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Partisan Strategies and Supply-Side Policies in Industrialized Nations, 1960-1990

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Abstract

Recent political economic models have concluded that several structural and institutional arrangements place heavy limits on the capacity of parties to affect the conduct of macroeconomic policies according to their initial political preferences. Yet those same factors (mainly, rational expectations among economic agents, the organization of the domestic political economy, and the international business cycle) hardly constrain the choice of economic strategies designed to shape the supply side of the economy—i.e., the provision of input factors, capital, and labor. Consequently, we should expect supply-side economic policies to conform to the preferred objectives of the party in government. In order to maximize growth, the Right trusts to private agents the determination of the optimal levels of savings and investment. The Left, instead, tends to rely on the public sector for that same purpose. This model is validated by looking at the levels of public intervention in fixed and human capital formation as well as tax policy in OECD nations from 1960 to 1990.

In focusing on the impact of government partisanship on macroeconomic outcomes, namely output and inflation, and, to a lesser extent, on macroeconomic policies, an accumulative body of research has concluded that the ability of parties to pursue their most preferred economic strategy is extremely limited. Partisan effects have been shown to be either temporary, strongly contingent on the organization of the domestic economy, or constrained by the performance of the world economy. Built upon the framework of a long-run, stable Phillips curve, a first generation of partisan model claimed that different parties could and did maintain different levels of inflation and unemployment over time. In order to satisfy the preferences of their class-based constituencies and thus maximize their chances of being reelected, while left-wing parties fought unemployment, right-wing parties kept inflation low (Hibbs 1977, 1987a, 1987b). Nonetheless, after the theoretical and empirical collapse of the long-run Phillips curve, a second wave of partisan models, now based on new research in economic theory emphasizing slowly adjusting markets even in the context of rational expectations, has stressed that partisan effects on inflation and output, although significant in size, are only temporary (Alesina 1987, 1989; Alesina and Roubini 1992; Alesina, Cohen and Roubini 1992).[1] A second strand of the literature has, in turn, successfully argued that the expansionary (and distributive) policies desired by the left can only be implemented if the labor movement has the institutional capacities to deliver wage restraint (Goldthorpe, ed. 1984; Lange and Garrett 1985, 1987; Alvarez, Garrett and Lange 1991).[2] Otherwise socialist parties would always introduce stabilizing policies to avoid high inflation, a net loss of competitiveness, and, eventually, electoral defeat (Scharpf 1987, 1991). Finally, the efficacy of partisan policies has been directly linked to the current world levels of economic activity (Alt 1985).

Research in the field of political economics has paid, however, scant attention to those economic

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[1] See also reviews in Alesina (1993) and Hibbs (1992) - the latter taking a critical stance towards rational partisan models.

[2] See, however, accounts in which capital (instead of labor) plays an equally important role in enforcing wage coordination by Katzenstein (1985), Soskice (1990) and Swenson (1991).

strategies designed to affect the supply side of the economy, this is, the level and nature of the economy's productive inputs, which may determine the domestic long-run growth rate.[3] Yet there are good theoretical reasons to believe that the existing economic and institutional arrangements, either at the domestic or at the international level, which do constrain macroeconomic policies, limit structural or supply-side policies to a much lesser degree. Accordingly, parties should be expected to have a higher, more permanent impact on structural economic strategies. The purpose of this paper is precisely to establish the continuing relevance of parties in this central area of the economic policy-making process.

With this goal in mind, the paper is built in the following way. After refining the concept of supply-side policies, it describes, in a highly stylized way, the set of alternative supply-side strategies available to policy-makers. It then briefly discusses the theoretical reasons why supply-side or structural policies are less constrained than macroeconomic policies by the growing internationalization of the economy, and provides some cursory evidence on the persistent cross-national variation in supply-side policies through the early nineties. The paper states a parsimonious theoretical model, in which parties are granted a preeminent role, to explain the contemporary variation in supply-side strategies across nations, and proceeds to test it on a set of policy indicators for a sample of all OECD countries from 1960 to 1990.

SUPPLY-SIDE ECONOMIC POLICIES

Supply-side economic policies are the set of strategies that shape the supply of productive inputs and that, in so doing, help to determine the long-run natural rate of output of the economy.[4] In other

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[3] Supply-side policy strategies are partly addressed in Hall (1986). The best accounts can be found in Katzenstein (1985), Freeman (1989) and Lange and Garrett (1991). For a more analytical perspective, see Alesina and Rodrik (1991).

[4] This does not exclude that macroeconomic policies might determine the rate of growth since, for example, by reducing the equilibrium rate of unemployment, they may favor a more efficient use of labor, or, by reducing the public deficit, they are likely to avoid crowding private investment out. For

words, given the economy's production function generally used:[5]

$$Y = F(A,K,H)$$

where A is an overall efficiency factor, K is physical capital and H is human capital, supply-side or structural economic strategies consist in those policies that affect both the level and efficient use of capital investment and labor.

Variation in the kind of supply-side economies policies that can be pursued depends, broadly speaking, in the role the government plays in the provision of productive inputs. Variation in structural policies can be thought as taking place in a scale that ranges from an unfettered market economy to a system highly regulated or intervened by the public sector. At one extreme of the scale, the government lets private agents establish the national level of input factors. The rate of public investment is either zero or close to zero. Private investment provides the bulk of (physical and human) capital formation. This strategy also involves minimizing the level of taxation. Since private investment is financed by savings and savings in turn depend on the level of profits, the government will be determined to keep taxation low and non-distortionary to avoid reducing private resources.[6] At the other extreme, instead, the state intervenes in order to ensure specific levels of investment. In order to correct both market failures and economic inequalities, the government channels or deploys physical and human capital, either directly, through publicly owned businesses or through regulatory schemes that alter the consumption and investment behavior of private agents. To finance the public provision of capital, governments will have to rely on high taxes, especially on savings - this is, in turn, likely to lead to progressive taxes since

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an empirical exploration of the effect of macroeconomic policies in the long-run output rate (within the context of the new growth theory), see Fischer (1991).

[5] See Bruno and Sachs (1985) for a technical, stylized account of how the nature and interaction of production factors affects the performance of any economy. See also Mankiw (1992, chapter 4).

[6] An enlightening discussion of this logic can be found in Przeworski and Wallerstein (1986).

higher incomes have higher marginal propensities to save.[7] Along the continuum between these two idealized, extreme options, policy-makers will choose the particular combination of investment and tax policies they consider optimal to foster long-term growth. This is, they will determine, first, the extent to which the public sector should finance fixed capital formation; second, the amount the state should spend in human capital formation; and, third, whether the government will establish progressive, strong tax systems to direct private resources to investment policies or not.

Even in the face of the growing constraints imposed by the international economy, mostly in the last decade, there are good theoretical reasons to expect supply-side economic policies to remain widely divergent across nations over time - contrary to what has happened to national macroeconomic management.[8] Increasing trade integration transfers a higher portion of demand abroad and therefore lowers the real effect of internally engineered expansionary policies. Growing (financial) capital mobility across borders (which in turn leads to higher difficulties in maintaining capital controls, cf. Goodman and Pauly 1993) entails a corresponding loss of autonomy in macroeconomic policies.[9] Whereas in a closed economy (i.e. with no capital mobility), fiscal and monetary policies have full effects (alone with floating exchange rates; jointly with sterilization procedures if the country decides to maintain a fixed exchange rate), perfect capital mobility actually erodes the ability of governments to manipulate the economy through macroeconomic instruments. Under fixed exchange rates, only fiscal policy can affect domestic demand (since monetary policy is geared towards sustaining the currency) - still fiscal policy is

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[7] Other forms of financing public investment are public borrowing (which may have important costs if it has no multiplier effects and cannot be absorbed through economic expansion) and seigniorage.

Evidence that high public investment rates have been financed through public deficits is scarce (see Cameron (1985) for the sixties on the relation between leftist governments, levels of taxation and public deficit). As a matter of fact, the results presented below show that governments of all venues prefer to reduce public deficits before expanding the rate of public investment.

[8] This paragraphs follows partly Lange and Garrett (1991).

[9] A good review of the growing internationalization of capital markets can be found in Frieden (1991).

constrained by the performance of the current account in the long run. Under floating exchange rates, only monetary policy may affect the economy - but its effects could be outweighed by the increasing cost of imports and a wage push that neutralizes the gains of the depreciation.[10] Indeed, research on recent cases of macroeconomic management, such as several corporatist attempts in the late seventies (Scharpf 1987, 1991) or the French experiment of 1981-83 (Sachs and Wyplosz 1986; Hall 1986), seem to confirm these claims. Constraints by the world economy (and the threat of capital exit) on supply-side strategies are, instead, smaller. The use of highly interventionist policies (in the supply of physical and human capital) have been defended, in theoretical and empirical grounds, both as complementary to private investment and as an optimal strategy to raise the economy's natural rate of output and to enhance its competitiveness - as such they should hardly deter capital from investing in that country.[11] Even if a high public investment-high tax strategy turned out to create inefficiencies, they would only be acknowledged in the long run - thus giving room to policy-makers to pursue them for a long period of time.[12] In short, while the efficacy of macroeconomic policies has eroded over time, microeconomic strategies have remained, or indeed become, central to the political governance of the economy.

As a matter of fact, a cursory look at the evolution of public involvement in both gross fixed capital and human capital formation confirms these expectations. By the late sixties, public gross fixed capital investment (both by the general government and the publicly owned enterprise sector) averaged 6.8 per cent of GDP and almost 30 per cent of all investment in all OECD countries. Two decades later

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[10] In other words, under floating exchange rates, the effects of macroeconomic policies depend on the assumptions made on the behavior of prices and wages. Carlin and Soskice (1990) provide a good discussion of macroeconomic policies in open economies beyond the Mundell-Fleming model.

[11] See the new growth theory on the effects of human capital formation (Lucas 1988; Barro 1991; Mankiw, Romer and Weil 1992). See also Munnell (1992) for the impact of physical capital formation by the government.

[12] Finally, since supply-side strategies' are likely to be sector-specific policies, they hardly affect the most mobile capital; therefore, there are low chances that high public investment-high tax strategies will be necessarily hindered by the threat that capital may exit (Alt 1987, Frieden 1991).

it still represented 5.9 per cent of GDP and over a fourth of all investment. Cross-national variation has always remained remarkable. The difference between the strongest and the weakest direct public investors (this is, the general government excluding public enterprises) has consistently amounted to at least 3 points of GDP (e.g. 5.9 per cent in Sweden and 2.5 per cent in the USA in the late sixties and close to 5 per cent in Spain and 1.6 per cent in Belgium and the United Kingdom in the late eighties) and 10 percentage points of total investment. Even higher differences have taken place in capital investment by state-owned enterprises. As a result of these national differences, total public fixed capital formation stretched from over 40 per cent of total investment in the United Kingdom to less than 20 per cent in the United States in 1970 and from 40 per cent in Norway to less than 15 per cent in the United Kingdom and the United States in 1990. Similar differences appear in the public effort in human capital formation. Although the percentage of GDP spent in public education has slowly converged over time (the standard deviation for OECD countries declined from 1.9 points in 1970 to 1.2 points in 1988-90), by the late eighties there were still strong cross-national differences. While Norway, Denmark and Sweden spent more than 7 per cent of their GDP in public education, Germany spent only 4.2 per cent and Greece about 2.8 per cent. As for public expenditure on active labor market policies, another important form of human capital formation, it averaged 0.74 per cent of GDP in the OECD area in the period 1985-90. More than doubling the OECD mean, Sweden and Ireland directed 1.84 and 1.51 per cent of their GDP respectively to manpower policies. In the other extreme, Japan and Switzerland spent just 0.17 per cent of their GDP in those programs.

EXPLANATORY MODEL

Building on previous theoretical work in the area of economic policy-making, we develop a model in which political parties in office are the main agents selecting and shaping the supply-side economic strategies; nonetheless, the nature of party systems and the organizational structure of each country are

acknowledged to constrain partly the effects of government partisanship.

Political parties

Partisan strategies towards the economy vary along the classic (and in many Western nations most decisive) political cleavage that pits Left against Right on the role the government should play in ensuring economic growth and distributing it. Several empirical studies at both at the mass and elite level indeed confirm its endurance and salience for all the postwar period. In the study gathered by Laver and Hunt (1992) based on experts' judgments on party policy spatial positions, this socioeconomic dimension was the most salient in nineteen out of twenty countries. Budge et al. (eds.) (1987) conclude the same for fifteen out of twenty cases (out of eighteen after excluding non-Western nations) after examining party manifestos during the last forty years. A survey analysis presented by Inglehart (1984) shows that, both among political elites and the public opinion, there is a strong Left-Right divide on socioeconomic issues built around the notions of the extent of government management of the economy, the degree of public ownership of industry and the reduction of income inequality.[13]

Hence, under a right-wing government, we should expect public fixed capital formation to be low, education and vocational training to remain in the hands of the private sector, and taxes to be hardly progressive. The reverse should be true under a leftist government: public investment will be high, public schemes of education and manpower policies will be large, and the tax system will be sharply progressive.

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[13] Differences in party positions are thus centrally connected to supply-side policies, and seem to suggest that the latter are more central in the political and programmatic debates in contemporary political economies than any alleged divide around macroeconomic outcomes and policy trade-offs.

It should be observed also that the personal self-placement along the spatial dimension on socio-economic issues seems to perform as a better predictor of electoral behavior than class-based (or other social) factors in many countries.

Constitutional rules and party system

Partisan policy-making does not operate in a vacuum. On the contrary, the effective implementation of any electoral platform eventually hinges, first, on the party's ability to control office and, second, on the government's capacity to impose its strategy on the main social actors.

The first constraint on partisan agency derives from the constitutional setting and the party system structure in which parties operate. Institutional rules (mainly the electoral system used to allocate seats) shape the nature of the party system (Rae 1967; Taagapera and Shugart 1989). Its fragmentation and the spatial disposition of parties in turn affect the capacity to form government and the set of policies that will be implemented. One-party majorities are expected to carry their platforms to completion. Multiparty coalitions tend to settle, instead, on more moderate programs in the policy space.[14] Moreover, they are characterized by highly costly negotiations that lead to incremental policy-making as well as by internal disagreements that may easily put the cabinet to an end - thus, carrying radical policy packages to completion is unlikely among fragmented governments.[15]

Organization of the domestic economy

The second constraint on partisan agency results from the national mode of interest intermediation, which, as a matter of fact, is well correlated with the political and economic status of the

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[14] See Fiorina (1990) for a forceful defense of the moderating effects of multiparty coalitions. In the Downsian model (Downs 1957) two-party systems, that lead to one-party governments, have incentives to come close to the median voter. Still, once its rather specific assumptions are relaxed, e.g. letting a third party enter the electoral space, both parties do not necessarily locate themselves at the center of the policy space. Thus multiparty coalitions (including a centrist, pivotal party) are more likely to lead to moderate outcomes. For a formal discussion, see Shepsle (1991).

[15] See Alesina (1993) for an enlightening distinction between the 'moderation' and 'gridlock' effects of multiparty governments. Spolaore (1992) offers a formal model of the 'gridlock' effects; Roubini and Sachs (1989) and Grilli, Masciandaro and Tabellini (1991) explore them in so far they affect the size of the budget deficit.

country in the international arena.[16] Open, small economies have generally yielded strong, highly organized social actors (either labor or capital or both), which are capable of sustaining nation-wide, coordinated schemes of wage bargaining and which play a predominant role in policy-making. Parties are here partially constrained by the pressures and behavior of organized labor and capital. As the literature on 'socialdemocratic corporatist regimes' has already revealed, socialist governments have the incentive, when they are backed by a powerful, encompassing union movement, to sustain highly interventionist supply-side policies in exchange for wage restraint.[17] Once these schemes have been devised, and even if the left loses complete control over the cabinet, right-wing parties will encounter harsh political and social resistance to dismantle them and to devolve power to market forces.[18] Moreover, since open economies are strongly dependent on world markets, the supply of 'correct' productive inputs by the state (e.g. strong educational policies to create a skilled labor force) might make sense from a pure economic point of view (e.g. if high returns are to be obtained from investing in goods that private agents are unable or unwilling to supply).[19] In countries with strong labor movements, the level of public intervention should be high - even if right-wing parties control the cabinet they only reduce it marginally

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[16] On the relation between openness and the organization of the domestic political economy, see Cameron (1978), Stephens (1991).

[17] Notice, however, in theoretical terms, that union assent is not a necessary condition to realize interventionist policies. Labor cooperation is only needed to ensure the success of expansionary macroeconomic policies without incurring into accelerating inflation. In other words, full interventionist microeconomic policies can be developed even in countries with no organized labor - indeed the case of Southern European nations ruled by socialist parties.

[18] As a matter of fact, the left seldom loses control at all over in small corporatist countries, which tend to have proportional representation systems and a fragmented constellation of right-wing parties.

[19] Notice that this also entails that most of the change in supply-side policies in small, highly dependent countries takes place imposed by the needs of a domestic economy challenged by new trends in the international economy - independently of the party in office and the corporatist structure of the country. Some proof of this is given in discussing the new tax reforms of the eighties at the end of the paper.

or at least very slowly.[20]

Due to the size of their domestic market, medium-size economies enjoy, instead, a higher degree of autonomy and therefore more policy leverage. Besides, their political structure generally presents a pluralist mode of intermediation in which social agents are weakly organized - for example, wage bargaining develops in a decentralized setting. Furthermore, as a result of its political development, the state tends to be more centralized and more separated from society (Tilly 1992). Hence, parties are less constrained by social demands and the world economy. Given the capacity of the state, the control of the cabinet enables them to shape policy more readily than in corporatist polities. In short, parties should have a significant effect in policy. As political office changes hands, we should expect clear-cut U-turns in economic strategies.[21]

EMPIRICAL FINDINGS

In order to test the model that we have just laid down, we identify and develop a set of three indicators: (1) the public provision of capital investment; (2) the role of the state in the supply of human capital; (3) the progressivity of taxation (which operates as a proxy for the level of transfers of private

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[20] On the contrary, in economies in which capital coordinates the economy (e.g. Switzerland; possibly Japan, cf. Soskice 1990), we should expect a strong resistance towards a large public sector. Even if the left controls the government, public capital formation will increase marginally. The same argument was laid down by Katzenstein (1985) when he distinguished between private and public forms of domestic compensation to economic adjustment in corporatist countries. Still, it is difficult to test empirically this hypothesis because in economies in which business is well organized, but labor is not, the left is generally small.

[21] As a matter of fact, constitutional settings and domestic structures seem to overlap considerably. Besides a strong corporatist network, all open economies have proportional representation systems (and in most cases multi-party systems). Medium-size (or relatively closed) economies tend to have plurality systems or corrected proportional systems (and therefore less fragmented part systems) (Rogowski 1987).

savings to the public sector).

We test the model with data from all OECD countries over one million inhabitants,[22] mostly for the period that extends from 1960 to 1990.[23]

Public Provision of Physical Capital

Cross-national analysis

In order to assess the relation between partisan control and gross fixed capital formation by the public sector we proceed in two steps.[24] First we engage in a cross-national analysis of the levels of public capital formation for each of the last three decades. Each of them broadly corresponds to a particular business cycle with specific economic traits -the sixties (through 1973) and the eighties (1982-1990) were expansionary cycles, the seventies were mostly a period of stagflation- as well as political conditions -the seventies as a period of leftist hegemony and the eighties as decade in which socialist electoral triumphs have taken place in Southern European nations. A cross-national analysis of this sort appears to be particular appropriate to isolate the matrix of incentives parties face in each period and to control for medium-term institutional factors (such as economic openness or corporatist frameworks). Afterwards we move into a panel data analysis of all the countries of the sample from 1960 to 1990. The panel data procedure completes the analysis by examining partisan effects in a more dynamic, short-term way, and by exploring how budgetary constraints and concerns about the annual economic performance interact with the partisan preferences in the policy-making process.

In the cross-national analysis we have estimated the level of public investment at the end of each

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[22] Iceland and Luxembourg are thus excluded. Turkey is also excluded for lack of reliable data.

[23] The historical period varies somewhat, however, depending on the availability of data.

[24] Notice that in this section we use the expressions 'public investment' and 'public gross fixed capital formation' interchangeably. Both denote the investment in fixed capital made by the general government, as defined by the OECD, which excludes capital formation by public enterprises.

economic period.[25] For the decade of the sixties we have averaged the percentage of public gross fixed capital formation over GDP (and over total investment) between 1969 and 1972 - this is, those years just before the first oil shock. For the seventies, we have taken the mean of 1979-1980. For the eighties we have calculated the average of the percentage of public gross fixed capital formation over GDP (and over total investment) from 1988 to 1990.[26] [27]

The dependent variable (public investment effort) is measured in two ways (as a proportion of GDP and as a proportion of total investment) to control for the behavior of the Japanese public sector, whose level of investment clearly deviates from all other countries when it is measured as a proportion of GDP. Although broadly in line with the public investment effort made by other countries in the sixties, public gross fixed capital formation in Japan reached 6.1 per cent of GDP in 1979-80 (twice the OECD average) and 5.0 per cent of GDP in 1988-90 (again almost doubling the OECD mean). However, when Japanese public investment is measured as a proportion of total investment, its values (19.7 per cent in 1979-80 and 16.3 per cent in 1988-90) hardly deviate from the OECD mean (14.1 per cent and 13.0 per cent respectively). As a matter of fact, the deviation of Japan in the first measure is due to a sizable difference in total gross fixed capital formation (as well as total savings) between that country and the rest of the OECD. From 1960 to 1990, total investment has averaged 31.3 per cent of GDP in Japan but only 21.7 per cent of GDP in the OECD. Thus, a public effort (in relation to the investment pool of the

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[25] Governments are assumed to deal with supply-side issues through medium-term strategies - contrarily to the short-term character of most demand-side policies. Consequently, it seems plausible to think that results at the end of each political and economic cycle reflect most accurately the preferences of the political coalition in office during that period. The panel data analysis tends to confirm this assumption - public investment decisions have hardly had a counter-cyclical nature.

[26] Note that no data are available for New Zealand ever and for Switzerland since the early seventies.

[27] Public investment has varied notably over time and across nations. From a statistical point of view, the levels of investment across decades are poorly correlated. Investment in the sixties explains only 22 per cent of the variation of investment rates ten years later. Public investment in 1979-80 explains none of the variance in public investment in 1988-90.

country) similar to the OECD average translates in Japan into a level of public investment (over GDP) much higher than all other industrialized nations.

The results are reproduced in tables 1, 2 and 3 always in the same fashion: first, using public investment as a percentage of GDP as a dependent variable with two sets of data (including and then excluding Japan)(parts A and B in each table); second, using public investment as a percentage of total investment (only for the sample of all OECD countries since results do not change when we exclude Japan) (part C in each table).[28]

[Tables 1 to 3 here]

National averages of both public investment over GDP and public investment over total investment have then been regressed on the level of socialist control of government between 1960-1972, 1973-1980 and 1982-1990 (in this case after the effects of the second oil shock waned),[29] respectively - first alone, then jointly with a set of economic and institutional variables. When the dependent variable is public investment as a proportion of GDP, the value of the independent variable has been logged for two reasons. First, it has been assumed that even when there are no Socialists in government some minimum levels of public investment have to be provided. Second, beyond a certain point, the levels of public investment are not proportional to Left strength and are harder to raise. The same conditions (especially the second one) are not likely to apply when public investment is measured as a proportion of total investment - accordingly socialist control of government is not logged here.

We now comment the results in part B in each table (this is, for each period) - this is, for public investment as a proportion of GDP and a sample that excludes Japan. Similar comments could made for

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[28] In spite of the bias introduced by the Japanese case, we have reproduced the results for public investment as a proportion of GDP because the measures on human capital formation we use thereafter are estimated as a percentage of GDP.

[29] The socialist control of government has been calculated as the percentage of cabinet posts controlled by Socialist and Communist parties in each period. The estimations are based on data from Lane et al. (1991) and from **Keesing's Contemporary Archives**.

part C - this is, public investment over total investment and a sample including Japan. The outcomes are very satisfactory. In all cases the socialist tenure of government alone explains around forty percent or more of the total variance, coefficients are very stable and standard errors are low (see column 1).[30] According to the results, full tenure of the cabinet by a socialdemocratic party implied 1.30 points of GDP more on public investment in the sixties and seventies, and 1.40 in the eighties. Notice that this effect is higher than the standard deviation of the dependent variable.

Economic development (measured as per capita income at the middle of the decade) might be expected to be correlated to public investment in any direction - either negatively since developing countries might have more room or more need for public investment programs or positively because developed countries might have more resources available. However, when income per capita is introduced in the regression, it does not have any impact and the effect of party tenure remains very stable (see column 2).

In order to examine the potential impact of the domestic organizational framework, we have looked at the effect of the extent of corporatist structures, the level of unionization and labor unrest. The first variable is reproduced in tables 1 to 3. Corporatist structures had only a significant impact in the sixties and the seventies (column 3).[31] Corporatism alone explains 46 per cent and 48 per cent of the variance in those two decades respectively. In both cases, corporatism is strongly correlated to socialist tenure of power (the Pearson's correlation coefficient is 0.89 for the sixties). Thus, when partisan control

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[30] It should be noted, however, that there is a reduction in total variance from the sixties to the seventies, and as a result, although the r^2 is stable, the variance being explained by the partisan variable decreases. This is especially true for the stagflation period. The decrease of total variance after 1973 does point to an overall reduction in the political autonomy of all governments. The latter, in turn, is due to falling growth rates and the emergence of stronger financial constraints on the budget. Evidence on this relation would be produced through the panel data analysis.

[31] Corporatism is measured through the non standardized version of the index built by Cameron (1984). The index goes from 0 to 1 here (it runs from 0 to 100 in Cameron's work). Note that there is no data for Greece and Portugal in this index.

of government and corporatism are regressed jointly on public investment (column 5), there are strong multicollinearity problems that cause their statistical significance to disappear.[32] Nonetheless, the influence of corporatism disappears in the eighties. New left governments, whose political force did not go hand in hand with a strong union movement, took power in Southern Europe (France, Greece, Spain; temporarily in Portugal) and, engaged in strong investment policies. As a result, partisanship alone explains the extent of public investment.

Panel Data

Once the effects of partisan strategies on capital investment policies have been verified controlling for structural factors, it is possible to move into a more extensive and dynamic model to examine how specific constraints (such as the annual rate of growth, the stance of the budget or unemployment rates, etc.) limit or shape partisan preferences. For that purpose we run panel regressions of time-series cross-national data for the period from 1960 to 1990 in nineteen countries.[33]

We specify the following model, which allows for differences in behavior over cross-sectional units (i.e. countries, for which specific, structural properties are assumed to lead to different levels of investment) as well as differences in behavior over time for a given cross-sectional unit:[34]

$$y_{it} = \sum_{j=1}^{N} B_{1j} D_{jt} + \sum_{k=2}^{k} B_k X_{kit} + e_{it} \qquad (1.1)$$

where $i = 1,2,\ldots,17$ refers to a cross-sectional unit (country); $t = 1960, \ldots, 1990$ refers to year; B_k, $k = 2,\ldots,K$ are the slope coefficients and are assumed to be constant over time and countries. The hypothesis that certain structural elements particular to each country over time, such as size, geographical

[32] A joint test of their statistical significance through the F ratio shows, however, that they both remain very strong explanatory variables of public investment rates.

[33] Our initial sample except New Zealand and Switzerland.

[34] A full discussion of this model can be found in Hsiao (1986).

landscape, etc., are going to affect constantly the necessary rate of public investment), leads to a dummy variable model where the D_{ji} are dummy variables (representing each country) and take values equal to one (if j equals i) or zero (if j does not equal i).[35] It is also assumed that e_{it}, the random error for the ith cross-sectional unit and tth time period, has zero mean and constant variance and is independently distributed over time and countries.

The general form of the estimated equation for public gross fixed capital formation is:[36]

$$(PI/GDP)_t = a + b_1 (PI/GDP)_{t-1} + b_2 (PI/GDP)_{t-2} + b_3 SOC_t + b_4 BUDGET_{t-1}$$

$$+ b_5 (SOC_t * BUDGET_{t-1}) + b_6 \triangle GDP_{t-1} + b_7 (SOC_t * \triangle GDP_{t-1}) +$$

$$+ b_8 (SOC_t * \triangle GDP_{t-1}) \{if (\triangle GDP_{t-1}) > 0\} + b_9 (\delta GDP_{t-1}) +$$

$$+ b_{10} (SOC_t * \delta GDP_{t-1}) + b_{11} * (SOC_t * \delta GDP_{t-1}) \{if (\delta GDP_{t-1}) > 0\} +$$

$$+ (GDP \text{ per capita})_t + SIXTIES + EIGHTIES + COUNTRY$$

The independent variables employed here are:

(1) $(PI/GDP)_{t-1}$ and $(PI/GDP)_{t-2}$ which correspond to the value that public investment over gross domestic product during the two previous years.[37] Given the incremental nature of budgetary policy, they are expected to provide the bulk of the explanation of the dependent variable.

(2) SOC_t or the share of cabinet posts controlled by socialist and communist parties every year. It runs as a continuous variable from 1 (full control of government) to 0 (no ministerial cabinets held by

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[35] We also essayed introducing dummy variables for years. Besides 1973 and, to some extent, 1975, they are not statistically significant.

[36] As it will shortly discussed, not all variables are regressed at the same time. Similarly, other explanatory elements, such as unemployment, that had been introduced as independent variables, have not been reproduced for reasons to be explained later.

[37] They will be $(PI/TI)_{t-1}$ and $(PI/TI)_{t-2}$ when public investment is estimated as a proportion of total investment. Those calculations are reproduced in table 4.

those parties in that given year).[38]

(3) $BUDGET_{t-1}$ (or net lending) is the stance of the budget as a percentage of GDP in the previous year since any government will be naturally constrained by the financial position of the budget in shaping the following annual budget. Generally speaking, we should expect that the healthier the budget, the less constrained the government will be to increase spending (and public spending). On the contrary, if there is a deficit, the government will be likely to reduce expenditure and cut public investment.[39]

(4) Since it is possible that, as budget surpluses grow larger, socialists may be tempted to increase public investment at rates higher than what they would if the fiscal stance were tight (this is, at rates higher than what is shown by the slope coefficient of the independent variable that measures Socialist control of government), we have introduced an interactive term that multiplies socialist control of government by the stance of the budget in the previous year: $SOC_t * BUDGET_{t-1}$. Notice that, given the operationalization of the variable of governmental control, different sizes in the budget stance have no different effect when there is a conservative government ($SOC_t = 0$).

(5) $\triangle GDP_{t-1}$ or the rate of change in real GDP in the previous year is likely to shape the governmental short-term response on the adequate levels of investment in two alternative ways. On the one hand, if the government follows a pro-cyclical economic policy, whenever there is an economic boom (economic crisis), it might boost (or cut) revenues and thus increase (reduce) the room for investment. In this case, the coefficient of the parameter will be positive. On the other hand, the government may systematically adopt a counter-cyclical stance towards the economy - whenever there are weak growth

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[38] It has been reduced to this interval in order to facilitate its use in building several interactive variables.

[39] As a matter of fact, public investment is likely to be that area of public expenditure that can be more easily cut whenever public deficits arise. On the contrary, public consumption and social transfers operate in the budget mostly as entitlements and will only be modified marginally because the strength of the social consensus that grounds the welfare state imposes extraordinary political costs on any government attempting to alter them in a substantial way.

rates, the government responds by boosting public capital formation; as the economy recovers, the governments cuts its investment rate to restore a long-term equilibrium rate of public capital formation. If that were true, the coefficient should be negative.

(6) The governmental response to the business cycle may be mediated by the ideological alignment of the party in power. In other words, the decision to boost or reduce public investment does not eventually depend on the situation of the economy but on the response that, according to its partisan preferences, each government understands to be better. Therefore, for example, and contrary to the previous hypothesis (paragraph (5)), in a situation of economic depression, conservative parties may decide to curtail public investment (or at least increase them minimally) both to avoid crowding out private investment and to balance the budget. The left, instead, might decide to incur in higher capital spending to overcome the economic downturn. To model different political responses, we have adopted two strategies:

(a) First, we have created an interactive term combining socialist control of power and growth rates (SOC_t * $\triangle$ GDP_{t-1}). Here, a positive coefficient would imply that whenever growth rates are positive (negative), a socialist government expands (reduces) public capital formation at a pace faster than any conservative government. Were the coefficient negative, the relation would be precisely the inverse (although the Left still would outpace the Right in its response): a socialist cabinet would increase (reduce) capital spending to respond to worsening (improving) economic conditions. In all cases, this interactive terms tends to assign to non-socialist governments a neutral, passive position; the level of public investment depends solely on the performance of the economy (or in past levels of public investment) but not in governmental decisions depending on the economic cycle. To understand how conservative governments behave we should look at the size and statistical significance of the coefficients of other parameters and how they compared to our interactive terms.

(b) A second interactive term multiplies socialist tenure of government by growth rate if and only

if the latter is positive ((SOC_t * $\triangle$ GDP_{t-1}) {if ($\triangle$ GDP_{t-1}) > 0}). In this case, we assume that a socialist cabinet only responds to positive growth rates. Therefore, if the coefficient of the parameter is positive, this result should be interpreted in the following way: with high growth rates, a socialist cabinet spends more than a conservative government; confronted, however, with an economic crisis, the former does not reduce capital spending more than the latter.

(7) The level of public investment is also regressed on the change experienced by the growth rate between the year t-2 and the year t-1 (this is, the growth rate at t-1 minus the growth rate at t-2) (this variable was represented by δ GDP_{t-1}). This indicator is assumed to reproduce the most reliable information policy-makers have on the potential growth trend in the future which they may use to shape the budget for the following year (year t). A negative coefficient implies that all governments act in a counter-cyclical pattern, boosting capital spending when the economy has slowed down, and cutting it otherwise. If the coefficient is positive, governments follow pro-cyclical policies always.

(8) (δ GDP_{t-1}) is also modified through an interactive terms to identify different political response to similar economic differences:

(a) (SOC_t * δ GDP_{t-1}) should be interpreted in the following fashion. A negative coefficient would mean that socialists behave as Keynesian policy-makers and engage in counter-cyclical policies; this is, as the economy slows down, they decide to boost public investment. If it were positive instead, we should conclude that leftist cabinets adopt a pro-cyclical stance. Again, this interactive terms does not capture the specific response of conservative governments.

(b) ((SOC_t * δ GDP_{t-1}) {if (δ GDP_{t-1}) > 0}). This interactive term is built under the assumption that the socialist response (in relation to public investment) only differs from the conservative one when the economy accelerates (i.e. GDP_{t-2} < GDP_{t-1}). Otherwise (this is, whenever the growth rate either remains equal or falls), it is assumed that both kinds of government behave identically (in the way determined by the coefficients of other variables). Now, we should interpret the sign of the interactive

term in the following fashion: if it is positive, it means that the socialist government takes advantage of better economic conditions (and a reduced structural public deficit), to invest; if it is negative, it shows that socialist government are behaving in a counter-cyclical fashion, i.e. reducing the level of public investment that was probably expanded to compensate for a past economic downturn.

(9) We introduce gross domestic product per capita as a proxy to control for levels of development and the structural need to deploy infrastructures.

(10) Variation in economic policies has taken place not only across nations but over time as well. Two oil shocks (in 1973 and 1979) divide what the standard literature calls the Golden Age of postwar consensus (until 1973) from the next period of economic expansion (1982-1992). Many consider each period to be characterized by a particular set of problems and policies that have uniformly affected the role of the state as a coordinator of the economy and a supplier of fixed capital across nations. This is, the sixties are portrayed as a period of light demand management and strong public intervention to accelerate growth whereas the eighties are taken to be a time of deflationary policies and retreating governments. In order to control for such 'period effects' we introduce two dummies: one for the period 1960-1973 and the other for 1982-1990.

Results are showed in tables 4 and 5. In table 4 we report a panel data analysis on public investment as a proportion of gross domestic product. In table 5 we reproduce the results of the panel data regressed on public investment as a proportion of total investment.

[Tables 4 and 5 here]

In tables 4 and 5 we show five possible explanatory models of public investment levels. In all of them we introduce control variables for economic development and period effects because, although variation in public investment has remained sizable across nations and governments, there has been a general fall in average levels of public investment across all nations. Except for column 4, results are very similar in tables 4 and 5. Here we will discuss table 4.

In all cases, economic development actually reduces the investment effort. The effect is, however, mild. Adding $ 1,000 to every per capita income shrinks public capital formation by 0.06 points of GDP. Controlling for all other variables, any given country with per capita income of $ 5,000 and public investment equal to 4 per cent of GDP (or $ 200 per capita), that doubles its per capita income to $ 10,000 should see its public rate investment rate drop to 3.75 per cent ($ 375 per capita, still much higher than before in absolute terms).

In column (1) we display a model in which public investment is explained by lagged public investment and socialist tenure of power. Lagged investment explains the bulk of the variation. Nonetheless, socialist control of power is significant. Full control of government by the left during one year adds over 0.1 points of GDP to public investment.[40]

Column (2) controls partisan effects for the stance of the budget, alone and in the interactive term. Partisan tenure has a somewhat stronger effect. No matter which party is in office, a balance surplus (deficit) contributes to boost (shrink) the level of public investment - each point of the budget stance changes public investment by 0.025 points of GDP. Thus we should expect public investment to be a whole point of GDP lower in a country with a public deficit of 4 per cent of GDP. A surplus of the same size, instead, adds 1 point of GDP to the level of public investment.

Columns (3), (4) and (5) control, instead, for the performance of the economy on public investment rates.[41] As shown in column (3), the rate of growth partially affects the level of public investment. While the impact of partisanship remains unaltered, each percentage point of the growth rate adds 0.18 points to the level of public investment. Thus, other things being equal, the proportion of

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[40] The result is in fact rather consistent with the results obtained in the cross-national analysis in tables 1 to 3, which show that for periods of a decade, full socialist control increases public investment over 1 point of GDP.

[41] When net lending and growth rates are regressed jointly, their t-statistics drop showing a multicollinearity problem. I do not reproduce these results.

public investment (over GDP) in a country enjoying a real growth rate of 5 per cent should be almost 0.1 points of GDP higher than in a country with no real growth at all. Similarly, column 3 shows that all governments are slightly 'counter-cyclical' in their reactions: as soon as the rate of growth seems to decay (i.e $GDP_{t-1} < GDP_{t-2}$), the level of public investment is increased (0.013 points of GDP for each point the growth rate changes).

Columns (4) and (5) introduce interactive terms to measure the extent to which the response to different economic situations is determined by the nature of the party in office. In both cases, the variable SOC_t loses all significance. The effect of partisanship reappears, however, in the interactive terms. The first interactive parameters (whose theoretical grounding is explained above, in paragraph (6)), (socialist control * real change in GDP) and (socialist control * real positive change in GDP), give way to very similar coefficients: 0.038 in column (4) and 0.040 in column (5). This should be expected given the few number of cases in which the gross domestic product has actually shrunk in real terms. At the same time, once they are introduced, the statistical significance of the variable controlling for growth rate alone wanes. The result shows that, although subject to the constraint imposed by the performance of the economy, the public investment effort continues to depend notoriously on the party in power. Thus, with the economy growing at 3 per cent, a socialist government increases the level of public gross fixed capital formation by 0.120 points of GDP (or 0.141 if we include the coefficient for real change in GDP alone);[42] however, if, for example, the rate growth is only 1 per cent, the investment effort only increases 0.047 points of GDP.

The second couple of interactive terms (explained in paragraph (7) above), (socialist control * difference in growth rates) and (socialist control * positive difference in growth rates) are -0.026 and -0.047 respectively. Their negative sign implies that, in general terms, a socialist cabinet responds to

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[42] Notice that this rate growth is the average one in OECD countries and that the corresponding investment effort is similar to the one in columns (1) to (3) in table 4 for the variable 'socialist control'.

accelerating growth by cutting public investment. According to the first parameter (in column 4) the inverse is also true: as growth rates decline, socialist governments boost public investment. Nonetheless, it should be noticed that the second coefficient (-0.047) is stronger than the first from a statistical point of view. This means that, as the economy improves (let us say from growing 1 per cent to growing 3 per cent), a socialist cabinet tends to cut public investment slightly (in this hypothetical case by almost 0.1 points of GDP). As the economy worsens, however, the coefficient in column (5) implies that the socialist cabinet abstains from taking any measure to expand public investment. Thus, there is no evidence that, generally speaking, leftist governments employ public investment as a demand management device to stabilize economic downturns.

According to the models developed in table 4, public investment decisions appear determined by a complex web of factors that include the past history of public investment, the level of development of each country, the strength of the economy and the direction in which it is moving and, eventually, the partisan preferences of the government in office. In order to disentangle which factor has the strongest impact on public investment, we proceed to simulate several scenarios - all displayed in graphs 1A to 1C. All estimates are based on the equation reproduced in column 5 in table 4.[43]

[Graphs 1A to 1C here]

Each graph shows a different GDP growth rate at time t-2 (i.e. two years before the budget year in which specific public investment allocations are made): 5 per cent in graph 1A, 3 per cent in graph

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[43] Notice, however, that in these simulations we have only used part of the variables regressed on public investment. We have excluded the lagged behavior of public investment, per capita income, the period effects and all dummies. As a result, all the simulated results on public investment decisions are positive. Those positive results are, in fact, countered by a historical trend towards less public investment - a trend captured by the coefficients of lagged public investment (PI/GDP_{t-1} and PI/GDP_{t-2}) and by the coefficient of the variable 'per capita income'. For example, a country with public investment initially at 3 per cent and an average per capita income of $ 10,000, and no new public investment decided by the government (i.e. in case the variables of partisanship and economic performance lead to no increase in public investment), would experience an absolute fall in its level of public investment around 0.1-0.2 percentage points of GDP (from 3 to 2.9-2.8 per cent).

1B, 1 per cent in graph 1C. In the horizontal axis, the graph shows the GDP growth rate at time t-1. The vertical measures the increase in public investment in points of GDP. As it is readily clear, partisanship has the strongest effect on the evolution of investment. Conservative governments hardly change the levels of public investment (even under the most favorable conditions, public investment does not increase beyond 0.04 points of GDP). Over time, given the effect of lagged investment and the negative impact of increasing per capita income, public investment quickly declines in real terms under a prolonged conservative administration. The control of government by the Left implies, instead, growing levels of public fixed capital formation. After the economy grows at 5 per cent for two years, a socialist government increases public investment by 0.25 points of GDP (the conservative administration less than 0.05 points); if, for example, the same pace of economic growth persists during four years, a socialist government will increase public capital formation by a whole point of GDP - whereas a conservative administration would increase public investment barely 0.15 points of GDP. Now, if the economy has grown at 3 per cent, the increase under a socialist government equals over 0.15 points of GDP; with growth at 1 per cent, the increase is only of 0.07 points. In short, the performance of the economy behaves as a powerful constraint on the investment policies of the Left. These simulations also make possible to ascertain the effect of accelerating (or decelerating) rates of growth. In a situation of continued improvement in the economy, a socialist cabinet tends to cut public investment and a conservative government to increase it - but, in both cases, only marginally. More importantly, in cases in which the economy begins to falter, the governmental effort in investment declines steeply - there are hardly signs that any administration wishes to run any debt to maintain public investment. In other words, all governments end up adjusting to the performance of the economy. Although public investment might be used for demand management goals, the actual level of public investment mainly reflects a fundamental choice on the supply-side role of governments and markets.

Our inquiry through both a simple cross-national analysis for different historical periods and panel

regressions leads to two main conclusions. First, partisan tenure of power plays a key role on the size of public capital spending. A decade of socialist government means more than a whole point of GDP in public investment. Before the stagflation period, and corresponding to the hegemony of socialist parties mainly in Scandinavian countries, high state investment appeared under corporatist arrangements - there socialdemocratic government acted according to their partisan preferences and employed these schemes to lure unions into wage restraint. After the seventies, however, as several socialist governments were established in the Mediterranean area, they too engaged in strong investment policies, without any pressure from organized labor.[44]

Second, the decision to engage the state in the supply of gross fixed capital is mostly done based on supply-side policy considerations. This is, even though the level of public investment may be boosted by the left in response to an economic crisis (our evidence is less than convincing), in the medium run public investment is conditional on balanced budgets and reasonable growth rates. The left seems to prefer sacrificing counter-cyclical policies to a longer-term objective of increasing the state intervention in investment. A leftist strategy based on 'spending its way out of the crisis' may occasionally happen (as it indeed took place in several countries, mildly in the sixties, more dramatically in the late seventies, cf. Hall 1986, Scharpf 1991) - still, its appears to be exceptional. More public investment should be actually expected from socialdemocratic governments after the finances of the state have been balanced (either through higher taxes or as a consequence of an improved business cycle). Otherwise, the left seems to risk higher deficits in exchange for an uncertain temporary boost in consumption without actually being capable of achieving its goal of transforming the domestic political economy. In short, long-term

[44] Higher public investment rates do not take place merely as a result of a generalized strategy of higher spending pursued by socialist governments. When we regress government outlays (as a percentage of GDP) on public investment (as a percentage of GDP), to check the extent to which they are correlated, the r-squared is less than 0.10 for all three decades. This points, in the first place to the fact that socialist parties consciously target public investment to develop their most preferred economic strategy. It also accords well, in the second place, with the current theoretical literature not finding a clear relationship between overall size of government and socialist parties.

economic growth, allocated in a redistributive manner, goes prior to short-term demand management.

Human Capital Formation

In order to examine the role of the state in supplying human capital, we develop two indicators: (1) public current expenditure on education as a percentage of GDP, controlling for the demographic structure of each country; (2) the volume of public expenditure directed to active labor market policies.

Public expenditure on education

Like in the cross-national analysis of public gross fixed capital formation, we examine current public expenditure on education as a proportion of GDP at the end of each of three economic periods or business cycles we have distinguished.[45] Hence, we present and analyze estimates for 1970, 1979-80 and 1988-89. A lack of complete and consistent data series on public expenditure on education makes it impossible to reproduce the cross-temporal cross-national analysis presented above for public gross fixed capital formation.[46]

To control for the demographic structure of each country, which has a fundamental impact on the level of expenses, we estimate the 'public effort' in education as a proportion of the population under twenty years. Thus, for example, in 1980 Ireland spent 6.3 per cent and Italy 5.1 per cent of their GDP in education respectively. However, given that the Irish population under twenty was 40.7 per cent of all population while the Italian proportion was 31.2 per cent, the index employed turns out to be almost the same for both cases. Both countries spent around 0.15 points of GDP in education in 1980 for each

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[45] Capital spending is excluded because it already appears in the estimates of fixed capital formation.

[46] Data are taken from the **Statistical Yearbooks** published by UNESCO. Except for the last years, the data reproduced by UNESCO correspond to specific years (1950, 1955, 1960, 1970, 1975, etc.). Data series published by the OECD (1988) are not complete across countries, do not report the late eighties, and are unclear, in some cases, about the distinction between private, public, capital and current expenditure.

1 per cent of the population under twenty years.

National averages of public effort in education have been regressed on the levels of socialist control of government in the corresponding previous decade.[47] Results are reproduced in tables 6 to 8.

[Tables 6 to 8 here]

Partisan control performs particularly well for the sixties. More than 40 per cent of the variation of the public effort in education in 1970 is explained by the partisan nature of the government. According to our results, full control of the cabinet by the socialist party implies 0.135 points of GDP spent in education for each point of population under 20 years (column 1, table 6). Thus, for example, two countries with a similar proportion of young population (30 per cent) but governed by distinct partisan coalitions, would differ strikingly in education effort: the first country, under a non-socialist administration, would spend 3.66 per cent of GDP (the constant term * 30 per cent of the population) - approximately the German case in 1970; the other nation, governed by socialdemocrats, would spend 7.71 per cent of its GDP -Sweden in 1970. The impact of partisanship remains stable when we introduce a measure of the proportion of active population employed in agriculture in 1965 (column 2). This variable, which controls for the level of economic development, seems particularly appropriate here to control for the level of demand of education: the population engaged in agricultural tasks seems less prone to both need and participate in the educational system.[48] Like in the case of fixed investment, the presence of corporatist structures (strongly correlated with socialist tenure of power in the sixties and seventies) is a strong predictor of the level of public effort in education in 1970 (columns 2 to 4, table 6). Again,

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[47] The period of socialist government differs only slightly from the periods used in the past section on fixed investment. All differences are due to small changes in the year of the dependent variable (1970 v. 1969-72, 1988-89 v. 1988-90). Using the same periods of time (to estimate socialist tenure of government) as in the section on physical capital does not affect the statistical results.

[48] We have not used here per capita income to control for economic development because its level appears to be in turn strongly affected by the volume of the expenditure in education (cf. all endogenous growth models).

when partisan control of government and corporatism are regressed jointly, they lose their statistical significance (column 5, table 6).

The success of partisanship in explaining the level of public effort in education diminishes over time - both in size and in statistical significance. Partisanship alone explains only 22 per cent of the variance in the public education effort in 1979-80. Moreover, compared with the sixties, the impact of the left was less important - around 0.09 points in the seventies. Corporatism instead plays a much stronger role. Corporatism alone explains 40 per cent of the variation in 1979-80 (column 3, table 7). The difference between a fully corporatist country and a non-corporatist country amounts to 0.102 points of 'public effort' or, for countries with 30 per cent of their population under 20, over 3 points of GDP.

In the eighties, partisan tenure of power does not explain, at least alone, any of the variance in the 'public effort' in education (column 1, table 8 (A)). When we control for the size of the primary sector, socialist tenure of power gets to play a stronger, though still minor, role: the coefficient is almost 0.07 and it is statistically significant at $p > .10$ (column 2, table 8 (A)). On the contrary, corporatist institutions keep explaining strongly the level of public education effort. Like in previous decades, they add close to 0.1 points of GDP in public expenditure in education for each percentage point of population under twenty (columns 3 to 5, table 8 (A)). The lasting impact of corporatism goes actually hand in hand with the fact that the average public effort in education has been very stable within each country in the last decades. The public effort indexes for 1970, 1979-80 and 1988-89 are all strongly correlated (the Pearson's correlation coefficient is over .80 in all cases).

Still, although partisanship has a minor or no explanatory power when it is regressed on the level of public expenditure in education in the late eighties, it performs as a key variable to understand the change in the public effort in education after the stagflation period.[49] In table 8 (B), we show several

[49] Regressions on the relative change of public effort in education during the seventies show no effect of partisanship. The results have not been reproduced here.

equations regressed on the relative change in the 'public effort in education' from 1979-80 to 1988-89. In all cases, the socialist control of government is a significant variable from a statistical point of view. In the simplest equation (column 1), full control of the government by a socialist party leads to the expansion of the level of 'public effort' in education by a 40 or 50 per cent in less than ten years. In other words, a public effort of 0.10 points in 1980 should reach 0.15 point in 1989 under a continuous socialist administration, all other things being equal. The effect of partisanship remains constant after we extend the first model to include regressors measuring the initial level of public effort in education (in 1980), the proportion of population employed in the primary sector and the presence of corporatist institutions (columns 2 to 4). It should be noticed that the initial level of expenditure and the partisan sign of government jointly explain close to 50 per cent of the variance. Now, very simple calculations based on the model presented in column 2 leave no doubt about the sizable impact of partisanship. Depending on the party in government, three different countries with an initial level (in 1980) of public effort in education of 0.10, 0.20 and 0.30 respectively perform in rather disparate ways. Ten years later, and under a socialist government, their corresponding levels would be 0.17, 0.28 and 0.33. Under a non-socialist government, they would be 0.13, 0.20 and 0.21 instead. Even though the initial level of expenditure has a substantial impact on its subsequent evolution, partisanship operates as a key factor in the composition of public expenditure in education - in the same way it did in the sixties.

All these results can be reconciled with the estimates for the eighties in table 8 (A) in the following way. Which party controls office does affect the dynamics of public expenditure on human capital. Partisanship, however, is, in the first place, mediated by the initial amount directed towards public education, and, in the second place, requires a sustained control of government to be visible. Public expenditure in education is mainly guided by domestic needs of a structural kind, which are captured in the equations by the constant term and the parameter of public effort in education in 1980. Both under socialist and conservative governments, the proportion of public money employed in education

increased whenever the index 'public effort' was below 0.20 points effort' in 1980 - in fact, the lower the initial level, the faster it rose. Still, under a socialist government, it tended to rise more swiftly. Now, when the initial expenditure in education (in 1980) was approximately over the OECD mean, the public effort in education tended to remain stable or even to decline (in the eighties) when the socialist party had control over the cabinet less than half the time (or controlled less than 50 per cent of its posts). Since the lack of durable one-party cabinets is the most common condition in contemporary industrial democracies, the level of public expenditure in education could not but rise slowly in most cases. To sum up, deep structural traits seem to affect decisively the sources of human capital formation, but, again, there are good reasons to believe that, in the long run, parties still appear capable of transforming the conditions of departure.

Active manpower policies

Moving beyond traditional income maintenance programs for jobless people, industrialized countries have progressively introduced active manpower policies to retrain directly the unemployed or to subsidize apprenticeship and other vocational schemes. Systematic measures on manpower policies have been gathered only lately. The OECD provides an almost complete battery of data since 1985 including strict labor market training measures, subsidized employment and measures for the disabled.[50]

We have regressed the battery of independent variables on two sets of data: first, on public expenditure in manpower policies as a proportion of GDP in the mid eighties;[51] second, on the relative change in public expenditure in manpower policies from 1985 to 1990. The results are reproduced in tables 9 and 10.

[Tables 9 and 10]

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[50] Data are taken from **OECD Employment Outlook** (several numbers).

[51] The data correspond to 1985 - except for Italy, for which 1986 is the first year reported.

Table 9 confirms the same explanatory model found for public fixed and human capital formation in the sixties and seventies. The participation of socialist parties in government is positively related to the strength of manpower policies in 1985 (Table 9, columns 1 and 2) and explains 22 per cent of the latter's variance. Corporatism performs just slightly better (columns 3 and 4). Again, we should remember that both variables are strongly correlated for that period (column 5) - underscoring the primacy of 'socialdemocratic corporatist' regimes through the early eighties.[52]

If we looked, however, at the relative change in public expenditure from 1985 to 1990, it is again partisanship that performs as a key variable (table 10). Alone, it explains 22 per cent of the variance (column 1). The parameter of socialist control of government continues to perform well within more complex models. The coefficient is rather stable - the control of government by a socialist party in the mid and late eighties increased by 10-12 per cent the level of public expenditure in manpower policies- and always statistically significant. The level of public expenditures in manpower policies in 1985 tends to reduce marginally their size in the budget five years later - by around 5 to 7 per cent for each 1 per cent of GDP spent in 1985 (see columns 3 to 5). On the contrary, the number of unemployed tends to increase the volume of manpower policies - around 0.5-0.7 per cent for each percentage point of unemployed so that, for unemployment at 10 per cent in 1985, we should expect labor market policies to be a 5 per cent higher in real terms in 1990 (see columns 4 and 5). To further clarify the role of partisanship, let us engage in a simulation of the evolution of manpower policies according to the equation of column 3 in four different countries - spending 0.5, 1.0, 1.5 and 2.0 per cent of GDP in manpower policies in 1985 respectively. Five years later, the level of expenditure would have risen to 0.57, 1.10,

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[52] These results get much stronger when we exclude Austria, which has the lowest level of public expenditure on manpower policies among European nations and therefore behaves as an outlier. When Austria is excluded, partisanship explains 34.2 per cent of the variance (versus 22.4 including Austria) and corporatism explains 43.7 per cent of the variation (versus 26.0 per cent). There might be good reasons for excluding Austria given its large nationalized sector which probably operates as a public source of training schemes (cf. Scharpf 1984; Freeman 1989).

1.60 and 2.07 per cent under a socialist government. Under a non-socialist cabinet, the outcomes would have been 0.50, 0.97, 1.41 and 1.81 per cent. The effect of partisanship is sizable and only tends to be countered by the initial level of expenditure when the latter is higher than 2 per cent of GDP -only the Swedish case is close to this situation.

The examination of human capital formation tends to confirm the results we reached above on fixed capital formation. The existence of corporatist settings jointly with leftist cabinets seems to provide for the bulk of the explanation of the levels of public supply of human capital, at least through the late seventies. There the government engaged in strong education and manpower policies to achieve full employment and induce wage restraint among the labor movement. Partisan agency counted - it did, though, embedded in the particular political and economic regime that ensued from small, open economies. Nevertheless, in the eighties, as new leftist governments emerged in Southern European medium-size economies, they actively expanded public education and vocational training schemes. Still, corporatist frameworks seemed to maintain previous levels of human capital formation even in those countries in which the hegemony of socialist parties started to erode.

Tax Policy

According to the main purpose of the paper, we focus on those elements of the tax structure that may have an impact on the behavior of economic agents, particularly in their saving (and investing) decisions.[53] [54] To this end, we examine the evolution of personal income taxation. Low tax rates should

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[53] In other words, we are primarily concerned with the economic effects that the design of different tax systems may have in the allocation of input factors - e.g. how substituting a flat tax rate system for a progressive tax structure may be an appropriate strategy to free high levels of private savings and thus boost private investment. The choice of the tax systems also involves resolving questions about its equity dimension - i.e to what extent policy-makers choose to redistribute income. As a matter of fact, both the efficiency and equity dimensions cannot be easily extricated one from the other - so that, for example, highly progressive systems are likely to channel savings into the public purse and have strong redistributive effects at the same time. Still, our analysis is only subsidiarily concerned with taxes as instruments of income redistribution. As the specialized literature has generally stressed, the extent to

be expected from conservative governments, which that claim that a better economic performance would take place by leaving all allocation decisions to private agents and minimizing any distortion on the working of markets - in particular, they will introduce low tax rates on higher incomes in order to reduce adverse effects on labor supply, savings and investment. Leftist governments, instead, will impose high taxes (especially on higher incomes) to finance their interventionist policies.[55]

To determine the nature of (personal income) taxation policy we have conducted, for each of the twenty-one countries in our sample, first in the late seventies, and then in the late eighties, the following estimations. For each case we have calculated the effective amount that had to be paid (after all allowances are deducted and the corresponding tax rate is applied) at two different income levels: first, for an income equal to five times the wage of the 'average production worker' (APW) (as defined by the OECD); second, for anyone earning ten times the APW wage.[56]

In order to test the model, we first regress the effective tax rates for incomes five times and ten

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which the state affects the redistribution of income depends on social transfers and public expenditure rather than on the structure of taxes.

[54] See Peters (1991) and Steinmo (1993) for reviews of the models offered to explain cross-national differences in the size of tax revenues as well as in its characteristics.

[55] Another reason, chiefly historical, also justifies examining personal income taxation. During the postwar period, personal income taxation turned out to be the fastest rising tax throughout the stagflation period. In all OECD countries, revenues from income taxation went up from 9 per cent of GDP in 1960 to 14 per cent in 1980. Social security contributions, driven by climbing social transfers, rose from 4 to 8 per cent of GDP in the same period. Instead, taxes on goods and services hardly changed: they amounted to 9 per cent of GDP in 1960 and 10.3 per cent in 1980. After the economic turmoil of the seventies, the personal income tax has been the tax to endure the most significant changes - it has been formally indexed to prevent fiscal drag, tax rates have been reduced in most countries, the number of tax brackets has been cut and there have been substantial efforts to broaden the tax base. Historical and analytical reviews of the process of tax reform in OECD countries since the late eighties can be found in Cnossen and Bird (eds.) (1990), Hageman, Jones and Montador (1988), OECD (1989, 1990), Pechman (ed.) (1987).

[56] Since the late seventies, the OECD reports the income of the 'average production worker' and the effective tax to be paid for a single worker and for a worker with two children. We have just estimated the case of a single worker.

times the average production worker, in the late seventies on party tenure of government from 1960 to 1975. The results are reported in table 11. Partisan control of the government explains around half of the total variation in the effective tax rates on high incomes (column 1, table 11). The statistical significance of the variable is high. Full control of government by the socialist party from 1960 to 1975 implies a difference of 41 percentage points on the effective tax rate for incomes five times the APW wage, and 36 percentage points for incomes ten times the APW wage.[57] When other variables are introduced in the regression, the coefficient of partisanship remains stable. The level of development (measured as real GDP per capita in 1975) has no effect on the progressivity of taxes (column 2, table 11). As in the case of capital investment, socialist tenure of government and corporatism are highly correlated (column 5).

[Table 11]

During the eighties (nominal) tax rates were reduced across the board in all countries without any exception. From 1980 to 1990, top tax rates fell an average of 14.3 points (from 63.0 points to 48.7 points) in all OECD countries. Nonetheless, the structure of national income tax systems did not necessarily converge towards less progressive schemes in real terms. Progressivity increased through fiscal drag in some cases (e.g. the Spanish case). In other countries, cuts in top tax rates were accompanied by even deeper cuts in low rates and a substantial reduction in past deductions and tax loopholes. As a result, in several cases, effective tax rates did rise. For example, in the late seventies, the effective tax rate on earnings ten times those of an APW amounted to 78 per cent in Sweden, 65 per cent in the United Kingdom, 49 per cent in Germany and around 27 per cent in France and Spain. Ten

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[57] The effcetive tax rate on higher incomes and the volume of revenues it generates are strongly correlated. Thus, personal income tax as a percentage of GDP in 1980 and the effective tax rate on an income five times and APW's wage in the late seventies show a Pearson's r coefficient of 0.79. This coefficient is 0.68 for personal income tax as a percentage of GDP in 1988 and the effective tax rate on an income five times and APW's wage in the late eighties.

Moreover, the proportion of income paid at each level, or *effective tax rate*, provides us with an approximate idea of the overall progressivity of any given income tax system. For example, the difference between the effective tax rate on an APW and on an income five times an APW's wage and the effective tax rate of the latter shows a correlation of 0.78 in the late seventies and 0.40 in the late eighties.

years later, the effective tax rate had declined to 63 per cent in Sweden and 40 per cent in Britain; it had been modestly lowered in Germany to 46 per cent; but it had risen sharply to over 41 per cent in France and Spain.

To assess the direction of the taxation reform and to determine the political and institutional factors behind it, we observe the relative change experienced from the late seventies to the late eighties by the effective tax rate on incomes five times and ten times the earnings of an average production worker. The models explaining the pattern of cross-national change in the effective tax rate are reported in table 12.

[Table 12]

To make the discussion shorter, we discuss the results for the equations on the effective tax rate on incomes five times the salary of an APW - the same conclusions apply, however, to incomes ten times the salary of an APW. Partisan control of government alone explains a fifth of the total variance of the relative change in the effective tax rate - according to the coefficient, which is statistically significant, full control of the cabinet by a socialist party should increase the effective tax rate by 40 per cent (column 1). Instead, corporatism has no influence on taxation in the 1980s (column 4). The performance of the partisan variable remains stable when new regressors are introduced. The explained variation increases to almost 60 per cent when the effective tax rate in 1980 and per capita income is included (column 2). The result (a coefficient of -0.886 for the effective tax rate in 1980) implies that for each percentage point of the tax rate in 1980, one should expect a decline in the effective tax rate of almost 1 per cent in the following decade. This is, other things being equal, an initial tax rate of 20 per cent would fall to 16.5 per cent (with the constant term, however, it would end up at 25.2 per cent); an initial tax rate of 50 per cent would decline to 27.9 per cent (including the constant term it would stay almost constant at 49.8 per cent). To clarify the results of the model reported in table 12, column 2, we have estimated the effective tax rate in 1990 by plotting alternative values in the independent variables. The fitted results are presented

in table 13, part (A).

[Table 13 here]

The simulation includes two different situations in terms of per capita income in 1980 ($ 5,000 and $ 10,000), in turn divided into four different initial effective tax rates (20, 40, 60 and 80 per cent). For each of these eight hypothetical points of departure we have estimated the impact of partisanship. The table should be read in the following way: in a country with per capita income of $ 5,000 and an effective tax rate of 20 per cent in 1980, the tax rate in 1990 is 30.4 per cent under a socialist administration and 23.0 per cent under a non-socialist one. Hence, the ideological sign of the government has a striking impact on the evolution of tax rates. In a country with per capita income of $ 5,000, the effective tax rate designed by a socialist cabinet tends to be between a third and two thirds higher than that implemented by a conservative party (the result depends on the initial effective tax rate) - the difference is somewhat sharper as per capita income increases. Similarly, the negative effect of the level of the effective tax rate in 1980 shows up: the higher it is, the less pronounced the influence of partisanship appears to be. Thus, a socialist that inherited an initial rate of 20 per cent increases it by 50 per cent throughout the decade. If the initial tax rate was 60 per cent, the increase under a socialist party oscillates instead around a 10 per cent (depending on the per capita income in 1980). The negative impact of the initial effective tax rate is probably pointing to natural limits to the amount of income that can be taxed as well as to the existence of a certain backlash against the welfare state in those countries in which the median voter started to be affected by heavy taxation (Meltzer and Richards 1981).

The tax reform movement across OECD nations during the eighties has often been attributed to a needed adjustment of the domestic economy to new international conditions. According to this view, international competitiveness would have convinced policy-making elites of all persuasions to scale back the level of state intervention (including taxes) to free private investment, reduce costs and let national businesses regain world markets. Indeed this is one of the strongest justifications that leftist coalitions

have employed to approve strong tax reforms in countries like Sweden or New Zealand - leading to sharp reductions in the effective tax rates on high incomes.[58] [59] According to this explanation, whenever there is a permanent, or at least sizable decline in economic performance of the country (or a deterioration in its structural basis), the likelihood that a cabinet will introduce deregulatory measures (in this case, tax cuts) in the economy increases. To verify this hypothesis we introduce a variable capable of measuring the long-term capacity an economy has to grow in the future. The evolution of total factor productivity, this is, of output per combined unit of labor and capital, appears to be a good proxy to estimate the capacity of any economy of growing consistently, or, in other words, of generating real income growth. Understood as a measure of the gains in the efficiency of production, the rate of growth of total factor productivity "determines the scope for non-inflationary increases in real incomes."[60] The average change of total factor productivity during the period 1973-79, this is, the period immediately antecedent to the reforms of the eighties, has been calculated for all the countries of our sample (except Portugal) by the OECD. It averaged 1.3 per cent annually but it ranged from -2.2 per cent in New Zealand to around 2 per cent in France and Spain. This variable is included in the equation reported in column 3. It is statistically significant (especially when regressed on the relative change of the effective tax rate of incomes ten times the APW wage). Its coefficient confirms that a weak total factor productivity prompts governments to reduce tax progressivity: if a country experienced a change in the former at a rate of -1 per cent from 1973 to 1979, one should expect taxes to fall 6 per cent in the following decade. Again, we produce some simulated results to shed more light on the interaction of all the variables in the equation reported in column 3. These simulations are displayed in table 13, part (B).

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[58] This reduction has not necessarily implied, however, a fall in tax revenues as a share of GDP.

[59] For the Swedish case, see Pontusson's analysis of the Swedish economic policy in the eighties (Pontusson 1991). For New Zealand, see the **OECD Economic Surveys of New Zealand**, several years.

[60] OECD (1987), p. 39. See also the discussion in Crafts (1991).

Partisanship keeps playing a strong role in the evolution of the progressivity of personal income taxation since 1980. Under a conservative government, the effective tax rate declines in all cases but one (when the effective tax rate in 1980 was 20 per cent and total factor productivity grew at 2 per cent every year). Under a socialist cabinet, instead, the tax rate rises in eight out of twelve cases. As a consequence, the simulation shows that starting from the same point, and all other things being equal, the tax rate under a socialist government turns out to be, in general, a fifty per cent higher than the tax rate chosen by a conservative government - in several cases the former actually doubles the latter. Notice that the initial level of the tax rate behaves in the same way it does in the model in column 2 (it could not be other way since the coefficient is very similar). Finally, the past performance of the economy, measured through the change in total factor productivity, which seems to explain the real potential for growth, has a sizable impact on partisan strategies. Under a situation of strong economic decline (total factor productivity falling 2 per cent every year - as a matter of fact, what happened to New Zealand in the seventies), the likelihood that any government will reduce the extent of tax progressivity is high. With an initial tax rate of 60 per cent, a socialist cabinet will bring it down to 55 per cent; a conservative cabinet to 29 per cent. The severity of the tax reduction decreases as total factor productivity improves: with the latter growing at 2 per cent, for example, conservative governments seem content to reduce the effective tax rate to 40 per cent in average.

CONCLUSIONS

Recent research on the political economy of modern democracies has shown that partisan control of office has only a limited, short-term impact on macroeconomic policies and aggregates. Rational expectations among economic agents eventually force governments to implement stabilizing, credible policies. Similarly, the internationalization of the economy constrains any prolonged attempt to put the economy into an expansionary path. These theoretical insights have been confirmed by the historical

experience of the last decade - attempts to establish Keynesian policies in one country alone failed loudly in France, corporatist experiments have waned in many cases and many socialdemocratic cabinets have prudently abandoned their past reliance on demand-management policies.

In the course of our inquiry, however, we have found that partisan platforms were strong predictors of supply-side economic policies before the stagflation period and that they still are afterwards. Although governments of all ideological signs are equally committed to economic growth, they end up relying upon different instruments to promote it. The left encourages particular forms of public intervention in the economy: boosting taxes to finance public intervention, claiming for the state an important role in the provision of physical and human capital. Our results also fit well the historical experience of the last forty years. The interventionism preached by the left first came hand in hand with the demand-management practices (or at least paradigms) of the postwar period (Hall, ed. 1989). When Keynesianism became under intense fire, mainly as failed attempts in demand management heaped up in the late seventies, microeconomic interventionism was gradually left as the main area in which socialist cabinets differed from conservative governments. Hence, even under alleged periods of monetary and fiscal discipline, the left has viewed the state as a central agent to overcome market failures, sustain national competitiveness abroad, equalize conditions and sober the social effects of competitive markets.

In turn, it has been possible to show that conservative parties trust on the capacity of private agents to supply the levels of savings and investments optimal to sustain growth. Mirroring the experience of the left, supply-side issues have also remained or indeed grown relevant among the right in the last fifteen years. In response to the stagflation crisis and to strong social changes that have progressively altered the electoral composition of contemporary democracies, the conservative agenda has experience an intense rejuvenation in most countries and a period of relative hegemony since the last oil shock - the tax reform movement of the eighties is but one example. Massive privatization programs are just another

one.[61]

Partisan strategies interact with the institutional systems in which they are implemented. On the one hand, fragmented party systems tend to produce centrist coalitions that adopt middle-of-the-road economic policies - public investment rates tend to pivot around the OECD average, human capital formation is provided jointly by the public and the private sector, tax schemes are equidistant from both highly progressive and flat tax systems.

On the other hand, the position of each country in the international economy and the corresponding mode of interest intermediation have a significant impact on the nature of the supply-side economic strategy pursued by the government. In medium-size countries, states tend to concentrate more power, to be more isolated from society, to act closer to the preferences of their top officials and policy-makers than in small, corporatist countries, in which a dense network of social interests and organizations has invaded the arena of public policy-making.[62] In statist nations, parties have more room to implement their policies; the state will be employed, by both left and right, as a decisive instrument to shape society. Hence, parties alone explain here much of the evolution of economic policy. In countries characterized by strong corporatist networks, instead, parties may count on organized capital and labor to sustain a particular economic strategy. For the period previous to the stagflation crisis, the literature has already shed light on a system of 'socialdemocratic corporatism' in which strong leftist governments developed a strong welfare state and extensive supply-side policies in exchange for wage moderation by encompassing trade unions. Such a model has been traced out in our empirical analysis. Still, there are

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[61] For evidence on the impact of conservative governments on privatization strategies, see my paper "Privatizing the State Business Sector in the Eighties: Partisan Strategies, Constitutional Rules and Economic Concerns," mimeo.

[62] On the capacity of states to act independently from socially determined interests and actors, see Skocpol (1985). On the logic of policy-making in corporatist countries, see Lijphart (1977) and Katzenstein (1985). For an attempt to explain the historical birth of these two different ideal types of polity (the statist, shaped through coercion, and the corporatist, sustained by capital), see Tilly (1992).

no good theoretical reasons why supply-side economic policies could only develop with the acquiescence of unions. Wage restraint may be enticed from unions by offering more public sector intervention but only expansive demand policies depend critically on some sort of incomes policy to survive over time. Encompassing unions may sustain public intervention -they may even thwart any attempt to reduce it- but they cannot spawn it.[63] In short, parties are always needed to transform the economy. The wave of socialist victories in Southern European countries in the early eighties is a good case in point. Even without the support of a strong, disciplined union movement, socialist parties raised the rate of public investment, expanded (or maintained) the state-run business system and introduced progressive taxes.

Before closing, we would like to identify two implicit arguments in our treatment of parties and partisan strategies that imply new venues of theoretical and empirical investigation.

Notice, first, that, in order to bring political parties back into political economic models, we have abandoned the notion of parties as mechanical translators of material or structural interests implicit in most partisan models. We stressed above that several empirical studies have shown how the beliefs and behavior of both politicians and electors appear distributed along a policy space or political dimension structured around the role the government should play in the economy. This political alignment cannot, in turn, be directly deduced from material, class-based interests. Voters hardly cast their ballots in direct correspondence to their individual (or collective) welfare; instead their evaluation of governmental performance and partisan programs appears to be mainly mediated by the way they first construe the political and social situation they are facing (Popkin 1991). As for politicians, although they are attentive to specific ends or goals, such as unemployment and inflation, they are strongly concerned about the policy instruments to be employed - such as, for example, the institutions used to coordinate the economy or the role governments or markets should be granted to foster growth. In most occasions, political and

[63] Indeed we have observed that, although the strength of 'socialdemocratic corporatist' solutions diminished in the eighties (and with it, its policy impact), the presence of corporatist structures explained certain continuities in certain areas - mostly in human capital formation.

economic goals and the policy arrangements to attain them greatly overlap. This is the case, for example, of the perception of Keynesianism within the European left - since it legitimized the pursuit of full employment as well as the use of several forms of state intervention to achieve that goal (Przeworski and Wallerstein 1986)- or the case of monetarism among some conservative parties - since it made operative and politically feasible at a practical level deep beliefs on private agency, market efficiency and individual liberties (Hall 1986, 1993). As Hall puts it nicely, "policymakers customarily work within a framework of ideas and standards that specifies not only the goals of policy and the kinds of instruments that can be used to attain them, but also the very nature of the problems they are meant to be addressing" (1993, p.279) - an interpretative framework he labels a 'policy paradigm'. Therefore, in order to understand partisan agency in the policy-making process, we should substitute a more complex notion of 'policy paradigms' or 'political platforms' for the too narrow concept of interests. Employing the former, theoretical progress could be made by examining their underlying sets of worldviews, ideologies, material interests, and instrumental economic theories; how they are interconnected; and how politicians may employ them to win elections and govern.

Second, in devolving to parties a preeminent role in policy-making, we were tacitly identifying them as the main agents of policy change and political dynamism in democratic systems. It is true that, broadly understood, the central divide between Left and Right, between the proponents of individual freedom and spontaneous coordination and the defenders of public intervention, has been a constant feature of partisan politics in most contemporary polities. At the same time, however, there has been a historical process in which the specific traits of political platforms have been altered, basic tenets of previous political programs have been removed and substantially new proposals have been added. We referred briefly to this process in the first part of our conclusions. Two brief comments are in order here. On the one hand, change can be better understood once we use the construct of 'policy paradigms' or 'partisan platforms'. On the other hand, change is mostly a process driven by electoral competition.

Changes in political platforms take place as the result of a process of 'political learning' through which parties react to new political conditions and attempt to make strategic choices to muster enough votes to win the election. In most cases, electoral defeats (or its threat) triggers within parties a process of programmatic renewal to gain credibility and to attract new constituencies. Parties attribute their incapacity to win to changed social conditions (e.g. the decline of their working-class base), to repeated policy mistakes which derive from following incorrect policy paradigms (e.g. using Keynesian countercyclical policies alone in an interdependent world) or to excessive internal polarization in their programs that scare away critical moderate votes. It is then when party elites engage in internal renovation and gamble on (partially) new ideas to restore a lost hegemony.

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Table 1. Political Parties and Public Investment in the Sixties.

(A) Dependent Variable: Average Public Investment as a Percentage of GDP in 1969-1972 - in all OECD countries[a]

	(1)	(2)	(3)	(4)	(5)
Constant	3.553^	3.398^	3.506^	3.202^	3.454^
	(0.273)	(0.461)	(0.299)	(0.299)	(0.301)
Log (Socialist Control 1960-72)	0.310^	0.278^			0.136
	(0.103)	(0.110)			(0.172)
Corporatism			1.694^	1.669^	1.090
			(0.565)	(0.578)	(0.954)
Per Capita Income in 1965 (every $ 1,000)		0.032		0.051	
		(0.076)		(0.080)	
R^2	0.310	0.317	0.359	0.376	0.385
Corr. R^2	0.271	0.236	0.319	0.293	0.303
D-W St.	2.100	2.088	1.914	1.951	2.134
No. Obs.	20	20	18[b]	18[b]	18[b]

(B) Dependent Variable: Average Public Investment as a Percentage of GDP in 1969-1972 - excluding Japan.

	(1)	(2)	(3)	(4)	(5)
Constant	3.405^	3.206^	3.329^	2.825^	3.245^
	(0.276)	(0.454)	(0.290)	(0.048)	(0.297)
Log (Socialist Control 1960-72)	0.333^	0.316^			0.179
	(0.101)	(0.108)			(0.160)
Corporatism			1.948^	1.939^	1.176
			(0.550)	(0.547)	(0.879)
Per Capita Income in 1965 (every $ 1,000)		0.041		0.081	
		(0.073)		(0.075)	
R^2	0.389	0.406	0.456	0.498	0.500
Corr. R^2	0.353	0.331	0.419	0.426	0.429
D-W St.	2.172	2.148	1.973	2.101	2.331
No. Obs.	19	19	17[b]	17[b]	17[b]

(C) Dependent Variable: Average Public Investment as a Percentage of Total Investment in 1969-1972 - all OECD countries[a].

	(1)	(2)	(3)	(4)	(5)
Constant	15.156^	14.279^	15.118^	12.687^	15.742^
	(0.772)	(1.421)	(1.211)	(2.255)	(1.011)
Socialist Control 1960-72	9.062^	8.528^			0.142
	(2.171)	(2.315)			(0.172)
Corporatism			5.774^	5.573^	-4.847
			(2.363)	(2.324)	(4.041)
Per Capita Income in 1965 (every $ 1,000)		0.018		0.041	
		(0.024)		(0.032)	
R^2	0.492	0.508	0.272	0.342	0.544
Corr. R^2	0.463	0.450	0.226	0.255	0.483
D-W St.	1.874	2.111	1.592	2.132	2.082
No. Obs.	20	20	18[b]	18[b]	18[b]

[a] All OECD countries over 1 million countries except New Zealand, for which data on general government fixed capital formation is not available, and Turkey.

[b] There is no data for Greece and Portugal in the corporatism index -built by Cameron ((1984)- used here.

Standard errors in parenthesis.
^ Statistically significant at .05 or less.
^^ Statistically significant at .10 or less.

Socialist Control 1960-72: National average of the percentage of cabinet portfolios held by Socialist and Communist parties from 1960 to 1972. Except when logged, index goes from 0 (no control) to 1 (absolute control). Source: Lane et al. (1991).

Corporatism: The index of corporatism follows Cameron (1984) and goes from 0 to 1.

Table 2. Political Parties and Public Investment in the Seventies.

(A) Dependent Variable: Average Public Investment as a Percentage of GDP in 1979-1980 - all OECD countries[a].

	(1)	(2)	(3)	(4)	(5)
Constant	3.001^	3.261^	2.925^	3.431^	2.994^
	(0.398)	(0.750)	(0.398)	(0.942)	(0.459)
Log (Socialist Control 1973-80)	0.122	0.122			-0.077
	(0.127)	(0.130)			(0.229)
Corporatism			0.948	1.029	1.273
			(0.760)	(0.788)	(1.243)
Per Capita Income in 1975 (every $ 1,000)		-0.034		-0.067	
		(0.085)		(0.113)	
R^2	0.052	0.062	0.094	0.117	0.101
Corr. R^2	0.004	-0.056	0.034	-0.010	0.027
D-W St.	2.099	2.224	1.828	2.065	1.728
No. of Obs.	19	19	17[b]	17[b]	17[b]

(B) Dependent Variable: Average Public Investment as a Percentage of GDP in 1979-1980 - excluding Japan.

	(1)	(2)	(3)	(4)	(5)
Constant	2.444^	2.738^	2.437^	2.971^	2.320^
	(0.265)	(0.464)	(0.244)	(0.528)	(0.284)
Log (Socialist Control 1973-80)	0.268^	0.268^			0.110
	(0.082)	(0.083)			(0.133)
Corporatism			1.631^	1.718^	1.194
			(0.451)	(0.453)	(0.698)
Per Capita Income in 1975 (every $ 1,000)		-0.040		-0.071	
		(0.051)		(0.063)	
R^2	0.399	0.422	0.483	0.530	0.509
Corr. R^2	0.361	0.345	0.446	0.457	0.433
D-W St.	2.005	2.356	1.127	1.578	1.450
No. of Obs.	18	18	16[b]	16[b]	16[b]

(C) Dependent Variable: Average Public Investment as a Percentage of Total Investment in 1979-1980 - all OECD countries[a].

	(1)	(2)	(3)	(4)	(5)
Constant	12.439^	12.421^	11.902^	13.644^	11.862^
	(0.985)	(2.041)	(1.097)	(2.580)	(1.143)
Socialist Control 1973-80	5.250^	5.248^			0.901
	(2.048)	(2.119)			(3.319)
Corporatism			6.264^	6.544^	5.561
			(2.094)	(2.158)	(3.374)
Per Capita Income in 1975 (every $ 1,000)		0.002		-0.023	
		(0.025)		(0.031)	
R^2	0.279	0.279	0.374	0.398	0.377
Corr. R^2	0.236	0.189	0.332	0.312	0.288
D-W St.	2.372	1.983	1.673	1.859	1.653
No. of Obs.	19	19	17[b]	17[b]	17[b]

[a] All OECD countries over 1 million countries except New Zealand and Switzerland for which no data on general government fixed capital formation is available, and Turkey.

[b] There is no data for Greece and Portugal in the corporatism index -built by Cameron ((1984)- used here.

Standard errors in parenthesis.
^ Statistically significant at .05 or less.
^^ Statistically significant at .10 or less.

Socialist Control 1973-80: National average of the percentage of cabinet portfolios held by Socialist and Communist parties from 1973 to 1980. Index goes from 0 (no control) to 1 (absolute control). Source: Lane et al. (1991).

Corporatism: The index of corporatism follows Cameron (1984) and goes from 0 to 1.

Table 3. Political Parties and Public Investment in the Eighties.

(A) Dependent Variable: Average Public Investment as a Percentage of GDP in 1988-1990 - all OECD countries[a].

	(1)	(2)	(3)	(4)	(5)
Constant	2.417^	2.744^	2.900^	3.273^	2.523^
	(0.403)	(0.843)	(0.382)	(0.878)	(0.455)
Log (Socialist Control 1982-90)	0.168	0.144			0.222
	(0.128)	(0.142)			(0.156)
Corporatism			-0.206	-0.134	-0.690
			(0.729)	(0.763)	(0.783)
Per Capita Income in 1985 (every $ 1,000)		-0.028		-0.040	
		(0.064)		(0.085)	
R^2	0.092	0.103	0.005	0.002	0.131
Corr. R^2	0.038	-0.009	0.060	-0.118	0.007
D-W St.	1.741	1.846	1.502	1.646	1.726
No. Obs.	19	19	17[b]	17[B]	17[b]

(B) Dependent Variable: Average Public Investment as a Percentage of GDP in 1988-1990 - except Japan.

	(1)	(2)	(3)	(4)	(5)
Constant	1.777^	2.015^	2.564^	3.186^	1.824^
	(0.289)	(0.562)	(0.339)	(0.710)	(0.321)
Log (Socialist Control 1982-90)	0.342^	0.324^			0.374^
	(0.089)	(0.098)			(0.103)
Corporatism			0.264	0.411	-0.405
			(0.628)	(0.645)	(0.495)
Per Capita Income in 1985 (every $ 1,000)		-0.020		-0.069	
		(0.041)		(0.069)	
R^2	0.478	0.487	0.013	0.083	0.510
Corr. R^2	0.446	0.418	-0.058	-0.059	0.435
D-W St.	1.900	1.972	1.563	1.780	1.912
No. Obs.	18	18	16[b]	16[b]	16[b]

(C) Dependent Variable: Average Public Investment as a Percentage of Total Investment in 1988-1990 - all OECD countries[a].

	(1)	(2)	(3)	(4)	(5)
Constant	11.056^	12.228^	13.026^	15.194^	11.955^
	(0.750)	(1.769)	(1.175)	(2.643)	(0.923)
Socialist Control 1982-90	6.061^	5.689^			7.037^
	(1.673)	(1.770)			(1.944)
Corporatism			-0.732	-0.317	-3.184^^
			(2.243)	(2.299)	(1.801)
Per Capita Income in 1985 (every $ 1,000)		-0.011		-0.023	
		(0.016)		(0.025)	
R^2	0.436	0.454	0.007	0.006	0.487
Corr. R^2	0.403	0.386	-0.059	-0.007	0.414
D-W St.	1.315	1.254	1.399	1.643	1.047
No. Obs.	19	19	17[b]	17[b]	17[b]

[a] All OECD countries over 1 million countries except New Zealand and Switzerland for which no data on general government fixed capital formation is available, and Turkey.

[b] There is no data for Greece and Portugal in the corporatism index -built by Cameron ((1984)- used here.

Standard errors in parenthesis.
^ Statistically significant at .05 or less.
^^ Statistically significant at .10 or less.

Socialist Control 1982-1990: National average of the percentage of cabinet portfolios held by Socialist and Communist parties from 1982 to 1990. For USA, control of executive office. Index goes from 0 (no control) to 1 (full control). Source: Lane et al. (1991) and own calculations based on data compiled from **Keesing's Contemporary Archives**.

Corporatism: The index of corporatism follows Cameron (1984) and goes from 0 to 1.

Table 4. A Cross-National Time-Series Examination of Public Investment as a Percentage of Gross Domestic Product (1961-90).[1]

	(1)	(2)	(3)	(4)	(5)
$(PI/GDP)_{t-1}$	1.071^	1.076^	1.070^	1.065^	1.065^
	(0.044)	(0.045)	(0.045)	(0.045)	(0.045)
$(PI/GDP)_{t-2}$	-0.226^	-0.226^	-0.217^	-0.216^	-0.218^
	(0.044)	(0.044)	(0.045)	(0.044)	(0.044)
Socialist Control$_t$	0.102^	0.140^	0.105^	-0.015	0.024
	(0.044)	(0.045)	(0.044)	(0.076)	(0.070)
Net Lending$_{t-1}$		0.025^			
		(0.008)			
Socialist Control * Net Lending$_{t-1}$		0.008			
		(0.010)			
Real Change in GDP$_{t-1}$			0.018^	0.007	0.007
			(0.009)	(0.010)	(0.010)
Socialist Control * Real Change in GDP$_{t-1}$				0.038^	
				(0.019)	
Socialist Control * Real **Positive** Change in GPD$_{t-1}$					0.040^
					(0.019)
Difference in GDP growth from t-2 to t-1			-0.013^	-0.006	-0.006
			(0.006)	(0.008)	(0.007)
Soc. * Diff. in GDP growth from t-2 to t-1				-0.026^^	
				(0.016)	
Socialist * Diff. in GDP growth from t-2 to t-1 only when the difference is **positive** (i.e. GDP$_{t-1}$ > GDP$_{t-2}$)					-0.047^
					(0.023)
Real GDP per capita (Every $ 1,000)	-0.043^	-0.068^	-0.045^	-0.047^	-0.048^
	(0.015)	(0.016)	(0.016)	(0.016)	(0.016)
1960-73	0.025	-0.056	-0.010	-0.007	-0.013
	(0.045)	(0.052)	(0.050)	(0.049)	(0.049)
1982-90	-0.030	0.080	-0.003	-0.002	-0.010
	(0.043)	(0.050)	(0.045)	(0.045)	(0.045)

R^2	0.921	0.930	0.922	0.923	0.923
Corr. R^2	0.918	0.926	0.918	0.918	0.918
Durbin-Watson	1.998	1.987	2.001	2.024	2.024
No. of Obs.	520	493	510	510	510

Standard error within parenthesis.
^ Statistically significant at .05 or less.
^^ Statistically significant at .10 or less.

[1] The estimated regression includes country fixed effects that are not reported in the table.

Table 5. A Cross-National Time-Series Examination of Public Investment as a Percentage of Total Investment (1961-90).[1]

	(1)	(2)	(3)	(4)	(5)
$(PI/Total\ I)_{t-1}$	1.006^	1.036^	0.994^	0.995^	0.994^
	(0.045)	(0.049)	(0.047)	(0.047)	(0.047)
$PI/Total\ I)_{t-2}$	-0.184^	-0.197^	-0.170^	-0.172^	-0.171^
	(0.046)	(0.047)	(0.046)	(0.046)	(0.046)
Socialist Control$_t$	0.581^	0.576^	0.616^	0.360	0.482
	(0.219)	(0.228)	(0.220)	(0.375)	(0.346)
Net Lending$_{t-1}$		0.138^			
		(0.039)			
Socialist Control * Net Lending$_{t-1}$		-0.045			
		(0.050)			
Real Change in GDP$_{t-1}$			-0.013	-0.034	-0.041
			(0.044)	(0.051)	(0.050)
Socialist Control * Real Change in GDP$_{t-1}$				0.077	
				(0.094)	
Socialist Control * Real **Positive** Change in GDP$_{t-1}$					0.116
					(0.094)
Difference in GDP growth from t-2 to t-1			-0.077^	-0.046	-0.039
			(0.032)	(0.040)	(0.036)

Soc. * Diff. in GDP growth from t-2 to t-1				-0.101 (0.076)	
Soc. * Diff in GDP growth from t-2 to t-1 only when the difference is **positive** (i.e. $GDP_{t-1} > GDP_{t-2}$)					-0.244^ (0.110)
Real GDP per capita (Every $ 1,000)	-0.224^ (0.074)	-0.330^ (0.080)	-0.210^ (0.076)	-0.212^ (0.076)	-0.219^ (0.076)
1960-73	-0.013 (0.222)	-0.432 (0.264)	0.065 (0.245)	0.066 (0.245)	0.036 (0.245)
1982-90	0.064 (0.205)	0.512 (0.243)	0.085 (0.216)	0.083 (0.217)	0.043 (0.217)
R^2	0.856	0.865	0.859	0.859	0.860
Corr. R^2	0.849	0.857	0.851	0.851	0.852
Durbin-Watson	1.969	1.978	1.994	2.002	2.004
No. of Obs.	514	487	504	504	504

Standard error within parenthesis.
^ Statistically significant at .05 or less.
^^ Statistically significant at .10 or less.

[1] The estimated regression includes country fixed effects that are not reported in the table.

Table 6. Public Effort on Education in the Sixties.

Dependent Variable:	Public Expenditure on Education (As a % of GDP) / Percentage Population under Twenty in 1970				
	(1)	(2)	(3)	(4)	(5)
Constant	0.122^	0.155^	0.128^	0.144^	0.132^
	(0.013)	(0.022)	(0.016)	(0.025)	(0.016)
Socialist Control 1960-69	0.135^	0.123^			0.092
	(0.037)	(0.036)			(0.064)
Corporatism			0.086^	0.087^	0.020
			(0.032)	(0.032)	(0.055)
% Active Population Employed in Agriculture in 1965		-0.0015^^		-0.0008	
		(0.0008)		(0.0010)	
R^2	0.414	0.505	0.311	0.342	0.395
Corr. R^2	0.383	0.450	0.268	0.254	0.315
D-W.	1.608	1.746	1.980	1.952	2.116
No of Obs.	21	21	18[a]	18[a]	18[a]

[a] There is no data for Greece and Portugal in the corporatism index -built by Cameron ((1984)- used here.

Standard errors in parenthesis.
^ Statistically significant at .05 or less.
^^ Statistically significant at .10 or less.

Data on socialist control refers to national average of the percentage of cabinet portfolios held by Socialist and Communist parties for each period. Index goes from 0 to 1. Source: Lane et al. (1991) and own calculations based on data compiled from **Keesing's Contemporary Archives**.

Corporatism: The index of corporatism follows Cameron (1984) and goes from 0 to 1.

Table 7. Public Effort on Education in the Seventies.

Dependent Variable: Public Expenditure on Education (As a % of GDP) / Percentage Population under Twenty in 1979-80

	(1)	(2)	(3)	(4)	(5)
Constant	0.153^	0.212^	0.151^	0.193^	0.151^
	(0.016)	(0.021)	(0.016)	(0.023)	(0.016)
Socialist Control 1970-79	0.087^	0.057^^			-0.001
	(0.038)	(0.031)			(0.001)
Corporatism			0.102^	0.088^	0.143^
			(0.031)	(0.028)	(0.055)
% Active Population Employed in Agriculture in 1978		-0.004^		-0.004^	
		(0.001)		(0.002)	
R^2	0.217	0.526	0.403	0.556	0.434
Corr. R^2	0.175	0.473	0.366	0.496	0.358
D-W	1.986	2.245	2.096	1.879	1.994
No. of Obs.	21	21	18[a]	18[a]	18[a]

[a] There is no data for Greece and Portugal in the corporatism index -built by Cameron ((1984)- used here.

Standard errors in parenthesis.
^ Statistically significant at .05 or less.
^^ Statistically significant at .10 or less.

Data on socialist control refers to national average of the percentage of cabinet portfolios held by Socialist and Communist parties for each period. Index goes from 0 to 1. Source: Lane et al. (1991) and own calculations based on data compiled from **Keesing's Contemporary Archives**.

Corporatism: The index of corporatism follows Cameron (1984) and goes from 0 to 1.

Table 8. Public Effort on Education in the Eighties.

(A) Dependent Variable:	Public Expenditure on Education (As a % of GDP) / Percentage Population under Twenty in 1988-90				
	(1)	(2)	(3)	(4)	(5)
Constant	0.197^	0.232^	0.172^	0.197^	0.174^
	(0.018)	(0.017)	(0.014)	(0.024)	(0.015)
Socialist Control 1980-90	0.014	0.067^^			-0.015
	(0.044)	(0.036)			(0.039)
Corporatism			0.099^	0.092^	0.105^
			(0.026)	(0.027)	(0.031)
% Active Population Employed in Agriculture in 1988		-0.006^		-0.004	
		(0.002)		(0.003)	
R^2	0.005	0.448	0.466	0.517	0.471
Corr. R^2	-0.047	0.387	0.433	0.453	0.400
D-W	1.869	1.771	1.735	1.687	1.759
No of Obs.	21	21	18[a]	18[a]	18[a]

(B) Dependent Variable:	Relative Change in (Public Expenditure on Education As a % of GDP/ Percentage Population under 20) from 1979-80 to 1988-90.			
	(1)	(2)	(3)	(4)
Constant	3.037	60.153^	71.599^	67.516^
	(9.723)	(17.481)	(30.370)	(24.774)
Socialist Control 1980-90	47.962^	42.315^	46.834^	59.473^
	(23.361)	(18.309)	(21.082)	(25.717)
Corporatism				-3.383
				(26.638)
Public Effort in Education in 1980		-308.078^	-351.215^	-357.218^
		(84.932)	(126.904)	(144.091)
% Active Population Employed in Agriculture in 1988			-0.623	
			(1.336)	
R^2	0.182	0.527	0.533	0.583
Corr. R^2	0.138	0.475	0.451	0.493
D-W	2.130	1.640	1.532	1.462

No of Obs.	21	21	21	18[a]

[a] There is no data for Greece and Portugal in the corporatism index -built by Cameron ((1984)- used here.

Standard errors in parenthesis.
^ Statistically significant at .05 or less.
^^ Statistically significant at .10 or less.

Data on socialist control refers to national average of the percentage of cabinet portfolios held by Socialist and Communist parties for each period. Index goes from 0 to 1. Source: Lane et al. (1991) and own calculations based on data compiled from **Keesing's Contemporary Archives**.

Corporatism: The index of corporatism follows Cameron (1984) and goes from 0 to 1.

Public Effort on Education in 1980: Public Expenditure on Education (As a Percentage of GDP) Over Percentage Population under Twenty in 1979-80.

Table 9. Active Labor Market Policies in the Mid Eighties.

Dependent Variable: Public expenditure in manpower policies in the mid eighties.

	(1)	(2)	(3)	(4)	(5)
Constant	0.493^	0.550^	0.442^	0.370	0.439^
	(0.134)	(0.235)	(0.307)	(0.283)	(0.174)
Socialist Control	0.835^	0.795^			-0.113
in 1960-79	(0.357)	(0.390)			(0.830)
Corporatism			0.778^	0.800^	0.864
			(0.328)	(0.345)	(0.722)
% Population Employed		-0.004		0.007	
in Agriculture in 1978		(0.014)		(0.021)	
R^2	0.224	0.228	0.260	0.265	0.261
Corr. R^2	0.183	0.142	0.214	0.167	0.163
D-W.	2.571	2.526	2.392	2.465	2.358
No. of Obs.	21	21	18[a]	18[a]	18[a]

[a] There is no data for Greece, New Zealand and Portugal in the corporatism index -built by Cameron ((1984)- used here.

Standard errors in parenthesis.
^ Statistically significant at .05 or less.
^^ Statistically significant at .10 or less.

Data on socialist control refers to national average of the percentage of cabinet portfolios held by Socialist and Communist parties for each period. Index goes from 0 to 1. Source: Lane et al. (1991) and own calculations based on data compiled from **Keesing's Contemporary Archives**.

Corporatism: The index of corporatism follows Cameron (1984) and goes from 0 to 1.

Table 10. Evolution in Manpower Policies in the Late Eighties.

Dependent Variable: Relative Change in Expenditure in Manpower Policies from 1985 to 1990.

	(1)	(2)	(3)	(4)	(5)
Constant	-0.491	0.529	3.825	-1.591	-5.246
	(2.541)	(3.113)	(3.338)	(3.911)	(4.281)
Socialist Control	11.808^	15.223^	12.845^	13.911^	10.033^
in 1985-90	(5.179)	(6.492)	(4.908)	(4.485)	(4.820)
Corporatism		-6.432			
		(6.407)			
Level of expenditure			-6.591^^	-7.446^	-4.763
in manpower policies in 1985			(3.555)	(3.253)	(3.461)
Level of unemployment in 1985				0.688^	0.541^^
				(0.314)	(0.310)
% Population Employed					0.521^^
in Agriculture in 1988					(0.305)
R^2	0.215	0.268	0.341	0.486	0.565
Corr. R^2	0.174	0.171	0.267	0.395	0.457
D-W.	2.008	1.942	1.652	1.660	2.380
No. of Obs.	21	18[a]	21	21	21

[a] There is no data for Greece, New Zealand and Portugal in the corporatism index -built by Cameron ((1984)- used here.

Standard errors in parenthesis.
^ Statistically significant at .05 or less.
^^ Statistically significant at .10 or less.

Data on socialist control refers to national average of the percentage of cabinet portfolios held by Socialist and Communist parties for each period. Index goes from 0 to 1. Source: Lane et al. (1991) and own calculations based on data compiled from **Keesing's Contemporary Archives**.

Corporatism: The index of corporatism follows Cameron (1984) and goes from 0 to 1.

Table 11. Political Parties and Tax Rates in 1979/80.

(A) Dependent Variable:	Effective Tax Rate on Income Five Times the "Average Production Worker"'s Wage				
	(1)	(2)	(3)	(4)	(5)
Constant	30.325^ (3.186)	30.096^ (6.579)	29.091^ (3.789)	31.889^ (8.886)	29.273^ (3.875)
Socialist Control 1960-75	41.400^ (8.594)	41.283^ (9.300)			12.657 (20.266)
Corporatism			33.867^ (7.394)	34.160^ (7.652)	24.284 (17.096)
Real GDP per capita in 1975 (every $ 1,000)		-0.034 (0.085)		-0.353 (1.007)	
R^2	0.550	0.550	0.567	0.571	0.578
Corr. R^2	0.526	0.500	0.540	0.514	0.522
D-W St.	1.871	1.874	2.419	2.393	2.316
No. Observations	21	21	18[a]	18[a]	18[a]

(B) Dependent Variable:	Effective Tax Rage on Income Ten Times the "Average Production Worker"'s Wage				
	(1)	(2)	(3)	(4)	(5)
Constant	39.410^ (3.204)	42.248^ (6.571)	37.288^ (4.148)	40.340^ (9.713)	37.510 (8.886)
Socialist Control in 1960-75	36.261^ (8.643)	37.714^ (9.290)			15.455 (22.079)
Corporatism			30.997^ (8.082)	31.317^ (8.364)	19.295 (18.626)
Real GDP per capita in 1975 (every $ 1,000)		-0.423 (0.849)		-0.385 (1.100)	
R^2	0.481	0.488	0.479	0.483	0.495
Corr. R^2	0.454	0.431	0.446	0.414	0.428
D-W St.	2.364	2.282	2.836	2.761	2.728
No. Observations*	21	21	18[a]	18[a]	18[a]

[a] Greece, New Zealand and Portugal are here excluded from the sample because they are not included in index of corporatism -built by Cameron ((1984)- used here.

Standard errors in parenthesis.
^ Statistically significant at .05 or less.

Socialist Control: Proportion of cabinet portfolios held by Socialist and Communist parties from 1960 to 1975. Index goes from 0 to 1. Own calculations based on Lane et al. (1991).

Corporatism: The index of corporatism follows Cameron (1984) and goes from 0 to 1.

Table 12. Political Parties and Tax Reform in the Eighties.

(A) Dependent Variable:	Relative Change (from 1980 to 1990) in the Effective Tax Rate on any Income Five Times the Salary of an Average Production Worker			
	(1)	(2)	(3)	(4)
Constant	-12.765	43.804^	17.824	61.957^
	(8.290)	(15.546)	(13.920)	(20.978)
Socialist control	39.912^	36.991^	43.530^	
in 1980-90	(19.918)	(15.398)	(15.216)	
Corporatism				13.221
				(19.713))
Eff. Tax Rate		-0.886^	-0.964^	-0.871^
on 5 * APW in 1980		(0.274)	(0.280)	(0.435)
Real GDP per capita		-2.246^^		-3.484^
in 1980 (every $ 1,000)		(1.284)		(1.548)
Annual Change in Total Factor			5.987^^	
Productivity in 1973-79			(3.203)	
R^2	0.174	0.590	0.598	0.428
Corr. R^2	0.131	0.512	0.522	0.306
D-W St.	2.269	2.298	2.395	1.453
No. Observations	21	21	20[a]	18[b]

(B) Dependent Variable:	Relative Change (from 1980 to 1990) in the Effective Tax Rate on any Income Ten Times the Salary of an Average Production Worker			
	(1)	(2)	(3)	(4)
Constant	-19.578^ (6.565)	22.275 (16.959)	9.007 (12.691)	71.017^ (20.090)
Socialist control in 1980-1990	35.004^ (15.774)	32.779^ (14.150)	32.465^ (11.150)	
Corporatism				20.937 (15.944)
Eff. tax rate on 10 * APW in 1980		-0.698^ (0.265)	-0.733^ (0.225)	-1.033^ (0.353)
Real GDP per capita in 1980 (every $ 1,000)		0.825 (1.116)		-3.755^ (1.374)
Annual Change in Total Factor Productivity in 1973-79			6.877^ (2.474)	
R^2	0.206	0.460	0.633	0.531
Corr. R^2	0.164	0.365	0.564	0.431
D-W St.	2.318	2.253	2.155	1.110
No. Observations	21	21	20[a]	18[b]

[a] Data on Annual Change in Total Factor Productivity in the seventies was not available for Portugal.

[b] Greece, New Zealand and Portugal are here excluded from the sample because they are not included in index of corporatism -built by Cameron ((1984)- used here.

Standard errors in parenthesis.
^ Statistically significant at .05 or less.

Socialist control: Proportion of cabinet portfolios held by Socialist and Communist parties from 1980 to 1990. Index goes from 0 to 1. For USA, control of executive office. Own calculations based on data from Lane et al (191) and data compiled from **Keesing's Contemporary Archives**.

Total Factor Productivity. Data from OECD, **Economic Outlook**, vol. 42.

Corporatism: The index of corporatism follows Cameron (1984) and goes from 0 to 1.

Table 13. Effective Tax Rates in 1980 and 1990: A Simulation Exercise.

(A) Fitted Values of Effective Tax Rate in 1990 According to the Equation Reported in Table 12 (A), column 2.

	Per capita income of $ 5,000		Per capita income of $ 10,000	
	Socialist government	Conservative government	Socialist government	Conservative government
Effective tax rate in 1980:				
20	30.4	23.0	28.1	20.7
40	53.6	38.9	49.2	34.3
60	69.8	47.6	63.1	40.9
80	78.9	49.4	70.0	40.4

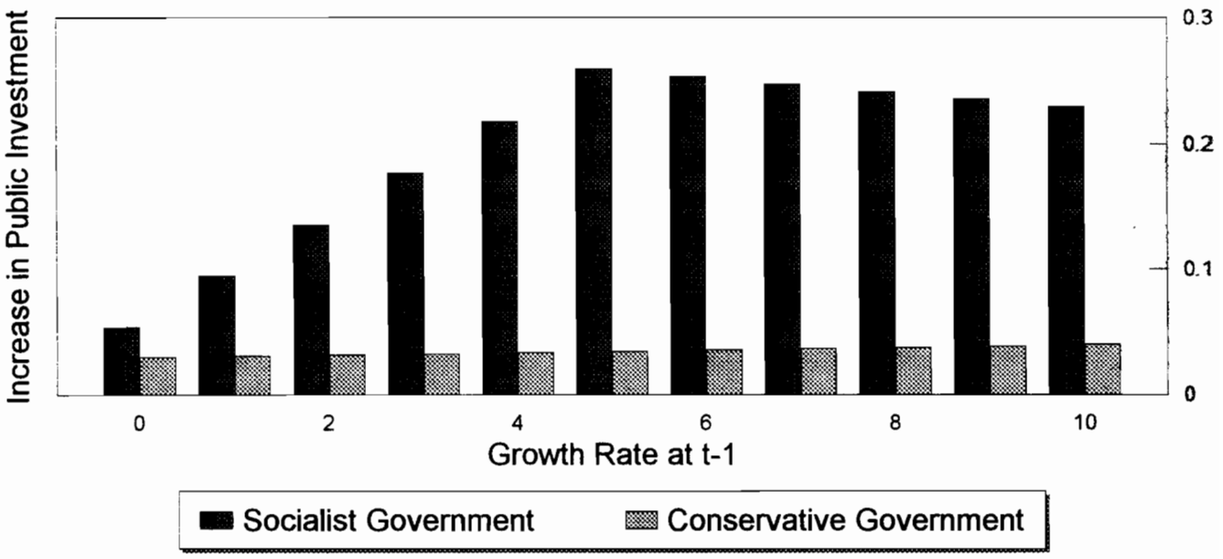
(B) Fitted Values of Effective Tax Rate in 1990 According to the Equation Repported in Table 12 (A), column 3.

	TFP = - 2 %		TFP = 0 %		TFP = 2 %	
	Socialist government	Conserv. government	Socialist government	Conserv. government	Socialist government	Conserv. government
Effective tax rate in 1980						
20	26.0	17.3	28.4	19.7	30.8	22.1
40	44.3	26.9	49.1	31.7	53.9	36.5
60	54.9	28.8	62.1	36.0	69.3	43.2
80	57.8	23.0	67.4	32.6	77.0	42.1

TFP: Annual Change in Total Factor Productivity from 1973 to 1979.

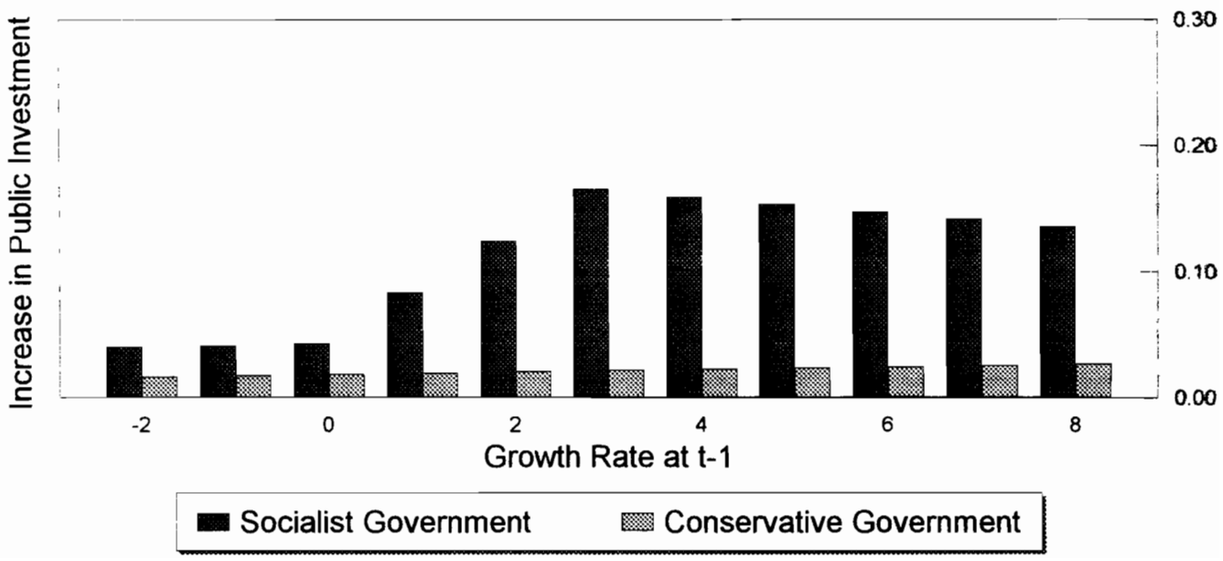
Graph 1A

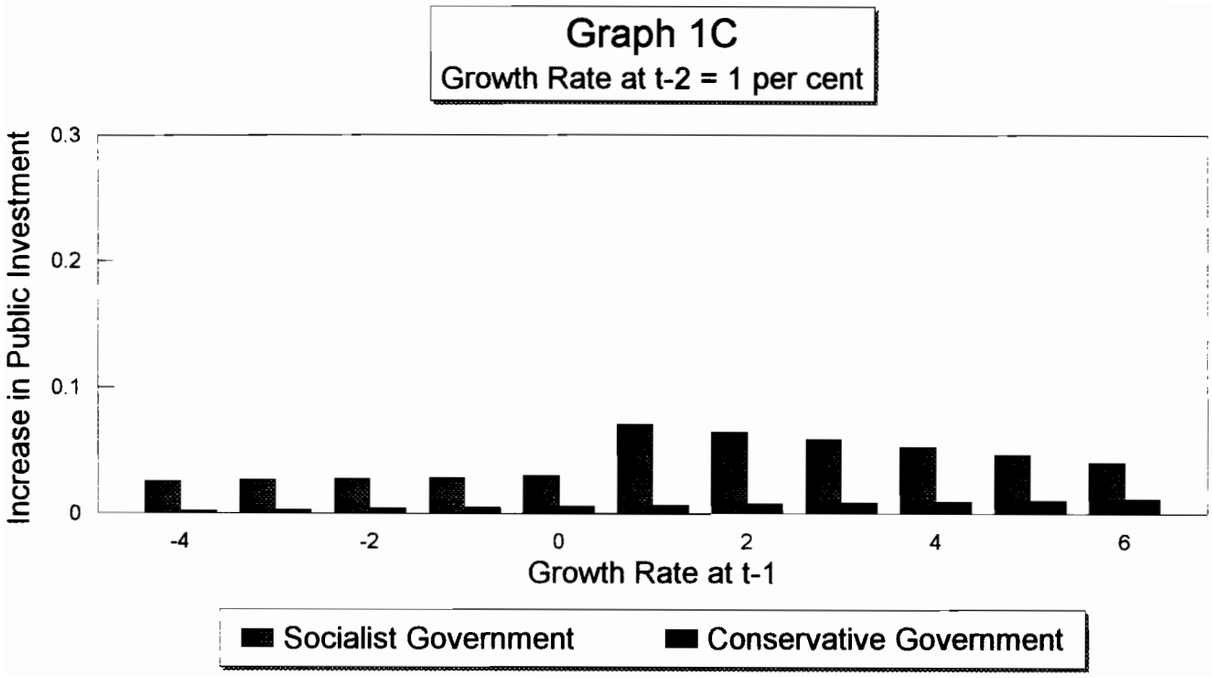
Growth Rate at t-2 = 5 per cent



Graph 1B

Growth Rate at t-2 = 3 per cent




Graph 1C
Growth Rate at t-2 = 1 per cent
Increase in Public Investment
0.3
0.2
0.1
0
-4
-2
0
2
4
6
Growth Rate at t-1
Socialist Government
Conservative Government

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