*Economic Growth Strategies: The Effects of Ideological Partisanship on Interest Rates and Business Taxation in the United States**

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We reformulate the partisanship thesis in light of four claims leveled against it. The reformulated version, ideological partisanship, is based upon the theory that similar rates of economic growth may follow from the different use of policy instruments. Owing to their role as determinants of investment and growth, interest rates, business taxation rates, and the redistribution of the tax burden between capital gains and earned income are examined. We advance models that take into account other views of politics beside the partisan one, and test for political influences. The United States is characterized by very pronounced partisan differences in national economic policy with Democratic administrations seeking to promote growth through a consumption driven, while Republican administrations promote an investment-driven strategy. Democratic administrations also seek to shift the tax burden toward corporations and owners of capital. These findings are examined in light of the comparative political economy literature. We conclude that the forms and institutional foundations of left partisan policies differ among democratic capitalist countries.

Introduction

Do voters in democratic capitalist countries have real choices among parties in terms of macroeconomic consequences? In summing up the work on the question, the majority view in political economy seems to be yes, though strong dissent continues. This debate has taken place against the backdrop of some comparative institutional research that has shown that nations differ in the strategies and institutions they employ in influencing economic activity (e.g., Freeman 1989; Katzenstein 1985; Shonfield 1965; Zysman 1983; see Hicks 1988a for a review).

Opponents of the partisan view claim that four weaknesses diminish the brightness of the partisan picture of politics. These are (1) the absence of links between partisanship and macroeconomic policies; (2) the tendency of parties to converge to similar policies; (3) the unsound assumption of a price-employment

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trade-off; and (4) the assumption that macroeconomic policies are specific enough in effects to benefit a social or economic class.

In this paper we address these problems through an analysis of policy instruments. Specifically, for signs of partisan effects, we examine two sets of U.S. policy instruments that are determinants of investment and growth: short-term interest rates and business and capital taxation. Our study of the effects of politics and partisanship is premised on there being two alternative strategies for achieving economic growth and stabilization that use these two policy instruments in differing ways. We ask: is there evidence for partisan differences in economic growth strategies? Are these differences manifested in different uses of policy instruments to achieve economic outcomes? And with regard to the *timing* of policies, are there partisan bursts of policy, sustained partisan policy, or electorally motivated policy bursts?

We shall show that the partisan position, when conceived of in terms of ideology and not class interests, is essentially correct for the United States. We shall also argue that the manner in which partisanship manifests itself in the United States is idiosyncratic to private-pluralist economies.

Class Partisanship versus Ideological Partisanship

Politicians have a well-founded suspicion that the performance of the economy exerts a powerful influence on how they are judged by their constituents (e.g., Erikson 1989; Weatherford 1986; Lewis-Beck 1986; Shapiro and Conforto 1980). The obvious question arises from this: do politicians then undertake policies so as to win or maintain the favor of voters in the political market? The answer is as apparent: of course, they do. The more problematic question concerns the nature of political influences on the economy.

The partisan view of politics and public policy starts from the position that different parties appeal to different groups with distinct interests, usually economic or class interests (Hibbs 1977, 1987; Alt 1985; Beck 1982). This view will be described as "class partisanship" in order to distinguish it from the alternative form of partisanship that we shall advance. Class partisanship results from attempts by politicians to return gains to allied rent-seeking groups. Some disagreement, however, exists as to whether class partisanship is a sustained phenomenon (Hibbs 1977) or whether it occurs in postelection partisan bursts (Alesina 1988b; Alt 1985; Woolley 1988), perhaps followed by counteracting policies just before elections or in exclusively preelection efforts to mobilize support (Woolley 1988), or whether it may be attributable mainly to the policies of particular administrations (Beck 1982).

The class partisanship thesis has been supported by empirical evidence in the areas of employment and inflation (e.g., Hibbs 1977, 1987; Alesina 1988b; Alt 1985; Beck 1982), income distribution policies (Hibbs and Dennis 1988),

and increasing gross domestic product (Lange and Garrett 1987). Though all these works have received close scrutiny and some criticism, the latter work, in particular, has been the subject of sustained criticism and controversy (cf. Jackman 1987, 1989; Hicks 1988b; Hicks and Patterson 1989; Garrett and Lange 1989). The "bread and butter" issue for class partisanship, however, has been the employment-price trade-off.

Four objections have been raised to the class partisan thesis, although the first three do not offer a decisive claim. Cumulatively, however, these problems cause us to wonder whether the statistical associations between macroeconomic outcomes and party variables represent genuine political influences. We examine each objection in turn.

Partisanship and Policy Instruments

The great empirical difficulty for the class partisan view has been that systematic links between partisanship and the instruments of public policy have not been discovered, even though some imaginative and sophisticated tests have been undertaken (Hicks 1984; Lowery 1985; Woolley 1987, 1988; Chappell and Keech 1988a; but see Alesina 1988b; Alesina and Sachs 1988). What Woolley describes as the "macropolitics paradox" is that, although statistical associations between left-wing governments and various macroeconomic outcomes have been found, the actual policies that we know to cause macroeconomic outcomes (e.g., interest rates, tax rates) show no partisan political influence (Woolley 1987, 1988; Chappell and Keech 1988a). According to Woolley, "We do not have convincing quantitative studies that explain how partisan differences at the aggregate level are stimulated at the level of policy instruments" (1988, 336). This is crucial because the finding of no policy effects is precisely predicted by one of the contending views of politics, the electoral view. In fact, one of the adherents of the electoral view, Jackman, argues that a policy instrument focus is needed "if we are to move ahead in understanding how politics affects growth" (1989, 660).

Party Convergence to a Median Policy

The second challenge to the partisan view comes from those who see parties as tending toward a political median in order to win elections (Downs 1957; Jackman 1986; Kramer 1977; Ordeshook 1986): the electoral view of politics. According to this model, on important issues, such as economic growth, policy convergence among parties is the necessary outcome of democratic political competition, and the failure to find persistent and systematic partisan differences is to be expected (Jackman 1987), though elections should affect the timing of policies (cf. Beck 1987; Grier 1989). Hence, the political business cycle might follow from rational political action, but systematic partisan differences will not.

Parties may also tend to convergence because of the "structural dependence of the state on capital" (Block 1977; Lindblom 1977). Here policies challenging the perquisites of the owners of capital (e.g., increasing capital gains taxation) are sharply limited because private investment is important for maintaining growth and government budget receipts, and this investment depends on investor confidence (see Przeworski and Wallerstein 1988 for a review). If investors fail to invest, the economy slows, budget receipts fall off, and voter unhappiness follows.

Neither view, however, offers a fundamental challenge to partisan views of politics. First, we find exceptions to the rule of political convergence to middle of the road politics: Reagan and Thatcher, most strikingly. As Crewe and Searing (1988) have observed, "Mrs. Thatcher has in fact demonstrated that a basic assumption of spatial models is not universal and is therefore not an appropriate axiom for deductive theories. Rational politicians can deliberately construct ideologies that draw their parties away from, not towards, the electorate" (378). Moreover, we also have the aforementioned substantial body of literature showing macroeconomic differences to be associated with partisan politics.

Second, recent spatial arguments have shown that one of the two major parties may be vulnerable to an emerging third party if the two parties converge in a Downsian fashion (see the reviews of this literature in Garrett and Lange 1989; Hicks 1988b). Likewise, related formal analyses of pressures for compromise and convergence in multiparty, proportional representation systems show that these pressures may be more than offset by incentives for the two largest parties to diverge and subsequently form coalitions with the smallest parties (see Austen-Smith and Banks 1988; Greenberg and Shepsle 1987). Other theoretical and historical work suggests that internal party politics, such as the dynamics of party activism, may lead to substantial interparty differences (Chappell and Keech 1986; Aldrich 1983; Page 1978).

The structural dependence argument is also not theoretically decisive. Przeworski and Wallerstein (1988) conclude from their formal analysis that "virtually any distribution of consumption between wage earners and owners of capital is compatible with continual private investment once an appropriate set of taxes and transfers is in place" (11).

Of particular relevance to this paper, one strong objection to the necessity of convergence to a mean among parties is that different strategies can yield similar rates of economic growth, thereby satisfying the convergent policy goal, either (1) through differing uses of macroeconomic policy instruments (Quinn 1988) or (2) through differing levels of reliance on government intervention (e.g., "demand stimulation," investment subsidies, and labor market intervention" tied to corporatist "political bargaining and concertation with organized economic interests") or on private market forces (Garrett and Lange 1989, 682).

Jackman (1987) asks which politician would oppose economic growth, but he does not account for there being several roads to its achievement.

A defender of the electoral position might respond that, while "it is true that different strategies of economic growth might lead to the same rate of growth, in a model with convergence the parties should adopt the growth strategy most desired by the median voter, as long as voters have preferences defined by growth strategies." This objection does not hold, however, if the growth strategies recommend contending, discrete, polar policies. That is, in a model with two policy instruments affecting growth, A and B, if growth strategy 1 calls for $-A \times B$ and growth strategy 2 calls for $A \times -B$, a median voter strategy is very difficult. (This policy polarity is actually the case regarding interest rate and taxation policies, we shall argue below.)

The Ineffectiveness of Anticipated Policies

The third objection to most class partisan analyses is that their authors assume a Phillips curve–style trade-off between employment and money wages, even when they concede that no long-run, stable Phillips curve (PC) exists (see, e.g., Hibbs 1987). That is, these models see left-leaning administrations seeking increased employment and right-leaning administrations seeking reduced inflation.

The empirical support for the existence of a PC trade-off, however, is weaker in the 1970s and 1980s than it was in the 1950s and 1960s. As important, the theoretical underpinning of the PC has come under attack (Phelps 1967; Friedman 1967). Even the most ardent defenders of the PC have conceded ground to the monetarist position (e.g., Wonnacott 1981, 352–65), though expectations-augmented Phillips curves may still prove useful for policy purposes (Hall and Taylor 1988). If the monetarist position is substantially correct and no real long-term Phillips curve trade-off exists, then we have reason for caution regarding the results from the majority of the partisan models, which employ anticipated (i.e., expected) partisanly motivated financial policies. In this view the only policies that will matter regarding real economic activity are *unanticipated* (or, surprising) policies (Barro 1977; Sargent and Wallace 1976), and even here the ability of governments to plan a surprise or to shock economic agents is questioned. So even if partisan governments do cause movements in actual policies, these policies might not affect the real economy.

As with the electoral view of politics, the rational expectations critique (RET) does not deal a fatal blow to the partisan view. Taxation policies and income distribution policies will be effective, even if anticipated, owing to the resulting changes in relative prices and to the limited ability of agents to arbitrage taxes. (Surprisingly enough, previous partisan models have not studied corporate taxation.)

Further, even if we assume forward-looking expectations, we may be able to posit credibly a short-term Phillips curve. Chappell and Keech (1988b) see the possibility that "systematic party related differences in unemployment [could] emerge as a consequence of money growth surprises caused by election outcome uncertainty" (108). In another study Alesina and Sachs (1988) employ a model with "unexpected policy," which arises because the public's expectations about policies are formed before the outcomes of elections are known.

The institutional context of policymaking also influences the effectiveness of policy (see Freeman 1989 for a discussion of institutions and policy areas). For example, individual workers in democratic corporatist countries in fact may be able to calculate accurately the effects of "loose" monetary policy on inflation and therefore real wages. But bargains stuck among governments, businesses, and unions might still be effective if unions are encompassing and able to enforce wage discipline (Hicks and Patterson 1989; Garrett and Lange 1989).

We also have empirical reasons for not accepting the strong or semistrong form of RET (see Frydman and Rappoport 1987; Lovell 1986; Quinn and Jacobson 1989). Many macroeconomists believe that predictable government policies do have an effect and that the political effect that does occur is roughly equal to that of unpredictable government policies (Reynolds 1988, 300).

Nonetheless, the strong theoretical arguments against a medium to long-term inflation-employment trade-off amplifies the policy instrument problem stressed by Woolley. In particular, rational expectations theory points to the importance of unanticipated changes in the value of policy instruments as a possible mechanism through which partisan policies might affect the real economy.

Class Interests

The most serious problem facing class partisanship is rooted in the basic assumption of the argument: that policies are motivated by the class interests of various partisan and economic groups, at least at the broad aggregate level of economic policy. In the case of U.S. interest rate and taxation policies, for example, the partisan literature says that Republicans are notorious for preferring anti-inflationary, prosaving policies that have the effect of increasing real interest rates and that Democrats are equally notorious for preferring inflationary policies that lead to lower real rates. But are these policy preferences in the short-term class interests of the coalition members of the two parties? No. Rising real interest rates may benefit *future suppliers* of capital and induce higher rates of saving, but the owners of the *existing capital stock* will see the value of their assets decrease, at least in the short-run: as has been conclusively demonstrated, stock prices fall when interest rates rise (e.g., see Fama 1981). If Republicans were motivated by class or economic interests, would they harm the owners of existing capital? Business firms are a net borrower of capital and are particularly harmed

by increases in interest rates. Is it, then, the Democratic party that is the friend of the large corporation?

A similar paradox holds for business and capital taxation rates. The Democratic party is perceived to work for lower rates of unemployment. The Democratic party is also famous (justly so, we shall show) for raising corporate and capital gains taxes. A rise in corporate and capital taxation, however, *reduces* future employment as business firms slow down the rate of new investment (see Hall and Taylor 1988, 239–42). While one plausible explanation for the trade-off between inflation and employment (and one that is not affected by Phillips curve problems) may follow from this analysis,[1] the adherents of class partisanship still need to explain the contradiction in Democratic party goals that results from seeking both increasing taxation and increasing employment.

The assumption of class interest becomes even more problematic when we realize that economic effects of public policy are hard to gauge even within the same class of people. As a simple illustration, a college professor with a paid-off mortgage who has been teaching for 30 years at a small college in rural southwestern Pennsylvania will be affected differently by rising interest rates than will his son who owns new home and teaches in an urban, East Coast school: same class, same profession, different economic interests.

Ideology and Partisanship

If we conceive of partisanship in terms of future visions of society—an "ideological" form of partisanship—several troubling features of class-interest partisanship are diminished. As we noted, growth strategies are future-oriented strategies, whose outcomes are extremely hard to anticipate. The choice of strategies by parties, we argue, is essentially a choice over different future visions of society, not a choice among predictable returns to extant interests. (This argument is developed in greater detail in Quinn 1989.)

The voters, in making their choices about parties, judge promises both in

[1]The effects of the inflation-employment trade-off that are so widely reported in the partisan literature could possibly be brought about through the tax code. Davies (1986) states, "Rising prices and the antiquated U.S. tax structure cause a misallocation of labor and capital in the economy. This induced inefficiency occurs because the cost of labor is expressed in current prices and deducted from current receipts when calculating taxable income: however, the cost of plant, equipment, and, in many cases, inventories are deductible only if original rather than replacement costs are used. As noted, the relatively low original or historic costs, which existed before a rise in prices, does not permit full allowance for the replacement of plant and equipment, understates true costs, and overstates income so that the corporate tax becomes a levy against capital. This bias against investment influences firms to use relatively more labor and less capital" (156). This phenomenon will, as is noted in the text, be transitory in terms of jobs gained. But if the thesis is that short-term increases in inflation are associated with short-term increases in employment, then this is a plausible (and easily testable) hypothesis, and one that does not rely on a Phillips curve effect. The long-term effects on employment of decreasing investment are, however, deleterious.

light of past economic events and in light of the societal images that the promises conjure up. The retrospective evaluations by voters of party performance are, however, from a candidate or party's perspective, a "sunk" cost. What matters in winning election or reelection, given the sunk cost of previous economic performance, is selling voters a program for future economic prosperity. (See, e.g., Abramson, Aldrich, and Rohde 1990, chaps. 6 and 7, for a discussion of retrospective and prospective voting.)

The "consumer" in the political "market" is, however, by many standards unknowledgeable and unsophisticated (Campbell et al. 1960; E. Smith 1989). Further, macroeconomic policy debates are arcane even to economists, with many of the debates about contending policy options turning on fine macroeconometric points like which variables should you treat as being exogenous in which models over what period, or how should you model expectations (Fair 1990). Class interests also provide very limited cues to votes because, as we noted earlier, the complexity of the effects of economic policies makes class interests nearly impossible to calculate. Prospective voting is difficult to evaluate anyway; as Fiorina (1981, 11) noted, "the standards of responsible prospective voting" are not "etched in stone tablets."

How, then, do voters make prospective judgments about the types of macroeconomic strategies that parties offer them? First, voters view the past as a partial guide to the future (Abramson, Aldrich, and Rohde 1990). Another cue to the voters, and key for our argument, is the resonance that macroeconomic stories have with images that voters have of society. We shall argue below that two macroeconomic models, a consumption driven model and an investment driven model, connect to two dominant visions of society. The connection allows voters to prefer one set of policies to another based on their preferences for the images connected to the models without requiring the voters to understand the complex issues that surround macroeconomic policy debates. (Economic policy is, of course, not the only area where voters use ideology to prefer one set of complex policies to another; see Page and Shapiro's forthcoming analysis of voters and foreign policy.)

An ideological view of partisanship is not plagued by the disadvantages of class partisanship. It emphasizes the ideological struggle between contending theories of political economy, and not the contemporaneous struggle among existing classes or interests over inflation and employment. Because individual voters and interest groups cannot anticipate successfully the relative gains associated with future economic growth per se, we have no prima facie reason for expecting policies to be ineffective. Unlike the employment-price trade-off, the investment-inducing policies to be studied (interest rates and taxation rates) are known theoretically and empirically to produce significant effects on firm investment. Since the two strategies government may follow to increase economic growth are rooted in two different visions of society, we need not try to match an individual

or a group's current economic interests to policy preferences. This ideological view of partisanship offers the possibility of establishing a connection between the statistical associations found by comparative political economists without foundering on the questions, "in whose *immediate* class interest is a rising real interest rate?" or "why would the Democratic party seek increasing business taxation if that policy decreases employment?"

Summary

Many sophisticated studies show a partisan effect on macroeconomic outcomes, but the consistency of the findings have not quieted the critics of partisanship. Adherents of the electoral and rational expectations views of political economy each have raised serious theoretical and empirical objections to the partisanship findings. Class partisanship is also vulnerable to criticism for the implausibility of its class interest assumptions, at least regarding broadscale macroeconomic policies. Our interpretation of this previous research and criticism leads us to propose a further area of study, *growth inducing policies,* and an alternative conception of partisanship, *ideological partisanship,* to meet these objections. Specifically, we ask: to what extent are there systematic political effects on policy instruments that influence economic growth?

Choices among Macroeconomic Policies

In this section we have two aims. The first is to argue that mainstream macroeconomics offers policymakers two contending growth and stabilization strategies and that the empirical evidence is not overwhelmingly in support of either. The second is to argue that the policy options offered by these macroeconomic perspectives connect to ideological partisan views.[2]

Increasing the rate of growth of real gross domestic product is the main economic goal of Western governments and all major Western political parties, with economic stabilization being an important secondary goal (Arndt 1984). Even though all parties seek to promote growth, the policies to its achievement are the subject of intense political controversy for several reasons. For one, the economic science of achieving growth is very uncertain. For another, similar rates of economic growth and stabilization may be achieved through contending strategies with very different consequences for other policy goals.

We consider two models of economic growth, an investment-driven model (neoclassical) and a consumption driven model (neo-Keynesian). These models are far from being static; both the neo-Keynesian and the neoclassical models are substantially modified from their antecedents, and each model has adopted elements of the other (Hall and Taylor 1988). One striking feature of both is that, despite swings in intellectual fashion, these models have remained central to the policy debate throughout the postwar era.

[2] We are indebted to an anonymous referee for some of the language in this section.

These models begin with several common assumptions. First, capital investment, technological innovation, and increases in the productivity of human capital matter for long-term economic growth (Denison 1967, 1985; Solow 1970, 1988). Second, because technological innovation, human capital advances, and other forms of productivity increases are thought to be embodied in capital (K), business plant and equipment investment is particularly important. The usual list of the determinants of changes in business investment comprise consumption, tax policy, interest rates, and the expectations that investors hold about future economic conditions. Business investment and economic growth are also spurred, as Keynes noted long ago, by redistributive government policies that increase aggregate demand.

From these points of agreement, however, the two models of growth diverge in language of description, in interpretation of the same facts, and in basic assumptions about the economy. The neoclassical view begins by assuming that investors have rational expectations and that the economy is essentially stable, tending toward equilibrium, producing nearly full employment. As to investment by firms, the view is that decreases in marginal business income taxation rates will induce higher levels of firm investment, though some controversy surrounds this point (cf. Chirinko 1986; Chirinko and Eisner 1983; Hall and Jorgenson 1967; Feldstein 1982). Decreasing capital gains taxation, particularly on venture capital, is also widely believed to spur investment (Davies 1986).

The neoclassical model of growth has incorporated the monetarist position that inflation is extremely deleterious in its effects on the economy. Inflation reduces investment by increasing the required rates of return on investment (Tideman and Tucker 1976; see also n. 1). Tightened monetary policy and increasing real interest rates are the antidotes to inflationary pressures. An increase in real interest rates will induce higher future rates of investment by steering income away from consumption toward saving and, more important, by reducing inflationary expectations. The short-term effects will be to decrease investment and output, but the cost of capital will ultimately decrease as inflation decreases and as more people save. The increased pool of saving will be directed toward investment: $S = I$ in a closed economy.

Neo-Keynesian views of growth, in contrast, see the economy as tending toward disequilibrium whenever wise government strategies are absent. These views stress business confidence and growth in aggregate demand as the key determinants of investment and underplay the effects of inflation. A consumption-led model of investment seeks lower real interest rates. Consumer demand will increase if the cost of credit is reduced, and an increase in sales will lead to upturns in employment and investment, all of which will accelerate the economy, thereby further increasing economic activity. Business investment is also directly affected by decreasing interest rates as this reduces the cost of capital to business firms, which thereby lowers the rate of return requirement for firm investment. Interest rates are also crucial in influencing the expectations of investors in capi-

tal markets because increasing nominal interest rates forecast decreasing consumer demand (Fama 1981).

Higher corporate taxes on profits and on capital gains are also consistent with Keynesian principles. First, an increase in government tax revenues (if redistributed to those with high marginal propensities to consume) is preferable to issuing government debt, since interest rates will not be pushed up directly; second, the multiplier effects of government-induced consumption are larger and more immediate than are the multiplier consequences of saving.

In summary, proponents of the investment-driven model of economic growth seek to decrease business and capital taxation and to increase saving. Proponents of the consumption-driven model of economic growth propose to decrease interest rates and increase business and capital taxation. The rational expectations critique leads us to suspect that unanticipated changes (at least) in the real values of interest rates will influence the real economy.

We do not aim to address the adequacy of these two stylized views of the economy, especially since both are partly consistent (or partly inconsistent) with the postwar economic evidence (Reynolds 1988). We only suggest that two growth models exist that lead to differing policy recommendations regarding firm taxation and interest rates.

What is crucial about these two growth models in terms of partisanship is that they connect directly to the rhetoric of politics. They do so by conjuring up very different and contending images of how the world works and of what is right and just in society (see Quinn 1989).

The investment-driven model's focus on fighting inflation, for instance, is associated in the eyes of the electorate with social images of thrift, saving, hard work, and the Protestant ethic (see, e.g., Inglehart 1990). Inflation is seen by conservative critics of neo-Keynesianism as being both "a reflection of and a major contributor to a general collapse of values" (Barry 1985, 284).[3] The investment model is also associated with the image of the individual entrepreneur, struggling against the injustice of increasing business taxation and bloated government: this was one of former President Reagan's favorite metaphors.

The consumption-driven model, in contrast, is associated with the very powerful images of distributive justice, which Inglehart (1990), for example, describes as being one of the attributes of the "postmaterialist" conception of society. Business taxation is portrayed by the adherents of the consumption model as an offset to the power of the large corporation (as Galbraith and others

[3]Barry quotes Buchanan and Wagner on the connection between the spirit of the 1960s and 1970s and "a generalized erosion in public and private manners, increasingly liberalized attitudes toward sexual activities, a declining vitality of the Puritan work ethic, deterioration in product quality, explosion of the welfare rolls, widespread corruption in both the private and the governmental sector, and finally, observed increases in the alienation of voters from the political process" (1985, 284).

argued), as an antidote to the overrewarding of capital at the expense of labor and of society as a whole (Keynes 1964, chap. 24), and as a way of forcing the private corporation to act for the public good. Arguments in favor of reducing capital gains taxation have been ridiculed by neo-Keynesians as amounting to claiming that "the poor have too much money, the rich too little." Lower interest rates and tax redistribution policies contribute directly to the consumption of the least advantaged, which is consistent with a Rawlsian conception of justice. The lower interest rates might spur inflation and lower rates of saving in the future, but as supporters of the consumption-driven strategy ask, "Is it not preferable to avoid certain evils now (unemployment, increasing income inequality) and risk possible evils in the future (inflation, decreasing saving)?" (Barry 1985).

These visions of the *future* consequences of macroeconomic policies provide a plausible motivation for partisan party policies as they offer partisans ideological, though not material, sustenance. As we argued in the previous section, support for proposed macroeconomic policies cannot be motivated by the material interests of extant interest groups, since the outcomes to individuals of these broadscale macroeconomic policies are hard to forecast, the policies tend to harm the interests of some members of extant interests, and the policies have very different effects for members of the same socioeconomic group.

In summary, two plausible macroeconomic scenarios concerning economic growth and stability exist that call for polar uses of government policies. These scenarios connect to the rhetoric of politics, wherein they conjure up images of "the good society." We need not rely on the unsound assumption that macroeconomic policies deliver benefits to extant economic and class interests. Instead, a motivation for partisan policies is provided by ideological partisanship wherein voters are offered contending growth and stabilization strategies linked to images of society.

Hypotheses

No political party will oppose economic growth per se. Contending political elites, however, will choose among growth strategies because of the future distributional consequences of these strategies. An ideologically motivated partisan view of politics hypothesizes that left-leaning governments tend to advance a consumption-driven model of economic growth that is consistent with future redistributive economic policies. We should expect to see left governments associated with higher rates of business and capital taxation and lower rates of interest, even controlling for investment or inflation. Right-leaning governments would follow the reverse policies: undertaking investment-driven policies that seek to induce higher rates of saving and lower rates of business and capital taxation. We would also expect, in this view, to find left-leaning governments seeking to redistribute the tax burdens of society toward the owners of capital

and right-leaning governments seeking to reduce the owners of capital's share of the total tax burden.

In the arena of macroeconomic policy, we can discriminate between ideological partisanship and class partisanship that sees employment as the crucial issue for left-leaning governments. As was noted earlier, an increase in either business taxation or capital taxation will lead to a decrease in investment and a subsequent decrease in employment. In consequence of the negative effects of firm and capital taxation on employment, the class partisan view would presumably predict no differences between Democrats and Republicans on this point, though to our knowledge, the class partisanship literature is silent on taxation. Ideological partisanship, in contrast, predicts differences in corporate taxation policies as the Democrats are seen as supporting a consumption-driven model of economic growth in which tax increases on firms and the owners of capital occupy center stage.

An electoral view of politics, in contrast to both views of partisanship, would hypothesize that few if any partisan differences between parties truly exist but that we should find electorally motivated policies. Parties in power will attempt to influence the economy so as to increase voter well-being during electoral periods. Reelected parties will try to counteract the electoral stimulus with restraining policies during the period following elections—the exact reverse expectations from Alt's (1985) partisan burst hypothesis. At issue for an electoral view of politics is not just the direction but also the timing of policy. The preceding section suggests that simultaneously lowering interest rates and tax rates will boost economic growth, so that we should expect such policies from electorally motivated governments during an election year. The winning party should then push both interest rates and tax rates up the year following the election to reequilibriate the economy.

The contribution of the rational expectations view to the hypothesis formation is in its suggestion that only unanticipated changes in financial policy instruments (here interest rates) will affect the real economy. Leaving aside the question of the adequacy of the RET perspective, we suggest that studying both the actual and the unanticipated changes in financial policy instruments is necessary in light of the theoretical claims of RET.

Model Specification and Data

Dependent Variables

We have four dependent variables: two taxation and two interest rate measures.[4] The first taxation measure is the nonfinancial corporate profit tax payments to the federal government divided by the IRS's measure of pretax profit;

[4] All the estimations in this investigation were done with the SHAZAM statistical programs (see White 1978).

substantively, this is the IRS corporate tax rate. The second is individual capital gains taxation as a percentage of individual earned income taxation: taxation of owners of capital as a percentage of taxation of wage earners. The second measure allows us to examine the redistributive effects of politics on tax policy, whereas the first allows us to examine only changes in the corporate tax rate in isolation.[5] The first interest rate measure is the observed 90-day Treasury Bill rate, the price of money to the federal government, which most lending in the economy follows. The second measure employs Treasury Bill rates but is transformed into the unanticipated change in the rate. Because there are two equally sound procedures for estimating unanticipated changes in interest rates, we report both results.[6] The interest rate measures are, for reasons discussed below, real interest rates.

[5]We also used a third and a fourth measure. The third measure is the corporate tax payments as a percentage of total federal tax collections, net of social security taxes; substantively, this is the corporation's share of the tax burden. The fourth measure is corporate tax payments as a percentage of total corporate assets, which many economists believe to be a more accurate measure of taxation than the IRS tax rate. In the interests of conserving space, these analyses are not fully reported in this paper but are available from the authors. The results are extremely robust across specifications.

[6]For a more detailed discussion of the theoretical and empirical issues in the use of unanticipated measures, see Barro (1977). For an example of the use of unanticipated measures in political science, see Quinn and Jacobson (1989). The first method is adapted from Barro (1977) and a standard method instrumental variable (IV) method for estimating time series models with a lagged endogenous variable ($Yt - 1$) (see Ostrom 1978). The observed dependent variable is regressed on exogenous variables (lags of the independent variables). Then the predicted value of the dependent variable is calculated based upon this estimation. In turn a residual is calculated by subtracting this predicted value from the observed value, thereby producing the unanticipated estimate that will be used as a separate dependent variable. The predicted value of the dependent variable is lagged ($*Yt - 1$) and entered on the right-hand side of the equation. In addition to its theoretical advantages, the use of this procedure (once adjusted for first- or second-order serial correlation) also serves the purpose of overcoming the autocorrelation present (as determined by the Durbin's H test) when a lagged endogenous variable is used. The equation with the observed value as the dependent variable will have a lagged endogenous variable on the right-hand side as well, requiring the same IV method in which $*Yt - 1$ is estimated and substituted for $Yt - 1$.

The other method of calculating unanticipated changes in interest rates is taken from "term structure theory of interest rates," first described by Fisher in 1896; see Brigham and Gapenski (1988, 74–76). Here, the dependent variable is calculated by subtracting from the observed one-year Treasury Bill the imputed forward one-year rate. The imputed forward rate is the rate necessary for the yield on a one-year Treasury Bill ($K1$) to equal the yield of the two-year Treasury Bill ($K2$): $(1 + K_1)^2 = (1 + K_2) \times (1 + X)$; so $X = ((1 + K_1)^2)/((1 + K_2)) - 1$. Then X is subtracted from the observed one-year Treasury Bill rate.

Each method has its strengths and weaknesses. In the second method, the price of the forward one-year money also reflects the liquidity preferences of bondholders as well as market segmentation conditions, in addition to expectations about future interest rates. The first method is more cumbersome to calculate and runs the risk of unstable parameters in case of regime shifts in interest rate policies. While neither is a "true" measure of expectations, both are serviceable, since an imperfect indicator of a dependent variable still allows for unbiased estimates of regression coefficients and their standard errors (Pindyck and Rubinfeld 1981).

Independent Variables

The models include as a political variable a dummy value for the party of the president: 1 for Democratic administrations, 0 for a Republican administration. The presidency is the main political influence on macroeconomic policy in the United States, both in terms of interest rates (Woolley 1984) and taxation (Pechman 1987). The Federal Reserve strongly influences monetary policy, but it supposedly does so in an apolitical fashion. The influence of the Federal Reserve is controlled for in our models as, for reasons described below, the money supply is a right-hand side variable.

Congress plays little-to-no role in interest rate policy. Congress does, however, play a stronger role in tax policy. Even here, however, the presidency tends to dominate. Pechman (1987) notes that, of the scores of major and minor tax bills between 1948 and 1986, only a few "originated in Congress and did not follow from presidential recommendations" (39). While the president's proposal is usually modified "by the time the bill reaches the president's desk, administration forces in Congress have tried every legislative device to modify it to meet his requirements. For this reason, the president rarely vetoes a tax bill, even though few satisfy him in every detail. In the past thirty-five years, only four important tax bills have been vetoed" (52). During the period we analyze, only one major tax bill, a 1980 oil import fee imposed by President Carter, was passed over a presidential veto.

During this period the Democratic party always controlled the House of Representatives. Analysis including dummy variables that control for change in party dominance of the Senate, the only party change during the period, showed no significant effects. Hence, congressional party variables were not included in subsequent analysis.

The magnitude and direction of the Democratic party coefficients estimate the difference in policies of the two parties in power in the White House. Democratic and Republican party pre- and postelection-year dummy variables were included in some sets of equations. These are election cycle variables that may have distinct effects, over and above regular partisan politics and policymaking.

Economic variables represent the macroeconomic environment under which political decisions are made. The rate of growth of real gross domestic product (GDP) is included in the interest rate and corporate tax rate models, since it represents major changes in the macroeconomy.

Another domestic economic variable is the major policy target of the policy instrument. Business taxation aims at promoting future investment and economic growth, so that change in real plant and equipment investment is included in the corporate tax rate model: if policy is effective, investment and taxation will be significantly negatively associated. Since interest rates are the main vehicle for fighting inflation, the percentage change in the consumer price index (as reported

by the IMF's International Financial Statistics) belongs in the interest rate model; inflation and interest rates should be significantly positively associated. This has the effect of transforming the dependent variable into real interest rates, as the variation in rates caused by inflation is controlled.

Several recent works in political science have emphasized the role of the international economy in shaping domestic political institutions and policies (Cameron 1978; Katzenstein 1985; Alt 1985; Garrett and Lange 1987). To account for international effects, such as the oil shock, political science theory suggests that some representation of the effects of the international economy be included in the model, even if the effects are inconsequential. Macroeconomic theory suggests that the current account balance (CAB), which measures net exports, be used to represent international effects. The effects on U.S. interest rates from foreign loans, for example, will be represented once CAB is in the model. The current account balance is preferable to such measures of international effects as oil imports dependence, since the effects of oil import dependence are nested in the CAB measure. We shall use CAB as a percentage of gross domestic product, and it will be included in all interest rate and taxation equations.

One variable of particular relevance for interest rates, the Money Supply (M1), is included despite its collinearity with the political variable. The money supply has been found to be subject to political partisan manipulation (see Alesina and Sachs 1988; Alesina 1988b). Put more strongly, political elites who seek to promote a growth strategy and its consequent interest rate policy might seek to alter the money supply (though Barro 1977 argues that the effectiveness of this strategy will be limited to unanticipated changes). If, however, the observed value of the money supply is significantly associated with party, this may increase the standard error of the party coefficient. We would then be more likely to accept the null hypothesis (no political effects), even when a political effect is present. Excluding money supply, however, would pose a serious omitted variable problem by biasing the estimates of the coefficients. This is so because economic theory leads us to believe that changes in the money supply (owing to other influences outside the model) produce changes in interest rates. In fact, the monetarist position holds that one of the main determinants of changes in interest rates is changes in the money supply. Excluding such a variable produces a more serious problem than does multicollinearity (Kennedy 1985).

A lagged dependent variable is included in all models for several reasons. First, public policy is not zero-based policy, so the previous value of a policy instrument partly will determine the current value. Second, the use of a lagged endogenous variable controls for unobservables and other sources of spurious results (see Jacobson 1990 for a discussion of the specification errors that can result from failing to control for unobservables). The use of a lagged endogenous variable has the disadvantage of accounting for much of the variance

in a model and possibly for underestimating the effects of other variables. We are compensated for this effect by the greater confidence we may have in whatever results emerge.

The interest rate equation, then, includes the major economic variables to which interest rates respond: inflation, economic growth, the money supply, a nation's current accounts, and the lagged endogenous variable. The model is estimated with different dependent variables: two measures of unanticipated interest rates and the observed interest rate.

The corporate tax rate equation includes the major economic variables to which taxation responds: business investment, economic growth, the current accounts, and the lagged value of the dependent variable. The party variable should capture the political effects once the economic factors are controlled.

In addition, a separate model is estimated for capital gains taxation as a percentage of wage earner taxation. This redistribution equation is estimated with a lagged endogenous variable, several political variables, and several economic variables. We first model the redistribution equation using all the variables from the tax equation, adding only a measure of stock price change. The latter measure, the percentage change in the Standard and Poor 500, should capture a known influence on capital gains taxation. In addition, we specify another model, omitting GDP, which is partly collinear with changes in the S&P 500, and lagging investment two periods. The two-period lag should capture the theorized effects of past levels of investment on return to investors. Two time periods are used, one to 1985, before the 1986 Tax Act; and one to 1987, after the 1986 act. The 1986 Tax Act constitutes a regime shift, and parameter estimates might be unstable across the regime shift.

The independent variables (except the lagged endogenous one) are tested using current values because economic and political conditions at time t determine the values of policy instruments at time t, though the policy instruments most directly affect the economy at time $t + 1$.[7]

The models are as follows:

$$\text{Interest rates}_t f(\text{IR}_{t-1}, \text{Party}_t, \text{Elect.}_t, \text{Infl.}_t, \text{M1}_t, \text{GDP}_t, \text{CAB}_t, e_t)$$
$$\text{Tax rates}_t f(\text{TR}_{t-1}, \text{Party}_t, \text{Elect.}_t, \text{P\&EInvest.}_t, \text{GDP}_t, \text{CAB}_t, e_t)$$
$$\text{Capital gains}_t f(\text{CG}_{t-1}, \text{Party}_t, \text{Elect.}_t, \text{P\&EInvest.}_t, \text{GDP}_t, \text{CAB}_t, e_t)$$

[7]The absence of simultaneous effects is clearer in the case of taxation than in the case of interest rates, as government tax changes are almost always set for the fiscal year following the current year. Interest rate policies have a shorter lag, but the "inside" lag is usually three to four months, and the following "outside" lag is usually nine to 12 months to peak effect (Reynolds 1988; Hall and Taylor 1988). An adherent of the electoral school might suggest that we ought to model the equations with a longer lag, since it is "peak-performance" of GDP, not simply changes in policy, that will matter to the electorate. We tested the electoral hypothesis using a one-period lag, in addition to the reported model, and the results are nearly identical, though the Republican "first-year in office" tax increase effect vanishes.

The data are drawn from seven sources that are described in the notes.[8] Because our theory is that the *joint* use of these instruments is what matters for partisanship, we have chosen to use annual data for both instruments so as to allow direct comparisons of taxation and interest rate policies. (The investment data are available annually, though the interest rate data are available quarterly.) The data begin in 1954, the year of the Internal Revenue Code of 1954, which was the major modern corporate tax act, introducing accelerated depreciation.

Analysis and Findings

Tables 1 and 2 examine the main issue of systematic political effects on policy instruments, and Table 3 addresses the question of capital gains taxation. Table 1 reports the estimates for three different interest rate models, and Table 2 reports the results of the taxation equation. The most striking finding across the models is in the strength of the partisan effects, which is consistent with the ideological partisan view of politics.

Table 1 includes two models of unanticipated changes in interest rates and one model of observed interest rates. The coefficient estimations are generally consistent across the models. The coefficient for the Democratic party dummy ranges in value from $-.84$ to -1.15 and is statistically significant (using a two-tailed test) at the .05 level in two models and is not quite significant in the

[8]The inflation and the interest rate data come from the International Monetary Fund's *International Financial Statistics 1987 Yearbook*. The interest rates are the yearly average of three-month Treasury Bills, except for the unanticipated rate (method 2), where yearly average one-year Treasury Bills are used. The rate of growth in real gross domestic product is taken from the OECD's *Historical Statistics*, except for the data from 1954–64, which are found in the *Historical Statistics* published by the Commerce Department. The first taxation measure consists of the taxes paid by corporations divided by pretax profits as calculated by the Internal Revenue Service, and comes from the Federal Reserve's Flow of Funds table for nonfinancial corporate business. The plant and equipment investment figure is taken from the same source and is deflated by dividing into it capital stock, reported in the Federal Reserve's Balance Sheets. The second taxation measure, capital gains taxation as a percent of wage taxation, was provided by Gerald Auten of the Office of Tax Policy, Department of the Treasury. Changes in stock price are taken from Standard and Poor's *Security Price Index, 1988*.

One of the more difficult choices faced in this investigation was in the measure of the corporate tax rate. We chose to use IRS data reported by the Bureau of Economic Affairs and published by the Federal Reserve's *Flow of Funds*, as this measure, for all its flaws, is what the government actually collects from corporations at the end of the year. The problem with the measure is that, beginning in 1980, the treatment of the reinvestment of the foreign affiliates of U.S. companies changed. The profit figures began to include the reinvested earnings of these foreign firms, thereby introducing a non-U.S. component to the reports of taxation. The problem is readily apparent: the new number will be less sensitive to changes in U.S. economic and political conditions, as it includes the effects of foreign economies and policies. We have chosen to use the original U.S. data where possible. The details of the data collection changes are found in "The National Income and Product Accounts of the United States: An Introduction to the Revised Estimates for 1929–1980," *Survey of Current Business*, December 1980, 1–26. When the updated data are used, the results reported here are still found, though the effects are a bit weaker.

Table 1. Partisan Effects on Short-Term Interest Rates, 1954–87

	Observed[a]	Unanticipated Changes	
		(Method 1)[a]	(Method 2)[b]
	IV, AR1	IV, AR2	IV, AR1
Independent variables:			
Party: Democratic			
	−1.15	−.91	−.84
	(−2.31**)	(−2.18**)	(−1.62)
Inflation			
	.69	.09	.70
	(6.75***)	(1.02)	(7.00***)
Money supply			
	.02	−.01	.00
	(.02)	(−1.18)	(.09)
Growth, real GDP			
	.23	.24	.21
	(3.67***)	(4.38***)	(2.66**)
Lagged dependent variable:	.36	.24	−.54
	(2.08**)	(1.59)	(−2.94***)
Current accounts			
	−.02	−.18	.14
	(−.05)	(−.43)	(.33)
Intercept			
	.22	−1.15	−.45
	(.14)	(−1.68)	(−.37)
R^2 (adjusted)	.90	.40	.63
DW	1.63	1.70	2.05
N	31	31	33

Note: *T*-statistics are in parentheses.

[a]90-day Treasury Bills, 1954–87.

[b]One-year Treasury Bills, 1954–87.

Method 1: Observed treasury bill rate minus predicted treasury bill rate equals unanticipated treasury bill rate.

Method 2: Observed one-year treasury bill rate minus imputed forward one-year rate necessary for current one-year treasury bill rate to yield current two-year treasury bill rate.

$^*p < .1$; $^{**}p < .05$; $^{***}p < .01$.

Sources: Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States;* Federal Reserve Bank, *Flow of Funds and Balance Sheets;* OECD, *Financial Statistics*, parts I, II, and III.

remaining model, which involves the unanticipated dependent variable calculated from yield curves. The model with the observed dependent variable performs well, as do the unanticipated interest rate models. The effect of GDP is strong and positively significant in each equation (as forecast by theory), and so is inflation in two of three cases. The current accounts balance does not have a significant impact, which is unsurprising given that the United States has historically been relatively isolated from the economic influence of other countries. A perhaps surprising finding is the absence of a significant coefficient for money supply. Inflation and party may be sufficiently collinear with M1 so that its independent effect cannot be ruled out, but clearly inflation and party have important effects on interest rates independent of M1.[9]

Table 2 reports the model of the corporate tax rate. The model has a strong and positive coefficient for the Democratic party variable, as predicted by the ideological partisan view of politics. The value of the coefficient corresponds to a roughly three-percentage-point increase in business taxation associated with a Democratic administration. The investment coefficient is negative and significant, which corresponds to the standard findings in the tax and economics fields (see, e.g., Feldstein 1982). The current account balance has a positive impact, again as is expected, though its estimate is not significant. The one finding contrary to expectations is the weak performance of the GDP variable.

We tested for election cycle effects, only one of which is reported. The "first year in office" tax equations reported in Table 2 show a striking finding. The Republican postelection dummy has a strong and statistically significant positive coefficient, suggesting that first-year Republican administrations increase business taxation. This finding may help explain Alesina's (1988) result that shows that the first two years of Republican administrations are associated with decreases in GDP. A strong rise in corporate taxation during the first year of a GOP administration, plus a possible increase in interest rates, would tend to decrease GDP. An alternative explanation is that the effect may arise from our decision to model party contemporaneously with tax rates, rather than to lag it. When we lag party, which we would do if we believed that a significant lag occurs between the start of a policy and its effects, this Republican first-year-in-office effect disappears. In either case the effect of the overall Democratic party dummy remains strong and stable.

Table 3 presents the results for the redistribution equation. The estimates also offer very strong support for the partisan view. The effect of the Democratic

[9] We tested for the administration effects found by Beck (1982) but did not find the anomalous results that he reports. The only significant administration effects were for Carter (strongly negative interest rate effects) and Reagan (strongly positive interest rate effects). Beck's findings regarding Nixon, Kennedy, and Johnson were not found here, but as we are using annual data, the number of cases may be too small to expect significant effects.

Table 2. Partisan Effects on Business Taxation Rates, 1954–87

	IV, AR2
Independent variables:	
Party: Democratic	2.85
	(3.42***)
Party: Republican (first-year effects)	1.21
	(2.14**)
Lagged dependent variable:	.02
	(.25)
Investment	−.66
	(−2.13**)
Growth, real GDP	.07
	(.08)
Current account balances	.70
	(1.16)
Intercept	50.4
	(9.51***)
R^2 (adjusted)	.89
DW	1.93
N	31

Note: *T*-statistics are in parentheses.

Dependent variable: Effect tax rates (business taxation as a percentage of gross profits).

$*p < .1$; $**p < .05$; $***p < .01$.

Sources: Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States;* Federal Reserve Bank, *Flow of Funds and Balance Sheets;* OECD, *Financial Statistics*, parts I, II, and III.

party dummy variable is positive and significant here as in all the other tax equations. No election cycle variables affected the distribution of taxation between the owners of capital and wage earners. Contrary to the expectations of structural dependence, the parties differ on the shifting of the tax burden between owners of capital and wage earners.

Conclusions and Implications

This investigation began with a critique of the class partisan view of politics in which its failings and shortcomings were discussed: it made questionable assumptions about price-employment trade-offs and about class interests; it was vulnerable to the challenges from the rational expectation and electoral cycle critiques; and it had limited empirical support linking partisan influences to those

policy instruments that are known to drive economic growth. This study ends with a set of findings that strongly support an alternative partisan view of political economy, ideological partisanship, which sees partisan macroeconomic policies as being motivated by voter preferences for social images of society.

The empirical results provide strikingly strong and unambiguous backing for this ideological partisan view of growth strategies in the United States. Democratic administrations have promoted growth through a consumption-led strategy that has decreased real interest rates and increased business taxation, and Republican administrations have promoted growth through an investment-led strategy that has increased real interest rates and decreased business taxation. Even the strong claims of rational expectations theory do not shake the findings: both

Table 3. Partisan Effects on Redistribution of Taxation Collection, Pre- and Post-1986 Tax Reform Act

	Model 1 1954–85	Model 2 1954–87	Model 3 1954–85	Model 4 1954–87
Independent variables:				
Lagged endogenous	0.30	−0.06	0.35	−0.03
	(1.92*)	(−0.44)	(2.67**)	(−0.19)
Gross domestic product	0.05	0.03		
	(0.96)	(0.30)		
Investment$_{t0}$	0.10	0.28		
	(0.81)	(1.61)		
Investment$_{t-2}$			0.20	0.26
			(2.02**)	(1.67)
Party: Democratic	0.66	0.77	1.07	1.34
(overall effects)	(2.12**)	(1.61)	(3.55***)	(2.82**)
Current accounts	−0.56	−1.03	−0.68	−1.18
	(−2.86***)	(−3.77***)	(−3.55***)	(−4.14***)
Standard & Poor's	0.05	0.05	0.04	0.04
% change	(3.59***)	(2.98***)	(3.48***)	(2.29**)
Constant	1.73	1.43	0.31	1.42
	(1.30)	(0.71)	(0.23)	(0.68)
R^2 (adjusted)	0.66	0.70	0.72	0.71
Durbin's H statistic	1.31 n.s.	−0.87 n.s.	0.99 n.s.	−0.81 n.s.

Note: Changes in capital gains taxation are divided by total wage taxation before and after Tax Reform Act of 1986.

OLS dependent variable is capital gains taxation as a percentage of wage taxation.

$*p < .1$; $**p < .05$; $***p < .01$.

Sources: Historical Tables, Budget of the United States, 1990; Office of Tax Policy, Department of the Treasury; Federal Reserve Bank, *Flow of Funds and Balance Sheets;* and *Standard and Poor's Security Price Index Record, 1988.*

observed *and* unanticipated measures of interest rates show strong evidence of differing partisan strategies for promoting economic growth.

Our empirical findings are important to the study of policymaking, state structures, and economic activity because they challenge the notion that the U.S. government and its two major political parties are essentially willing captives of market forces and market ideologies. The United States may have more room for policy maneuvering than students of comparative politics believe.

One alternative explanation to ideological partisanship for our findings might be that the Democrats generally won the presidency during the heyday of Keynesian strategies of growth, and the Republicans generally occupied the White House after Keynesian growth strategies had fallen out of favor among economists. Contending growth strategies to Keynesianism, such as supply-side economics, came into intellectual fashion among economists at the same time that the Republicans controlled the presidency for 16 out of 20 years. Our results might reflect changing economic orthodoxy as much as political partisanship. We have focused on the connection between macroeconomic arguments and cultural images, but perhaps the ideas that matter are those of academic economists?

This explanation is inadequate, as it misses both the continuing clash among economic ideas and the imperfect translation of ideas from the academic community to political leadership in the White House. First, Keynesianism is far from finished as an academic perspective. It has evolved so that neo-Keynesianism remains a viable policy perspective, perhaps still the most common perspective in macroeconomics (Hall and Taylor 1988; Colander and Klamer 1987). Second, politicians do not choose policies based upon either the latest theories in macroeconomics or the latest research findings. For instance, President Reagan's enthusiasm for supply-side economics appears to have arisen because its policy proposals matched what he already wanted to do, the overwhelming academic evidence against his ideas notwithstanding (H. Smith 1988, 343–46). Relatedly, the new classical economics (NCE) has widespread currency among academic economists, but it has no noticeable effect on policy in Washington. As the reader might have noted in our discussion of modeling expectations, NCE is highly technical in language, and it has no easily understood "handle" that allows its ideas to be translated into policy. In sum, it is not the ideas of academic economists per se but the fit between a macroeconomic story and the cultural images it evokes that matters for politics.

We have examined macroeconomic policy in the United States. How does this research fit into the comparative literature in political economy? Is the pattern of ideological partisanship concerning economic growth strategies found here likely to be found in non-U.S. contexts? Most of the research on partisanship cited earlier has been done comparatively, with many countries combined and fully aggregated in various cross-section studies. Jackman (1987) refers to

these studies as the "new political economy" (243), though the "new comparative, quantitative political economy" (CQPE) is a more accurate phrase.

In most CQPE studies, identical models have been specified for each country, with 20 or so years of data often *averaged* into one observation per variable. The unstated underlying assumption is that the parameter estimates of the key economic and political variables are relatively stable cross-nationally. The implication is not that national institutions matter little, but rather, matter similarly and therefore need not be modeled separately. In an estimation of a model that pools data from countries as different from each other as, for example, the United States and Finland, the assumption is being made that Finnish factor markets will change in response to an exogenous shock in a manner similar to U.S. markets. The similar response allows for statistical comparisons. May we then pool the data from other countries into the model we used here for the United States and expect valid and reliable parameter estimates?

The major other tradition in comparative politics is comparative, institutional political economy (CIPE), which gives "pride of place to historically informed comparisons rather than to statistical investigations" (Katzenstein 1985, 21). CIPE's adherents hold that state, social, and economic structures do matter and are nationally idiosyncratic in effects. Countries may be compared, however, and CIPE studies have successfully categorized democratic capitalist countries based upon similarities and differences in political and economic institutions. We now routinely speak of "strong states," "weak states," "corporatist states," and "private economy" versus "mixed economy" states, though which countries fit into which categories, and how many categories there are, are in some dispute (cf. Freeman 1989; Katzenstein 1985; Hicks 1988a).

CIPE studies offer no basis for assuming that a single model may be specified if it contains countries that we know fall into different political economic categories. A set of CQPE estimates might appear to "acceptably" fit the data points derived from a set of countries, but we might otherwise obtain either separate country or subset estimates that collectively fit the data much better. Pooling within CIPE categories, however, does offer some hope of valid and reliable parameter estimates. At a minimum, CQPE research should begin its investigations by testing to see whether the CIPE categorizations of states produce findings different from the overall aggregate samples. Hence, we should test carefully before pooling, for example, Finnish and U.S. economic data.

In terms of the CIPE categories, the United States has a clear place. The United States has a weak national state but strong private markets. Labor unions are weak, neither business nor labor are formally incorporated into the political process, and U.S. financial markets are deep and undirected. Two points regarding ideological and class partisanship follow from this.

First, since the U.S. political economy differs fundamentally from the political economy of most democratic capitalist countries, the U.S. results are

likely to be idiosyncratic. Using the two instruments of economic growth studied here, we can illustrate why the United States findings are unlikely to be replicated among countries with different political economic institutions.

Interest rates policies, according to Shonfield (1965) and Zysman (1983), are dependent on the financial market structures of a country and, relatedly, on the capacity of states to implement policies, a finding borne out in subsequent quantitative analysis of comparative industrial policies (Quinn and Jacobson 1989). The governments of France and Japan, for example, historically have had available to them a credit allocation scheme wherein capital was lent at below market rates to favored firms. In this case studying partisan effects on the macro interest rate would ignore the fact that partisan differences in France partly occur at the microlevel of the firm, not at the broad macrolevel. Further, when an exogenous shock occurs, both the French and the Japanese financial systems respond very differently from that of the United States.

Private firm taxation data are less problematic, thanks to the heroic work of the OECD in its *Non-Financial Enterprise Financial Statements*. But even here, the differences among countries will be amplified by the inclusion in taxation data sets of state-owned as well as privately owned firms. Governments have other sources of influence over state-owned firms beyond offering state-owned firms incentive from the tax code: tax incentives therefore may appear to be less influential in countries with many state-owned firms. Democratic corporatist societies rely on state-owned firms to a greater degree than do pluralist-private societies such as the United States (Freeman 1989). Hence, estimates of the interactions among investment, taxation, and growth rates will almost certainly differ among corporatist and private-pluralist countries. Finally, the well-known underlying differences in factor markets and industry structures across countries will lead to biased parameter estimates. Japanese firm taxation, for example, will be influenced differently by changes in the Japanese current accounts balance than will American firms by changes in the United States current accounts.

The second point is that drawing inferences about partisanship and the United States from data sets that include corporatist and statist countries is likely to lead to misleading conclusions regarding partisanship in the United States. In particular, comparative studies of other political contexts have identified some institutional prerequisites for successful left-wing class partisanship: high levels of labor organization, segmented financial markets, state capacity for planning (Lange and Garrett 1985; Freeman 1989; Shonfield 1965). For example, in analyzing partisanship and its effects on economic growth, Garrett and Lange (1989) argue that the organizational structure of society gives rise to differing partisan growth outcomes. The enabling strategies are more or less coherent depending on their match to social organization, especially labor organization. They wrote: "In sum, governments may be able simultaneously to pursue their partisan-preferred policies and to produce satisfactory growth performance, but only

when institutional conditions permit. If they seek to impose their partisan preferences when conditions are unpropitious, poorer performance is to be expected" (1989, 684). From the studies of partisanship done on other countries, we might conclude that the United States lacks the basis for a coherent left-wing partisan program.

In contrast, our findings show that the United States does have a coherent left-wing partisan alternative, but its forms and institutional underpinnings are very different from those of other countries. Here the relevant partisan policies are macroeconomic, and the terrain of battle is ideology, not class struggle. The forms of partisanship found in the United States are likely to be "invisible," however, in models that pool U.S. data with data from corporatist and statist countries and that control for ostensibly the same left-right form of partisanship. Relatedly, the left-corporatist form of class partisanship analyzed by Lange, Garrett, and Hicks is, of course, very unlikely to be found in the United States. As a "weak" state, the United States has available to it macroeconomic policy instruments but few of the microeconomic or industry-specific instruments that are found elsewhere.

The implication, damning to some forms of CQPE, is that "left" and "right" policies will each have many, occasionally diverging, manifestations. These manifestations will depend on the political institutional context; what it means to be "left" will depend on this context. At the limit the governments of two nations, each following "left" policies, might employ opposite policies. And in terms of our study, this limit exists. The U.S. Democratic party has followed a high taxation policy on corporate profits, whereas Sweden's Social Democrats have followed a *low* tax policy on corporate profits (see the essays by Burtless and Gramlich in Bosworth and Rivlin 1987). Both policies are "left" within the given political context, but what model that pools the two countries will help us understand this?

In summary, our findings indicate that the United States, a private-pluralist country, is characterized by partisan policy differences, but the policies and their underlying motivations differ from those in either corporatist or statist societies. The main finding is nonetheless a positive one for those believing Keynes's claim that the state may exert a guiding influence on the economy. Macropolitics can make a difference. Left and right parties have held contending growth strategies and have acted upon them, causing changes in the policy instruments that move the macroeconomy. This implies that U.S. voters have real choices regarding growth strategies, though whether they have been fully and accurately apprised of this fact is another story. Democracy in the United States is not, as has been suggested, a simple shell game.

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