

INFORMATION AND TRANSACTION COSTS AS THE DETERMINANTS OF TOLERABLE GROWTH LEVELS

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Abstract

This paper develops a theory to explain growth in developed and undeveloped countries.

Where transaction and information costs are low, people more easily perceive and oppose activities conducive to deadweight losses. The opposite holds where information and transaction costs are high, because it will be too costly for relatively weak groups to check the rent-seeking proclivities of the dominant interest groups. And, by definition, high transaction and information costs make it hard to displace incumbent leaders who produce poor growth.

The levels of information and transaction costs in different countries will determine how much growth we can expect.

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Information and Transaction Costs as the Determinants of Tolerable Growth Levels

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1. Introduction

Although most developed and undeveloped economies have been growing below their possibilities, no satisfactory theory of growth and development exists, either for the undeveloped world or for the developed world. This is of course of some relevance in the so-called rich economies. But the case for the undeveloped countries remains striking for its dimensions, its resilience and its humane implications.

In this paper we suggest a new theory that explains the observed patterns of growth in both developed countries (DCs) and undeveloped countries (UDCs) after World War II¹. Our theory posits that political freedom serves the economic function of improving the internal market for political leadership. Political freedom, by lowering the information costs of finding out about how leaders are performing, and lowering the transaction costs of displacing existing rulers, constrains policy making so as to meet the electorate's desires and expectations. Widespread differences in information and transaction costs among nations critically affect growth level in various countries; so that in some countries leaders will be replaced if economic performance is only modestly bad, while in other countries actual starvation conditions may exist before serious efforts are made to replace poorly performing leaders.

In particular, under our theory, when the information and collective-action costs associated with changing leadership are low, growth is bounded at the top by rent-seeking, and

¹ The middle of the 20th century marks the time when the central policy-making authorities - politicians and bureaucrats - began to have a large-enough size, as well as the technical means to enforce policies, create and extract rents. See also OVERBYE [1996].

bounded on the bottom by the fact that the median voter will turn out of office a ruling coalition that fails to achieve what is viewed as tolerable growth. By contrast, when such costs are high, the incentives facing ruling political coalitions often are entirely different. The rulers' best strategy for remaining in power is to permit very few civil liberties, and to adopt policies bound to produce very low growth. By depriving their citizens of the education resources, and organizational skills to mount effective opposition to the state, rulers of these countries can often prevent rival coalitions from emerging. Thus, the received wisdom - that achieving prosperity inevitably is the best strategy for politicians - is faulty.

Traditionally, growth experts have split between the "neoclassical" camp and the "structuralist" camp. The abysmal results generated by the normative implications of these approaches are well known (COLOMBATTO [1998]). First, the hypothesis that poorer countries (UDCs) ultimately will "catch up" with the richer countries (DCs) that is implicit in the neoclassical view is not supported by the historical evidence. Similarly, the structuralist recipes for improved state intervention in policy making have met with surprising resistance (and sometimes outright refusal) by the political leaders in the countries that are the targets of the structuralist's advice. As a matter of fact, the neoclassical and the structuralist approaches share the same defects: each is based on an unrealistic assumption about the motivations of the leadership in such countries to effect meaningful change. Existing approaches to growth do not reflect the actual political calculations that leaders of UDCs typically make.

Rival academic theories have not fared much better, though. The so-called endogenous-growth approach predicts that growth is faster in higher income economies. But OLSON [1996, 20] rightly observes that "the fastest growing economies are never the countries with the highest per capita incomes but always a subset of the lower-income countries".

The development theories elaborated within the schools of public choice and institutional economics offer more credible scenarios. The latter approach posits that institutional capital defines the limitations of human organizations and sets the limits for growth. The shortcoming of this development theory, however, is that the levels of institutional capital are exogenous, and

therefore economic growth is completely path dependent when viewed from an institutional perspective. Under this framework, policy suggestions are futile because of the intransigent nature of the political, social, cultural, legal and economic institutions that determine economic success or failure.

Like institutional economics, public-choice analysis also suffers from a path-dependency problem. Within the public-choice paradigm, bureaucrats and politicians in power exploit available possibilities to engage in rent-creation and rent-extraction by trading regulation or regulatory forbearance for political support. In stable, democratic regimes, where the dominant interest-group coalitions are strong and effective, economic development will be arrested to the point that such countries should experience a steady decline. Within this model, the most rapid growth should thus occur in countries where there have been exogenous shocks that weaken the existing rent-seeking coalitions, as argued in OLSON [1982]. Unfortunately, these predictions are not consistent with historical experience. The data are easy to describe: stable democracies exhibit steady, albeit slow, growth. The very poor countries that experience significant revolutionary activity exhibit the slowest growth, despite the disruption to special interest groups that such revolutionary activity would seem to cause².

We do not fully agree with those who believe that economic freedom necessarily leads to the achievement of both political freedom and economic flourishing (FRIEDMAN [1962], SCULLY [1992], HELLIWELL [1992]). Nor do we posit that political freedom is a necessary condition for economic growth. Rather, our argument is that political freedom (civil rights) is a sufficient condition for such growth. Thus, in rich countries civil liberties abound. We also observe that in some countries, such as Taiwan, China and Singapore, growth has indeed been possible without widespread civil liberties. But we note two things about this sort of growth. First, as recent experience in Indonesia, South Korea and Thailand suggests, growth in countries with weak civil liberties is more precarious than growth in true democracies. Second, we observe

² Some recent data are presented in the Appendix. See also UNGER and van WAARDEN [1994] for an accurate critical analysis of OLSON [1982].

that in the more successful newly industrialized countries, such as Taiwan, the existence of external threats to power has deprived the internal leadership with little choice but to pursue high growth policies.

Politicians' choices among economic policies for achieving growth reflect their suppositions about how those policies will affect their ability to remain in power. Fear of replacement acts as a powerful incentive to rulers. In the U.S. and Western Europe, where civil liberties are strong and - more generally - the transactions costs of political change are small, leaders who do not successfully maximize political support are ousted by rival teams (political parties). When such liberties are denied, rulers can successfully consolidate their hold on power by keeping their countries poor and depriving citizens of the means to organize opposition. Finally, in countries where awareness about foreign threats is particular deep, leaders are legitimized only by their ability to keep domestic growth high and insure independence.

In this light, the role of transaction and information costs is discussed in section 2.; the consequences for growth policies in democratic DCs and totalitarian UDCs are then considered in sections 3. and 4., respectively. Some extensions of this theory are then discussed in section 5., while the conclusions are presented in section 6..

2. Information and Transaction Costs

The starting point for our analysis is the public-choice paradigm that well-organized interest groups inevitably will galvanize into effective political coalitions to seek wealth transfers (a process known as rent-seeking) supplied by the public at large³. Rent-seeking exists in all countries, developed and undeveloped. However, levels of rent-seeking are not constant across economies. Information and transaction costs will determine the relative levels of rent-seeking in a given country. And the level of rent-seeking will affect growth.

³ Unless stated explicitly, rent-seeking includes attempts to create rents, to appropriate them, to extract them.

Having incurred the information costs necessary to find out the efforts of rival groups to obtain rents, affected citizens must incur transaction costs in order to seek each other out and galvanize into an effective political coalition to oppose those politicians and bureaucrats that are implementing policies that impose unwanted costs upon them⁴.

It is straightforward to see how civil rights and civil liberties not only affect, but in fact *determine* the level of information and transaction costs faced by citizens who are dissatisfied with the level of growth in a country and wish to affect change. In a multi-party democracy with a free press, freedom of assembly, high literacy, fair elections, and tolerance of dissent, the information and transaction costs associated with political dissent are relatively low. And of course, as individuals within a society become wealthier and more educated, their ability to engage in political discourse increases. By contrast, in the absence of literacy, free press, freedom of assembly and other civil rights, the information costs associated with learning about government action will be very high.

This article begins with a discussion of the determinants of tolerable economic performance in democratic developed countries. Rational ignorance and other collective-action problems cause citizens in democracies to tolerate low growth up to the point at which it becomes rational for voters to displace existing rulers, as suggested in SALMON [1997, 147 and 153]⁵.

⁴ Information costs refer to the costs of finding out about the rent-seeking attempts of special interest groups, evaluating the consequences of policy makers' behaviour, and formulating informed guesses about the behavior of candidates to political leadership.

The (political) transactions costs mentioned here are those that the individuals incur in order to galvanize into political action, to oppose or remove the incumbent policy makers when their behaviour is perceived to be against the public interest. Such costs are fairly low in a democracy with a free press, freedom of assembly, high literacy and fair elections. But they may be very high under a totalitarian regime, where the autocrat must be fought out of power.

Of course, information and political transaction costs differ among individuals and groups of individuals within a country. Such differences are reflected in the fact that there are wide variations among interest groups in the amount of power and influence they wield.

⁵ There are of course many countries where "democratic" institutions and constitutions do exist on paper; but where individual liberties are severely constrained, and political information and transaction costs kept high. According to the terminology used in this paper such countries are defined as "totalitarian", due to the high political information and

As civil rights and civil liberties increase in a democracy, *ceteris paribus*, the information costs associated with monitoring politicians and bureaucrats, and the transaction costs of displacing an existing ruling coalition decline. This suggests that politicians and bureaucrats in liberal democracies will attempt to produce growth. But this preference for growth is not unconstrained, because as the growth rate increases, so too do the opportunities for entrepreneurial rent-seeking. Politicians who create too much growth create too many rent-seeking opportunities for rival political coalitions, and risk displacement. Thus, the optimal survival strategy for politicians in liberal democracies is to generate enough growth to avoid being displaced by the citizens who supply votes. But not so much growth as to create entrepreneurial opportunities for rival political coalitions who can offer to divert the gains associated with the surplus growth to interest groups in exchange for their political support.

Of course, even in liberal democracies characterized by substantial civil liberties, political information and transaction costs tend to be relatively high for the public at large. Rational ignorance and free-rider problems frequently make the cost of (1) discovering the effects of laws and regulations; and (2) galvanizing into an effective coalition to oppose the interest groups and bureaucrats proposing such measures, higher than the benefits that would be generated by defeating such measures. As a consequence, the "tolerable" amount of rent-seeking that is allowed to take place will be substantially greater than zero. Hence, actual growth will be lower than potential growth. When rent-seeking comes to exceed the tolerable amount (which, in turn, is determined by the amount of civil liberties in the country), the costs of mounting effective opposition to the incumbent policy makers will be less than the perceived benefits, and political change will take place.

Under our theory the incentive structure faced by politicians in undeveloped, undemocratic countries is entirely different. In these countries, politicians have an incentive to deprive the citizens of the necessary education, skills and, above all, resources with which to confront the state. Thus, for example, in sub-Saharan Africa, the radio, which is the primary

transaction costs in place.

mechanism for reducing the information costs of the citizenry, is state-controlled (LANSNER [1996]). And the transaction costs of replacing an existing ruling coalition in a military dictatorship in which rival political parties are not tolerated and political dissent is met with imprisonment or death, are obviously higher than in a liberal democracy. The high information and transaction costs (including substantial loss of life, torture, incarceration) that must be incurred to replace existing leaders causes the citizens in those countries to have a very high economic tolerance for low growth. Public opinion is not only irrelevant; it simply does not exist. In such countries the high political transaction and information costs cause the public to lack the information necessary to form an opinion about many relevant issues. And, of course, the absence of any avenue through which to register disapproval lowers people's incentive to obtain the information necessary to form an opinion about the relevant issues of the day.

Based on this analysis, we dispute the standard assumption that growth in low-income countries will be favoured by incumbent rulers because it makes them more popular and hence more secure. Instead, we conclude that although rulers in totalitarian countries do not advocate retrogression, they actually prefer zero or slow growth to rapid growth. Growth alters the balance of power between the rulers and potential rival coalitions and increases the probability of political change⁶. In other words, in these economies growth can bring the political information and transaction costs associated with opposing an existing ruler into reach. When these costs become affordable interest groups that are powerful enough to fight for it will form. Hence, the frequently observed efforts by autocrats to stifle growth opportunities are consistent with the rational self-interest of such leaders: when political freedom is questionable, income and growth tend to be low. This we call the UDC scenario.

In sum, low or zero growth exists in UDCs because the high costs associated with galvanizing into an effective political coalition to demand growth-oriented reform are higher than the benefits of affecting reforms. It is in this sense that we say that low growth in undeveloped

⁶ Similar conclusions are consistent with de Tocqueville's work on *L'Ancien Régime*, and were also reached in OLSON [1963], although for different reasons.

countries is "tolerated" by citizens. As the costs of organizing dissent about government policy decline, or the benefits of the perceived reward rises, the level of tolerable growth rises.

3. Tolerable Growth in Democratic Developed Countries

In democratic developed countries growth rates tend to be low until growth, or income, or a mix of both fall below the threshold of tolerance and institutions change. The available empirical evidence is consistent with this idea.

This raises the question of how one defines the concept of tolerable growth and how one determines the threshold below which the populace will not tolerate low growth. In democracies, low economic and political transaction costs enable a wide variety of interest groups to come together to engage in rent-seeking and rent-avoidance. These groups will try to obtain rents by giving and withholding political support from politicians and bureaucrats; but when income is disappointing or growth becomes too low, then pressure will build up from the public at large and force governmental change. Hence, in the democratic case economies tend to be rich, or on their way to becoming rich.

In the following section we explain the next piece of the puzzle, namely why in rich democratic countries, actual growth remains low - according to many, well below potential growth.

3.1 Compensation and compromise

In democracies there is seldom a single, stable winning coalition. Instead, the ruling party, which itself may be stable, is generally an alliance among an odd mixture of unrelated, and even potentially rival interest groups (MACEY [1990]). In general, the primary thing that keeps these groups together is the awareness that shared power is better than no power at all. In particular, each interest group represented in the winning alliance would find it hard to benefit themselves at the expense of other allied groups, without compensating these other groups.

Without compensation, allied groups would support the opposition. It follows that the rent-seeking game in a democracy tends to be rather complicated, and also fluid. To be successful, leaders must obtain the support of a variety of factions. Compensation and mediation are thus fundamental parts of the political process. Consistent with the public choice model, law is the result of a complex bargaining mechanism that leads to complex rules and legislation that is accompanied by other pieces of legislation aimed at assuaging at least one other group of voters. Thus, it is not surprising that ruling political coalitions in successful democracies as diverse as Italy, Japan, the United States and Germany are united by the remarkable characteristic that they lack a coherent ideology. Instead, diverse interests have replaced ideology at the core of the political systems.

The complexity of the bargaining process used to make law raises the information costs associated with learning about the nature of the rent-seeking activities in process. People are aware that rent-seeking occurs. They know that interest groups play a disproportionate role in policy-making. But information and transaction costs prevent the public from grasping the implications of most of the bargains reached among narrow interest groups and ruling political coalitions. This uncertainty, coupled with the complexity of economic and social interaction, creates a demand for a base level of social security for the public-at-large.

Clearly, the argument above holds true only in a (democratic) DC, where overall high growth is not so important as in a poor economy; but where issues about income distribution and redistribution become dominant, as the public strives to protect the purchasing power of their incomes. The fact that rational ignorance and free-riding allow rent-seeking to occur virtually unnoticed is also critical to our analysis. After all, if information and political transaction costs were truly zero, no rent-seeking would be tolerated, and growth rates would be significantly higher than they are now. In the real world of positive information and transaction costs that make it difficult, but not impossible, for people in DCs to galvanize into effective political coalition to effect meaningful change, rational individuals will raise their demand for social protection. People will demand social protection as insurance against the damages generated by the rent-

seeking game played by better informed interest-group coalitions. The growth of the welfare state may be viewed as a necessary by-product of rent-seeking in a democracy. A broad coalition of interest groups will support the welfare state in exchange for a diminution in protest against their own activities.

This insight is motivated by the observation that in developed countries, information and political transaction costs are lower than in undeveloped countries, but they are still significant. Perhaps equally important, such information and transaction costs are not uniform across individuals and groups within society. Consequently, legislative compromises often will include not only well organized groups, but also poorly organized interest groups. Such poorly organized groups are able to galvanize into a successful political coalition to demand favorable legislation, but are likely to be unable to sustain their organizational structure in order to protect their rights in the future (MACEY [1992a, 97]). The imbalance of information and transaction costs among interest groups thus creates a demand for the establishment of a strong bureaucracy. In particular, guaranteed social protection provided by life-time bureaucrats is then an appealing solution to the organizational difficulties faced by these groups.

Bureaucracies exist for three reasons. First, they are needed to implement and operationalize the complex laws created by the regulatory state (MASHAW [1977]).

Second, bureaucracies provide durability to the legislation procured from the legislature by special-interest groups in the face of changing coalitions. In other words, bureaucracies, which can be "captured" or strongly influenced by interest groups, are instruments of political control for such groups (McCUBBINS, NOLL and WEINGAST [1987]). As argued in MACEY [1992b], these durable rights are of particular value to interest groups that are unable to sustain their organizational structure or that fear that they will be unable to provide consistently strong demand for wealth transfers in the future. Also, relatively weak interest groups need bureaucrats to help them understand and take advantage of the benefits of the welfare state. Indeed, over time, the bureaucrat, not the politician, becomes the typical "state" representative in the eyes of the average citizen.

Finally, as the bureaucracy becomes larger and larger - in numbers and in discretionary power, following the increasing complexity of rules and legislation - bureaucrats become a most important interest-group coalition in their own right. JOHNSON and LIBECAP [1994] clearly illustrate this point with reference to the US Federal Civil Service.

These bureaucrats have a vested interest in letting the welfare state expand, whereas politicians end up by playing a marginal role, in that they are *de facto* controlled by the bureaucrats and by the interest groups that find it more profitable to seek rent from bureaucrats than from politicians.

3.2 *The upper boundary of the welfare state*

To this point, the discussion has focused largely on the positive aspects of democracy and political and civil rights. Leaders in developed countries want to produce growth in order to remain in power. Growth tends to be bounded at the low end by the fact that politicians will be displaced if they do not produce satisfactory growth levels. In a liberal democracy characterized by rivalrous competition among political interests, the public (alternatively characterized as the "median voter") may not be able to discern the details of the rent-seeking that is occurring among politicians, bureaucrats and special-interest groups. However, although in rich countries the median voter does not have substantial low-income or fast-growth problems, he is indeed concerned when he feels generally financially insecure, or when he feels that his real income is falling. In other words, the voter knows when it is time for change. That is why low growth threatens the leadership in liberal democracies (though not, as we shall see, in totalitarian UDCs). But the story does not end here.

In a democratic framework information and transaction costs are relatively low, but they are not so low as to prevent rent-seeking altogether. In a liberal democracy, just as growth is bounded at the bottom by public intolerance of low growth, so too is growth bounded at the top by special-interest groups who rationally view additional growth as creating rents that can be obtained from the ruling coalition. In other words, rational, political-support maximizing rulers do not want to maximize growth. Instead, they wish to maximize political support, which comes

from both the public-at-large (i.e. the median voter) and from powerful special interest. Too many favours for special interests will produce unsatisfactorily low growth and lead to political defeat for the ruling coalition. But too few favours to special interests, particularly where such favours can be provided without reducing growth to levels that are intolerable to the median voter, also will lead to defeat, as special interest groups move funding and other forms of support to more cooperative rivals.

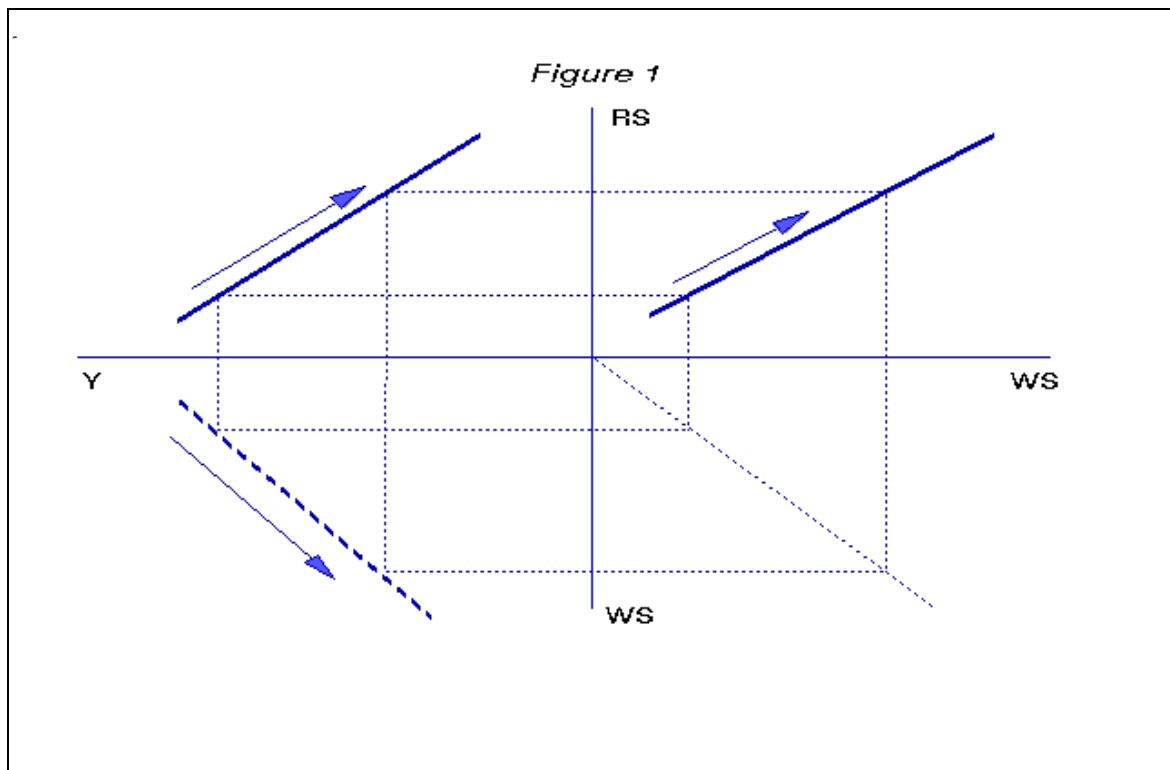
The public's demand for a welfare state (social security protection) as a reaction to rent-seeking by more powerful interest groups also places a limit to growth. Relatively weak interest groups will react to increases in rent-seeking by better organized groups by demanding more and more social protection (welfare state) for themselves. Consistent with the dominant public-choice paradigm, the public, which is the real loser in the rent-seeking process, supplies the revenues and regulatory compliance that pay for the legislation to the organized groups. From the state, the public demands and receives social protection, which, of course, also demands the creation of a large bureaucracy to administer such protection.

The bureaucrats run both the compensation mechanisms and the social-protection system. As such, they are an important coalition in favour of the welfare state *per se*. Once the bureaucrats are strong enough, the welfare state expands on its own in order to fulfill bureaucrats' demands for more power and larger budgets.

In answer to the perennial question of whether there is a limit to the size of welfare state (WS), we note that as the costs of the welfare state become higher, the probability rises that the median voter feels his purchasing power is jeopardized. More generally, economic performance is perceived as unsatisfactory. As an exceedingly large welfare state causes voters to demand a change in governments, national politicians seek to control the welfare state so as not to reach the point at which it stifles growth to levels that threaten the incumbent coalitions.

We analyze the issue of the limits to the growth of the welfare state in the following figures. Democratic coalitions will grant additional welfare state benefits (WS) in order to provide social protection to relatively disorganized groups. These weaker groups demand such pro-

tection as their price for continuing to support the ruling coalition. This is described in the first quadrant in figure 1, where the upward-sloping schedule shows the additional amounts of welfare state produced - to satisfy demand for social protection - when rent-seeking (RS) intensifies.



At the same time, the rent-seeking and the institutional features that enhance rent-seeking result in distortions in production and consumption patterns.

The effects of these static and dynamic distortions, the nature of which has already been clearly explained by OLSON [1982, ch. 3], are reflected by the schedule in quadrant II, which describes the negative correlation between rent-seeking (RS) and gross income (Y)⁷.

Finally, quadrant III depicts the combinations of WS and Y generated by various levels of rent-seeking activity. Each point along the schedule in quadrant III identifies the amount of social protection and of gross income typical of a country at a given moment in time.

As the rent-seeking game is played, the country slides down to the right in quadrant III along the

⁷ We ignore the effects of productivity growth for the sake of simplicity. Higher levels of total factor productivity would imply shifts to the left of the schedule in the second quadrant.

dotted schedule. That is, as rent-seeking increases, the economy experiences both a reduction in gross income (Y), and an increase in the welfare state (WS). In order to gage how far the slide in gross income can go, people's behaviour must be taken into account.

The utility of the people at large is assumed to be an increasing function of disposable income (y)⁸ and of the amount of social protection provided by welfare expenditures, so that we can write $u=u(y,WS)$, with obvious notation. Clearly, both first-order derivatives are positive: at any given level of disposable income, people's utility improves as the amount of social protection (WS) they receive goes up.

Let us consider disposable income first. Disposable income is a decreasing function of WS for several reasons. First, the increase in the welfare state is caused by a rise in rent-seeking activities. Consequently, the expansion in WS implies a decline in gross income (see figure 1), which is reduced both because of RS activities and because people must invest resources in battling rent-seeking. Therefore, as gross income declines, the highest possible level for disposable income also declines.

Second, the amount of resources taken away from taxpayers to finance WS reduces disposable income by an amount greater than the addition due to the welfare-state provision of income, goods and services. This is because the introduction of income-transfer programmes creates an incentive to reduce labour supply. Further, the increase in taxation (and/or public debt) is most likely to distort the relative-price structure, leading, in turn, to a decline in income (McGUIRE and OLSON [1996, 74-75]). It follows that rent-seeking reduces gross income, and that the welfare state lowers disposable income (out of given gross income). Thus, as the welfare

⁸ Disposable income is defined as gross income, minus taxation, plus income or consumption related to the provision of welfare-state subsidies, commodities and services. For instance, a person on the dole without accumulated wealth, who benefits from unemployment benefits has zero gross income, but positive disposable income. An individual who benefits from the national health service will have a disposable income equal to his gross income, minus taxes, plus the difference between the market price for those very health services and what he actually pays for them.

Of course, individuals are deemed to be more concerned about their actual purchasing power than by what their income would have been if no rent-seeking had taken place and no redistribution policy had been adopted.

state and taxation expand, the wedge between gross and disposable income also increases. This is described in figures 2a and 2b.

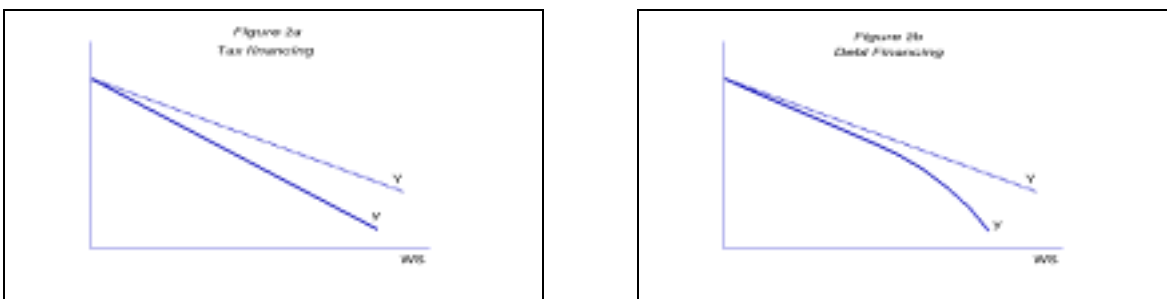


Figure 2a refers to the standard case just outlined, where the welfare state is financed through taxation. Gross income (Y) falls because rent-seeking increases. Disposable income (y) falls faster to reflect the deadweight loss generated by the welfare state. Figure 2b refers to those cases where taxation is replaced by debt, at least temporarily. Public-debt financing keeps the wedge modest initially; but eventually the wedge increases dramatically, as more and more taxation is required to finance debt servicing⁹.

If the public at large is risk-averse, they are likely to be willing to accept some decline in aggregate disposable income in exchange for additional social protection, particularly since progressive taxation would place a disproportionate share of the tax burden on a minority of the voting population. Moreover, the costs of the decline in income will, over a certain range of such decline, be lower than the costs to the public of determining precisely why and how their income is declining.

The core of our analysis is that, due to the different political information and transaction costs among countries, the point at which a marginal decline in disposable income topples a government will differ among countries. Thus, while in every developed country, a fall below a certain point will be unacceptable, the tipping point will vary among countries. Because politicians

⁹ The case whereby the Ricardian equivalence condition is met in full is omitted, to keep the analysis as simple as possible.

are rational, income growth will be critically determined by the politicians' perception of the location of this point, i.e. the point at which further growth in the welfare state will lead to political change brought about by voter dissatisfaction with decreases in income.

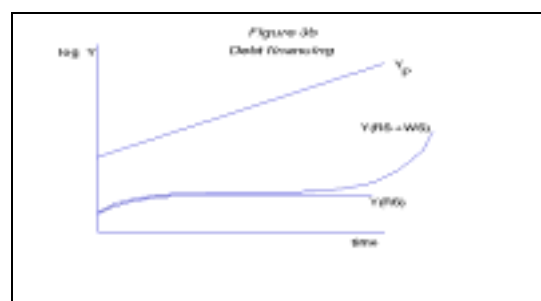
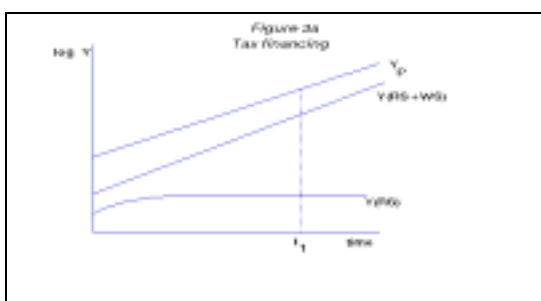
As the welfare state continues to expand, increasing numbers of voters would come to be affected by the fall in disposable income caused by this expansion. Of course some people will continue to prefer to sacrifice disposable income (theirs, or preferably other peoples') in exchange for social protection. But at some point the marginal voters in democratic DCs will be unwilling to pay more, i.e. the marginal costs of government become higher than the marginal costs of changing the government. But over some range, governments and voters will sacrifice growth for political support, and this places an upper limit on growth opportunities in democratic DCs.

In other words, there exists some, significant amount of space in which governmental actors are free to implement government policy and to enlarge the welfare state at the expense of growth. However, this growth in the welfare state must eventually end as people react to the deterioration of their living standards, and take action. And, of course, savvy politicians will recognize this, and, in equilibrium will respond by not permitting the welfare state to expand beyond the point at which their jobs are threatened. It then follows that WS will increase until the cost of the welfare state (in absolute terms) equals the perceived benefit.

What has been argued so far is shown in figures 3a and 3b., where income (in logarithms) is shown on the vertical axis. Here Y_P (potential income) describes income in an economy where no RS distortions are imposed¹⁰. On the other hand, $Y(RS)$ is greater than zero, and indicates the gross income foregone as a consequence of a given amount of rent-seeking. $Y(RS)$

¹⁰ Contrary to what described in the graph, it is well known that growth does not follow a steady-state behavior. Rather, it is a random walk, perhaps with a drift - see for instance PLOSSER [1989]. There is a great deal of debate about the nature of the variables which affect growth, and about their interdependencies - see for instance STERN [1991] and HELPMAN [1991]. For our purposes it seems therefore plausible to make the simplest possible assumption (constant growth), for other choices would not change our conclusions substantially, but would bear a cost in terms of greater complexity and vagueness.

is thus the cost of rent-seeking, and $Y_P - Y(RS)$ is what has been called gross income (Y). Of course, if $Y(RS)$ is flat, the economy does suffer from rent-seeking, but not its growth rate. If a given amount of RS also affected growth, then the $Y(RS)$ schedule would display a positive slope (RS is increasing), although presumably not steeper than that of the Y_P schedule (gross-income growth would still be positive in the future). Finally, $Y(RS+WS)$ indicates the gross income foregone as a consequence of rent-seeking and of the welfare state, so that $y = Y_P - Y(RS+WS)$.



It is important to emphasize that the size and cost of the welfare state increase at a faster rate than that of rent-seeking¹¹. And that once policy makers have become the leading coalition¹², they tend to slow down and possibly freeze the rent-seeking game, and focus instead on a continuous expansion in social protection.

By doing so, policy makers no longer need to share the rent with other coalitions. In addition, an expansion in the welfare state is also perceived to entail some benefits for the populace, so that opposition tends to be smaller than to rent-seeking.

When this happens, social protection is in fact presented as something desirable *per se*, not as a form of insurance against the effects of rent-seeking. Of course, the limit to the welfare state is still provided by the disposable-income constraint mentioned earlier on.

¹¹ Figure 3a refers to a constant-growth-rate hypothesis, but it is just an example.

¹² That is, beyond the situation described in figure 1.

For this to happen, the $Y(RS+WS)$ function in figure 3a must be steeper than the Y_P schedule. If that is the case, then sooner or later disposable income starts to decline. This is what happens as from time t_1 in the graph¹³.

4. *Low Growth in Totalitarian UDCs*

For precisely the same reasons that incumbent management teams in publicly-traded corporations want to make hostile takeovers difficult to accomplish, so too do totalitarian rulers prefer to keep the costs of being displaced by rival political coalitions as high as possible. One way to accomplish this is by political repression of such rivals.

When power is in the hands of an *élite*, which tends to be strongly supported by the bureaucrats (including the military), or is the bureaucracy itself, high political transaction costs insulate the public at large from political matters and eliminate the possibility of striking any kind of contract between rulers and "subject". Raw power does not need the legitimization that comes with growth. As a consequence, in totalitarian economies the quest for political leadership tends to become a fight among competing *élites* or autocrats, and thus political changes often take the form of palace insurrections. Revolutions do take place rather frequently. But as OLSON [1963, 544] already pointed out a long time ago, these revolutions do not produce meaningful change because those who win them face the same incentive structure as their predecessors. Put differently, in most cases institutional reform is out of question.

¹³ It is obvious that the timing of the crisis depends on the parameters of the growth process described by the Y_P and $Y(RS+WS)$ functions.

More generally, comparisons are difficult, for Y_P differ across DCs, and so do other relations described. Similarly, the nature of income distribution does matter, for it affects both "how much" welfare people are willing to trade off for a reduction in disposable income, and the number of people involved in this trade-off, as the policy drift proceeds. One can surely say that the DC problem is about both tolerable growth and, more directly, about tolerable social protection. Higher growth in terms of gross income does lead to higher tolerable levels of RS and WS ; and when the economy experiences permanently and perceptibly diminishing disposable income, crisis breaks out, and politicians will find themselves fundamentally threatened. But it should be stressed once again that there is not a unique tolerable amount of WS for all democratic DCs.

Unlike the situation in liberal democracies, fair elections don't take place because of the high probability that the incumbent rulers would lose them. Thus, the ruling *élites* have no incentive to try to assuage public opinion and there are not outside coalitions with which to find an agreement, because high political transaction costs keep such groups from forming. The main purpose of the ruling *élite* is quite simply to extract all the rents which can be extracted during their relevant time horizon and keep information and political transaction costs high. Indeed, there seems to be no limit to poverty and bad policy making.

4.1 The autocrats' strategy

The autocrat generally will not develop, or permit the development of economic infrastructure (education, communications, transportation).

More generally, income and growth remain low, since high transaction costs and low growth prevent other groups from forming and allow the coalition in power to enjoy a monopoly position in seeking and obtaining wealth transfers. This explains the strong correlation between totalitarian regimes and under-development.

However, in some cases economic transaction costs can be lowered selectively, if that helps stimulate economic activities in industries where the rents thus generated can at least in part be captured by the autocrat, but in no way by potential local political opponents. By doing so, the autocrat may increase his rent-seeking activities significantly, although the high political information and transaction costs make sure that his leadership remains unchallenged. This explains the strange fact that totalitarian UDCs have a strong taste for foreign joint ventures as a means for development. These business schemes enrich the local despot without empowering local interests that might develop into rivals.

The paucity of such interest groups leads to a situation in which there is little real trading and compromise because of the lack of competition among groups: the same dominant group or groups win systematically.

Moreover, in the typical totalitarian UDC there is no public opinion to compensate. Thus, the tolerance for low growth is much higher in totalitarian UDCs than in democratic DCs.

In fact, the substantial political stability despite low growth seems to suggest that in the former countries political turmoil is not really a direct function of economic performance (KIMENYI and MBAKU [1993]). Simply put, unlike the situation in a democracy, politicians in totalitarian states can provide rents to themselves and their favored coalitions to a much greater extent before they are deposed. And there is no need to create a large welfare state, because the nature of the information and political transaction costs prevent the weak interest groups who would demand a welfare state from forming.

Thus, we believe that in a totalitarian framework income growth matters only in special cases. In general, coalitions do not expect that their chances to stay in power are going to depend decisively on the quality of their growth performance. In fact, their hold on power can be weakened by development. This justifies the close association between the UDC status and a totalitarian political situation.

In this context our analysis is consistent with the observation by NORTH [1979, 255], according to whom where there are no close substitutes for an existing ruler, that ruler will be characterized as a despot, dictator, or absolute monarch. As close substitutes for an existing leader emerge, the degrees of freedom of the incumbent will diminish. Our analysis extends North's observations in two ways. First, we treat the emergence of rivals as partially endogenous. That is to say, the emergence of substitutes for the existing ruling coalition of a UDC is partially within their control. Our point is that, through repression of civil liberties and general despotism, an incumbent ruling coalition can severely raise the costs of entry to rivals. That is why despots are despots; and why in UDCs revolution is a fight between despots¹⁴.

Second, and more importantly, implicit in North's analysis is the idea that incumbent leaders face a choice between a strategy of taking a relatively small share of a relatively large GDP, and a strategy of taking a relatively large share of a relatively small GDP. The advantage of the first strategy is that, by protecting property rights, respecting the rule of law and devel-

¹⁴ According to SIVARD [1981], quoted in SEERS [1983, 62-63], there were 76 military coups in the Third World between 1960 and 1980, excluding "those cases where there had been coups but power had later been yielded to a civilian government".

oping infrastructure, a leader can promote growth and enlarge GDP. But by respecting property rights, the government's *share* of that GDP will be smaller than it would be if the government disregarded property rights, and acted in a confiscatory manner. In contrast, a government that acts confiscatorily, fails to respect property rights, and acts in a generally despotic manner will be able to obtain a larger share of the country's wealth, but the perverse incentive effects of the ruler's policies will discourage growth. Absent the tolerable growth theory presented in this article, it would seem obvious that the rational strategy for even the greediest leader would be to pursue a strategy of protecting property rights in order to maximize the size of the country's tax base. And this seems to be the assumption of development experts, who erroneously presume that leaders of UDCs want their countries to achieve higher levels of economic growth. But the tolerable growth theory presented in this article implies that rulers will prefer the alternative strategy of taking a high percentage of a small economic pie. This is because this strategy will maximize the ruler's chances for staying in power by keeping the public's tolerance for low growth very high.

4.2 Bureaucrats, politicians and time horizons in UDCs

Another implication of our analysis is that UDC economic performance does not depend critically on the time horizon of the ruling coalition. As suggested above, rational leaders of UDCs recognize that they will only remain in power if they can keep transaction and information costs sufficiently high to impede the development of coalitions that will challenge their power. As such, whether the ruling *élite* thinks that they will remain in power for a long period of time or a short period of time, they will, under our theory, pursue the same strategy, which is to obtain as much wealth as possible in the short term, without regard to the implications for future investment.

This approach runs counter implications of the prevailing paradigm, whereby ruling coalitions that believe they will stay in power for relatively long periods of time will adjust their behavior accordingly. As argued for instance in Clague, Keefer, Knack and OLSON [1996], they will try to increase long term growth in order to increase future rent-seeking opportunities, i.e.,

to increase the present value of the rents they obtain from being in power. Increasing the present value of the rents that leaders obtain from being in power necessarily involves increasing societal wealth generally. This is true because it is the societal wealth that produces the rents. The problem is that the very process of increasing societal wealth increases the probability that the existing leaders will be deposed, since rival groups have greater opportunities to form in wealthier societies. Consistent with our analysis, but contrary to the prevailing paradigm, KIMENYI and MBAKU [1993] indicate that interaction between policy making and rulers' time horizon is modest.

We turn now to the role of bureaucracies in totalitarian UDCs. Clearly bureaucracies sometimes exist in these economies, but they play a role that is fundamentally different than their role in democratic DCs. As explained earlier, in DCs bureaucracies serve the purpose of running complex rent-seeking compensation schemes and of solving contracting problems faced by individuals and weaker interest group coalitions. However, such weak interest group coalitions do not exist in UDCs; nor is there a need for intermediaries between rent-seeking coalition(s) and the public at large.

Therefore, in totalitarian regimes bureaucrats are not mediators among interest groups. Instead they are agents of the ruling coalition, and the top ladders of the bureaucratic hierarchy are likely to be close associates/relatives of the leaders. As emphasized in OLSON [1993], their function often is to loot the economy as efficiently as possible. In totalitarian countries, unlike in liberal democracies, bureaucracies are not autonomous or semi-autonomous, and their activities are not constrained by tolerable growth. No floor on growth is provided by the reaction of the electorate or of public opinion at large, nor is it provided by the foresight of the established bandits who want to maximize rent-seeking revenue in the medium-to-long run. Instead, income remains at the low level where there is very little to extract, or where rent-extraction has become too expensive.

5. *Some extensions*

The analytical framework put forward in the previous sections interprets growth as a by-product of rational self-interested, survival-oriented behaviour in developed and undeveloped economies. We believe that our theory may generate some interesting insights for the analysis of the intermediate cases neglected so far - non-democratic DCs and democratic UDCs (section 5.1). Also our theory has implications for the prospects of UDCs to evolve, and for the prospects for international aid efforts as a means for enhancing growth in the UDC world (section 5.2).

5.1 Some exceptions?

Because our theory predicts that although political freedom is sufficient condition for growth, one implication is that countries characterized by low political information and transaction costs either will be economically developed or on their way towards high income levels. Our theory also predicts that totalitarian rulers have strong incentives not to promote development. Hence, countries characterized by high political information and transaction costs are likely to be poor and to have little prospects for future growth.

At the same time, we acknowledge the existence of countries with democratic constitutions, that also have low income levels and growth rates. We also observe rich and fast-growing countries characterized by totalitarian regimes. To these special cases we now turn.

As regards the first alleged anomaly, in many countries there exists a democratic constitution on paper, but where government control of the media, lack of adequate infrastructure, education, communication, or outright threats¹⁵, make it virtually impossible for potential interest groups to oppose and challenge the incumbent groups. Many Latin-American countries were in such a situation for a significant part of the post-WWII period, even if most of them could boast Constitutions which were not too far away - on paper - from that of the USA. Although such countries are "democratic" in theory, they are in fact "totalitarian" according to the terminology suggested in these pages.

¹⁵ For instance, the Human Rights Watch said that in 1997 there were 336 murders inside Venezuelan prisons, and called them the most dangerous in the world (quoted from the Economist, June 20th, 1998, 29).

As for the second set of exceptions, involving totalitarian regimes that demonstrate robust growth, three comments are in order. The first draws on the argument put forward by CAMPOS and ROOT [1996], who suggest that in the case of the East-Asian NICs that have exhibited high growth in the absence of political freedom the autocrat was forced to pursue fast-growth policies under external political pressure. Legitimacy was therefore provided by the ability to pursue fast growth. In these cases even a successful traditional dictator would have been removed from power, either by foreign intervention, or by domestic coalitions fearing foreign intervention¹⁶. Under such circumstances, the cost of galvanizing into pressure groups with the purpose of removing the incumbent leader was certainly high, but lower than the cost associated with foreign occupation or Communist rule. The incumbent rulers knew this, and behaved accordingly.

Second, in the NICs selective growth policies were pursued following the pattern shown in section 4.1, and such selective policies could be pursued in those industries because the economy was enjoying significant comparative advantages. Growth was so high in these countries during the post-war period that absolute investment levels were more important than investment allocation. In other words, the rulers were able to mimic the market, at least for a time, without risking their political power and their economic rents. Of course, in the long run this led to distortions, for the "winning" industries became insulated, and prevented successful entrepreneurs to enter the market; and bad firms were prevented from exiting. But the consequences were felt only in the second part of the 1990s, when increased global competition made investment allocation decisions increasingly important.

Finally, not all the NICs are totalitarian according to our definition of this term. As CAMPOS and ROOT [1996] have shown, most NIC rulers have tried to govern through consensus, rather than violence and oppression. That means that the political information and

¹⁶ CAMPOS and ROOT [1996] claim that rulers behave according to a long-term perspective only if long-term growth legitimizes power. And that this has been the case in only a limited number of cases in post-war history, mainly connected with the Cold War and the threat of Communist invasion.

transaction costs were not as high as in the typical UDCs. Of course, rents were created and extracted, but the mechanism was not unlike that observed in many democratic DCs. The only substantial differences are in the levels of tolerable growth and of the political information and transaction costs, both higher in the NICs than in the DC area. Hence, quasi-totalitarian institutional frameworks did not always imply prohibitively high political information and transaction costs. Rather, they were justified by the need to reduce economic transaction costs, given the constraints mentioned above.

Indeed, when the foreign political threat weakened, and the distortions provoked by rent-seeking activities were exposed, that model of development was badly shaken. These facts are consistent with our theory. Growth does not lead to problems in those countries where the ruling *élite* is legitimized by popular consensus, or where external threats force incumbent leaders to promote growth in order to maintain the domestic prosperity necessary to withstand foreign pressure; or where information and transaction costs are relatively low (Singapore). But growth becomes a problem when the autocrat keeps such costs high and there are no external threats, as has been the case in Indonesia.

5.2 *On the future of undeveloped countries*

Foreign external pressure may be an important cause for institutional change. But it is not the only one. More generally, one may argue that technology and globalization have made anti-growth policies in UDCs much more difficult to pursue, by comparison with the post-WWII period. Exposure to and information about high-income consumption patterns have provided new incentives which may induce the public at large to suffer the high political transaction costs involved in opposing and even ousting rent-seeking autocrats. By and large, in most countries the tipping point at which the cost of fighting the ruler is lower than the expected benefits of reducing rent-seeking has not yet been reached. That explains the UDC figures presented in the Appendix. UDC rulers have thus been able to keep growth low and maximize rent-seeking. Nevertheless, it may no longer be so in the future. In this light, our tolerable-growth theory only predicts that if and when the tipping point is reached, the incumbent ruling *élite* will be fought or

voted out of power, in spite of its efforts to raise information and transaction costs. Of course, this will be easier - and the moment of institutional change closer - for countries where the population is relatively well educated, cultural traditions are stronger, infrastructure is better; where exposure to globalization is enhanced by geography or emigration patterns coupled with resilient family ties. Unfortunately, today not many UDCs present these features.

Our theory also predicts that most among the future NICs will be unlikely to replicate the very fast growth performances of the four so-called East-Asian Tigers. The new political regimes in reformed UDCs will not tolerate a new autocrat, even if committed to growth. More likely, democracies will prevail and part of the rent-seeking pattern typical of the DC case will be replicated. Pressure in this direction is already coming to the surface in today's NICs, advocating substantial increases in the welfare state. The tolerable-growth threshold will surely be higher than in today's DCs, but a substantial amount of rent-seeking will remain.

As argued in DRÈZE and SEN [1989] and SEN [1990], policy making in UDCs could improve substantially if the ruling *élite* were made accountable to the public. But the goal of such an *élite* is not to be accountable, for otherwise it would lose power. Thus, international aid is often of little use, for it is managed by the local bureaucracy on behalf of the ruler. In fact, in many cases aid is used by the ruler to increase his rent, not to improve the living conditions of the population or enhance growth.

Unfortunately, there is no easy or simple recipe. The international community should however make a special effort to encourage education and to create opportunities for exposure to globalization. That touches on migration and trade policies, of course. Issues about which the positions of the DC community have actually favoured the rent-seeking autocrat, even against the interest of the DC public at large. This suggests that perhaps the concern of the international community for institutional change in UDCs often fails to meet the real needs of these countries.

6. Conclusion

We have no hesitation in acknowledging that many among the basic concepts of this paper are not new. The importance of the role of the rent-seeking coalitions as regards welfare and growth had already been perceived by Jean-Baptiste Say at the beginning of the 19th century, not to mention Bastiat and Marx, towards the middle of that century. The same applies to the analysis of the collective-action problems typical of fragmented coalitions, as is known from the work of Vilfredo Pareto in the late 1880s. Moreover, J.S. Mill and - more recently - Hayek predicted the shift in focus from income-production to income-redistribution issues. Finally, we are also indebted to Quigley, who in the early 1960s elaborated on de Tocqueville and J.S. Mill, and identified the origins of decline in the erosion of government action, whereby "social instruments" gradually transform into "institutions"¹⁷.

Yet, although we cannot claim originality for the conceptual tools utilized in this article, we believe that the use of such tools in order to shape a new theory for growth and development after World-War II is indeed innovative. By analyzing the role of political information and transaction costs we suggest a new "comprehensive" view about growth policies, which is applicable both to DCs and to UDCs. In particular, we believe it succeeds in explaining low growth in both groups of countries.

According to the traditional approach to institutional change, path dependency can be broken only by war or by a dramatic shock in relative prices, as argued for instance in OLSON [1982] and NORTH [1990]. In partial contrast with this view, this paper argues that in democracies rulers are removed as a consequence of a breach of contract. The nature of the contract rests on the cost of detecting and stopping the rent-seeking game played by the incumbent coalitions. If the transaction and information costs involved in detecting breaches become suffi-

¹⁷ As QUIGLEY [1979, 101-102] put it, "An instrument is a social organization that is fulfilling effectively the purpose for which it arose. An institution is an instrument that has taken on activities and purposes of its own, separate from and different from the purposes for which it was intended".

ciently high, the public's "toleration" for low growth rises concomitantly. Then interest group coalitions will increase levels of rent-seeking and growth will slow.

The weaker groups will demand a bureaucracy, including an "independent bureaucracy", to protect them from the ravages of better rent-seekers by providing social-protection programs and protection for the deals garnered by the weaker interest groups. In turn, the demand for bureaucracy by weak groups may lead the administrative state to become the dominating coalition. The bureaucrats in the administrative state will attempt to further their own power by promoting the expansion of the welfare state *per se*. Ultimately, the crucial policy variable in these economies turns out to be the size of the administrative state, which will grow until it threatens the survival of politicians. In other words, the upper bound on the growth of the modern administrative state is provided by its negative effect on disposable-income growth.

The typical totalitarian country differs from the democratic world in that: (1) there is no clear contract between populace and ruling *élite*, for the latter seldom derives its authority from an undisputed source of legitimacy; and (2) there are no weak interest groups who have a special need for the protection offered by an independent bureaucracy. As a consequence, the incumbent *élite* uses whatever bureaucracy exists in order to maximize its quest for wealth. In other words, bureaucracies in these countries behave like roving bandits.

This paper has focused on two polar but highly realistic cases. One where information costs and transaction costs are sufficiently low that low growth is not tolerated. The other where information and transaction costs are kept high, so that low (including zero or negative) growth is endured because weak interest groups are not tolerated and the public is unable to galvanize into a political coalition that is able to replace current leadership. We therefore conclude that democratic countries are usually relatively rich, or on their way towards high income levels. On the other hand, a totalitarian country is likely to be an undeveloped economy. For if the autocrat pursued growth strategies, sooner or later new coalitions would come to the surface, and his power would be successfully challenged.

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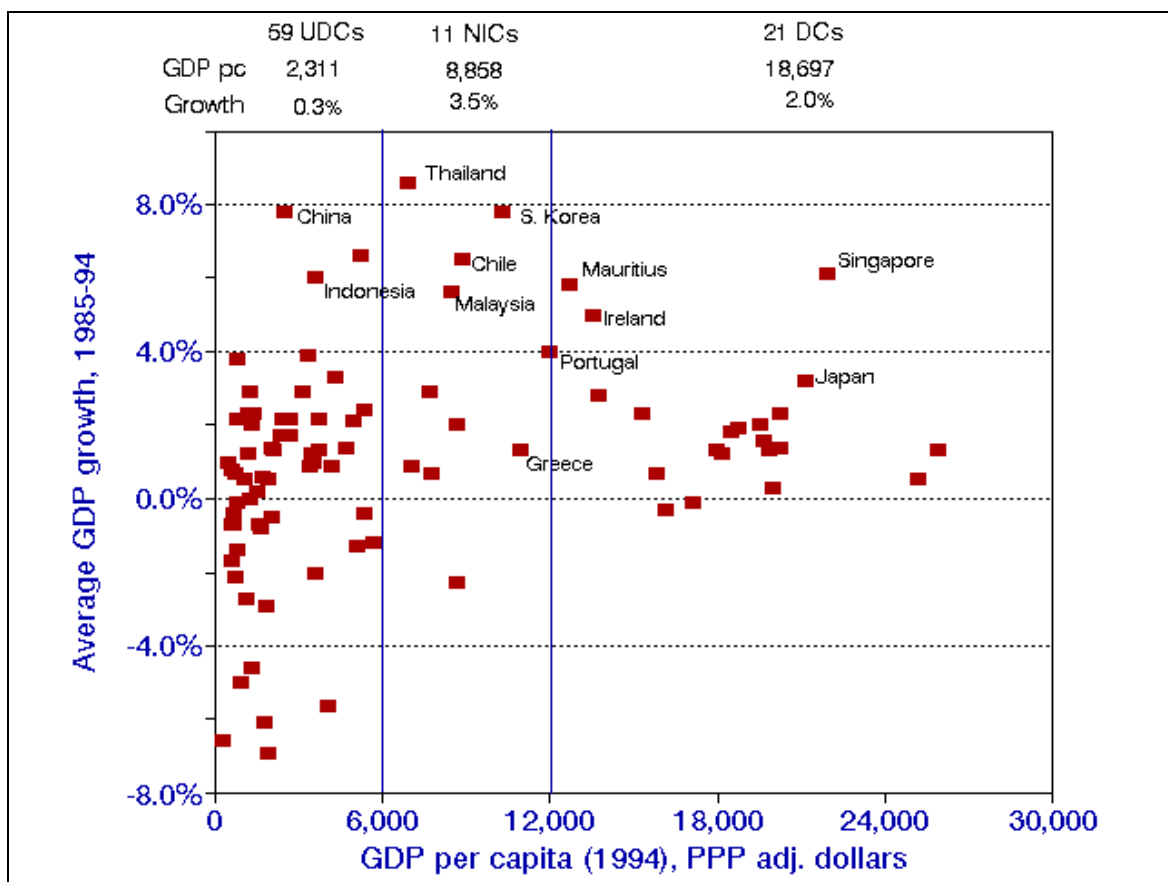
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APPENDIX

Even a cursory look at the data shows that most countries of the world are poor and that their growth performances continue to be disappointing.



As the figure describes, in 1994 the average GDP per capita in undeveloped countries (UDCs) is slightly above 2,311 US dollars, and their average annual growth rate in the past ten years has been a mere 0.3%¹⁸. Of course, income in these countries is far below the level com-

¹⁸ The data in the graph below are drawn from the *World Development Report* [1996, table 1, p.188], The World Bank: Washington D.C.. They refer to GDP per capita, adjusted for PPP, for all the 91 countries for which data were available. The former Soviet bloc and

patible with their production-possibility frontier, and no catch-up process seems to be underway.

The performance in the developed countries (DCs) is also somewhat disappointing (about 2.0% growth rate in the past ten years, which drops to 1.6% if Singapore and Mauritius are excluded from this group of countries), thereby validating reports about missed opportunities for faster growth in the industrialized area as well.

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some oil exporting countries (Oman, UAE, Saudi Arabia, Kuwait) have been excluded. The partition of the countries into three groups (DCs/NICs/UDCs) is consistent with what the World Bank defines as "high-income" economies (above 9,000 US dollars in GDP per capita, unadjusted for PPP), "upper middle-income" economies (between 3,000 and 9,000 US dollars, plus Brazil), and "middle-income, lower-middle-income and low-income" economies (below 3,000 US dollars, excl. Brazil).