Inflationary expectations, political parties and the exchange rate regime: Greece 1958–1989*

George S. Alogoskoufis

Birkbeck College, London, UK; Athens University of Economics, Athens, Greece; and CEPR

Apostolis Philippopoulos

University of Essex, Colchester, UK

We investigate the applicability of the 'rational partisan' and 'exchange rate regime' models of inflation to the case of Greece. Greece has fully participated in the Bretton Woods system of fixed exchange rates until 1972, but has since followed an independent 'crawling peg' policy. It has had a polarized political system and a problem of persistently high inflation in the last two decades. Outside fixed exchange rate regimes, persistently high inflation can be attributed to the failure of political parties to pre-commit to price stability. The higher aversion of 'socialists' to unemployment results in an inflation rate which is higher by 8 percentage points than under the more anti-inflationary 'conservatives'. Unemployment is independent of the identity of the party in power and elections.

The persistence of high inflation, even in economies where there is no exploitable systematic relation between inflation and unemployment, is often attributed to the inability of governments to pre-commit to price stability. When the private sector knows that the government will have incentives to generate a surprise inflation in order to reduce unemployment, it will take these incentives into account and expect high inflation. Given such expectations, the government can do no better than accommodate expected inflation, otherwise unemployment will be even higher [Barro and Gordon

(1983a, b)]. Recent extensions include the 'rational-partisan' model of inflation [Alesina (1987, 1988)], according to which different political parties have different incentives to inflate, and the 'exchange-rate-regime' model of inflation [Giavazzi and Giovannini (1987) and Giavazzi and Pagano (1988)], according to which participation in a low inflation fixed exchange rate regime, pre-commits national governments to low inflation.

The 'rational-partisan' model starts from the premise of Hibbs (1977), that parties have different preferences for inflation and unemployment. 'Socialists' care more about unemployment and less about inflation than 'conservatives'. Alesina demonstrates that – as in the policy games analysed by Barro and Gordon (1983a, b) – wage setters anticipate the incentives of the policy-makers and form their expectations accordingly. As a result, inflation will be higher under 'socialist' administrations than under 'conservative' ones, while the unemployment rate will be at its 'natural' rate under either admin-istration. The only exception to this is in the aftermath of elections, when nominal wages are set before the announcement of the election result. In that case, inflationary expectations are a weighted average of the expectations under the 'conservatives' and the 'socialists', the weights being the respective probabilities of election victory. If the 'socialists' win, nominal wage settle-ments turn out to have been too low. Then real wages fall and so does unemployment. If the 'conservatives' win, settlements turn out to have been too high, so that real wages and unemployment rise. In subsequent years of an administration, expectations adjust to the party in power so that unemployment returns to its 'natural' rate. Nominal wage growth and inflation are higher when the 'socialist' party is in office, but without any employment benefits.[1]

The 'exchange-rate-regime' model builds on the reputational and insti-tutional solutions to the problem of ending up with high inflation without employment benefits. One of the institutional solutions, investigated by Rogoff (1985), is the appointment of independent, inflation-averse central bankers. If wage setters know that monetary policy is in the hands of an anti-inflationary monetary authority, then their expectations will be affected, and subsequently inflation will remain low, although unemployment will still remain at its natural rate. This solution has an almost perfect analogue in exchange rate regimes [Giavazzi and Giovannini (1987) and Giavazzi and Pagano (1988)]. Participation in a regime of fixed exchange rates, in which monetary policy is determined by an anti-inflationary foreign central bank, 'ties the hands' of inflation-prone domestic policymakers, who cannot choose their monetary policy independently. This affects the expectations of wage

[1]The alternative approach of 'political business cycles' goes back to Nordhaus (1975) and Lindbeck (1976). It views politicians as solely 'office motivated', They therefore try to engineer pre-election booms in order to boost their electoral chances. See Cukierman and Meltzer (1986) and Rogoff and Sibert (1988). For empirical tests and a survey see Alesina and Roubini (1990).

setters, and thus the domestic economy ends up with the same average inflation as the rest of the economies participating in the system.

The objective of the present paper is to combine the two models and to test their predictions for the Greek economy. From 1953 to 1972 Greece fully participated in the Bretton Woods system of fixed exchange rates. After the breakdown of Bretton Woods, it has followed an independent 'crawling-peg' exchange rate policy, almost fully accommodating inflation differentials with its trading partners. In addition, Greece has had a rather polarized political system in the post-war period. The ideological differences between 'conservatives' and 'socialists' have been rather sharp, and both camps have held office for extended periods. This experience makes the Greek economy an ideal candidate for testing the applicability of the 'rational-partisan' and 'exchange-rate-regime' models of inflation.[2]

Like Alesina (1987) and Giavazzi and Giovannini (1987), we follow Gray (1976) and Fischer (1977) in assuming that wage setters set nominal wages for one period in advance in order to achieve an employment target. Wage inflation turns out to be equiproportional to expected price inflation, and to depend negatively on past deviations of unemployment from its equilibrium rate.

Expectations of inflation, and hence nominal wage growth, depend on the nature of the exchange-rate-regime, the identity of the party in power, and on whether an election is expected to take place. In a fixed exchange rate regime, domestic policymakers have little influence on the domestic inflation rate. Hence, expected inflation is equal to expected world inflation. However, under managed exchange rates, domestic policymakers can influence domestic inflation through exchange rate and monetary policy. As 'socialist' parties care more about unemployment than 'conservative' ones, they have stronger incentives to go for surprise inflation. This is anticipated by wage-setters, and results in higher wage and price inflation. Expectations of inflation before an uncertain election are in-between expectations under a 'socialist' and a 'conservative' administration.

We test this model for the Greek economy for the period between 1958–1989. The tests are mainly based on structural wage equations, although the findings can be also corroborated from reduced form unemployment equations. Thus, to the extent that we concentrate directly on structural wage equations, we provide an alternative to the reduced form testing strategy of Alesina and Sachs (1988), Alesina and Roubini (1990) and

Giavazzi and Giovannini (1987). Our results for wage equations offer qualified support for the 'rational partisan' model and the 'exchange-rate-regime' model.

The main empirical findings are as follows. We first examine the relationship between monetary and exchange-rate regimes and the persistence of inflation. Under the fixed exchange rate regime of Bretton Woods (up to 1971), expected and actual inflation are lower and less persistent than under managed floating. These findings are consistent with Alogoskoufis and Smith (1991) and Alogoskoufis (1992) for the industrial economies. Therefore, inflation and nominal wages behave in a different way during the period of monetary policy independence 1972–1989 from the period of the Bretton Woods up to 1971.

We then test for partisan effects during managed floating. Under the managed floating and 'crawling-peg' regimes since 1972, which have given monetary independence to the Greek governments, the identity of the party in power matters for expected and hence actual inflation. 'Socialist' governments, with their higher tolerance of inflation relative to unemployment, have generated inflationary expectations which are on average higher by about 8 percentage points than expectations under 'conservative' governments. This suggests that average wage inflation is higher by 8 percentage points under 'socialist' governments. However, the significance of differences in inflation between 'socialists' and 'conservatives' can be rejected when 'socialists' resort to comprehensive incomes policies, like in 1983, 1986 and 1987. Similarly, since under fixed exchange rates monetary policy cannot be chosen independently, inflation is independent of the party in power during regimes such as Bretton Woods.

Our results suggest that what matters for expected price inflation and nominal wage growth is the identity of the party in power, irrespectively of whether we are in an immediate post-election period or not. Electoral uncertainty plays no role.

There are at least two reasons as to why electoral uncertainty is not important in Greece. First, most of the elections have been held at the end of the year, shortly before the traditional date for the start of wage negotiations which is January. Second, with few exceptions, the identity of the eventual winner could be predicted well in advance in most elections. Therefore, what seems to matter for inflation is not elections, but the identity of the administration. Then, in the absence of electoral uncertainty, there should be no partisan cycles in unemployment. The fact that elections do not affect the evolution of the unemployment can be also confirmed from unemployment equations.

The rest of the paper is as follows: Section 1 presents the basic model. Section 2 presents econometric tests for the Greek economy. The conclusions are summed up in the last section.

1. The model

This section combines a version of the 'rational-partisan' model in the spirit of Alesina (1987), and the 'exchange-rate-regime' model in the spirit of Giavazzi and Giovannini (1987) and Giavazzi and Pagano (1988).

Assume a political system in which two parties interact with wage setters that form expectations rationally. This strategic interaction takes place in a linear-quadratic environment as in Barro and Gordon (1983a, b).

The set-up takes the following form: Wage setters sign one-period nominal wage contracts at the beginning of each period. They aim to achieve an employment target for 'insiders', while policymakers care about full employment. Employment is determined by competitive firms and, because of diminishing marginal productivity of labour, is a negative function of the real wage.

Under a managed exchange rate, the party in office can choose monetary and exchange rate policy to determine the rate of inflation. On the contrary, in a fixed exchange rates regime, the rate of inflation is largely imported and determined abroad.

Two political parties can hold office, a 'conservative' one and a 'socialist' one. In any given election, the 'conservatives' have a probability q of being elected, with the 'socialists' having a probability $1-q$.[3] In the period prior to an election there is uncertainty about the policy parameters, since nominal wage contracts are signed before the outcome of the election becomes known. In the period after the election, the elected party remains in office and therefore there is no uncertainty about policy preferences. Wage setters know who is in office, they know the structure of their preferences, and they take these data into account in forming their expectations. The two parties differ in their relative evaluation of unemployment and inflation. The 'socialists' are systematically less averse to inflation than the 'conservatives'.[4]

1.1. Wage and employment determination

At time t, demand for labour is given by[5]

[3]Even if independence of past history is a strong restriction, we assume for simplicity that these probabilities are exogenous and constant over time. In general, these probabilities depend on the party identity, the incumbent identity and the state of the economy [see Alesina and Cukierman (1990); Rogoff (1990) and Alogoskoufis, Lockwood and Philippopoulos (1992)]. Here, to focus on the empirical implications of the model, we abstract from endogenous or changing probabilities.

[4]We assume that the timing of elections is exogenous, following a regular four-year cycle. As table 1 shows, apart from the early 1960s, there are no 'early' elections in Greece either for opportunistic or majority reasons. Of course, there are no elections (and hence electoral uncertainty) during the military dictatorship, 1967–1974.

[5]For simplicity, we exclude persistence of labour demand due, for instance, to costs of adjustment. However, see Alogoskoufis and Manning (1988).

Table 1

Political dummy variables used in the regressions.[a]

	d_t^e	d_t^{cn}	d_t^{sn}	d_t^c	d_t^s	d_t^{ce}	d_t^{se}
1958	0	1	0	1	0	0	0
1959	1	0	0	1	0	1	0
1960	0	1	0	1	0	0	0
1961	0	1	0	1	0	0	0
1962	1	0	0	1	0	1	0
1963	0	1	0	1	0	0	0
1964	1	0	0	0	1	0	1
1965	0	0	1	0	1	0	0
1966	0	0	1	0	1	0	0
1967	0	1	0	1	0	0	0
1968	0	1	0	1	0	0	0
1969	0	1	0	1	0	0	0
1970	0	1	0	1	0	0	0
1971	0	1	0	1	0	0	0
1972	0	1	0	1	0	0	0
1973	0	1	0	1	0	0	0
1974	0	1	0	1	0	0	0
1975	1	0	0	1	0	1	0
1976	0	1	0	1	0	0	0
1977	0	1	0	1	0	0	0
1978	1	0	0	1	0	1	0
1979	0	1	0	1	0	0	0
1980	0	1	0	1	0	0	0
1981	0	1	0	1	0	0	0
1982	1	0	0	0	1	0	1
1983	0	0	1	0	1	0	0
1984	0	0	1	0	1	0	0
1985	0.5	0	0.5	0	1	0	0.5
1986	0.5	0	0.5	0	1	0	0.5
1987	0	0	1	0	1	0	0
1988	0	0	1	0	1	0	0
1989	0.5	0	0.5	0.5	0.5	0.5	0

[a]d^e denotes a post-election year. d^{cn} and d^{sn} denote respectively a conservative and a socialist administration, excluding the post-election year. d^c and d^s denote respectively a conservative and a socialist administration, including the post-election year. Finally, d^{ce} and d^{se} denote post-election years in which there has been a conservative and a socialist victory respectively.

$$l_t^d = -\beta(w_t - p_t - \mu_t) \tag{1}$$

where l_t is the log of employment, β is the elasticity of labour demand, w_t is the log of the nominal wage, p_t the log of the price level, and μ_t is a productivity shock which follows a random walk with drift g. In what follows, all variables, with the exception of the unemployment rate, are defined in natural logs.

Following Lindbeck and Snower (1986), Blanchard and Summers (1986) and Alogoskoufis and Manning (1988), we assume that wages are set by a

group of 'insiders' $\bar{n}_t$, so as to achieve an employment target l_t^s which is equal to $\bar{n}_t$. Thus,[6]

$$l_t^s = \bar{n}_t \tag{2}$$

where $\bar{n}_t < n$ for all t. n is the log of the average labour force.

Nominal wage contracts are signed at the beginning of each period, so as to make the expected demand for labour (1), equal to the employment target of wage-setters (2). If the information set of wage-setters includes all values up to and including period $t-1$, then nominal wages are given by,

$$w_t = g + E_{t-1} p_t + \mu_{t-1} - \frac{1}{\beta} \bar{n}_t \tag{3}$$

where E_{t-1} denotes a mathematical (rational) expectation conditional on the information set available at the end of $t-1$. In (3) we have made use of the fact that $E_{t-1}\mu_t = g + \mu_{t-1}$.

Lagging (1) once, solving for μ_{t-1} and substituting the solution in (3), after some rearrangement, we end up with,

$$\Delta w_t = g + E_{t-1} \Delta p_t - \frac{1}{\beta}(u_{t-1} - \bar{u}_t) \tag{4}$$

where Δ is the first-difference operator, u_{t-1} is the lagged unemployment rate $(u \cong n - l)$, and $\bar{u}_t$ is the equilibrium, or 'natural', unemployment rate $(\bar{u}_t \cong n - \bar{n}_t)$. (4) defines the form of the expectations augmented 'Phillips curve' in this model. To the extent that past unemployment has been higher than the 'natural' rate, wage inflation will be lower, and vice versa. The reason is that a deviation of unemployment from the 'natural rate' in the past reflects a discrepancy between the real wages and productivity needed to achieve equilibrium unemployment. This could be either because of a negative (permanent) productivity shock in the previous period, or a negative (permanent) price shock. Wage setting aims to correct that.

Ex post, employment is determined by labour demand, as in (1). It differs from what was aimed for by wage-setters only to the extent that there are unanticipated productivity shocks and unanticipated inflation. Thus,

$$l_t = \bar{n}_t + \beta(\Delta p_t - E_{t-1}\Delta p_t + \mu_t - E_{t-1}\mu_t). \tag{5}$$

Using the definition of the unemployment rate, (5) can be re-written as,

---

[6]See Blanchard and Fischer (1989, chap. 9), for more complicated objective functions of wage setters.

$$u_t = \bar{u}_t - \beta(\Delta p_t - \mathrm{E}_{t-1}\Delta p_t + \mu_t - \mathrm{E}_{t-1}\mu_t), \tag{6}$$

so that unanticipated inflation and productivity shocks reduce unemployment.

This concludes the section on wage and employment determination. We turn next to the description of the behavior of political parties under alternative exchange rate regimes, and its effects on the expectations of wage-setters.

1.2. The inflation and unemployed objectives of political parties

Assume that both the conservative party (denoted by the superscript c) and the socialist party (denoted by the superscript s) like full employment and inflation stability. In particular, both parties want to minimize the unemployment rate, and deviations of inflation from a target rate, say π. Therefore, assuming that they can use monetary policy to choose the inflation rate, as in a managed exchange rate regime (denoted by the superscript m), in each period t they choose Δp_t to solve,

$$\min_{\Delta p_t} \Lambda_t^{im} = \tfrac{1}{2}(\Delta p_t^{im} - \pi_t^i)^2 + \alpha_t^i u_t^{im}; \qquad i = c, s \tag{7}$$

subject to the unemployment equation (6) and the behaviour of wage setters.[7]

Superscript i denotes the political party in power, and m denotes a managed exchange rate regime. π_t^i denotes their target inflation rate, and α_t^i is the relative weight they attach to the unemployment objective as opposed to the inflation objective.

The parties are assumed to differ in at least one of the following two ways: First, 'socialists' put on average a higher weight on unemployment relative to inflation that 'conservatives'. Thus, $\mathrm{E}_{t-1}\alpha_t^s > \mathrm{E}_{t-1}\alpha_t^c$ for all t. Secondly, 'socialists' target on average a higher inflation rate than the 'conservatives'. Thus, $\mathrm{E}_{t-1}\pi_t^s > \mathrm{E}_{t-1}\pi_t^c$ for all t. Note however that we will allow both the inflation target and the relative weight attached to unemployment to be stochastic processes.[8]

---

[7]To simplify, we follow Barro and Gordon (1983b) by using a quadratic term for inflation but a linear term for unemployment. This implies that the authorities care about the level of unemployment but the variance of inflation. Our results are not sensitive to using a quadratic for the unemployment rate as well, but we stick to the simpler linear specifications, as we find it more reasonable.

[8]We assume for simplicity that these inflation targets are exogenous. In general, they could be functions of the level of unemployment.

This completes the description of the macroeconomic preferences of political parties.

1.3. The determination of equilibrium inflation under managed exchange rates

To solve the model, the first step is to calculate the time-consistent policy chosen by each part if it is in power. Using (6) to substitute for the unemployment rate in (7), we end up with the following objective function for party $i = c, s$ under managed floating exchange rates (m).

$$\min_{\Delta p_t} \Lambda_t^{im} = \tfrac{1}{2}(\Delta p_t^{im} - \pi_t^i)^2 + \alpha_t^i[\bar{u}_t - \beta(\Delta p_t^{im} - E_{t-1}\Delta p_t^{im} + \mu_t - E_{t-1}\mu_t)]. \quad (8)$$

From the first-order conditions for a minimum of (8), the equilibrium inflation rate under a 'conservative' and a 'socialist' administration is given respectively by,

$$\Delta p_t^{cm} = \pi_t^c + \beta\alpha_t^c, \qquad\qquad\qquad\qquad\qquad (9a)$$

$$\Delta p_t^{sm} = \pi_t^s + \beta\alpha_t^s. \qquad\qquad\qquad\qquad\qquad (9b)$$

The rational expectation of inflation, when it is known which party will be in power, is simply given by,

$$E_{t-1}\Delta p_t^{cm} = E_{t-1}(\pi_t^c + \beta\alpha_t^c), \qquad\qquad\qquad\qquad (10a)$$

$$E_{t-1}\Delta p_t^{sm} = E_{t-1}(\pi_t^s + \beta\alpha_t^s). \qquad\qquad\qquad\qquad (10b)$$

It is straightforward to see that, given our assumption about the preferences of political parties, expected inflation under the 'socialists' will be higher than expected inflation under the 'conservatives'.

Immediately before an election, however, expected inflation will be given by,

$$E_{t-1} \Delta p_t^{em} = q E_{t-1} \Delta p_t^{cm} + (1-q) E_{t-1} \Delta p_t^{sm} \tag{11}$$

where, superscript e denotes a pre-election year, and q is the probability of a 'conservative' victory.

Clearly, since in an election year the expectation of inflation is a weighted average of the expectation under a 'conservative' administration and a 'socialist' one, it will be higher than expected inflation with an already elected 'conservative' government, but lower than expected inflation with an already elected 'socialist' government. This uncertainty can produce partisan business cycles in unemployment immediately after the election.

Substituting (10a), (10b) and (11) in (4), we end-up with the following alternative wage equations.

$$\Delta w_t^{cm} = g + E_{t-1}(\pi_t^c + \beta \alpha_t^c) - \frac{1}{\beta}(u_{t-1} - \bar{u}_t), \tag{12a}$$

$$\Delta w_t^{sm} = g + E_{t-1}(\pi_t^s + \beta \alpha_t^s) - \frac{1}{\beta}(u_{t-1} - \bar{u}_t), \tag{12b}$$

$$\Delta w_t^{em} = g + E_{t-1}[q(\pi_t^c + \beta \alpha_t^c) + (1-q)(\pi_t^s + \beta \alpha_t^s)] - \frac{1}{\beta}(u_{t-1} - \bar{u}_t). \tag{12c}$$

From (12a), (12b) and (12c), expected inflation, and, ceteris paribus, wage inflation will be the lowest with a 'conservative' administration (12a), the highest with a 'socialist' administration (12b), and in-between in the aftermath of an election (12c). As in Alesina (1987, 1988), if the socialists win the election, inflation will turn out higher than expected in the first post-election year, and from (6) unemployment will fall. If the conservatives win, inflation will turn out lower than expected before the election, and unemployment will rise. In the subsequent years of an administration inflationary expectations are correct, (12a)–(12b), and there are no further systematic shocks to unemployment.

1.4. The determination of equilibrium inflation under fixed exchange rates

In a fixed exchange rate regime (denoted by the superscript f) expected inflation will be independent of the party in power. It will be determined by average expected inflation in the economies participating in the regime. Without room for an independent monetary policy, the wage eq. (4) will take the form,[9]

---

[9]For simplicity, we assume complete loss of monetary autonomy, as in a small open economy with perfect capital mobility. See, however, Giavazzi and Giovannini (1987).

$$\Delta w_t = g + \mathrm{E}_{t-1}\Delta p_t^f - \frac{1}{\beta}(u_{t-1} - \bar{u}_t) \qquad (12\mathrm{d})$$

where Δp_t^f denotes the exogenously given inflation rate in the fixed exchange rates regime.

We can now move on to empirical testing.

2. Econometric estimates and tests: Greece 1958–1989

The most important question that needs to be resolved, before proceeding to estimation and testing, is the modelling of the stochastic processes driving the employment targets of wage-setters $(\bar{n})$, the preferences of the political parties concerning target inflation (π), and the relative weight attached to unemployment (α).

In what follows, we shall assume that the target level of employment of wage setters is a weighted average of those who have been previously employed and the total labour force. We shall thus assume that $0 \leq \lambda \leq 1$ and

$$\bar{n}_t = \lambda l_{t-1} + (1-\lambda)n. \qquad (13)$$

This is the assumption made in Blanchard and Summers (1986) and Alogoskoufis and Manning (1988), as an explanation for the persistence of unemployment. λ measures the extent to which the unemployed get disenfranchised from the labour market. If λ equals unity, only the previously employed matter for wage setting. If it is equal to zero both the employed and the unemployed get the same weight, and wage-setters aim for full employment.

With regard to the target inflation rate of the policy authorities, we shall assume that the target inflation rate is a linear function of the lagged inflation rate. When inherited inflation is high, the adjustment of monetary and exchange rate policy required to reduce it to any given level will be more costly, and governments will thus modify their target inflation rate to take account of these costs. Thus, in what follows we make the following assumptions.[10]

---

[10]To focus on the empirical implications of the model, we have ignored the influence of structural dynamics due to the presence of insiders in (2) or lagged inflation (see 14) on the optimization problem of the authorities. Thus, we restrict our attention to the one-period solution, as in Alesina (1988). Solving the model in a formal way, by dynamic programming, would require the calculation of the undetermined coefficients in the Bellman equation. This would complicate the solution, without affecting our qualitative results. However, see Lockwood and Philippopoulos (1991) and Alogoskoufis, Lockwood and Philippopoulos (1992) for a formal solution of the Barro–Gordon model with uncertain elections and insiders.

$$\pi_t^c = \pi^c + \theta \Delta p_{t-1} \tag{14a}$$

$$\pi_t^s = \pi^s + \theta \Delta p_{t-1} \tag{14b}$$

$$\pi^s \geqq \pi^c, \tag{14c}$$

where θ can be interpreted as the parameter measuring the difficulty of adjusting monetary and fiscal policy to change inflation from any given level. We assume that both parties face the same costs in adjusting monetary and exchange rate policy.[11]

With regard to preferences as between unemployment and inflation, we shall assume that the α's are normally distributed around constant means. These means will be different for the two parties. Thus, we assume that,

$$\alpha_t^c = \alpha^c + v_t^c \tag{14d}$$

$$\alpha_t^s = \alpha^s + v_t^s \tag{14e}$$

$$\alpha^s \geqq \alpha^c, \tag{14f}$$

where the v's are zero mean normally distributed shocks.

The last question that needs to be resolved is the determination of expected inflation during the Bretton Woods system of fixed exchange rates, in which Greek administrations did not have as much independence in determining the average domestic inflation rate. Up until 1971, the average OECD inflation rate was determined by the monetary policy of the Federal Reserve System. Under the rules of Bretton Woods all countries, with the exception of the United States, were pegging their exchange rates to the U.S. dollar, while the Fed undertook to maintain a fixed price of gold at $35 an ounce. By and large, this precluded accommodation of price shocks by the Fed, and resulted in lack of inflation persistence [see Alogoskoufis (1991); Alogoskoufis and Smith (1992)]. Thus, given the characteristics of this system, we shall assume that expected inflation in Greece during the Bretton Woods system was constant and, given the obligations of the Fed, not higher than expected inflation under a managed drachma exchange rate, under any administration. Thus, we assume that,

$$E_{t-1} \Delta p_t^f = \bar{\pi} \tag{14g}$$

where $\bar{\pi}$ is a low constant, and $\pi_t^s \geqq \pi_t^c \geqq \bar{\pi}$.

---

[11]We have found no empirical evidence of partisan differences in the θ's.

2.1. Econometric specification

The econometric specification of the model, after substituting (13) and (14) in the wage equations (12), takes the following form:

$$\Delta w_t^{cm} = g + \pi^c + \beta\alpha^c + \theta\Delta p_{t-1} - \frac{1-\lambda}{\beta} u_{t-1}, \tag{15a}$$

$$\Delta w_t^{sm} = g + \pi^s + \beta\alpha^s + \theta\Delta p_{t-1} - \frac{1-\lambda}{\beta} u_{t-1}, \tag{15b}$$

$$\Delta w_t^{em} = g + [q(\pi^c + \beta\alpha^c) + (1-q)(\pi^s + \beta\alpha^s)] + \theta\Delta p_{t-1} - \frac{1-\lambda}{\beta} u_{t-1}, \tag{15c}$$

$$\Delta w_t^f = g + \bar{\pi} - \frac{1-\lambda}{\beta} u_{t-1}. \tag{15d}$$

(15a) refers to wage inflation under a managed exchange rate regime and a 'conservative' administration, (15b) to wage inflation under a managed exchange rate regime and a 'socialist' one, (15c) to wage inflation under a managed exchange rate regime in the aftermath of an uncertain election, and finally (15d) to wage inflation under the fixed exchange-rate-regime of Bretton Woods.

Estimation of the model is straightforward. One has to use additive dummy variables to capture the shifts in the constant terms between alternative regimes, and multiplicative dummy variables to capture the shift in the coefficient of lagged inflation between exchange rate regimes.

2.2. The data

Before we move on to estimation and testing, a brief discussion of the data is in place. Fig. 1 depicts wage and consumer price inflation and the unemployment rate in Greece, from 1958 to 1989. The E's indicate the dates of elections.

Conservative administrations were in power up to November 1963. They won elections in 1958 and 1961. A centrist coalition won the elections of November 1963 and the subsequent snap elections of February 1964, in which it registered an impressive victory. This centrist government is associated with a turn to the left, and for the purposes of our investigation will be labelled 'socialist'. It is worth bearing in mind, however, that the socialists were a small minority in this coalition. Following an unwarranted intervention by the monarch, the prime minister resigned in July 1965 and
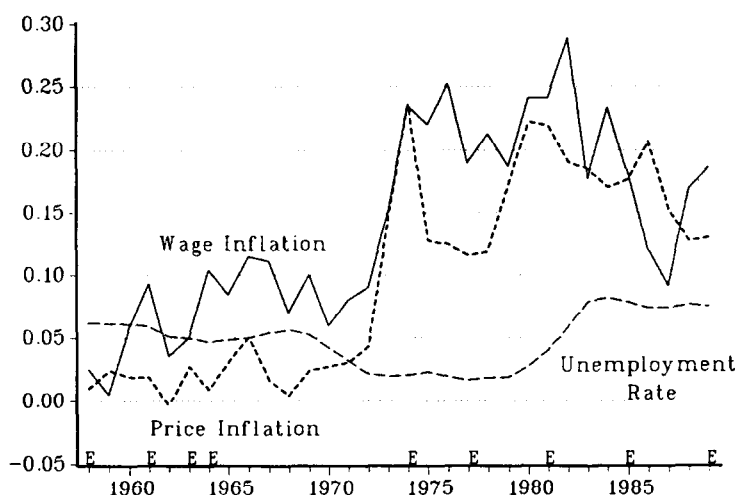
Fig. 1. Wage and price inflation and the unemployment rate.

the coalition split. Between 1965 and the military coup of April 1967, the right of centre factions of the centrist coalition formed minority governments, which were tolerated by the conservatives. For our purposes these governments will also be labelled 'socialist' although our empirical results are robust to treating them as 'conservative'.[12]

Following the restoration of democracy in 1974, the first elections registered an easy conservative victory in November 1974. The conservatives remained in power in the elections of November 1977, but were ousted following a socialist landslide in October 1981. The socialists remained in power until June 1989, having also won the elections of June 1985.

In the light of the above discussion, the list in table 1 of the political dummy variables we use in this study is self-explanatory. With few exceptions, they are zero-one dummies. For example, the dummy variable d_t^e takes the value one in the year following an election, and zero elsewhere. For 1985, when the election took place in June, it takes the value 0.5, with another 0.5 transferred to 1986. The same applies to 1989.

With regard to exchange rate regimes, Greece fully participated in the Bretton Woods system of fixed exchange rates from 1953 until its collapse in 1971. The Greek drachma was pegged to 30 drachmas per U.S. dollar until 1974, and thus depreciated against other OECD currencies, following the dollar depreciation. Since 1974 the Greek authorities have followed an

---

[12]In fact, as will be seen below, our empirical results are not sensitive to how these governments are labelled, since in the period of Bretton Woods the identity of the party in power is found not to matter for inflation.

independent 'crawling peg' exchange rate policy, that has given them considerable monetary independence. Thus, the dummy variable for fixed exchange rates (d_t^f) will take the value of 1 between 1958 and 1971 and zero afterwards, whereas the dummy for managed exchange rates (d_t^m) will take the value 1 after 1972 and zero before.

We can now turn to estimates and tests of the model, (15).

2.3. Estimates and tests from wage equations, 1958–1989

We are now ready to test the restrictions imposed on the parameters in the wage equations (15) by the 'exchange rate regime' and the 'rational partisan' models of inflation.

Since policy-makers can follow an independent policy only under managed floating, it is natural to start with testing the restrictions imposed by the 'exchange rate regime' model, abstracting from partisan effects. Then, if the nominal exchange rate regime matters for wage and inflation determination – in the sense that wages and inflation behave in a different way during the period of monetary policy independence, 1972–1989, from the period of the Bretton Woods system, 1958–1971 – the next question is how different political parties have used monetary policy independence after 1972. To answer this, we combine the 'exchange rate regime' model with the 'rational partisan' model, testing the applicability of the encompassing model (15).

Exchange rate regimes

In the absence of any kind of partisan effects, (15) is reduced to,

$$\Delta w_t^m = g + \pi + \beta\alpha + \theta\Delta p_{t-1} - \frac{1-\lambda}{\beta}u_{t-1}, \tag{16a}$$

$$\Delta w_t^f = g + \bar{\pi} - \frac{1-\lambda}{\beta}u_{t-1}, \tag{16b}$$

where (16a) summarizes (15a)–(15b)–(15c), when $\pi^c = \pi^s = \pi$, $\alpha^c = \alpha^s = \alpha$ and $q = 0.5$. Thus, (16a) refers to managed floating and (16b) to the Bretton Woods system.

To test the 'exchange-rate-regime' hypothesis, we use the following four dummy variables: Two additive dummies (d_t^f and d_t^m), in order to capture the difference between the intercept under fixed exchange rates and the intercept under managed floating.[13] We also use two multiplicative dummies (Δp_{t-1}^f

---

[13]Thus, d^f takes the value 1 for 1958–1971 and zero elsewhere, while d^m takes the value 1 for 1972–1989 and zero elswhere.

Table 2

Wage inflation and exchange rate regimes.[a]
Dependent variable Δw_t

Sample: 1958–1989
Method of estimation: OLS

	(I)	(II)
u_{t-1}	−0.678	−0.697
	(2.089)	(2.112)
Δp_{t-1}^{f}	0.929	–
	(1.390)	
Δp_{t-1}^{m}	0.650	0.652
	(4.495)	(4.428)
d_t^{f}	0.089	0.108
	(3.698)	(5.467)
d_t^{m}	0.136	0.136
	(5.656)	(5.582)
d_t^{inc}	−0.083	−0.083
	(3.606)	(3.523)
R^2	0.855	0.844
σ	0.032	0.032
DW	1.952	1.920
$z_1(1)$	0.016	0.001
$z_2(1)$	6.722	7.205
$z_3(2)$	1.180	1.375
$z_4(1)$	0.493	0.186

[a] t-statistics are in parentheses below estimated parameters. R^2 is the coefficient of determination, σ the standard error of the regression and DW the Durbin–Watson statistic. z_1 is a Lagrange multiplier test for first-order residual autocorrelation, z_2 Ramsey's RESET test for non-linearity, using the square of the fitted values, z_3 a test for non-normality, based on the skewness and kurtosis of the residuals, and z_4 a Lagrange multiplier test for heteroskedasticity, based on an auxiliary regression of squared residuals on squared fitted values. These are all χ^2 tests. For variable definitions see table 1. Variables with an additional superscript f have been multiplied by a fixed-exchange-rates dummy that takes the value 1 for 1958–1971 and zero elsewhere. Variables with an additional superscript m have been multiplied by a managed-exchange-rates dummy, taking the value 1 in 1972–1989 and zero elsewhere. d with superscript inc denotes an incomes policy dummy taking the value 1 in 1983, 1986 and 1987, and zero elsewhere.

and Δp_{t-1}^{m}) to allow for possible differences in inflation persistence during fixed exchange rates and managed floating.[14] For their coefficients (16) predicts $d_t^{f} < d_t^{m}$, $\Delta p_{t-1}^{m} > 0$ and $\Delta p_{t-1}^{f} = 0$.

Column I of table 2 presents unrestricted estimates. We have also added an incomes policy dummy, d^{inc}, that takes the value 1 in 1983, 1986 and 1987, three years of comprehensive incomes policies and zero elsewhere. The

[14]Where, $\Delta p_{t-1}^{m} = (\Delta p_{t-1}) \cdot (d_t^{m})$ and $\Delta p_{t-1}^{f} = (\Delta p_{t-1}) \cdot (d_t^{f})$.

equation has a very good fit and all coefficients have signs consistent with the theory. Since the coefficient of Δp_{t-1}^{f} is not statistically significant, it is excluded in column II. The null hypothesis of zero inflation persistence under fixed exchange rates cannot be rejected by this evidence. The calculated F-statistic is 1.96, which is less than the critical value of 4.22 at the conventional 5% level and the appropriate degrees of freedom. It cannot be rejected by the appropriate Wald test in column I either. The calculated χ^2 statistic is 1.93, which is less than the critical value of $\chi^2(1)$ at 5% which is 3.84. Therefore, there is no statistically significant dependence of expected and actual inflation on the lagged inflation rate under fixed exchange rates. On the contrary, outside the Bretton Woods discipline, inflation persists.

All other theoretical predictions seem to be satisfied. For example, the coefficient of d_t^{f} is lower than that of d_t^{m}, the coefficient of Δp_{t-1}^{m} is significantly positive and the coefficient of Δp_{t-1}^{f} is not significantly different from zero. As one would expect on the basis of the 'exchange-rate-regime' model of inflation, nominal wage growth and inflation are higher and more persistent under managed floating than under the Bretton Woods system. This result is consistent with the findings of Alogoskoufis and Smith (1991) and Alogoskoufis (1992) for the industrial countries.

Exchange rate regimes, political parties and elections

The results so far provide clear evidence that the nominal exchange rate retime matters for wage and inflation determination. Wage inflation follows a different process during the period of monetary policy independence, 1972–1989, from the period of Bretton Woods, 1958–1971. The next question is how different political parties have used monetary policy independence after 1972, and whether this has affected inflationary expectations. We therefore proceed with testing the additional restrictions imposed on (15) by the 'rational partisan' model during managed floating.

Recall the predictions of (15). (15c) implies that wage inflation in a post-election year is the same, independently of the identity of the eventual winner. Only in the subsequent years of an administration do expectations adjust to the party in power. As a result, nominal wage growth is higher under the 'socialists', as in (15a)–(15b). In addition, wage inflation in a post-election year should lie in-between wage inflation for the two parties. All these predictions hold only under managed floating, since during Bretton Woods there seems to have been no room for an independent monetary policy.

It will be convenient for what follows to start from an unrestricted regression. We therefore introduce four partisan dummy variables for the managed floating regime: d_t^{cem}, d_t^{sem}, d_t^{cnm} and d_t^{snm}, which respectively denote a post-election year of a 'conservative' victory, a post-election year of a

'socialist' victory, a 'conservative' administration excluding the post-election year, and a 'socialist' administration excluding the post-election year.[15]

The results are reported in column I of table 3. The equation has an impressive fit and all coefficients have signs and values consistent with the theory. Thus, we will treat it as an adequate encompassing statistical model, against which we can test the predictions of our structural econometric model (15).

The first thing to note is that the point estimates support the central hypothesis of the partisan model, namely that expected inflation is higher under 'socialists' than under 'conservatives' during managed floating. This occurs irrespectively of whether one is in a post-election year. Thus, the coeffcients satisfy $d_t^{sem} > d_t^{cem}$ and $d_t^{snm} > d_t^{cnm}$.

In column II of table 3 we test the key electoral uncertainty hypothesis implied by (15c). That is, we impose the restriction that expected inflation for a post-election year is the same, independently of the identity of the eventual winner, $d_t^{sem} = d_t^{cem}$. As predicted by (15a), (15b) and (15c), expected inflation in a post-election year lies in-between the expected inflation rate for the two parties. Thus, $0.147 < 0.157 < 0.181$. Testing the restriction, the calculated F-statistic is 3.6 versus a critical value of 4.26 at 5%. However, the equation in column II seems to suffer from functional form mis-specification, and the differences between post-election and non election years are not large enough to be statistically significant. We therefore view this evidence as not particularly supportive of the electoral uncertainty hypothesis. It appears from column I that what matters for expected inflation is the identity of the party in power, irrespectively of whether we are in an immediate post-election period or not.

To test the above hypothesis, we impose it in the estimates of columns III of table 3. The restrictions imply that expected inflation rates only differ with the identity of the party in power and the exchange rate regime, independently of elections. Formally we impose the restrictions $d_t^{cem} = d_t^{cnm}$ and $d_t^{sem} = d_t^{snm}$. These two restrictions are the only difference of column III from column I. The calculated F statistic is almost zero, suggesting that the restrictions cannot be rejected.

Consequently, the evidence appears to suggest that forthcoming elections may not matter for inflationary expectations in Greece, and that what matters for expected inflation is the identity of the party in power, irrespectively of whether we are in an immediate post-election period or not.

There are a number of reasons as to why electoral uncertainty may not be important in the case of Greece. First, most of the elections have been held at the end of the year, shortly before the traditional date for the start of

---

[15]Where, for $i = c, s$, $d^{iem} = (d^{ie}) \cdot (d^m)$ and $d^{inm} = (d^{in}) \cdot (d^m)$. See table 1 for dummy definitions.

Table 3

Wage inflation, political parties, elections and exchange rate regimes.[a]
Dependent variable Δw_t

Sample: 1958–1989
Method of estimation: OLS

	(I)	(II)	(III)
u_{t-1}	−1.774	−1.086	−1.745
	(2.642)	(1.825)	(3.013)
Δp_{t-1}^m	0.539	0.616	0.527
	(3.293)	(3.696)	(3.509)
d_t^f	0.166	0.129	0.165
	(4.472)	(3.879)	(5.104)
d_t^{cnm}	0.172	0.147	0.171
	(5.742)	(5.191)	(6.086)
d_t^{cem}	0.166	0.157	0.171
	(4.048)	(3.668)	(6.086)
d_t^{snm}	0.250	0.181	0.248
	(3.643)	(2.953)	(4.363)
d_t^{sem}	0.244	0.157	0.248
	(3.993)	(3.668)	(4.363)
d_t^{inc}	−0.099	−0.089	−0.097
	(3.908)	(3.433)	(4.204)
R^2	0.868	0.848	0.868
σ	0.032	0.033	0.030
DW	2.096	2.030	2.099
$z_1(1)$	0.485	0.860	0.457
$z_2(1)$	2.864	8.284	2.152
$z_3(2)$	1.292	1.244	1.245
$z_4(1)$	0.926	0.701	0.629

[a]t-statistics are in parentheses below estimated parameters. R^2 is the coefficient of determination, σ the standard error of the regression and DW the Durbin–Watson statistic. z_1 is a Lagrange multiplier test for first-order residual autocorrelation, z_2 Ramsey's RESET test for non-linearity, using the square of the fitted values, z_3 a test for non-normality, based on the skewness and kurtosis of the residuals, and z_4 a Lagrange multiplier test for heteroskedasticity, based on an auxiliary regression of squared residuals on squared fitted values. These are all χ^2 tests. For variable definitions see table 1. Variables with an additional superscript f have been multiplied by a fixed-exchange-rates dummy that takes the value 1 for 1958–1971 and zero elsewhere. Variables with an additional superscript m have been multiplied by a managed-exchange-rates dummy, taking the value 1 in 1972–1989 and zero elsewhere. d with superscript inc denotes an incomes policy dummy taking the value 1 in 1983, 1986 and 1987, and zero elsewhere.

wage negotiations, which is January. For example, the elections of 1961, 1963, 1974, 1977 and 1981 have been held either in October or in November. The second, and possibly more important, reason is that the identity of the eventual winner could be predicted well in advance of the actual election in

most cases.[16] With few exceptions, such as 1963, 1985 and 1989, none of the other elections were very close. Such differences between the parties do not generate enough electoral uncertainty. Therefore, in what follows, we investigate differences in the preferences of political parties during the managed floating regime, in the absence of electoral uncertainty.

In table 4 we present our final set of restrictions. The equation in column I is the same as the equation in column III of table 3. The new dummy variables, d_t^{cm} and d_t^{sm} denote, respectively, a conservative administration and a socialist administration including the post-election year, during managed floating.[17] The theoretical prediction is that $d_t^{cm} < d_t^{sm}$.

Column I of table 4 reveals that, under the managed floating system and given past inflation, the difference in expected inflation, and hence wage inflation, between 'socialist' and 'conservative' administrations is equal to 7.7 percentage points $(d_t^{sm} - d_t^{cm} = 24.8\% - 17.1\% = 7.7\%)$ with a standard error of 3.6%. This difference is statistically significant, as it has a t-statistic of 2.14. This offers strong support for the combined 'exchange rate regime' and 'rational partisan' model of inflation: when policymakers are free to manipulate policy, inflation is higher by 7.7% under the more unemployment-averse 'socialists'.

We next test the importance of incomes policies, captured by d_t^{inc}, which are all related to 'socialist' administrations in 1983, 1986 and 1987. In column II of table 4, we exclude d_t^{inc}. Now the difference between 'socialist' and 'conservative' administrations is reduced to 3.4 percentage points $(3.4\% = 21.1\% - 17.7\%)$ with a standard error of 4.3%. The t-statistic for the significance of this difference is now 0.78, which is not statistically significant at the conventional 5% level. Therefore, the statistical significance of differences in inflation between 'socialists' and 'conservatives' can be rejected when 'socialists' resort to comprehensive incomes policies, like in 1983, 1986 and 1987.

We finally test in a different form the key hypothesis of the 'exchange rate regime' model that, under the Bretton Woods system of fixed exchange rates, inflation is independent of the party in power (simply because there is no room for independent policy). To do this, we introduce d_t^{cf} and d_t^{sf} in the place of d_t^f which has so far captured the whole Bretton Woods period.[18] The results are reported in column III of table 4. If we test this unrestricted regression against the regression in column I, the restriction $d_t^{cf} = d_t^{sf}$ imposed in column I cannot be rejected. The calculated F-statistic is 0.748 which is less than the critical value at 5% which is 4.24. Therefore, we cannot reject

---

[16]Unfortunately, we lack reliable pre-election opinion polls to support this argument.

[17]Where, $d^{cm} = (d^c) \cdot (d^m)$ and $d^{sm} = (d^s) \cdot (d^m)$. Thus, for $i = c, s$, we have $d^{im} = (d^{icm}) + (d^{inm})$. See dummy definitions in table 1.

[18]Where, for $i = c, s$, $d_t^{if} = (d_t^i) \cdot (d_t^f)$. Of course, $d_t^f = d_t^{cf} + d_t^{sf}$. See table 1.

Table 4

Wage inflation, political parties and exchange rate regimes.[a]
Dependent variable Δw_t

Sample: 1958–1989
Method of estimation: OLS

	(I)	(II)	(III)
u_{t-1}	−1.745	−1.666	−1.702
	(3.013)	(2.263)	(2.919)
Δp^m_{t-1}	0.527	0.479	0.529
	(3.509)	(2.518)	(3.513)
d^f_t	0.165	0.160	–
	(5.104)	(3.911)	
d^{cm}_t	0.171	0.177	0.170
	(6.086)	(4.940)	(6.001)
d^{sm}_t	0.248	0.211	0.244
	(4.363)	(2.952)	(4.273)
d^{inc}_t	−0.097	–	−0.097
	(4.204)		(4.186)
d^{cf}_t	–	–	0.160
			(4.896)
d^{sf}_t	–	–	0.189
			(4.478)
R^2	0.868	0.778	0.872
σ	0.030	0.039	0.031
DW	2.099	1.875	2.046
$z_1(1)$	0.457	0.002	0.253
$z_2(1)$	2.152	0.231	1.953
$z_3(2)$	1.245	0.571	1.041
$z_4(1)$	0.629	0.192	0.448

[a] t-ratios are in parentheses below estimated parameters. R^2 is the coefficient of determination, σ the standard error of the regression and DW the Durbin–Watson statistic. z_1 is a Lagrange multiplier test for first-order residual autocorrelation, z_2 Ramsey's RESET test for non-linearity, using the square of the fitted values, z_3 a test for non-normality, based on the skewness and kurtosis of the residuals, and z_4 a Lagrange multiplier test for heteroskedasticity, based on an auxiliary regression of squared residuals on squared fitted values. These are all χ^2 tests. For variable definitions see table 1. Variables with an additional superscript f have been multiplied by a fixed-exchange-rates dummy that takes the value 1 for 1958–1971 and zero elsewhere. Variables with an additional superscript m have been multiplied by a managed-exchange-rates dummy, taking the value 1 in 1972–1989 and zero elsewhere. d with superscript inc denotes an incomes policy dummy taking the value 1 in 1983, 1986 and 1987, and zero elsewhere.

the key hypothesis of the 'exchange rate regime' model that, under fixed exchange rates, inflation is independent of the party in power.

Summarizing the empirical results

In conclusion, our results for wage equations offer qualified support for the 'rational-partisan' and 'exchange-rate-regimes' models of inflation. They suggest that what matters for expected inflation is not elections, but the identity of the administration and the exchange rate regime. During managed floating, 'socialist' governments, with their higher tolerance of inflation, generate expectations of inflation that are higher by about 8 percentage points than under 'conservative' governments. Ceteris paribus, this results in average inflation being higher by about 8 percentage points under 'socialist' as opposed to 'conservative' administrations, unless the 'socialists' engage in an incomes policy.[19]

The main theoretical prediction that is not borne out by the evidence is the one about the impact of electoral uncertainty on expected inflation. This is a crucial prediction in Alesina's model, as it is exactly this feature that could drive systematic fluctuations in unemployment in the aftermath of an election.

Since there is no evidence of electoral uncertainty, one should not find even a temporary 'partisan' correlation between elections and unemployment. In the absence of uncertainty about the electoral outcome, there should be neither employment benefits from higher inflation when 'socialists' win the elections, nor employment costs from lower inflation when 'conservatives' win. The process driving unemployment should be independent of the electoral process. In fact, in an AR(1) process for unemployment,[20] the likelihood ratio statistic for the exclusion of the four post-election dummies (conservative and socialist victories under fixed and flexible exchange rates) is equal to 4.2, the critical value of $\chi^2(4)$ at 5% being 9.49. Thus, the unemployment process seems to be independent of election results. This is in agreement with the evidence in Alogoskoufis (1982) that only unanticipated inflation can affect output fluctuations in Greece.

3. Conclusions

This paper has suggested a model that combines the 'rational partisan' model of inflation, with the model that stresses the impact of 'fixed exchange

[19]Estimates of the short-run elasticity of labour demand with respect to real wages imply a short run elasticity of 0.10. Given the estimated response of wage inflation to unemployment in table 4, column I, the implied λ is equal to 0.825, suggesting a very high degree of unemployment persistence. This is in accordance with direct estimates of unemployment persistence in Greece, and the structural characteristics of the Greek labour market as surveyed by Emerson (1988).

[20]Such a process follows form (6) and (13).

rate regimes'. The model has been tested for the Greek economy 1958–1989, which has been characterized by both a polarized political system, in which the ideological differences between 'socialists' and 'conservatives' have been sharp, and extended experiences with both fixed and flexible exchange rates.

The results provide strong support for the combined model, in that they suggest that the differences in the policy preferences of political parties are taken into account by rational wage setters, and thus affect inflation outcomes. They also suggest that under fixed exchange rates, such differences do not occur, as domestic policymakers cannot manipulate inflation through monetary and exchange rate policy. However, the prediction of partisan fluctuations in unemployment is rejected, as post-election years do not seem to be characterized by systematic expectational mistakes, depending on which party wins the election.

Thus, although inflation under 'socialist' administrations seems to be higher on average, by as much as 8 percentage points, this is not translated into lower unemployment, even in the immediate aftermath of a 'socialist' victory. The reason for this rejection of the 'electoral uncertainty' hypothesis may be that elections in Greece seem to have taken place mostly in October or November, shortly before the date for the signing of new labour contracts. Thus, the identity of the government is generally known when contracts are drawn-up.

Since higher inflation under 'socialists' is not translated into lower unemployment, there is the question of why voters support 'socialist' administrations. However, as it is known from the 'political economy' literature, the inflation–unemployment trade-off is only one of the issues on the political agenda. Income distribution, changes in real disposable income or the size of the public sector are additional possible differences between 'conservatives' and 'socialists'.[21] Then, all these economic conditions, taken as a whole, influence the outcome of elections. However, this would require a formal analysis of voting behaviour which is beyond the scope of this paper [see Rogoff (1990) and Alesina and Cukierman (1990)].

The results are very interesting in a number of other ways. They suggest that the preferences of political parties are very important for inflation outcomes, but not for unemployment, as anticipated nominal rules cannot systematically affect real variables like unemployment. The inability of governments to pre-commit to price stability results in a positive equilibrium inflation bias, which is higher under 'socialist' administrations which are known to care more about unemployment. It also results in higher inflation persistence.

[21]The political determinants of government spending and finance in Greece form part of our current research.

In order to mitigate this problem, and achieve lower equilibrium inflation rates, the Greek authorities, and especially 'socialist' administrations, may have to give up their discretion to use monetary and exchange rate policy for purposes of short-run stabilization, and follow fixed rules. Ensuring the independence of the central bank, or entering the exchange rate mechanism of the EMS, may be one way to pre-commit to a stable monetary policy and thus low and non-persistent inflation.

References

Alesina, A., 1987, Macroeconomic policy in a two-party game with rational voters, Quarterly Journal of Economics 102, 651–678.

Alesina, A., 1988, Macroeconomics and politics, in: S. Fischer, ed., NBER macroeconomics annual (MIT Press, Cambridge, MA).

Alesina, A. and A. Cukierman, 1990, The politics of ambiguity, Quarterly Journal of Economics 105, 829–850.

Alesina, A. and N. Roubini, 1990, Political cycles in the OECD economies, CEPR Discussion Paper no. 470, London.

Alesina, A. and J. Sachs, 1988, Political parties and the business cycle in the United States 1948–1984, Journal of Money Credit and Banking 20, 63–82.

Alogoskoufis, G.S., 1982, Unanticipated money, output and prices in Greece, European Economic Review 19, 289–303.

Alogoskoufis, G.S., 1986, On the determinants of consumer price inflation in Greece, Greek Economic Review 8, 245–266.

Alogoskoufis, G.S., 1992, Monetary accommodation. exchange rate regimes and inflation persistence, Economic Journal 102, 461–480.

Alogoskoufis, G.S., B. Lockwood and A. Philippopoulos, 1992, Wage inflation, electoral uncertainty and the exchange rate regime: Theory and U.K. evidence, Discussion Paper in Economics no. 92/1, Birkbeck College, London; Economic Journal 102, forthcoming November.

Alogoskoufis, G.S. and A. Manning, 1988, Wage setting and umemployment persistence in Europe, Japan and the U.S.A., European Economic Review 32, 698–706.

Alogoskoufis, G.S. and A. Philippopoulos, 1991, Political parties, elections and inflation in Greece, CEPR Discussion Paper no. 547, London.

Alogoskoufis, G.S. and R. Smith, 1991, The Phillips curve, the persistence of inflation and the Lucas critique: Evidence from exchange rate regimes, American Economic Review 81, 1254–1275.

Backus, D. and J. Driffill, 1985. Rational expectations and policy credibility following a change in regime, Review of Economic Studies 52, 211–222.

Barro, R. and D. Gordon, 1983a, A positive theory of monetary policy in a natural rate model, Journal of Political Economy 91, 589–610.

Barro, R. and D. Gordon, 1983b, Rules, discretion and reputation in a model of monetary policy, Journal of Monetary Economics 12, 101–121.

Blanchard, O. and S. Fischer, 1989, Lectures on macroeconomics (MIT Press, Cambridge, MA).

Blanchard, O. and L. Summers, 1986, Hysteresis and the European unemployment problem, in: S. Fischer, ed., NBER macroeconomics annual (MIT Press, Cambridge, MA).

Brissimis, S. and J. Leventakis, 1984, An empirical enquiry into the short-run dynamics of output, price and exchange market pressure, Journal of International Money and Finance 3, 75–89.

Cukierman, A. and A.H. Meltzer, 1986, A theory of ambiguity, credibility and inflation under discretion and asymmetric information, Econometrica 53, 1099–1128.

Emerson, M., 1988, Regulation or deregulation of the labour market, European Economic Review 32, 775–817.

Fischer, S., 1977, Wage indexation and macroeconomic stability, Carnegie Rochester Conference Series on Public Policy 5, 107–147.

Giavazzi, F. and A. Giovannini, 1987, Models of the EMS: Is Europe a greater DM area?, in: R.C. Bryant and R. Portes, eds., Global macroeconomics: Policy conflict and cooperation (Macmillan, London).

Giavazzi, F. and M. Pagano, 1988, The advantage of tying one's hands, EMS discipline and Central Bank credibility, European Economic Review 32, 1055–1075.

Gray, J., 1976, Wage indexation: A macroeconomic approach, Journal of Monetary Economics 2, 221–235.

Hibbs, D., 1977, Political parties and macroeconomic policy, American Political Science Review 7, 1467–1487.

Leventakis, J. and S. Brissimis, 1980, Two economic models for the explanation of inflation in Greece: 1958–1978, in: The Greek economy (in Greek) (The Bank of Greece, Athens).

Lindbeck, A., 1976, Stabilization policies in open economies with endogenous politicians, American Economic Review, Paper and proceedings 66, 1–19.

Lindbeck, A. and D. Snower, 1986, Wage setting, unemployment and insider–outsider relations, American Economic Review, Papers and proceedings 76, 235–239.

Lockwood, B. and A. Philippopoulos, 1991, Insider power, employment dynamics and multiple inflation equilibria, Birkbeck College Discussion paper no. 378, London.

Nordhaus, W., 1975, The political business cycle, Review of Economic Studies 42, 169–190.

Rogoff, K., 1985, The optimal degree of commitment to an intermediate monetary target, Quarterly Journal of Economics 100, 1169–1190.

Rogoff, K., 1990, Equilibrium political budget cycles, American Economic Review 80, 21–36.

Rogoff, K. and A. Sibert, 1988, Equilibrium political business cycles, Review of Economic Studies 55, 1–16.