# Political Institutions and Economic Performance, 1950-1999

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#### **Abstract**

The paper is a summary of a research project concerning the impact of political institutions on economic development. Political regimes, dichotomized as democracies and dictatorships, do not axect the rate of growth of total income but, since population grows faster under dictatorships, per capita incomes grow faster under democracies. Finer grain distinctions show that parliamentary institutions promote development, that military dictatorships are particularly adverse to it, and that institutionalized dictatorships grow faster than those without institutions. Long term patterns con...rm the ...ndings based on annual observations.

#### 1 Introduction

This paper is a summary of an ongoing research project concerning the impact of political institutions on economic performance. It updates and extends some of the analyses contained in Przeworski et al. (2000). Political institutions are ...rst dichotomized as democracies and dictatorships and then ...ner distinctions are considered. The aspects of economic performance analyzed here include the rate of growth of total income, the rate of growth of population, and the rate of growth of per capita income.

A methodological clari...cation is needed ...rst. If we are to determine whether political institutions a xect economic performance, we must ...rst ask under what conditions these institutions exist. Unless this question is posed ...rst, we will be unable to distinguish the exect of exogenous conditions from the exect of these institutions. Suppose that you were to observe that in 1985 per capita income of Mali, which was a dictatorship, grew at the rate of 5:35 percent. Would the rate of growth of Mali in 1985 been dimerent had it been a democracy? This is what we want to know when we ask about the impact of political regimes on growth. But we do not observe 1985 Mali as a democracy, only as a dictatorship. We could look for a case which was like 1985 Mali in every aspect other than its political regime. But what are we to do if we cannot ...nd a democracy like Mali in 1985? As you probably already know, and will soon learn, democracies are very rare in poor countries, such as Mali, which in 1985 had a per capita income of \$532<sup>1</sup>. In turn, we may observe that in 1996 Luxembourg, which was a democracy and had per capita income of \$19; 229, grew at the rate of 3:03 percent. Was its growth slow because it was a democracy? Again, we may try to ...nd a dictatorship which would look in all respects like Luxembourg. But the wealthiest dictatorship we observed between 1951 and 1999, Singapore, had per capita income of \$18;400. Hence, we will not ...nd a single case of a dictatorship as wealthy as Luxembourg.

Why does it matter? Suppose that poor countries in general grow slower than wealthy countries. Since most poor countries are dictatorships and all wealthy countries are democracies, we will conclude that economic growth is faster under democracies. But this will be an invalid conclusion: the dixerence will be due to conditions under which these regimes exist, not to anything they do. To take another example, consider the possibility that democracies are very vulnerable to economic crises, while dictatorships survive them. Again, if we were to just com-

<sup>&</sup>lt;sup>1</sup>Throughout the paper, all income ...gures are expressed in 1985 purchasing parity dollars.

pare the growth rates observed under the two regimes, we would conclude that democracies grow faster. And, again, this conclusion would be erroneous: we will have observed this dixerence only because democracies died when they encountered bad economic conditions and became dictatorships which survived under these conditions. Finally, consider the possibility that there is some factor which we cannot observe systematically and which axects both the political regime and the rate of growth. Enlightened leaders, for example, may opt for democracy and well manage the economy. If we rely on comparisons of the observed cases, we will yet again erroneously conclude that faster growth is due to democracy, rather than to the enlightened leadership.

To distinguish the conditions under which regimes ...nd themselves from the exect of these regimes, therefore, we need to understand under which circumstances these regimes come into being and under which circumstances they survive and die. Only then can we proceed to isolate the impact of regimes, rather than of these conditions, on economic performance. Statistical methods for doing this were developed by Heckman (1976, 1988) and are applied here.

The plan of the paper is the following. In the next section, I brie‡y explain what I mean by democracy and dictatorship and I examine their impact on economic growth. Then I distinguish di¤erent types of democracies and dictatorships and analyze the same. Finally, I look at the long-term patterns of development. A brief conclusion follows. To keep the discussion free of technical issues, I present descriptive tables and report only conclusions of statistical ...ndings. Most of the results summarized below are based on observing 152 countries (excluding six Gulf oil producers) between 1951 and 1999. The political data were extended from Przeworski et al. by José Antonio Cheibub and Jennifer Gandhi. Economic data are taken from Penn World Tables, release 5.6, and combined with data from the World Bank. Demographic data are taken from the WDI (2000). Readers interested in methodological aspects should consult Przeworski et al. (2000, Appendix 1).

## 2 Democracies and Dictatorships

The prototype of democratic politics which underlies this analysis retects Schumpeter's (1942) focus on ...lling governmental o¢ces by elections. Democracy is a political regime in which rulers are selected through free and contested elections and in which they are not formally responsible to some non-elected power. Operationally, democracy is a regime in which incumbents lose elections and leave o¢ce if they do. Hence, the de…nition of democracy is Schumpeterian or "electoralist."

Dictatorships are treated as a residual category, "non-democracies."

Obviously, one can argue about de...nitions, and indeed there is a vast literature attempting to de...ne what we should consider as a democratic regime. But while one can, and some do, engage in endless hair splitting, most people readily agree whether a particular country is a democracy. Inkeless (1990: 5-6) found that the scales of democracy developed independently by Gastil (1990), Coppedge and Reinicke (1990), Bollen (1980), and Gurr (1990) are all highly correlated. Przeworski et al. (2000: 56) reported that their dichotomous classi...cation of regimes is almost perfectly predicted by all these scales. If you took any two informed persons and asked them whether a particular country has a democratic regime during a particular year, they would almost certainly say the same, even if you did not specify any criteria for their judgements.

Figure 1 presents the average observed rates of growth of total income for the two regimes by year. Some of patterns merit a comment. First, it is apparent that the rate of growth of both regimes fell sharply after 1978. Secondly, both regimes seem to follow the same pattern over time and their average performance appears to be very close. Third, the annual variation of the rate of growth of dictatorships appears to be greater than that of democracies.

These impressions are con...rmed when we calculate average growth rates by period and regime. Table 1 shows presents the average rates of growth of total income, as well as of population and per capita income by regime, observed ...rst for the entire period and then separately for 1951-1977 and 1978-1999.<sup>2</sup>

Table 1: Rates of growth by period and regime.

| Period            | 1951 | i    | 1999 | 1951 | i    | 1977 | 1978 | i    | 1999 |
|-------------------|------|------|------|------|------|------|------|------|------|
| Growth of         | ΑII  | Dem  | Dic  | AII  | Dem  | Dic  | All  | Dem  | Dic  |
| Total income      | 3:99 | 3:65 | 4:26 | 5:14 | 4:62 | 5:51 | 3:00 | 2:91 | 3:09 |
| Population        | 1:95 | 1:41 | 2:38 | 2:05 | 1:58 | 2:38 | 1:86 | 1:27 | 2:38 |
| Per capita income | 2:04 | 2:24 | 1:88 | 3:09 | 3:04 | 3:13 | 1:14 | 1:62 | 0:71 |
| N                 | 5258 | 2358 | 2924 | 2440 | 1018 | 1422 | 2842 | 1340 | 1502 |

<sup>&</sup>lt;sup>2</sup>Note that these averages are not weighted by population. Since we are interested in national political institutions, it makes sense to treat countries, rather than individuals, as units here. Weighted for population, the rate of growth of total income in the world shows no trend between 1951 and 1999.

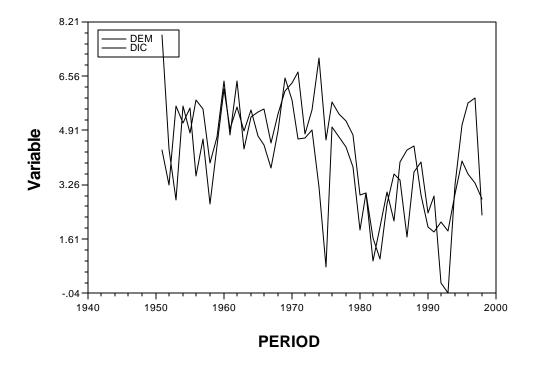


Figure 1: Growth of total income, by year and regime.

It is clear that average growth of total income slowed down after 1978. Moreover, even if population growth declined as well, per capita income grew much more slowly during the latter period. Total income grew faster under dictatorships until 1977 but, since their population growth was much faster, per capita income grew at about the same rate under the two regimes. After 1978, the growth of total income became almost identical under the two regimes but the slower rate of population growth under democracies made their per capita incomes grow faster.

One should not, however, make too much of these patterns. The reason is that the distribution of the two regimes with regard to per capita income is highly unbalanced. Any casual observer will note that democracies are rare in poor countries and frequent in the wealthy ones. Of the 1340 annual observations of countries with per capita income under \$1000, we observed only 74 years of democracy. Of the 757 annual observations of countries with incomes above \$8000, only 39 years were spent under dictatorships. Indeed, if you take per capita income alone, you will correctly predict 68 percent of the 5716 annual observations of regimes. Figure 2 portrays the proportion of democracies as a function of per capita income.

Hence, if per capita income a¤ects the growth rates, the observed averages will re‡ect income rather than e¤ects of regimes. Note in Figure 2 that this is indeed the case: rates of growth of total income are on the average low in very poor countries, rise rapidly until countries reach per capita of about \$2,500, and then decline.

To purge these patterns of the potential exect of income as well as of other conditions that may axect them, we need to engage in statistical analyses. The method is the same throughout. It consists of generating counterfactual observations for the missing observations. In terms of the examples with which we began, the method consists of generating the observation for 1985 Mali as if it were a democracy and for 1996 Luxembourg as if it were a dictatorship, under otherwise identical conditions. The procedure is to estimate separately for each regime regression equations augmented by an instrumental variable that summarizes the conditions under which the particular observation was generated and then compare the average predicted values independent of these conditions. The net result is then the exect of regimes. In each case, I report the observed values, based on the observations as they happened to occur, and "selection-corrected" values.

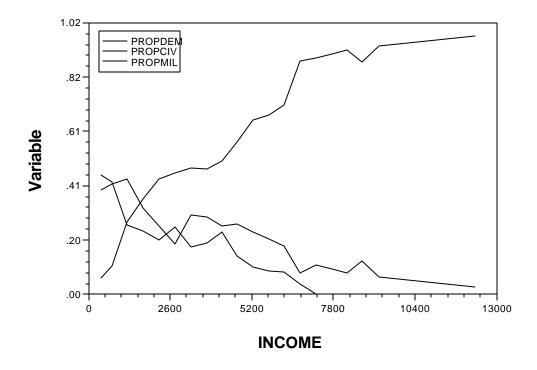


Figure 2: Democracies, civilian and military dictatorships, by per-capita income.

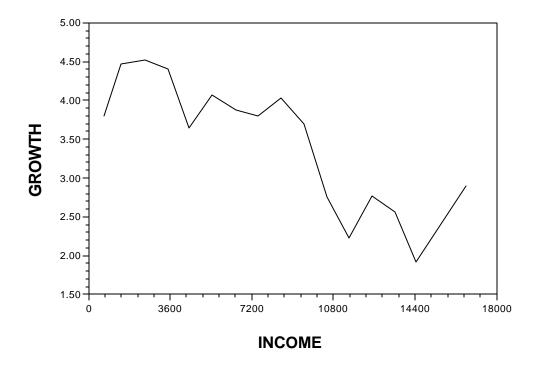


Figure 3: Growth of total income by per-capita income.

Table 2 presents the results of applying this procedure to the growth of total income, population, and per capita income, for the entire period:<sup>3</sup> "Obs" stands for the observed values while "Sel" shows values corrected for selection. These "selection-corrected" averages should be read as follows: "Had the two regimes existed under identical conditions, the average for each would be the value given in the table."

Table 2: Growth of total income, population, and per capita income under democracy and dictatorship

|      |      | Total | income | Popu | lation | Percapita | income |
|------|------|-------|--------|------|--------|-----------|--------|
|      | Ν    | Obs   | Sel    | Obs  | Sel    | Obs       | Sel    |
| Dics | 2918 | 4:40  | 4:24   | 2:56 | 2:24   | 1:84      | 1:93   |
| Dems | 2131 | 3:69  | 4:06   | 1:43 | 1:74   | 2:26      | 2:11   |

As we see, the observed rates of growth of total income dimer little between the two regimes and correcting for selection brings them even closer.

To check these results another way, consider diachronic patterns. The average rate of growth of total income during all the years of democracies preceding dictatorships is 4:22 percent and of dictatorships following democracies is 4:36 percent. Hence, transitions from democracy to dictatorship do not axect the rate of growth. Growth during all the years of dictatorships preceding democracies is higher, at the average of 4:07 percent per annum, than the average of 3:65 percent during all the democratic years that follow. But since the recovery from the crises accompanying transitions to democracy is slow and the observations are right-hand censored, the conclusion that transitions to democracy slow down growth would be erroneous. Just note that many democratic observations follow transitions either from bureaucratic-authoritarian or communist dictatorships during the 'eighties, including the very end of the decade. Since these democracies did not have time to recover, they weigh the democratic average down.

<sup>&</sup>lt;sup>3</sup>All the analyses are preceded by a probit analysis, in which the current regime is conditioned on the past regime, per capita income, the proportion of democracies in the world in the particular year, the sum of past transitions to authoritarianism, and interaction terms. The growth of total income is conditioned on the growth of capital stock and of labor force, which do not signi...cantly di¤er between the two regimes, as well as by per capita income and its square. The rate of growth of population is conditioned on per capita income and the distribution of major religious groups. Finally, the selection-corrected rate of growth of per capita income is estimated in the same way as the total income except for adding population growth.

In sum, neither the selection-corrected values for the entire sample nor the paths of growth associated with regime transitions give any support to the claim that regimes axect the rate of growth of total income. Selection-corrected average rates of growth of total income are the same for the two regimes. And there are no reasons to think that steady-state rates of growth are dixerent under the two regimes when countries experience regime transitions. The ...rst conclusion, therefore, must be that political regimes have no impact on the rate of growth of total income. The arguments about the superiority of dictatorships in mobilizing savings for investment (Galenson 1959, de Schweinitz 1959, Huntington 1968, Huntington and Dominguez 1975) ...nd no support in the evidence.

What matters, however, from the point of view of well-being is not the growth of total but of per capita income. And it turns out that, for reasons discussed below, population grows signi...cantly faster under dictatorships. The observed rate of growth of population is 2:56 percent under dictatorships and 1:43 percent under democracies. Selectioncorrected estimates are 2:24 percent for dictatorships and 1:74 for democracies. And since the rate of growth of per capita income is the dixerence between the growth of total income and of the population, the observed estimate of the growth of per capita income under dictatorship is 1:84 percent and under democracy it is 2:26 percent. The selection-based estimates are 1:93 for dictatorships and 2:11 for democracies. The third conclusion, therefore, is that per capita incomes grow slightly faster under democracy. Looking diachronically at the rates of growth of per capita income shows that they decline from 1:94 to 1:84 when a dictatorship follows a democracy and increase from 1:88 to 2:24 when a democracy follows a dictatorship.

What remains signi...cantly di¤erent between the two regimes are the rates of population growth: according to the selection-corrected values, population doubles in thirty-one years under dictatorships and in forty years under democracy. Moreover, diachronic analysis shows that while democracies that follow dictatorships have a sharply lower rate of population growth, this rate increased on the average from 2:07 to 2:48 when dictatorships followed democracies.

This is a surprising ...nding, directing our attention to the demographic exects of regimes in general. The higher rate of growth of population under dictatorships is not due to lower mortality: in fact mortality rates are higher under dictatorship. They are due to higher birth rates. In turn, higher births rates under dictatorship are not due to the age structure, but to higher fertility, even when controlling for population of

reproductive age.4

Table 3: Death rates, birth rates, and fertility under democracy and dictatorship

|      | Death | rates | Birth | rates | Fertility | Fertility |
|------|-------|-------|-------|-------|-----------|-----------|
|      | Obs   | Sel   | Obs   | Sel   | Obs       | Sel       |
| Dics | 13:42 | 10:45 | 36:16 | 31:47 | 5:15      | 4:44      |
| Dems | 9:29  | 9:56  | 19:94 | 24:49 | 2:73      | 3:42      |

In the light of this analysis, had the two regimes existed under the same conditions, an average woman would have one more child under dictatorship than under democracy. Why it would be so is far from apparent. Przeworski et al. (2000) suggest that higher fertility may be a means of old age insurance under conditions of high uncertainty and provide evidence that uncertainty is much higher under dictatorships. But, whatever the explanation, the fact is that deaths, births, and fertility are higher under dictatorship at every income level. Figure 4 shows fertility by per capita income and regime.

<sup>&</sup>lt;sup>4</sup>Following probit, death rates (per thousand) are conditioned on per capita income, distribution of major religions, and population over 65. Birth rates and fertility are conditioned on income, religions, and population between 15 and 65.

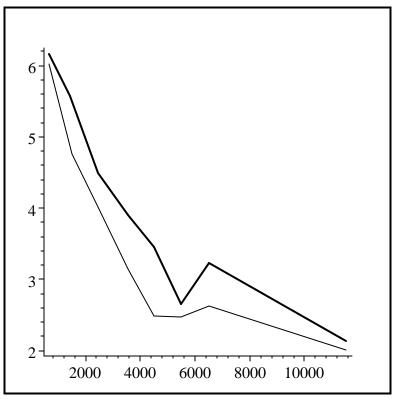


Figure 4: Fertility as a function of per capita income and regimes.

Note that very poor countries, those with incomes below \$1,000 have fertility slightly above 6 under both regimes, while wealthy countries, those with incomes above \$10,000, converge to the replacement rate. But at all intermediate income levels, fertility is higher under dictatorships.

Hence, we learned that political regimes have almost no impact at the rate of economic growth but they appear to have a powerful exect on demography. Since the rate of growth of population is higher under dictatorships, per capita income increases faster under democracies.

#### 3 Political Institutions at a Finer Grain

Neither democracies nor dictatorships are all the same. Hence, we will now look at political institutions at a ...ner grain.

One way to distinguish democracies is by the institutions that regulate the separation of power between the executive and the legislative branches. Parliamentarism is a system in which the executive serves at the discretion of the legislature. Speci...cally, these are systems in which the legislature can at any time change the government. Presidential systems are those where the chief executive is elected independently of

the legislature and cannot be changed at its discretion. Finally semipresidential or "mixed" systems are hybrids in which the government responds both to the legislature and to independently elected president.

Proceeding as we did before<sup>5</sup> shows that the institutional framework of democratic regimes makes a di¤erence for the growth of total income. Growth of total income would have been higher under parliamentary regimes had they existed under the same conditions as the other institutional frameworks. Since in addition the observed population growth was lowest in countries with parliamentary institutions, both the observed and selection-corrected rates of growth of per capita income are much higher under parliamentarism. Even when we control for the rate of growth of population, the di¤erences are important: under ceteris paribus conditions, per capita income doubles in 30:8 years under parliamentarism, 44:6 years under presidentialism, and 59:8 years under semi-presidential systems.

Table 4: Growth of total income, population, and per capita income under dimerent democratic institutions

|       |      | Total | income | Population | Percapita | income |
|-------|------|-------|--------|------------|-----------|--------|
|       | Ν    | Obs   | Sel    | Obs        | Obs       | Sel    |
| Dics  | 2915 | 4:39  | 4:19   | 2:56       | 1:84      | 2:10   |
| Parl  | 1244 | 3:72  | 4:38   | 1:12       | 2:61      | 2:23   |
| Mixed | 233  | 3:02  | 2:88   | 1:15       | 1:86      | 0:74   |
| P res | 654  | 3:85  | 3:80   | 2:12       | 1:73      | 1:64   |

Distinguishing dictatorships is a more complicated matter. One obvious distinction is whether they are ruled by military men, civilians, or monarchs.

Table 5: Growth of total income, population, and per capita income under military, civilian, and monarchical dictatorships

|          |      | Total | income | Population | Percapita | income |
|----------|------|-------|--------|------------|-----------|--------|
|          | N    | Obs   | Sel    | Obs        | Obs       | Sel    |
| Dems     | 2131 | 3:69  | 4:41   | 1:43       | 2:26      | 2:42   |
| Military | 1129 | 4:21  | 2:30   | 2:54       | 1:68      | 0:47   |
| Civilian | 1387 | 4:28  | 3:88   | 2:28       | 2:00      | 1:92   |
| Royal    | 214  | 5:17  | 3:61   | 2:52       | 2:66      | 1:45   |

<sup>&</sup>lt;sup>5</sup>The only di¤erence is that selection is based on multinomial logit.

The selection-corrected values for all dictatorships are low: the reason is that these dictatorships are most frequent at the income level when the rates of growth are the highest, while democracies are frequent when the rate of growth tends to be lower. Among the dictatorships, those headed by civilians grow much faster than military or royal ones. The estimates for monarchies are not reliable, since their number is very small (remember that Gulf countries are not considered).

Finally, we can distinguish dictatorships by their institutional frameworks. This approach may seem unorthodox, since almost all students of dictatorships dismiss their institutions as mere "window dressing," assuming that they are inexectual. Yet Gandhi and Przeworski (2002) have shown that institutional frameworks a ect the longevity of dictators' tenure in power, while Gandhi (2002) discovered that these frameworks have consequences for some policies pursued by dictatorships. Gandhi's central idea is that dictators establish and maintain nominally democratic institutions, such as parties, legislatures, and elections as an instrument of cooptation, but to exectively coopt some groups of the potential opposition, these institutions must have some real effects on policy. Following Gandhi, I distinguish dictatorships that tolerate more than one autonomous party in the legislature (TWOPARTY), those that either have a legislature with one party or a non-partisan legislature<sup>6</sup> (ONEPARTY). Finally, some dictatorships have no legislature (NOLEG). Non-institutionalized dictatorships occur primarily in poor countries, one-party dictatorships survive in middle income countries, while some two-party dictatorships continue to thrive in wealthier countries. The exect of dictatorial institutions on economic performance is presented in Table 6.

Table 6: Growth of total income, population, and per capita income under di¤erent dictatorial institutions

|          |      | Total | income | Population | Percapita | income |
|----------|------|-------|--------|------------|-----------|--------|
|          | Ν    | Obs   | Sel    | Obs        | Obs       | Sel    |
| Dems     | 2131 | 3:69  | 4:33   | 1:43       | 2:26      | 2:34   |
| TwoParty | 871  | 4:59  | 3:34   | 2:45       | 2:13      | 1:33   |
| OneParty | 1370 | 4:32  | 2:52   | 2:33       | 1:98      | 0:70   |
| NoLeg    | 495  | 3:79  | 1:63   | 2:49       | 1:30      | i 0:52 |

<sup>&</sup>lt;sup>6</sup>There are only 181 years in which dictatorships had a non-partisan legislature and these institutions appear to function similarily to one-party legislatures. This is why I lump the two together.

The results con...rm the importance of institutions under dictatorships. The more institutionalized is a regime, the faster it grows. Under ceteris paribus conditions, democracies would grow faster than dictatorships that maintain multi-partisan legislatures, which in turn grow faster than democracies with one-party legislatures, and those grow faster than dictatorships that are not institutionalized at all. The di¤erences are again quite large.

## 4 Long Run

Although our question concerns the impact of political institutions, one would be blind not to note ...rst the grip over people's lives of sheer poverty. While regimes do make a di¤erence for material welfare, their exect pales in comparison to that of scarcity.

In every aspect we examined, the di¤erences between poor and rich countries are enormous. For one, even if democracies do occasionally spring up in poor countries, they are extremely fragile when facing poverty, while in wealthy countries they are impregnable. Hence, poor people are much more likely to be ruled by dictators. Obviously, poverty means that people consume less. They also live shorter, have more children, see more of them die and are more likely to su¤er from collective violence. However one thinks of well-being, people with low incomes lead poor lives.

Moreover, while with regard to mortality and life expectancy the gap between poor and rich countries has been closing, the disparity of incomes and of fertility rates increased during the second half of the twentieth century. The coe¢cient of variation (the ratio of the standard deviation to the mean) of death rates fell slightly, from 0:48 when the countries were ...rst observed to 0:45 during the last year each country was observed. The coe¢cient of variation of life expectancy declined from 0:22 to 0:17. But the coe¢cient of variation of fertility increased from 0:39 to 0:51 while the coe¢cient of variation of per capita income rose from an already enormous 0:88 to 1:07. While the multiple of per capita income of the richest to the poorest country when they were ...rst observed was 47, at the end of the period it was 121.

These disparities of income and fertility increased because countries that were richer to begin with developed further, while many countries that were poor remained poor. Of the one hundred countries with per capita incomes under \$2,000 when ...rst observed, ...fty-six remained equally poor or even poorer some thirty or forty years later. Of the ...fty-two countries that began with higher incomes, all but seven developed over the long run. Figure 4 shows per capita incomes when we last ob-

Figure 4: Final income as a function of initial income.

served each country (typically in 1999) as a function of its income when ...rst observed.

Poverty can trap societies in its grip. Yet the bonds of poverty are not inexorable. Some countries, notably Taiwan, South Korea, Japan, Singapore, Portugal, Malta, Ireland, Spain, Thailand, Greece, Malaysia, and Botswana developed spectacularly, at least quintupling their per capita incomes. Of this list, three countries were parliamentary democracies during the entire period (Japan, Ireland, Malta). Greece was a parliamentary democracy before and after a period of military rule. One country had more than one party with reasonably free elections in which the same party always won an overwhelming majority (Botswana), which makes it a civilian-two party regime in our classi...cation; Singapore was ruled ...rst by civilian-one party and later civilian two-party authoritarian regime, and Malaysia tolerated more than one party except for two years. Portugal, Spain, South Korea, and Taiwan proceeded, some in convoluted ways, from various forms of dictatorship to di¤erent forms

of democracy. Finally, Thailand has been so unstable politically, that its history cannot be summarized. Table 7 shows the ratio of per capita income during the last year we observed a country, typically 1999, to the income during the ...rst year we observed it, and the history of political institutions.

Table 7: Developmental Miracles

| Taiwan    | 13:27 CIV-ONE/CIV-TWO/MIXED              |
|-----------|--|
| SKorea    | 12:84 CIV-TWO/PARL/MIL-NONE/MIL-TWO/     |
|           | MIL-NONE/CIV-TWO/MIL-ONE/MIL-TWO/PRES    |
| Japan     | 10:74 PARL                               |
| Singapore | 9:97 CIV-ONE/CIV-TWO                     |
| Portugal  | 7:72 CIV-ONE/MIL-NONE/MIXED              |
| Malta     | 6:81 PARL                                |
| Ireland   | 6:04 PARL                                |
| Spain     | 6:04 MIL-ONE/CIV-TWO/PARL                |
| Thailand  | 5:90 MIL-TWO/CIV-NONE/MIL-NONE/MIL-TWO/  |
|           | MIL-ONE/CIV-ONE/CIV-NONE/PARL/CIV-ONE/   |
|           | MIL-NONE/MIL-TWO/PARL/MIL-NONE/PARL      |
| Greece    | 5:53 PARL/MIL-NONE/MIL-ONE/MIL-NONE/PARL |
| Malaysia  | 5:49 CIV-TWO/CIV-NONE/CIV-TWO            |
| Botswana  | 5:03 CIV-TWO                             |

Thus, while such spectacular successes are rare to begin with, there is nothing to indicate that it takes one regime or the other to generate them. The "tigers" have been democratic as well as authoritarian, politically stable and highly unstable. Absences are perhaps more enlightening. There is not a single democracy on this list that was presidential or mixed during the entire period and there is not a single dictatorship with no institutions or just one party during the entire period. Hence, while developmental miracles can occur under a variety of political circumstances, we know at least under which conditions they do not occur.

The list of disasters is much longer. Nineteen countries which were independent before 1990 had lower incomes at the end than at the beginning of the period.

Table 8: Developmental Disasters

Kiribati 0:49 PARL Madagascar 0:51 CIV-TWO/MIL-NONE/MIL-ONE/MIL-TWO/MIXED Chad 0:52 CIV-TWO/CIV-ONE/MIL-NONE/CIV-NONE/

CIV-ONE/CIV-TWO

Sierra Leone 0:52 PARL/MIL-NONE/CIV-ONE/MIL-ONE/

MIL-TWO/MIL-NONE/PRES

Comoros 0:59 CIV-NONE/CIV-ONE/MIXED/CIV-TWO

Guinea Bissau 0:60 CIV-ONE/MIL-ONE/MIL-TWO

Haiti 0:67 CIV-ONE/CIV-TWO/MIL-NONE/CIV-NONE/

MIL-TWO/MIXED

Angola 0:68 CIV-ONE/CIV-TWO

Zambia 0:70 CIV-TWO/CIV-ONE/PRES Somalia 0:70 MIXED/MIL-NONE/MIL-ONE

Burundi 0:79 ROYAL-TWO/MIL-ONE/MIL-NONE/CIV-TWO/

MIL-TWO

Djibouti 0:79 CIV-ONE

CAF 0:80 CIV-TWO/CIV-ONE/MIL-NONE/CIV-NONE/

MIL-NONE/MIL-ONE/MIL-TWO/MIXED

Niger 0:85 CIV-ONE/MIL-NONE/MIL-ONE/MIL-TWO/

MIL-NONE/MIXED/MIL-TWO

Guyana 0:87 CIV-TWO/PRES

Papua NG 0:89 PARL

Suriname 0:92 PARL/MIL-NONE/MIL-ONE/MIL-NONE/

MIL-TWO/MIXED/MIL-TWO/MIXED

Mozambique 0:92 CIV-ONE/CIV-TWO Mongolia 0:98 CIV-ONE/MIXED

Patterns are again hard to ...nd. Two countries (Kiribati and Papua New Guinea) were parliamentary democracies throughout. Five countries remained under dixerent dictatorships during the entire period, with quite a few upheavals. Seven countries started as authoritarian and ended as democracies, but typically too late to have an impact on the growth patterns we observed. Somalia began as a democracy and disintegrated under military rule. Finally, Suriname had a convoluted political history. All one can say is that most of these countries were ruled by dixerent forms of dictatorship during most of their histories, having often experienced periods of civil strife and the absence of any political institutions.

## 5 Conclusions

The Holy Grail of the research on political institutions is to identify those institutional arrangements that promote economic growth, internal peace, and welfare. This research is particularly important since many governmental agencies, U.S. as well as international, are eager to

impart advice to less developed countries about the proper framework of governance, and some are even willing to condition their policies on what they consider to be "good governance." Consulting ...rms, thinktanks, private foundations, as well as public agencies are engaged in rating dixerent aspects of political and economic institutions. But these are typically subjective judgements, rather than evaluations based on systematic observation. One paradox of this research area is that these subjective judgements always predict economic performance well, while studies based on observable aspects of political institutions always raise doubts (Aron 2000). In my view, most of this advice is hasty and illfounded, as likely to be helpful as to lead to yet another disaster.

While I certainly share the widespread belief that politics is crucial for economic development, ...nding those features of observable institutions that matter for development is not easy. The results presented here are at most a ...rst step in this direction. They show that democracy and dictatorship are too abstract as characterizations of political institutions to explain the patterns of economic development. When countries are observed across the entire spectrum of conditions, political regimes have no impact on the growth of total income. But while this ...nding is a "negative" one from an intellectual point of view, it is politically comforting. Contrary to views widespread during the 1960s and 1970s, democracies do not reduce the rate of investment even in poor countries and do not reduce their rate of growth. There is no trade-ox between democracy and development. Indeed, Przeworski et al. (2000) found that while in poor countries political regimes make no dixerence either for the pace or for the patterns of development, in wealthier countries dictatorships rely on the growth of labor force and on keeping wages low, while democracies pay higher wages, use labor more exectively, and bene...t more from technical progress. The few countries that developed spectacularly during the past ...fty years were as likely to achieve this feat under democracy as under dictatorship.

Moreover, per capita incomes grow faster in democracies. The reason is that democracies have lower rates of population growth. In spite of rapid di¤usion of medical advances, death rates remain somewhat higher under dictatorship and life expectancies are much shorter. Population grows faster under dictatorships because they have higher birth rates, and the di¤erence in birth rates is due to higher fertility, not to age structures of the population.

Women are particularly axected by dictatorships. They participate in gainful activities at the same rates as they do in democracies and, as workers, they get lower wages. But they also have more children, see more of them die, and are themselves more likely to die in childbirth.

These ...ndings add up to a bleak picture of dictatorships. While democracies are far from perfect, lives under dictatorships are grim and short. Dictatorships are regimes in which political rulers accede to and maintain themselves in power by force. They use force to prevent people from expressing their opposition and to repress workers. Because they rule by force, they are highly vulnerable to any visible signs of dissent. They are successful economically only if they are "stable," if no one expects that dictators would change or the dictatorship would be abolished. Since in dictatorships policies depend on the will, and sometimes whim, of a dictator, they exhibit high variance of economic performance: some generate miracles, some disasters, and many generate both. Because their policies and their performance are so unpredictable, they do not allow people to plan their lives over a longer horizon, inducing households to hoard the least risky asset, namely children. In the end, per capita incomes grow slower and people live shorter lives in dictatorships. Thus, while scarcity makes lives destitute, regimes do make a di¤erence, not only for political liberty but also for material well-being.

Looking within democracies and dictatorships shows, however, that they are not all the same. Parliamentary democracies seem to perform better economically than presidential regimes and much better than semi-presidential ones. Military dictatorships seem particularly adverse to economic growth. Political pluralism, represented in a legislature, seems to be conducive to growth even in those countries where the legislature is just a rubber stamp for the will of the dictator. Hence, "getting institutions right" does matter.

I am certain that institutions conducive to good economic performance can be pinpointed with much greater precision once we have more systematic information about them. Electoral systems, budgetary rules, independence of the judiciary, ...scal (de)centralization, regulatory frameworks may all axect economic outcomes. Hence, the research agenda remains open.

Yet we must end with a note of caution. The fact that particular countries have the speci...c institutional frameworks – indeed, some have no institutions at all – is not arbitrary. Not all institutions can emerge and function under all conditions. Institutions are to a large extent endogenous. Hence, "getting institutions right" cannot mean indiscriminately exporting institutions that work under some conditions to the rest of the world. Institution building is not just a matter of engineering. It must include transforming the conditions under which these institutions function. "Second-best" institutions may be often more exective than some "ideal" institutional arrangements. This is then the second item on the research agenda: what kinds of institutions can function exectively

under which conditions?

### 6 References

Aron, Janine. 2000. "Growth and Institutions: A Review of Evidence." The World Bank Research Observer 15: 99-136.

Bollen, Kenneth A. 1980. "Issues in the Comparative Measurement of Political Democracy." American Sociological Review 45:370-390.

Coppedge, Michael, and Wolfgang H. Reinicke. 1990. "Measuring Polyarchy." Studies in Comparative International Development 25:51-72.

De Schweinitz, Karl, Jr. 1959. "Industrialization, Labor Controls, and Democracy." Economic Development and Cultural Change 7:385-404.

Galenson, Walter. 1959. Labor and Economic Development. New York: John Wiley and Sons.

Gandhi, Jennifer. 2002. "Policies and Institutions under Dictatorship." Ms. Department of Politics, New York University.

Gandhi, Jennifer and Adam Przeworski. 2002. "Dictatorial Institutions and the Survival of Dictators." Ms. Department of Politics, New York University.

Gastil, Raymond D. 1990. Freedom in the World: Political Rights and Civil Liberties. New York: Freedom House.

Gurr, Ted Robert. 1990. Polity II: Political Structures and Regime Change, 1800-1986. Ann Arbor, MI: Inter-University Consortium for Political and Social Research.

Heckman, James J. 1976. "The Common Structure of Statistical Models of Truncation, Sample Selection, and Limited Dependent Variables and a Simple Estimator for Such Models." Annals of Economic and Social Measurement 5: 475-492.

Heckman, James J. 1988. The Microeconomic Evaluation of Social Programs and Economic Institutions. In Chung-Hua Series of Lectures by Invited Eminent Economists no. 14. Taipei: The Institute of Economics, Academia Sinica.

Huntington, Samuel P. 1968. Political Order in Changing Societies. New Haven: Yale University Press.

Huntington, Samuel P., and Jorge I. Dominguez. 1975. "Political Development." In Marcropolitical Theory, edited by F. I. Greenstein and N. W. Polsby. Reading, Mass: Addison-Wesley Publishing Co.

Inkeles, Alex. 1990. "Introduction." Studies in Comparative International Development 25.

Montesquieu. 1995[1748]. The Spirit of the Laws. New York: Hafner Press. Thomas Nugent, translator.

Przeworski, Adam, Michael E. Alvarez, José Antonio Cheibub, and Fernando Limongi. 2000. Democracy and Development: Political Institutions and Well-being in the World, 1950-1990. New York: Cambridge University Press.

Schumpeter, Joseph A. 1942. Capitalism, Socialism, and Democracy. London: George Allen & Unwin.

World Bank. 2000. World Development Indicators 2000. Washington, DC: World Bank. CD-Rom.