lag(5)	34.059 (0.000)	7.6795 (0.175)	3.5702 (0.613)	2.7282 (0.742)
Lag(36)	65.256 (0.002)	34.451 (0.542)	33.688 (0.579)	19.366 (0.989)

3.1.   THE «OPPORTUNISTIC» PBC THEORY AT THE SPANISH STOCK EXCHANGE

To check the «opportunistic» PBC hypothesis for the Spanish case, the mean equation in Model (3) is then augmented with the political-cycle variable which is the variable of interest:

$$RS_t = \alpha + \beta \cdot RW_t + \chi \cdot RS_{t-1} + \delta \cdot M_t + \phi_1 \cdot Pc1_t + \varepsilon_t$$
$$h_t = \gamma_0 + \gamma_1 \cdot h_{t-1} + \gamma_2 \cdot \varepsilon_{t-1}^2$$

(4)

where $Pc1_t$ is a dummy variable that takes the value 1 if t belongs to the second half of each government's term and 0 otherwise.

ESTIMATES OF MODEL 4

Panel A presents the estimates of Model (4). RSt is the return on the Spanish Index at time t, RW_t is the return on the World Index at time t, M_t is a dummy variable capturing the Monday effect on Spanish returns before 25 November 1991, $Pc1_t$ is a dummy variable taking the value one if t belongs to the second half of each government's term, and 0 otherwise. T-dist. DOF denotes degrees of freedom of Student-t's distribution. Panel B reports the Adjusted R2, the Akaike Information Criteria (AIC), the Schwarz Criteria (SC), and the Durbin-Watson statistic (D-W). * (**) denotes statistical significance at the 1% level.

Panel A	Model 4	
Variable	Coefficient	t-statistic
α	-0.0002	-1.1617
RW_t	0.8169*	59.642
RS_{t-1}	0.0642*	6.8352
M_t	0.0033*	6.9566
$Pc1_t$	0.0001	0.6627
γ_0	3.38E-06*	6.3417
h_{t-1}	0.8838*	93.133
ε^2_{t-2}	0.0915*	11.454
T-dist. DOF	6.87*	17.384

Panel B	Model 4
Adjusted R^2	26.46%
AIC	-6.32
SC	-6.31
D-W	2.00

Estimation results of Model [4] allow us to conclude that Spanish excess returns have not been statistically significantly higher during the second half of government's term, meaning that there is no evidence supporting the theory of «opportunistic» PBC for the Spanish case. Indeed, the coefficient on the political cycle variable, *Pc1*, is not significantly different from zero (see table III). Nonetheless, some comments should be made on this subject. On the one hand, that no political effect on the market is found does not necessarily mean that policy-makers have not followed the above-mentioned strategies to gain votes, but that investors, acting in a rational way, might have anticipated these policy moves and do not adjust their positions accordingly. On the other hand, the true capacity of politicians to use economic variables in order to interfere in people's voting decisions can be quite limited in countries like Spain that belong to a monetary union. In fact, as stated in Hays *et al.* (2000), the theoretical model linking government partisanship and stock market performance via inflation does not apply to Germany (and by extension to the rest of the economies of the European Monetary Union) because with the introduction of the euro, national monetary is no longer controlled by national central banks but by the European Central Bank, which is independent from the political process.

3.2. The «partisan» theory at the spanish stock exchange

We then investigate whether the ideological composition of the government may affect the performance of the Spanish stock market, as the «partisan» PBC theory postulates, not only in the days following elections (temporary effects) but also throughout the tenure (permanent effects).

Right-wing parties are assumed to pursue more prominent supply-side policies than left-wing parties which tend to be more concerned about employment. The model in Leblang and Mukherjee (2005) predicts that rational anticipation of higher (lower) inflation under left-wing (right-wing) administrations decreases (increases) demand for stocks among traders and lowers (raises) trading volume, which leads to a decrease (increase) in the mean and volatility of stock prices not only during the incumbency of left-wing (right-wing) governments but also when traders expect the left-wing (right-wing) party to win elections. Of course, other indicators apart from inflation could be additionally used by investors to judge the incumbent´s competence. Thus, in efficient markets, stock prices anticipate election results in such a way that an expected victory of a right-wing party should stimulate prices as long as the expectation remains unchanged. But an unexpected switch from a right-wing to a left-wing government could depress stock prices once election results are made public, and vice versa, since investors might presume that the former will put into practice more favorable policies to their interests. Following this line of argumentation, one would expect abnormally higher (lower) returns when expecting a right-wing (left-wing) party's victory, after an unexpected switch from a left-wing (right-wing) to a right-wing (left-wing) government, or even during the tenure of the right-wing (left-wing) party [7].

The nexus between the ideology of the incumbent as a political event and stock returns is first tested for the Spanish case by adding three dummy variables to the mean equation of Model (3) that take the value 1 when a particular ideological party wins elections:

$$RS_t = \alpha + \beta \cdot RW_t + \chi \cdot RS_{t-1} + \delta \cdot M_t + \phi_1 \cdot UCD\_w_t +$$
$$\phi_2 \cdot PSOE\_w_t + \phi_3 \cdot PP\_w_t + \varepsilon_t \tag{5}$$
$$h_t = \gamma_0 + \gamma_1 \cdot h_{t-1} + \gamma_2 \cdot \varepsilon_{t-1}^2$$

i_w_t equals 1 if t is the election day, or the first trading day after elections if the election day takes place during the weekend, and the 'i' stands for the party that has won elections, where $i = UCD$ (centre), $PSOE$ (left-wing), PP (right-wing).

Estimation results from Model (5) are reported in Table IV. Note that the coefficient related to the victory of the UCD party is statistically positive, the coefficient of the

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(7)   In contrast, as indicated in the Introduction, some evidence for the US is just the opposite, i.e., stock prices are shown to grow faster when Democrats are in office. An alternative explanation for such a result, given in Bialkowski *et al.* (2007), is that it is interpreted as an increased risk premium accumulated by investors who decide to hold stocks throughout the left-wing administrations, since they attribute greater uncertainty to left-wing incumbencies. Thus, the higher returns may be seen as a compensation for the increased risk. In any case, one should have in mind that there won't be any impact on stock prices as long as the difference between the economic policies of the left and the right-wing parties becomes less clear-cut.

victory of the PSOE party is not significantly different from zero, and the coefficient of the variable that captures the effects of a victory of the PP party is significantly negative. In view of the above results, it can be concluded that the «partisan» PBC theory is verified for the Spanish case, since the Stock Exchange is shown to be affected differently by victories of parties based on different political ideas. In other words, it seems that the ideology of the government also matters. However, the negative reaction to the victory of a right-wing party seems to contradict *a priori* the expected effects previously described, which are coincident with those suggested in the analysis of party manifestos by Garret (1998) or Budge *et al.* (2001), namely that right-leaning parties tend to provide economic policies that are more favorable to corporate profits than to left-leaning parties. Thus we need to go into this question in depth by looking at the election day returns of each Spanish election separately in order to shed light on the reasons for the positive (negative) excess returns following the victories of the centre (right-wing) parties in Spain.

The Spanish Stock Exchange reacted very positively to UCD victories with price rises of 3.6 and 6.7 percent respectively for the 1977 and 1979 elections. This result may be explained by the euphoria of investors after the establishment and advancement of democracy in Spain after almost forty years of dictatorship. Regarding the two elections won by the right-wing party, the magnitude of the market reaction to the 1996 PP victory was remarkable, with stock prices dropping six percent in just one day. During the month prior to elections, there was a climate of political change based on the polls and the Spanish Stock Exchange rose nearly seven percent. Finally, the election outcome led to a PP victory, though much less comfortable than expected [8], and a market correction followed. Therefore, the Stock Exchange reacted to an unexpected political event such as a narrower-than-expected margin of the right-wing party. In some sense, the fact that the abnormally lower Spanish returns obtained the day after elections could be explained by errors of prediction of the right-wing party's margin of victory implicitly means that investors are not indifferent between left- and right-wing parties. Such a result is consistent with the implications of the Leblang and Mukherjee (2005) model and lends support to the «partisan» theory for the Spanish case.

Complementarily, our focus turns to measuring stock market performance under different incumbencies. Thus, the previous dummy variables are replaced by i:

$$RS_t = \alpha + \beta \cdot RW_t + \chi \cdot RS_{t-1} + \delta \cdot M_t + \omega \cdot i_t + \varepsilon_t$$
$$h_t = \gamma_0 + \gamma_1 \cdot h_{t-1} + \gamma_2 \cdot \varepsilon_{t-1}^2$$

(6)

where $i = UCD$ (centre), *PSOE* (left-wing) or *PP* (right-wing) that equals 1 over the term of the centre, left-wing and right-wing governments.

As shown in table IV, the variable testing for the left-wing party permanent effects is not statistically significant. In contrast, excess returns are shown to be significantly higher (lower) during the right-wing (centre) party's term in office. Higher excess

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(8)   The polls indicated a larger margin in favor of PP than finally registered (González, 1998).

returns under right-wing governments are again consistent with the predictions of the Leblang and Mukherjee (2005) model. Of course, these results should be confirmed with a larger sample, when available.

As an overall conclusion of this section, it can be stated that with respect to elections, considered as political events, the experience of the Spanish Stock Exchange supports the «partisan» PBC theory, not only on the election day but also during their tenure of office.

TABLE IV
ESTIMATES OF MODELS 5 AND 6

Panel A presents the estimates of Model (5) and Model (6). UCD_w_t, $PSOE\_w_t$, and PP_w_t, (UCD_t, $PSOE_t$ and PP_t) are dummy variables to test for temporary (permanents) effects of the ideological composition of the government on economic variables. RS_t is the return on the Spanish index at time t, RW_t is the return on the World index at time t, M_t is a dummy variable capturing the Monday effect on Spanish returns before 25 November 1991. *T-dist. DOF* denotes degrees of freedom of Student-t's distribution. Panel B reports the Adjusted R2, the Akaike Information Criteria (AIC), the Schwarz Criteria (SC), and the Durbin-Watson statistic (D-W). * (**) denotes statistical significance at the 1% (5%) level.

Panel A	Model 5		Model 6.1		Model 6.2		Model 6.3	
Variable	Coefficient	t-stat.	Coefficient	t-stat.	Coefficient	t-stat.	Coefficient	t-stat.
α	-9.87E05	-0.933	6.04E-05	0.5275	-0.0001	-0.836	-0.0003**	-2.415
RW_t	0.8177*	50.490	0.8158*	59.629	0.8169*	59.639	0.8163*	59.619
RS_{t-1}	0.0642*	6.888	0.0626*	6.6513	0.0643*	6.835	0.0638*	6.784
M_t	0.0033*	7.011	0.0032*	6.6214	0.0033*	6.826	0.0035*	7.335
UCD_w_t	0.0487*	9.674						
$PSOE\_w_t$	-0.0062	-1.422						
PP_w_t	-0.0388*	-10.135						
UCD_t			-0.0012*	-4.070				
$PSOE_t$					5.32E-05	0.248		
PP_t							0.0008*	3.330
γ_0	3.09E-06*	6.213	3.46E-06*	6.380	3.38E-06*	6.339	3.45E-06*	6.375
h_{t-1}	0.8883*	97.789	0.8820*	91.924	0.8837*	93.114	0.8822*	91.877
ε^2_{t-2}	0.0890*	11.548	0.0927*	11.492	0.0916*	11.459	0.0926*	11.460
T-dist. DOF	7.114*	16.627	6.825*	17.391	6.877*	17.382	6.821*	17.396
Panel B	Model 5		Model 6.1		Model 6.2		Model 6.3	
Adjusted R^2	26.87%		26.50%		26.46%		26.50%	
AIC	-6.32		-6.32		-6.32		-6.32	
SC	-6.31		-6.31		-6.31		-6.31	
D-W	2.00		1.99		1.99		2.00	

4. ELECTIONS AND STOCK MARKET PERFORMANCE

Election outcomes can indicate whether the existing policies are going to remain the same or not. It is in this sense that political uncertainty is assumed to influence the behavior of investors. Furthermore, as long as uncertainty continues, it may imply increased volatility in financial markets. As previously reported, Brown *et al.* (1988, 1993) developed the so-called «Uncertain Information Hypothesis» (UIH) noting that when election-induced uncertainty is reduced, the risk-adjusted expected return falls and stock prices rise. Therefore, positive price changes should be expected following

the election as uncertainty about the election outcome is resolved, though much of the uncertainty about the outcome may be resolved prior to the actual election date.

4.1. RESPONSE OF RETURNS TO POLITICAL EVENTS

An important topic is whether stock prices are politically sensitive and returns react positively (or negatively) to elections as political events (without distinguishing between the ideologies of the parties taking and leaving office). Thus, three dummy variables are included into the expression of Model [3] so that the following model is estimated:

$$RS_t = \alpha + \beta \cdot RW_t + \chi \cdot RS_{t-1} + \delta \cdot M_t + \pi_1 \, BN_t + \pi_2 \, N_t + \pi_3 \, AN_t + \omega \cdot i_t + \varepsilon_t$$
$$h_t = \gamma_0 + \gamma_1 \cdot h_{t-1} + \gamma_2 \cdot \varepsilon_{t-1}^2$$

(7)

where BN_t takes the value 1 if t is one of the three previous days before the national election day, and 0 otherwise; N_t takes the value 1 if t is the national election day or the day after the national election day if the election day takes place during the weekend or on a bank holiday, and 0 otherwise; and AN_t takes the value 1 if t is one of the three next days after the national election day, and 0 otherwise. The choice of the number of days respectively included in the previous and the next period to the national election day has been made in accordance with the minimized AIC and SC.

Estimation results are reported in table V. Our findings show that excess returns are not statistically different from zero either prior to elections nor once election outcomes are known. These results should be interpreted jointly with those previously obtained, confirming the «partisan» theory for the Spanish case. Indeed, potential effects of the uncertainty reduction on the stock prices could be mixed with those of unexpected election outcomes. According to the «partisan» theory, prior to the election, traders form expectations about the probability of a certain party winning elections and hence future economic policies. Then, traders take positions in the market. Once the election results have been released, there would be a market reaction only if these results were unexpected and such a reaction would be positive or negative depending on the value given by investors to the party winning the elections. Therefore, it is very difficult to disentangle which part of the effect could be explained by partisan theory and by the Uncertain Information Hypothesis. Furthermore, both effects could offset each other so that no impact would be observable.

4.2. RESPONSE OF VOLATILITY TO POLITICAL EVENTS

in this section, we investigate the impact of political events on the volatility of the Spanish stock market. Uncertainty regarding the policies that will be carried out by the future government is likely to increase stock market volatility. Indeed, in financial theory, volatility is known as a measure of risk.

It is important to note that politics in Spain presents some interesting and distinctive features that should be accounted for. Firstly, the 1985 Electoral Law in Spain (art. 69.7) forbids pre-election polls from being released by any communications media in the five days preceding the date of polling. Thus, according to the Uncertain Information

TABLE V
ESTIMATES OF MODEL 7

Panel A presents the estimates of Model (7). BN, N_t, and AN_t, are dummy variables to test for any effect of the national elections on returns during the three previous days (BN_t), the election day or the first trading day after elections if elections take place on weekend (N_t) and the three days after elections (AN_t), respectively. RS_t is the return on the Spanish index at time t, RW_t is the return on the World index at time t, M_t is a dummy variable capturing the Monday effect on Spanish returns before 25 November 1991. *T-dist. DOF* denotes degrees of freedom of Student-t's distribution. Panel B reports the Adjusted R2, the Akaike Information Criteria (AIC), the Schwarz Criteria (SC), and the Durbin-Watson statistic (D-W). *   denotes statistical significance at the 1% level.

Panel A	Model 7	
Variable	*Coefficient*	*t-stat.*
α	-0.0001	-0.994
RW_t	0.8190*	59.641
RS_{t-1}	0.0637*	6.752
M_t	0.0033*	7.000
BN_t	-0.0003	-0.143
N_t	-0.0015	-0.505
AN_t	0.0013	0.631
γ_0	3.40E-06*	6.334
h_{t-1}	0.8832*	92.670
ε_{t-2}^2	0.0919*	11.457
T-dist. DOF	6.87	17.403

Panel B	Model 7
Adjusted R^2	26.32%
AIC	-6.32
SC	-6.31
D-W	1.99

Hypothesis (UIH) proposed by Brown *et al.* (1988, 1993), we would expect a peak of uncertainty resolution when official election outcomes are made public. Secondly, given that Spain has a proportional electoral system, following Vuchelen (2003), the Spanish stock market performance should also be analyzed once the uncertainty about the composition of the government is eliminated, namely on the date of the investiture session. Finally, due to the importance of Catalan and Basque independent parties for the stability of the national government during some periods, we extend the study by considering the date of regional elections.

Prices are expected to adjust (sometimes abruptly) to the new information arriving to the market. Furthermore, uncertainty rises as the election nears, becoming increasingly difficult to predict the expected value of a stock. It is therefore interesting to further examine the link between politics and stock market behavior by focusing on election-induced volatility. In order to address this question, we follow two different approaches.

The first approach consists of comparing the volatility before and after each election day over several time horizons, i.e. 5 days, 10 days, 15 days and 20 days. We take

the residuals from the estimation of Model [3] and test the null hypothesis that the volatility is equal to zero. The Brown-Forsythe (modified Levene) test is employed to determine if there are significant differences in volatility over the reported intervals. Table VI shows the probability of rejecting the null of equal variances before and after national elections. We note that there are no meaningful differences in the volatility of returns over the considered time horizons, except for the case of the 1996 national election, in which volatility, computed once the election outcome is known, appears to be higher than before the election day for the fifteen-day interval.

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TABLE VI

TEST OF EQUALITY OF VARIANCES

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This table presents the test of equality of variances before and after national elections over several daily intervals shown in the first column. The reported probability value is the p-value, or marginal significance level, against a two-sided alternative. If this probability value is less than the size of the test, say 0.05, we reject the null hypothesis.

	1977	1979	1982	1986	1989	1993	1996	2000	2004	2008
5	0.5406	0.1261	0.9369	0.6047	0.7213	0.4493	0.0972	0.6918	0.5206	0.2919
10	0.9091	0.2845	0.5402	0.9051	0.1975	0.8414	0.0769	0.6549	0.5254	0.7043
15	0.3773	0.7322	0.6365	0.8172	0.3488	0.812	0.0485	0.6866	0.9586	0.3108
20	0.1250	0.7783	0.9797	0.284	0.3079	0.8041	0.239	0.7878	0.9663	0.1019

However, a word of caution is needed. Indeed, according to Kalev *et al.* (2004), the use of unconditional volatility often generates peak or inconclusive results regarding the news-volatility relation whenever heteroskedasticity is present. Hence, as a robustness check of the results, we also analyze the impact of elections on volatility by employing the conditional volatility in order to take the volatility persistence effect into account. Thus, within the second approach, the dummy variables capturing the effect of national elections on the Spanish index returns are also set as exogenous variables in the conditional variance equation of the GARCH (1,1) specification, Model (8), as follows:

$$RS_t = \alpha + \beta \cdot RW_t + \chi \cdot RS_{t-1} + \delta \cdot M_t + \pi_1 BN_t + \pi_2 N_t + \pi_3 AN_t + \omega \cdot i_t + \varepsilon_t$$
$$h_t = \gamma_0 + \gamma_1 \cdot h_{t-1} + \gamma_2 \cdot \varepsilon_{t-1}^2 + \lambda_1 BN_t + \lambda_2 N_t + \lambda_3 AN_t$$

(8)

Several results are derived from the estimation of the above model (table VII). Firstly, the inclusion of these dummy variables into the variance equation improves the overall goodness-of-fit of the model as indicated by a deviance statistic of 22.26 (the critical value of the chi-square with 3 degrees of freedom and $\alpha=0.01$ is 13.4). Secondly, the significance of the coefficients of the mean equation remains unchanged. Thirdly, regarding the potential effect of national elections on the volatility of returns, the coefficient on the dummy variable for the three days before the election day, λ_1. is statistically negative, indicating that volatility is significantly lower during the three days before the election day when no poll results are allowed to be released. For these three days, investors are likely to be waiting for the outcome that will only come

out on the election day (or the day after if the election day is a non-business day). If the election outcome is unexpected, then investors will need to adjust their positions with a consequent increase in volatility on this particular day, as is indicated by the significantly positive coefficient on the dummy variable for the election day, namely, λ_2. This result is consistent with that of Bialkowski *et al.* (2008) who observe an abnormal rise in volatility starting on the election day and continuing for a number of days thereafter. Such a prolonged reaction is justified by the authors by arguing that the official results may not be released until several days after the elections. In Spain, election outcomes are made public on the election day itself, which allows the market to process the new information very quickly. Finally, volatility is not shown to be statistically higher or lower during the following days once uncertainty has vanished. Hence, it appears that investors are waiting for the definitive distribution of votes and high levels of volatility are observed on the first trading day after elections. It should be noticed, however, that the magnitude of each coefficient is quite low, suggesting that the impact of national elections on the volatility of returns is somewhat limited. Furthermore, the GARCH effect does not disappear entirely (as shown by the statistically significant γ_1 and γ_2), implying that the days surrounding national elections do not logically cover all the sources of information.

In countries with proportional representation, as in Spain, governments are sometimes multi-party coalitions whose composition is difficult to predict from the election results. In these cases, as stated by Vuchelen (2003), the main political event may be the composition of the coalition instead of the election results themselves, although election outcomes will, however, still have some effects on the stock market since the uncertainty is reduced. Hence, the analysis is extended to explore the responses, if any, of the market to the final composition of the government. It is in the Parliamentary investiture session that the candidate in the most voted party at the national elections presents his/her program with the aim of obtaining support from a majority in Congress. In this sense, it is important to remark the fact that throughout the history of Spanish elections from the beginning of the transition to democracy in 1975, only in two of the ten national elections has there been no clear winner in the sense that the most voted party's candidate was obliged to form a coalition to become president[9]. Thus, in seventy percent of the cases, uncertainty around election outcomes has disappeared some days after the election day and there has been no need to form a coalition with the opposition in order to gain sufficient support for holding office. In spite of that, except for the cases of absolute majority[10], all candidates to government have made efforts to make pacts with the other parties to ensure further support during their term in office, which might well explain the higher volatility. Then, we add three dummy variables in the variance equation to capture the impact in volatility of the definite composition of the government derived from the investiture session on the days surrounding the investiture session. Though not shown, none of the coefficients of the new dummy variables are significantly different from zero. Going

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(9)   These two elections were the 1993 elections, won by PSOE, and the 1996 elections, won by PP (see Figure I).
(10)   Absolute majority has been achieved twice by PSOE (1982 and 1986 elections) and once by PP (2000 elections).

deeper into this question, the Model is re-estimated by replacing the dummy variables related to the investiture session by similar dummy variables that only consider the elections won without an absolute majority, Model (9).

$$RS_t = \alpha + \beta \cdot RW_t + \chi \cdot RS_{t-1} + \delta \cdot M_t + \pi_1 BN_t + \pi_2 N_t + \pi_3 AN_t + \omega \cdot i_t + \varepsilon_t$$
$$h_t = \gamma_0 + \gamma_1 \cdot h_{t-1} + \gamma_2 \cdot \varepsilon_{t-1}^2 + \lambda_1 BN_t + \lambda_2 N_t + \lambda_3 AN_t + \theta_1 BI_{ts} + \theta_2 I_{ts} + \theta_3 AI_{ts}$$

(9)

where BI_{ts} is a dummy variable taking the value 1 if t is the day prior to the investiture session and s is one of the elections not won by an absolute majority, and 0 otherwise; I_{ts} is a dummy variable taking the value 1 if t is the investiture session day and s is one of the elections not won by an absolute majority, and 0 otherwise; and AI_{ts} is a dummy variable taking the value 1 if t is the day after the investiture session and s is one of the elections not won by an absolute majority, and 0 otherwise. As reported in table VII, only the coefficient on the variable for the day after the investiture session is significantly different from zero and negative, indicating that volatility appears to be statistically reduced on that particular day.

To make a complete analysis of the influence of political variables on the volatility of the Spanish stock exchange, (Catalan and Basque) regional elections [11], European elections [12] and national referendums [13] are additionally considered. Proceeding in the same way as for the previous models, the results lead us to conclude that no evidence is found of any impact of (Catalan and Basque) regional, European elections or general referendums on volatility, which implies that there is likely no substantial information embedded into the outcome of these political events. Finally, we have unsuccessfully tested whether stock price volatility is lower (higher) under left-wing (right-wing) administrations as predicted by the Leblang and Mukherjee (2005) model. All these empirical results, though not shown in order to economize on space, are available from the authors on request.

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(11)   A total of sixteen (Catalan and Basque) regional elections have taken place in Spain from the very first ones, the Basque elections in 1980, to the last (included) Catalan elections in 2006.

(12)   Our sample includes five European elections taking place in 1987, 1989, 1994, 1999 and 2004.

(13)   National referendums included in our analysis are those of December 1978 for the ratification of the Spanish Constitution, March 1986 for the permanence of Spain in NATO and February 2005 for the Spanish ratification of the European Constitution.

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TABLE VII

ESTIMATES OF MODELS 8 AND 9

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Panel A presents the estimates of Models [8] and [9]. BN_t, N_t, and AN_t, are dummy variables to test for any effect of the national elections on returns during the three previous days (BN_t), the election day or the first trading day after elections if elections take place on the weekend (N_t) and the three days after elections (AN_t), respectively. BI_t, I_t and AI_t are dummy variables to test for any effect of the day prior to national investiture session, the national investiture session day and the day after the national investiture session, respectively, for elections not won with absolute majority. RS_t is the return on the Spanish index at time t, RW_t is the return on the World index at time t, M_t is a dummy variable capturing the Monday effect on Spanish returns before 25 November 1991. *T-dist. DOF* denotes degrees of freedom of Student-t's distribution. Panel B reports the Adjusted R2, the Akaike Information Criteria (*AIC*), the Schwarz Criteria (*SC*), and the Durbin-Watson statistic (*D-W*). *   (**) denotes statistical significance at the 1% (5%) level.

Panel A	Model 8		Model 9	
Variable	Coefficient	t-stat.	Coefficient	t-stat.
α	-0.0001	-0.972	-9.24E-05	-0.869
RW_t	0.8203*	59.777	0.8243*	61.258
RS_{t-1}	0.0639*	6.784	0.0650*	6.855
M_t	0.0033*	7.024	0.0033*	7.038
BN_t	-0.0016	-0.543	0.0006	0.195
N_t	-0.0047	-0.776	-0.0061	-1.085
AN_t	0.0008	0.381	0.0007	0.314
γ_0	3.08E-06*	6.281	2.89E-05	1.390
h_{t-1}	0.0863*	99.873	0.8910*	119.80
ε^2_{t-2}	0.0863*	11.581	0.0828*	14.012
BN_t	-0.0001*	-2.932	-0.0001*	-3.506
N_t	0.0005**	2.501	0.0005*	3.016
AN_t	1.86E-06	0.117	2.61E-06	0.185
BI_t			4.79E-06	0.063
I_t			2.05E-05	0.247
AI_t			-5.13e-05	-22.801
T-dist. DOF	7.12*	16.591	15.87*	17.732

Panel B	Model 8	Model 9
Adjusted R^2	26.29%	26.29%
AIC	-6.32	-6.31
SC	-6.31	-6.30
D-W	1.99	2.00

5.   SUMMARY AND CONCLUSIONS

In this paper we look into the link between politics and the Spanish stock exchange. Specifically, we have studied the empirical implications of both the Political Business Cycle Theory and the Uncertain Information Hypothesis.

On the one hand, according to our results, there are no systematic differences in excess returns in the last two years preceding elections and market responses are of the same magnitude when incumbents win or lose the election. Therefore, no evidence supporting the theory of the «opportunistic» PBC is found. In this sense, our results indicate that either policy-makers are not able to (or do not wish to) create a rising

market in periods preceding elections or, if they are, rational investors detect and exploit this profit opportunity.

We also address the question of how investors value parties holding office to conclude that the Spanish Stock Exchange appears to react differently to victories of parties with different ideologies. In fact, stock returns are shown to behave distinctively depending on the political orientation of the government, not only on the election day but also during the tenure of office. These results allow us to state that the partisan theory is verified for the Spanish case.

Regarding stock market performance around election dates, volatility is shown to be significantly lower during the three business days prior to national elections and statistically higher on the elections day (or the day after if elections take place during the weekend) which could be explained in terms of levels of uncertainty. Hence, our results are in line with Brown *et al.*'s (1988, 1993) Uncertain Information Hypothesis that postulates that volatility of stock returns increases following the arrival of unexpected information. However, we obtain no significantly higher returns on the election day that could compensate investors for taking this political risk. Though there are other factors at work, including the (positive or negative) effects of unexpected election results on stock returns explained by the partisan theory, another conclusion drawn from this study is that the risk premiums may not provide sufficient compensation for risk-averse investors on the election day or the day after if elections are held on the weekend.

REFERENCES

ALLIVINE, F. D., and O´NEILL, D. D. 1980. Stock market returns and the presidential election cycle. *Financial Analyst Journal* 36 (5): 49-56.

BIALKOWSKI, J.; GOTTSCHALK, K., and WISNIEWSKI, T. P. 2007. Political orientation of government and stocks market returns. *Applied Financial Economics Letters* 3 (4): 269-273.

— 2008. Stock market volatility around national elections. *Journal of Banking and Finance* 32(9): 1,941–1,953.

BOHL, M. T., and GOTTSCHALK, K. 2006. International evidence on the Democrat premium, and the presidential cycle effect. *North American Journal of Economics and Finance* 17(2): 107-120.

BOLLERSLEV, T. 1986. Generalized Autoregressive Conditional Heteroskedasticity. *Journal of Econometrics* 31(3), 307-327.

BOOTH, J. R., and BOOTH, L. C. 2003. Is presidential cycle in security returns merely a reflection of business conditions? *Review of Financial Economics* 12 (2): 131-159.

BROWN, K. D.; HARLOW, W. V., and TINIC, S. M. 1988. Risk aversion, uncertain information, and market efficiency. *Journal of Financial Economics* 22 (2): 355-385.

— 1993. The risk and required rate of common stock following major innovations. *Journal of Financial and Quantitative Analysis* 28 (1): 101-116.

BUDGE, I.; KLINGEMANN, H. D.; VOLKENS, A.; BARA, J., and TANENBAUM, E. 2001. *Mapping policy preferences. Estimates for parties, electors and governments 1945-1998*. Oxford University Press.

CAHAN, J.; MALONE, C. B.; POWELL, J. G., and CHOTI, U. W. 2005. Stock market political cycles in a small, two-party democracy. *Applied Economic Letters.* 12 (12): 735-740.

CHEN, D-H.; BIN, F-S., and CHEN, C-D. 2005. The Impacts of Political Events on Foreign Institutional Investors and Stock Returns: Emerging Market Evidence from Taiwan. *International Journal of Business* 10 (2): 165-168.

CHRÉTIEN, S., and COGGINS, F. 2009. Election outcomes and financial market returns in Canada. *North American Journal of Economics and Finance* 20 (1): 1-23.

DÖPKE, J., and PIERDZIOCH, C. 2006. Politics and the stock market: Evidence from Germany. *European Journal of Political Economy* 22 (4): 925-943.

ENGLE, R. 1982. Autoregressive Conditional Heteroscedasticity with Estimates of the Variance of United Kingdom Inflation. *Econometrica*, 50 (4): 987-1,007.

FOERSTER, S. R., and SCHMITZ, J. J. 1997. The Transmission of US Election Cycles to International Stock Returns. *Journal of International Business* 28 (1): 1-27.

FÜSS, R., and BECHTEL, M. M. 2008. Partisan politics and stock market performance: The effect of expected government partisanship on stock returns in the 2002 German federal election. *Public Choice*, 135 (3/4): 131-150.

GARRET, G. 1998. *Partisan politics in the global economy.* Cambridge University Press.

GONZÁLEZ, J. J. 1998. Política y demoscopia. Los sondeos y las elecciones generales de 1996. *Empiria*, 1 (1): 181-199.

HE, Y.; LIN, H.; WU, C., and DUFRENE, U. B. 2009. The 2000 presidential election and the information cost of sensitive versus non-sensitive S&P 500 stocks. *The Journal of Financial Markets*, 12 (1): 54-86.

HAYS, J. C.; STIX, H., and FREEMAN, J. F. 2000. The electoral information hypothesis revisited. Available from **http://www.polisci.umn.edu/~freeman/eihr.pdf** (30 March 2010).

HIBBS, D. A. 1977. Political parties and macroeconomic policy. *American Political Science Review*, 71 (4): 1,467-1,487.

HUANG, R. D. 1985. Common stock returns and presidential elections. *Financial Analysts Journal* 41 (2): 58-61.

IMAI, M., and SHELTON, C. A. 2011. Elections and political risk: New evidence from the 2008 Taiwanese Presidential Election. *Journal of Public Economics* 95 (7/8): 837-849.

KALEV, P. S.; LIU, W-M.; PHAM, P. K, and JARNECIC, E. 2004. Public information arrival and volatility of intraday stock returns. *Journal of Banking and Finance* 28 (6): 1,441-1,467.

LEBLANG, D., and MUKHERJEE, B. 2005. Government Partisanship, Elections, and the Stock Market: Examining American and British Stock Returns, 1930-2000. *American Journal of Political Science* 49 (4): 780-802.

MEHDIAN, S.; NAS, T., and PERRY, M. J. 2008. An examination of investor reaction to unexpected political and economic events in Turkey. *Global Finance Journal* 18 (3): 337- 350.

NIEDERHOFFER, V.; GIBBS, S., and BULLOCK, J. 1970. Presidential elections and the stock market. *Financial Analysts Journal*, 26 (March/April): 111-113.

NORDHAUS, W. D. 1975. The political business cycle. *Review of Economic Studies* 42 (2): 169-190.

PANTZALIS, C.; STANGELAND, D. A., and TURTLE, H. J. 2000. Political elections and the resolution of uncertainty: The international evidence. *Journal of Banking and Finance* 24 (10): 1,575-1,604.

PEIRÓ, A. 1994. La estacionalidad diaria del mercado de acciones español. *Investigaciones Económicas* XVIII (3): 557-569.

Santa-Clara, P., and Valkanov, R. 2003. The presidential puzzle: Political cycles and the stock market. *Journal of Finance* 58 (5): 1,841-1,872.

Vuchelen, J. 2003. Electoral systems and the effects of political events on the stock market: The Belgian case. *Economics and Politics* 15 (1): 85-102.

Wong, W.-K., and McAleer, M. 2009. Mapping the Presidential Election Cycle in US stock markets. *Mathematics and Computers in Simulation* 79 (11): 3,267–3,277.