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**Democratic governments, economic growth
and income distribution**

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Il y avait déjà longtemps que le comte Mosca était de retour à Parme, comme premier ministre, plus puissant que jamais... Les prisons de Parme étaient vides, le comte immensément riche, Ernest V adoré de ses sujets qui comparaient son gouvernement à celui des grands-ducs de Toscane (Stendhal).

1. Introduction

That in democracies more inequality leads to more redistribution is an implication of Allan Meltzer and Scott Richard's well-known model (1981).¹ That, in turn, more redistribution leads to less growth is a generally accepted proposition. That "inequality is harmful for growth" (Persson and Tabellini, 1994) is thus the predictable result of the introduction of policy-making à la Meltzer and Richard into the theory of growth. The small literature in which such introduction has been attempted includes contributions by Alberto Alesina, Giuseppe Bertola, Roberto Perotti, Thornsten Persson, Dani Rodrik, Gilles Saint-Paul, Guido Tabellini and Thierry Verdier. Short surveys are provided by Perotti (1992), Persson and Tabellini (1992b) and Verdier (1994). The proposition that inequality of income or wealth, measured at one point of time, has a negative influence on subsequent growth is derived by all these authors with the exception of Saint-Paul and Verdier (1993), and some empirical support for it is displayed in Alesina and Rodrik (1992, 1994) and in Persson and Tabellini (1992a, 1994).

For these two pairs of contributors - and, with qualifications, in some of the articles of the others (Bertola, 1993; Perotti, 1993) - the causality is the following: inequality of income or wealth generates, through a political mechanism identical or analogous to the one proposed by Meltzer and Richard, redistributive policies (e.g. taxes and transfers) that are unfavourable to investment (tangible investment and/or investment in human capital), hence to economic growth (see Figure 1). In the simplest models (Persson and Tabellini, 1992a), collective policy-making consists in fixing the rate of a linear income tax and redistributing the proceeds of that tax equally to all individuals. The only issue is the tax rate, voter preferences are single-peaked, and the median voter sets the policy according to his or her own cost-benefit calculation. This is modelled as the maximisation of a utility function whose form ensures

¹ For a critical discussion of Meltzer and Richard, see, e.g., Mueller (1989), Brosio and Marchese (1993), Winer and Rutherford (1993).

that the income distribution and consequently the identity of the median voter remain the same in the future.² The larger the distance between the median income and the average income, the higher the tax rate and larger the transfer which the median voter chooses. The higher the tax rate, the lower the after tax return of individual investments and thus the level of aggregate investment. The lower the latter, the smaller the rate of growth. In the somewhat more complicated model of Alesina and Rodrik (1994), among other differences, the proceeds of taxes are used for the production of public goods favourable to growth as well as for transfers. But the basic logic remains the same: the net effect of taxes (and underlying that, of inequality) on investment is negative.

[Insert Figure 1 about here]

As noted, Alesina and Rodrik (1992, 1994) and Persson and Tabellini (1992, 1994) present empirical work which, they argue, supports the predictions of their models. But, whatever confirmation they can claim to find in the data only applies to the reduced-form relation between inequality at one point of time and subsequent growth. To say the least, the regressions do not confirm the intermediary relations which are necessary components of the causal chain spelled out above. Indeed, the findings reported in Perotti (1994) are that a more equal distribution of income leads to more (not less) transfers and that more transfers results in more (not less) investment.

Both Perotti (1994) and Thomas Piketty (1995) consider this evidence as casting serious doubts on the approach summarised above - especially since the negative relation between inequality and investment or growth can be explained by other factors or mechanisms than the ones borrowed from Meltzer and Richard.³

² There is thus something in the approach discussed here which reminds one of Tocqueville's famous distinction between the effects of equality and of the attempts to reduce inequality. Jon Elster (1991, p. 279) writes: "From a political perspective, the distinction between transitional effects and equilibrium effects is perhaps the central idea in Democracy in America. Tocqueville wanted his compatriots to understand the distinction between the often disruptive effects of equalization and the much less dangerous effects of equality". However, in the approach discussed in the text, redistributive policies do not as a rule produce more equality.

³ One approach which does not bring us too far astray from the foregoing involves "socio-political instability" - a composite variable which is increased by inequality in the distribution of income and which affects negatively

There is an additional reason not to claim too much for what has been achieved so far.⁴ On the basis of empirical work, it is a moot point whether the nature of the political regime plays a role in the relationship. Is democracy an important variable or condition? Or, in spite of their finding their inspiration in Meltzer and Richard, is the reference to it in the models merely convenient as an explanatory device? Persson and Tabellini (1992a, 1994), as well as Alesina and Rodrik (1992), find the democratic character of a country to be empirically significant, whereas Alesina and Rodrik (1994) do not any more, and thus argue that the reference to it in their theoretical reasoning should not be interpreted literally.

If it is clear to all that we are still at a very early stage of the reflection on the relationship between inequality and growth and about the way political variables, and especially the democratic nature of the political regime, might play a role in it. This has a pleasant consequence. It allows us to explore new possibilities or lines of research in as informal and unempirical a way as we wish, provided we do not claim too much for whatever such explorations or speculations may lead up to.

In the remainder of this paper, I will indulge in such speculation and develop an argument whose starting point is that growth, especially relative growth, often enters directly as an argument in the preference functions of voters. More exactly, I will argue that voters become concerned with economic growth when they perceive it to be, or fear it to become, in their country, abnormally low. This may very well lead, depending on the circumstances, to

the rate of investment. Others focus exclusively on non-political variables or relationships such as demand or capital markets. For the sake of testability, Perotti interprets these various approaches as alternatives, but it is conceivable that they work together in the real world. As a consequence, even if the reduced-form, negative relation between inequality and growth is considered as established, it is not compelling with regard to models or explanations which are avowedly partial or *ceteris paribus*. This applies, for example, to the minority position, so to say, of Saint-Paul and Verdier (1993). In their model also, following Meltzer and Richard, the median-income voter sets a tax rate, but the proceeds of the tax are used for public education instead of transfers. Public education is a form of investment and thus favourable to growth. As a consequence, greater income inequality tends to affect growth positively, contrary to what is argued by the other authors. That the data answer otherwise (it seems) would be a serious objection to Saint-Paul and Verdier's story only if this story were posited as the whole one. As argued elsewhere (Mingat et al., 1985; Salmon, 1994), contributions like Saint-Paul and Verdier's should be interpreted as implicit counter-arguments (addressed at the suggestion that inequality is always, under democratic decision-making, unfavourable to growth).

⁴ To be fair, it must be stressed that all this work is very recent, with a lot more in process (see some references in Perotti, 1994, and Verdier, 1994).

redistributive concerns (among others) being subordinated to the single policy objective of fostering growth. However, in this story, there will be considerable variation across countries. This variation will be related to differences in the sensitivity of public opinion to growth comparisons and in the nature of the political regime. We will in particular consider whether democracy is likely to be a significant variable in the cross-section explanation of growth. Figure 2 provides a first view of this alternative hypothesis.

[Insert Figure 2 about here]

2. From insufficient growth to discontent: Similarity and variation across countries

With the magnitude of growth rates experienced since the beginning of the 19th century in an increasing number of countries, economic growth has become, almost "objectively", of the utmost importance - arguably more important than any other economic or social issue except extreme deprivation or poverty (non-economic issues such as peace or freedom are another matter). One reason for this "quasi-objective" importance, in a world whose economy is generally growing, is that, for a given country, to experience no growth or only a rate of growth much smaller than that of otherwise similar countries means falling behind these other countries rapidly - not at all the same situation as if growth were slow or non-existent everywhere.

[Insert Table 1 about here]

A comparison of the first two columns of Table 1 shows what growth has done to income per head in a number of countries over a period of time as short as forty-three years. In 1870, the income per head of Spain was quite respectable, close to the income per head of Germany, higher than that of Finland, Norway, or Sweden, about two thirds of the income per head of the United States, already one of the highest. Calculations of this kind are obviously precarious. But, the enviable position occupied by Spain around 1870 is not a statistical aberration. As explained by Bradford De Long (1988, p. 1142), it is confirmed by other

indicators (for instance about four thousand miles of railroad having been built by 1877). Forty-three years later, income per head in Spain was about half the income per head of France and Germany and about the third of the income per head of the United States. Spain was not part of the first world anymore, if I may venture this anachronism.⁵ Somewhat arbitrarily, one can say that Spain had recovered its place in the first world by 1979 while Portugal, Argentina and Chile - also part of it in 1870 - had not.

It is unlikely that public opinion in Spain realised what was happening. There were no rates of growth available, and anyhow economics was not in the news or in the minds then to the extent that it is now. That this situation has changed profoundly is clear from everyday experience. According to The Economist (13 August 1994, p. 52), in countries such as Malaysia, Singapore or Indonesia, "the latest GDP figures invariably get banner headlines". In these countries, the article goes on, "like shareholders in a rising market, the locals like to monitor their countries' ascent up the world GDP league table". I do not claim that our locals, in Europe or North America, are similarly obsessed with growth rates. Unemployment or inflation - the variables typically cited in the literature on the effect of economic variables on voting - probably get more attention. But differences in growth have cumulative effects (arguably more so than inflation). What happened to the Spanish economy between 1870 and 1913 may have remained unnoticed at the time. I submit that an evolution of much smaller amplitude would not today.

It should be stressed that, contrary to the assumption made in Meltzer and Richard's model and models borrowing their structure from it, the foregoing discussion about what people may be concerned with is based on the assumption that their policy preferences and evaluations are of a "sociotropic" rather than "pocket-book" kind (Lewis-Beck, 1985). According to Martin Paldam (1991, p. 14), "there seems to be a fairly general agreement ... that what people react to is their perception of the general economic conditions, and not their

⁵ I borrow the expression from Carlos Diaz-Alejandro (cited by DeLong, p. 1142), who was referring to what happened to Argentina at a later date.

own economic grievances" (the classical reference on this matter is Kinder and Kiewiet, 1979). The reasons which voters may have to behave as Paldam and others claim that they do may involve some altruism. But a high level of uncertainty about the idiosyncratic effects of policies may do just as well.

[Insert Table 2 about here]

On the basis of the figures of Table 1, everybody would agree, I think, that the Spanish economy did badly between 1870 and 1914, but this is an easy case. In most other cases, things are not so clear. I make nonetheless the assumption that experts can determine, and even measure "growth performance gaps", thanks to comparisons with what obtains in comparable countries, or by more sophisticated means. That this is unrealistic is obvious. But to what degree? An example of the capacity which I have in mind is the interesting article of Steve Dowrick and Duc-Tho Nguyen (1989) from which I derived Table 2. The authors start for each period from the OECD average growth rate of per capita GDP and indicate how each country deviates from that average (the numbers in parentheses in Table 2). If there is a tendency for countries to converge (see Sala-i-Martin, 1994), and thus for countries which have a lower productivity to catch-up, countries such as Canada, the United States or Switzerland, which have a high productivity should not be expected to grow as fast as countries which start with a much lower productivity level such as Ireland, Italy or Japan. Hence the adjusted deviations written in bold types in Table 2. By idealising somewhat from that example, I will assume that experts can say when the relative performance of a country with regard to economic growth is negative and measure the corresponding gap.

This growth performance gap, deemed "objective", is measured on the horizontal axis of Figure 3. I assume now that objective gaps cause discontent among voters and/or in public opinion; and that for a given country, the larger the gap, the higher the level of discontent. This is a reduced form relation, whose strength and shape depend on two sets of underlying

mechanisms or forces. A first set pertains to information and concerns the way objective gaps translate into perceived gaps. We do not have to specify how this works to predict the outcome: the larger the objective gap, the more (in a given country) it is perceived by voters and/or public opinion. The second set relates to how a perceived gap causes discontent to build up. Again, we can safely assume that the outcome is unambiguous: for a given country, the larger the perceived gap, the larger the level of discontent.

In Figure 3, discontent (D) being measured along the vertical axis, the overall (reduced form) relation for a given country has an S-shape, as illustrated by curve V_1 . In the case of this particular curve, the two underlying mechanisms operate with maximum vigour. Some sectors of opinion perceive the performance gap as soon as it appears and even a small perceived gap creates some discontent. Then, unitary increases in the performance gap have increasing effects on the amount of discontent (the curve becomes steeper). Other people, less perceptive, discover the gap as it gets bigger, conversations and the media focus on it to an increasing degree, etc. When discontent caused by underperformance is very widespread, however, unitary increases in underperformance have decreasing effects on discontent. The reasons for this are that most people who could be informed about the existence of a gap have already been informed, that the discontent of informed people is already so high that the gap becoming even more serious does not increase their level of discontent very much, and that a fraction of the population are left more or less unconcerned by the performance gap whatever its level. The process considered here is not a pure diffusion process but it does include a process of information diffusion as one of its components. Thus, it is not surprising that the shape of the curves is of a kind which is typically found when diffusion processes are involved.

[Insert Figure 3 about here]

Curve V_2 corresponds to a situation in which the mechanisms underlying the reduced form relation are weaker than is the case with curve V_1 . This difference may stem from

obstacles to assessing the growth performance of the country by comparisons with what obtains in other countries. The situation of the country is felt to be special in one way or another, for instance the economy to be more subject to risks of the kind called in the tournament literature idiosyncratic than to risks common with the economy of the countries with which comparisons could be made. The difference can also be the result of geographical, linguistic or other obstacles to information flows from abroad. It can arise from the population being relatively unwilling, for instance for cultural or historical reasons, to engage into comparisons.⁶ Finally the population may not be as concerned with growth as is the case elsewhere. These various factors can interact. Anyhow, at some level of the performance gap, discontent will appear and, if the gap becomes bigger, it will spread to a large part of the population. Thus curve V_2 has the same general shape as curve V_1 . I make the obviously simplifying but convenient assumption that the only difference is that a given amount of discontent is caused by a performance gap which is larger by a fixed amount. This is reflected in Figure 3 by curve V_2 being derived from curve V_1 by a straightforward horizontal translation. The same applies to curve V_3 , which corresponds to mechanisms even weaker than is the case for curve V_2 .

3. From discontent to political or policy change: the role of political regimes.

A given level of discontent will not have the same effect under a system of majority rule allowing rapid alternation in office of competing political parties and in which, thus, office-holding is highly "contestable", under a system of proportional representation with strong political parties of the kind observed for instance, until recently, in Italy (called "partitocracy" by many Italians), under an undemocratic or authoritarian regime which, however, tolerates some expression of dissenting opinion, and under a totalitarian dictatorship in which no such expression is tolerated. The effect of discontent on the likelihood of political or policy change may thus serve as an indicator of the nature of the political regime.

⁶ I have discussed all these points more in detail in previous work (Salmon, 1987, 1991).

In Figure 3, the horizontal lines R_j indicate the levels of discontent which create a political crisis and endanger the incumbent politicians or political parties, or even the existing political regimes or systems. Each line reflects the nature of the political system or of a state of the political system. As soon as the level of discontent reaches it, it is assumed that this is a sufficient condition for political change - or drastic policy change with the same politicians - to take place. If, following Karl Popper (1945, p. 121), we define democracy as a system by which ordinary people can get rid of what they think as bad government "without bloodshed" and "by the way of general elections", line R_1 , labelled "high contestability" in Figure 1, corresponds to democracy at a high degree. Line R_2 corresponds to "partitocracy", say, of the kind alleged to have existed in Italy - somewhat less democratic under Popperian definitions. Line R_3 corresponds to relatively mildly undemocratic regimes of the kind observed in many third-world countries. Finally, line R_4 corresponds to totalitarian dictatorships.

4. From insufficient growth to potential political or policy change

At a point of time, each country has two structural attributes, which can be called, for convenience, "growth gap sensitivity" and "nature of political regime". Each country can thus be located at the intersection point of a V_i curve (the first attribute) and a R_j horizontal line (the second). This gives us the maximum objective growth performance gap which can be tolerated in the country.

Let me illustrate this by commenting on some such points in Figure 3.

. Point A reflects a situation in which office-holding is highly contestable and in which objective gaps cause discontent swiftly. A small objective performance gap (G_A) would cause an amount of discontent D_1 which, although very small, would be sufficient to provoke political change. Thus, the government is highly constrained by performance competition.

. Point B reflects a situation in which office-holding is not very contestable (the "partitocracy" situation, say), while objective gaps cause discontent swiftly. As a result of the first characteristic, only a relatively high level of discontent (D_2) would provoke political

change, but, as a result of the second characteristic, this high level of discontent could be brought about by an objective performance gap (G_B) still relatively small (although higher, of course, than in the previous case).

. In the case of point C, an authoritarian regime could survive a very high amount of discontent (up to D_3), but, as a result of a high sensitivity of the population to growth comparisons, discontent could nonetheless reach its limit with a performance gap (G_C) still relatively modest.

. Point U corresponds to a situation in which office-holding is extremely contestable but in which the sensitivity of the population to growth comparisons is mediocre. A very small amount of discontent (D_1) would provoke political change but the performance gap (G_U) would have to be relatively important to cause that amount of discontent.

. Finally, point S reflects the situation in a totalitarian regime of the worst kind. Very little information from abroad trickles in and the regime could survive a very high level of discontent, while for such a level to obtain, the performance gap would have to be considerable (G_S).

Figure 3 suggests an hypothesis which I formulate now but on which I do not want to insist too much in this paper. It is that the sensitivity of public opinion to comparisons in growth rates is more important or constraining than the political regime or system (totalitarian dictatorships excepted) for explaining observed growth. This is reflected in the shape of the V_i curves, implying that moving along a V_i curve would not change very much the maximum tolerable performance gap while moving from one V_i curve to another would have a much more significant effect on this gap.

Let me illustrate this by a comparison of two countries, Italy and Britain. In a previous paper (1991), I have argued that all Western European continental countries, and particularly, the six founding members of the European Community, have been for a long time and still are in a situation which favours comparisons of performance. In the same paper, I have argued also that Britain, for historical reasons (having won the war, starting from a relatively high

level, being culturally insulated, etc.) was not until the 1970s's in such a situation. This means that, in Figure 3, I would put Italy, say, on the V_1 curve, and Britain in the 1960's and 70's, say, on the V_2 curve. On the other hand, Britain has a political, and in particular electoral, system which is considered to make its government highly contestable, while Italy has had until recently the already referred to so-called "partitocracy" system which made the Italian government much less contestable. This implies putting Britain, say, on a R_1 line and Italy, say, on a R_2 line. If we consider both structural attributes, Italy would be in B, and Britain in U. But, then, the maximum performance gap tolerable for Italy (G_B) would be much smaller than it would be for Britain (G_U). And, in fact, as argued in the same paper, the Thatcher revolution came as a consequence of a particularly serious performance gap over an extended period of time (see also Table 2). If Italy were to move leftwards on the V_1 curve, as seems now plausible as a result of the change in the electoral system, the foregoing discussion implies that the effect of this move on the tolerable performance gap of the country would be limited (from G_B to G_A). But, let me repeat, this hypothesis is even more tentative, if that is possible, than the rest of the paper.

5. Implications: From potential political or policy change to actual policy-making.

What are the implications of the foregoing hypothesis on the questions raised in the introduction about the relationship between democracy, redistribution and growth? Before trying to spell out these implications, let me formulate two remarks. First, so far I have referred to discontent without being too specific about what this discontent is directed at. The models discussed in the introduction, like the model of Meltzer and Richard, are "direct democracy" models, in the sense that no government is mentioned and policy-making reflects without bias the preferences of the median voter. Even as an idealisation, this kind of approach to democracy is often misleading (Salmon, 1993). Here, however, I must admit that one might wish to use the vocabulary of direct democracy and assume that the median voters, when dissatisfied, are dissatisfied mainly with their past decisions (I use the term "median

voter" for convenience). This is related to the line adopted, for instance, by Daniel Cohen (1988, 1994) to explain policy reversals in France and elsewhere in the early 1980s's. In his very interesting analysis, median voters progressively discover new realities and change their minds. Especially given what we observed in France in 1982-83, I must admit that, in important respects, what counts is the policy reversal itself, and the fact that it was supported by a majority of voters, not whether it was operated by the politicians elected in the first place or by their opponents. Although I use the vocabulary of representative democracy and refer to politicians as well as to voters, the just noted possible equivalence should certainly be kept in mind.

Whether underperformance is ascribed by voters to office-holders or to their own mistaken policy preferences, it causes discontent with current policies and arrangements which, when reaching or moving near the threshold lines identified in Figure 3, creates a compelling incentive for policy change. That is (and this is my second remark): provided of course that domestic policies are responsible for economic growth, or are considered as such by voters. More exactly, the logic of the foregoing discussion is that domestic policies are assessed in the light of growth comparisons and this makes sense if part of total growth can be ascribed to an element common to all countries (or a subset, e.g. Western European countries). The average growth rate of GDP per capita of OECD countries fell from about 4 percent over the period 1960-73 to about 1.5 percent over the period 1973-85 (Table 2). It was argued everywhere that all countries were affected by a common factor. The foregoing discussion concentrates on the actual or feared underperformance of individual countries vis-à-vis the average (or some standard of the kind), not on the evolution of the average (this statement is qualified below).

How difficult is it for a government to remain within the tolerance limit? Much depends on what happens abroad. If we introduce uncertainty as to policy outcomes, and if governments are risk-averse, it may be the case that each one will tend to adopt policies which have a high probability of resulting in a growth rate well above what is needed to avoid

excessive discontent. But this means that all policies which are detrimental to growth will tend to be discarded. This includes redistribution of the kind considered by Alesina and Rodrik or by Persson and Tabellini, not of the growth-enhancing kind considered by Saint-Paul and Verdier though. Thus the first implication of the hypothesis developed in this paper is that, in each country, redistribution will be accepted only if it is favourable to growth or if that country is far enough of, in terms of Figure 3, of its threshold point (itself dependent of factors analysed previously). This may explain transfers being correlated positively with investment and growth, as was found, we noted above, by Perotti (1994).

A second implication is that, at the international level, several equilibria are likely to be possible. Performance competition may be very intense; we may have a kind of "rate race"; and the consequences on income distribution may be severe. Or, we may be in a situation in which the best placed countries use their discretion margin in a way which lowers growth and makes life easier for the underperformers. Thus an average rate of growth at the international level which is low according to comparisons in time (for instance between 1973 and 1985 as showed in Table 2) may be the outcome (unlikely in the particular case), not of a common exogenous factor as suggested above, but of a coordination game which allows all governments, under the leadership of some, to pursue policies inimical to growth, in the domain of redistribution notably. In that case, as predicted in the models discussed at the beginning of this paper, and contrary to the result that I have just recalled, it might be the case that a positive correlation between redistribution (and high taxes) and low growth could be found.

If performance gaps are perceived only on the basis of comparisons within a subset of countries, the foregoing analysis could lead to multiple equilibria in space rather than in time, so to say. For instance, European countries, under the leadership, say, of Germany might adopt with regard to growth a standard less demanding than the one adopted by East Asian countries. As a consequence, more redistribution could be indulged in Europe than in East Asia.

The third implication of the foregoing analysis is more a set of assumptions formulated somewhat differently than a real implication. The way Figure 3 has been drawn embodies the assumptions that the degree of democracy is a continuous variable and that, ceteris paribus, it has a positive influence on growth (more democracy, in the Popperian sense, reducing the tolerable growth gap), but also the assumptions that there is no discontinuity between democracies and mildly undemocratic regimes (the discontinuity being rather between these regimes and the totalitarian dictatorships) and that the degree of democracy may have less influence on growth (via the tolerable growth gap) than sensitivity to growth performance comparisons.⁷ This may help explain some of the hesitations found in the empirical literature about the significance of democracy as an explanatory variable or condition.

6. Concluding remarks

Contrary to Figure 1, Figure 2 should be read from right to left. The foregoing discussion suggests a relationship between democratic politics, growth and redistribution which is at least sometimes the opposite of that underlying the models summarised in the first section. In the modern world, when endangered, growth is too important to be left to the petty calculations of a median voter à la Meltzer and Richard. More generally, redistribution objectives or considerations often seem compelling because the reasoning is developed under the assumption of certainty or perfect information (or of rational expectations), and thus as if we were already on a utility frontier of some sort (Salmon, 1993). In the real world, we are very far from the frontier, there is plenty of scope for Pareto improvements which benefit large numbers if not all, the effects on income distribution of various policies are extremely uncertain. This explains also that redistribution is less and growth more important than assumed in many analyses.

⁷ Countries such as Malaysia, Singapore and Indonesia are not democracies but, following the observation of The Economist cited in Section 2, they are indeed sensitive to growth comparisons. That they grow fast is what we should expect from the assumptions embodied in Figure 3.

All this is tentative, of course. Among the many problems I am aware of, let me mention one which seems to me particularly intriguing. To introduce it, let me note how puzzling, to say the least, is the time dimension implicit in the hypothesis developed in the preceding sections. Typically, politicians care most about their current popularity and the results of the next election. But policies have effects on growth which are delayed and voters cannot be assumed to be competent enough to anticipate these effects. The usual solution of that kind of puzzle is party reputation and I agree that it is important.⁸ I think, however that even in a perspective of reputation building or maintaining, an actor which I did not mention until now must be given a role. This actor is the bureaucracy, and more precisely the subset of it referred to in France as the *administrations économiques et financières*. Let me conclude this paper with a brief discussion of what should have been, ideally, a major component of it.

The rigorous, relatively far-sighted and not very popular policy adopted by France between 1983 and 1993 was not invented by the President, the Prime Ministers or the political parties in power (the Socialist Party most of the time).⁹ Nor is it very enlightening for our purpose to observe that it was eventually accepted by the "median voter". It came out progressively, I suggest, from the reflections of that part of the bureaucracy which is concerned in the French system with economic and budgetary policies (*Budget, Trésor, Banque de France, Direction de la Prévision, INSEE, etc.*). In France, every *Ministre de*

⁸ The reputation concerns of individual politicians may be also essential (Salmon, 1993).

⁹ The objectives of this policy are interpreted by Patrice Vial (1993, p. 48), an insider in many respects, as follows:

"While it can be argued that the French experience has developed as a pragmatic construction rather than from a well-defined *ex ante* concept, the ultimate objective has never changed; it has consistently been to restore long-term, and not just short-term competitiveness - and this was understood as the capacity to sustain permanently adequate growth with a balanced current account in the context of a stable exchange rate against the DM".

Let me also quote Vial's analysis of the policy implications:

"Central to the strategy, therefore, was the idea that it was necessary to promote or enforce structural change and reforms in the basic relations governing, among other things, the price-setting mechanism, wage settlement procedures and the pattern of income distribution. One of the important features differentiating France from Germany in the 1973-82 period has been that wages had consistently increased faster than labour productivity, leading to low margins, high indebtedness and a global impoverishment of the enterprises. To reverse this tendency was considered a priority. Clearly this meant a diminution in the relative price of labour."

Note the reference to permanently adequate growth, comparisons with Germany, the need of anti-wage redistribution, all this concerning policies adopted over almost all the period by a left-wing government.

l'Economie et des Finances, after a while, expresses views which - it is difficult not to suspect - reflect exactly the views which have come to dominate in these bureaux. Obviously, bureaux are much more able than voters to decide whether a policy is oriented toward long-term objectives. By adopting policies which have such orientation, political office-holders build up their reputation with the bureaux. What are, here, the motivations of the bureaucrats? Why are politicians interested in this kind of reputation? How does this interact with their concern with public opinion and voters? These questions are difficult to deal with and may be viewed as somewhat unusual from the perspective of the rational choice theory of politics. But I think that their exploration will have to be undertaken for an improved understanding of policy-making in contemporary representative democracies.

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Table 1. Per capita income estimates in 1975 dollars

	1870	1913	1979
Argentina	762	1450	3119
Australia*	1922	2523	6160
Austria	751	1436	5731
Belgium	1137	1778	6078
Canada	881	2085	7527
Chile	519	1156	2337
Denmark	883	1724	6621
Finland	506	1053	5640
France	847	1658	6705
Germany (East)	741	1749	5409
Germany (West)	731	1562	6789
Ireland	656	1007	3491
Italy	746	1051	4424
Japan*	328	621	5749
Netherlands	1104	1591	5778
New Zealand	981	1624	4724
Norway	665	1162	6475
Portugal	637	725	2845
Spain	728	854	4246
Sweden	557	1336	6594
Switzerland	1118	1846	6388
UK	1214	1864	5166
United States	1038	2462	8205

Cf. De Long (1988), Table A4, p. 1152. All estimates of 1979 per capita income are taken by De Long from Summers and Heston (1984). For 16 countries, the estimates for 1870 and for 1913 are calculated from these 1979 estimates and from estimates of annual growth provided in Maddison (1982). According to De Long, the Australian income and Japanese income in 1870 were probably significantly lower and higher, respectively, than those calculated in this way and reported in the table. The way De Long estimates the income per capita in 1870 and 1913 of Argentina, Chile, East Germany, Ireland, New Zealand, Portugal and Spain is explained in the appendix of his article (pp. 1148-52).

Table 2. Relative growth rates of per capita GDP (1950-85)
Adjusted (and unadjusted) deviations from OECD average

	1950-60	1960-73	1973-85
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<i>OECD average</i>	3.12	3.95	1.55
Canada	- 0.96 (- 1.86)	+ 0.65 (- 0.13)	+ 0.64 (- 0.03)
France	+ 0.48 (+ 0.42)	+ 1.08 (+ 0.68)	+ 0.42 (- 0.08)
Germany	+ 3.15 (+ 3.64)	+ 0.10 (- 0.36)	+ 0.93 (+ 0.36)
Ireland	- 1.95 (- 1.06)	- 0.95 (- 0.21)	- 1.09 (- 0.26)
Italy	+ 1.29 (+ 2.05)	- 0.23 (+ 0.21)	- 0.45 (+ 0.06)
Japan	+ 2.17 (+ 4.14)	+ 3.34 (+ 4.50)	+ 0.98 (+ 1.24)
Switzerland	+ 1.28 (+ 0.39)	- 0.32 (- 1.05)	- 0.54 (- 0.98)
United Kingdom	- 0.41 (- 0.85)	- 1.17 (- 1.42)	- 0.52 (- 0.42)
United States	- 0.26 (- 1.79)	+ 0.02 (- 1.15)	+ 0.61 (- 0.28)

Selected from Table 6 of Dowrick and Nguyen (1989, pp. 1026-27). The numbers in parentheses are the unadjusted deviations. An example of the calculation: For the period 1950-1960, the average annual per capita GDP growth in the OECD countries is 3.12 percent; with regard to that, the deviation of the average GDP per capita of the United States is equal to - 1.79 per cent. To that (negative) figure 0.22 is subtracted for "cyclical bias" and 1.75 is added for "catch-up" (or, rather, the absence thereof). As a result of these corrections the adjusted deviation is equal to - 0.26. For the periods 1960-73 and 1973-85, the same kind of calculation yields, for the US, an adjusted deviation which is equal to zero and is positive, respectively.

**Models of the relation
between inequality,
voting, and growth**

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Figure 1

The alternative view

Figure 2

Figure 3