Does Electoral Uncertainty Cause Economic Fluctuations?

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Recent empirical work on aggregate economic fluctuations and elections since World War II in the United States identifies interesting regularities. In particular, economic growth tends to fall in the first half of Republican administrations (reaching its minimum during the second year of each term) and to rise in the first half of Democratic administrations; yet, in the last two years of each term, there are no significant differences (see Alberto Alesina et al., 1993). Similar regularities, generally referred to as the “political cycle,” are found in other democracies with a two-party system or with two clearly distinguishable coalitions (see e.g., Alesina and Nouriel Roubini, 1992).

While consistent with the hypothesis of Douglas Hibbs (1977) that different parties have different preferences over inflation and unemployment, this evidence appears to be inconsistent with rational, forward-looking behavior. To be sure, building on Hibbs’s hypothesis, Alesina (1987) shows that an election can change macroeconomic conditions even when expectations are rational, that is, provided nominal wage and price contracts are signed before the election outcome is known. In this “rational-partisan” theory, electoral uncertainty is instrumental in generating the political cycle. However, why should rational, forward-looking agents lock themselves into nominal contracts before the resolution of electoral uncertainty?

This paper argues that, insofar as elections are predictable events, rational economic agents involved in contract negotiations are likely to time their activities to avoid the uncertainty revolving around elections. The actual timing of union wage contracts from 1960 to 1992 in the United States lends some support to this argument and, thereby, suggests that electoral uncertainty might be less important in explaining the political cycle than previously thought. Without relying on electoral uncertainty, we also offer a new explanation of the political cycle, based on a simple model of temporal agglomeration (Robert Hall, 1991).

I. Electoral Uncertainty and the Timing of Contract Negotiations

To analyze the effects of electoral uncertainty on the timing of contract negotiations, consider a simple two-period setting. Period 1 is before the election, and period 2 is after. Following the approach taken in the literature, the discussion here assumes that two political parties compete for office: the Democratic and Republican parties. From the perspective of period 1, the election outcome is viewed as uncertain.

Given this electoral uncertainty, when would two economic agents prefer to negotiate their contract—before the election or after the election? The intuition underlying our answer to this question relies on the idea that the first-best solution is a contingent contract: wages (or prices) would be set at one level if the Democrat candidate wins and at a different level if the Republican candidate wins. In this first-best solution, electoral uncertainty would have no relevance for economic outcomes, and accordingly, economic agents would be indifferent about the timing of contract negotiations. However, such contingent contracts are uncommon if not nonexistent. In what follows, then, we assume that they do not exist. In this case, entering into a contract

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before the election requires the payment of identical wages (or prices) regardless of who wins the election. In contrast, by waiting until after the election, the two economic agents can set the wage (or price) contingent on the results of the election. Because any agreement reached before the election can be duplicated by agreements after the election, economic agents will prefer to negotiate immediately after the election rather than immediately before, as long as the costs of postponement are not too large.

To see whether the actual timing of contract agreements in election years differs from that in nonelection years, we analyze a data set consisting of all wage contracts listed in the U.S. Department of Labor’s publication Current Wage Developments that meet both of the following conditions: (i) the number of affected workers is over 3,000, and (ii) the publication lists the month and year in which a contract was entered. The sample period is 1960–1992, with a total of 6,105 contracts.

Each year is divided into quarters. Because elections are held on the Tuesday immediately following the first Monday in November, that is, at the beginning of the month, it is convenient to view November, December, and January as the three months after the election. To examine the pattern of contract negotiations around an election date, the first quarter in year \( t \) is defined as the months of May, June, and July in year \( t \); the second quarter consists of months August, September, and October; the third quarter consists of November and December in year \( t \) and January in year \( t + 1 \); the fourth quarter consists of February, March, and April in year \( t + 1 \).

Table 1 reports the average proportion of contracts signed in each quarter for all years; for even years (i.e., years with elections for Congress or the presidency) and the complementary years; and finally, for years with a presidential election and the complementary years.\(^1\) For contracts of duration two years or less, presidential elections appear to be more important than congressional elections in determining the timing of contract negotiations. Indeed, the difference between years with and without a presidential election is striking: 39 percent of all contracts were signed in November or later in a year without a presidential election, versus 50 percent in years with a presidential election.\(^2\) Furthermore, the table shows a clear tendency for unions and firms to enter into contracts in the quarter immediately after a presidential election (26 percent) rather than immediately before (19 percent).

For contracts lasting more than two years, presidential elections would seem no more or less important than congressional elections. The table would suggest, in fact, that the timing of elections has little, if any, relevance for determining the timing of these contracts. One plausible explanation

\(^{1}\)We obtain similar results in examining the proportion of all workers entering into contracts, rather than the proportion of contracts signed.

\(^{2}\)A chi-square test shows that the difference in the time-distribution of contracts in years with and without a presidential election is significant at the 0.5-percent level. The difference between election and nonelection years is not statistically significant, even at the 10-percent level.
is that changes in aggregate demand have a negligible influence on certain industries; it is precisely in these industries where unions and firms should be more willing to enter into long-term contracts.

In any case, the apparent effects of presidential elections on the timing of shorter-term wage contracts casts some doubt on the rational-partisan theory of the political cycle. To be sure, the evidence presented here is fully consistent with the idea that economic agents expect different economic conditions under different political parties. Those agents in industries most likely to be affected by policy-induced changes in aggregate demand have the greatest incentive to postpone their negotiations until after the election. The implied tendency for postponement, however, weakens the potential impact of election surprises on aggregate economic outcomes. If the agents locked into nominal contracts before the election are those least affected by the election outcome, the impact of election surprises could be quite small.3

II. Political Cycles Without Electoral Uncertainty

Many of the empirical regularities considered under the term “political cycle” can be explained in terms of rational, forward-looking behavior even in the absence of electoral uncertainty. The essential feature of our explanation is the assumption that agglomeration effects are present. That is to say, a firm will want to invest more when investments by all other firms are greater. Direct evidence of temporal agglomeration over periods as long as presidential terms is not available; but Hall (1991) cites a number of reasonable explanations for this type of phenomenon. For example, the costs of doing business are lower in times of higher total activity due to “thick-market” externalities (Peter Diamond, 1982). Thick-market effects might be at work within a firm as well, given the fixed costs that workers must incur each day (or longer period) they go to work; in this case, specialization into periods of intense work and periods of no work is optimal (Richard Rogerson, 1988). Similarly, increasing returns can appear when the availability of some specialized inputs reduces production costs but there is a large fixed cost to producing such inputs.4

In what follows we take agglomeration effects as given and use them to explain the link between economic fluctuations and elections without having to rely on electoral uncertainty. Since the component of aggregate output exhibiting the greatest variation over the course of the business cycle is investment, we shall focus on that.

Consider a two-period model consisting of N identical, risk-neutral firms. Each period can be thought of as extending for the length of a presidential term. At the beginning of the first period, each firm is endowed with a fixed amount of resources, normalized to 1, which it can invest over the two periods. Let f denote the fraction of a representative firm’s resources invested in period 1; 1 − f is the fraction the firm invests in period 2. The corresponding values

3As a further test of the rational-partisan view, we examined the relation between the magnitude of the change in real economic growth and unemployment and the extent to which the election results could be considered surprising. The rational-partisan view predicts that the greater the surprise, the greater will be the effect of the election on economic activity. Using either the popular vote or the electoral college vote, we found no systematic relation between the extent of the election surprise and the effect of the election on economic activity in the United States between 1952 and 1988. However, we should also note that there is no systematic relation between our measure of the election surprise and the timing of wage contract negotiations. Details are available from the authors upon request.

4See Hall (1991) for a more detailed discussion of existing explanations of temporal agglomeration and how this phenomenon might contribute to the business cycle. Also see Russell Cooper and Andrew John (1988) who consider a more general class of models characterized by strategic complementarities. Speaking in terms of herd behavior induced by managers who are concerned about their reputations in the labor market, David Scharfstein and Jeremy Stein (1990) suggest an additional reason for firms to invest when others do. Specifically, rational managers who have imperfect information might find it advantageous to mimic the (perhaps irrational) behavior of other managers.
for the fraction of aggregate resources invested in the two periods are $F$ and $1 - F$.

Agglomeration effects are captured in this model by the assumption that the return from each firm's investment increases in aggregate investment. Specifically, the gross per-unit return of investment to a firm is given by $r(I)$, where $I = F$ or $I = 1 - F$, and $r'(\cdot) > 0$. By contrast, a firm's costs of investment in each period depend only on its own investment as follows: $c(i)$, where $i = f$ or $i = 1 - f$, $c'(\cdot) > 0$, and $c''(\cdot) > 0$.

In period 1, each firm chooses an allocation of resources to investment in the two periods to maximize its current and (undiscounted) future profits,

$$fr(F) + (1 - f)r(1 - F) - c(f) - c(1 - f)$$

treating $F$ as fixed. The representative firm's choice of $f$ must satisfy $r(F) - r(1 - F) = c'(f) - c'(1 - f)$. Since firms are identical, $f$ must equal $F$ in equilibrium, so that

$$r(F) - r(1 - F) = c'(F) - c'(1 - F).$$

If firms chose their allocations before they knew the election results and the two periods were ex ante identical, an individual firm would have no reason to believe that others will invest more in one period than in the other; and, with increasing marginal costs of investment, the firm would plan to invest the same amount in each period. Given that all other firms plan such an allocation, no individual firm has an incentive to deviate. Hence, smooth investment ($F = 1/2$) is an equilibrium.

That equilibrium need not be the only one, however. By virtue of our assumptions that $c''(\cdot) > 0$ and $r'(\cdot) > 0$, both sides of the equilibrium condition in (2) increase in $F$. Thus, the equilibrium condition can be satisfied at other values of $F$; and some of these other equilibria can be stable ones.

To see the potential link between elections and investment activity in this model, suppose now that firms make investment decisions knowing that the president in the first period is a Democrat and that the president in the second period will be a Republican. Suppose further that, based on historical experience, firms believe that investment is higher under a Democratic administration than under a Republican one. Given that $r'(\cdot) > 0$, this belief is a self-fulfilling one. That is to say, each firm now has an incentive to invest more of its endowment in period 1 under the Democrat than in period 2 under the Republican. The implied variation in investment over the two periods at this alternative equilibrium ($F > 1/2$) can be interpreted as part of the political cycle.

In the context of this simple model, a perfectly anticipated change in administrations (from a Democrat to a Republican or vice versa) can serve as a coordination mechanism that drives the economy away from the equilibrium characterized by smooth investment ($F = 1/2$) to another in which a political cycle emerges ($F > 1/2$ or $F < 1/2$). Given firm's beliefs about differences in aggregate investment under the two administrations, this coordination mechanism works even if the parties' policies are indistinguishable. Of course, the amplitude of the cycle would be magnified if public officials actually took actions consistent with those beliefs. For example, a Democratic president might pressure the Federal Reserve Bank to increase the money supply and thereby further stimulate the economy; or presidents might "jawbone" firms and unions, with Democrats pressuring firms to increase employment and Republicans pressuring for moderations in wage and price increases. However, meaningful differences in the policies of the political parties are not essential to our explanation of political cycles.

III. Concluding Remarks

This paper questions the importance of electoral uncertainty in understanding eco-

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5Some evidence that presidents effectively jawbone firms is given in Glazer and Henry McMillan (1992). In particular, they show that Congress and President Carter induced banks to lower the prime interest rate.
nomic fluctuations. Our analysis of the data on wage contracts identifies a tendency for economic agents to postpone contract negotiations until after the election. This observed tendency suggests that the rational-partisan theory, which treats the timing of contract agreements as fixed, overstates the importance of uncertainty about future election outcomes. Furthermore, our analysis of investment in a simple model of temporal agglomeration suggests that the political cycle can be understood in terms of rational, forward-looking behavior even in the absence of electoral uncertainty.

REFERENCES


