

Table 1.5. Regime duration: average age in years at end of regime spell or last year of observation

All regimes	All	Democracy	Dictatorship
Spells completed between 1950 and 1990	18.6 (97) ^a	8.5 (45)	27.4 (52)
Spells in course by 1990	38.2 (141)	36.6 (60)	39.4 (81)
Age of regime as of 1950	34.7 (70)	26.2 (34)	42.7 (36)
Spells initiated in or after 1950 and completed by 1990	15.7 (168)	9.4 (71)	20.3 (97)
and in course by 1990	7.3 (67)	5.1 (33)	9.4 (34)
	21.3 (101)	13.0 (38)	26.2 (63)
Democracies	Parliamentary	Mixed	Presidential
Spells completed between 1950 and 1990	11.2 (19)	4.5 (4)	9.4 (25)
Spells in course by 1990	41.9 (36)	28.8 (5)	24.4 (19)
Age of regime as of 1950	31.2 (21)	7.0 (2)	20.2 (11)
Spells initiated in or after 1950 and completed by 1990	10.7 (34)	9.7 (7)	8.2 (33)
and in course by 1990	4.5 (14)	4.5 (4)	5.3 (17)
	15.0 (20)	16.7 (3)	11.2 (16)
Dictatorships	Bureaucracy	Autocracy	
Spells completed between 1950 and 1990	20.9 (59)	9.3 (22)	
Spells in course in 1990	26.0 (87)	13.9 (94)	
Age of regime as of 1950	42.1 (28)	37.7 (8)	
Spells initiated in or after 1950 and completed by 1990	12.7 (118)	7.3 (108)	
and in course by 1990	7.7 (67)	6.3 (87)	
	19.3 (51)	11.7 (21)	

^a Number of spells in parentheses.

France, Luxembourg, the Netherlands, Norway, and Switzerland²⁶ – had been established before 1900. In turn, the thirty-six dictatorships that existed in 1950 had an average age of 43.8 years. Seventeen of them had been established prior to or in 1870: Ethiopia, Liberia, the

²⁶ We extended the age of a regime back as far as 1870. All regimes, democratic or authoritarian, established before that date were recorded as having been established in 1870. In Chile, democracy was first established in 1891, but there was a reversal in 1925.

Dominican Republic, El Salvador, Haiti, Honduras, Mexico, Nicaragua, Bolivia, Paraguay, China, Iran, Nepal, Thailand, Romania, Turkey, and the USSR (Russia).

However, democracies also lasted for shorter periods than dictatorships among the countries that did not exist prior to 1950. Of the 168 regimes that were established in or after 1950, 67 had died by 1990. Thirty-three were democratic, and they lasted, on average, 5.1 years; 34 were authoritarian and lasted 9.4 years. Of the 101 remaining regimes, that is, the regimes that lasted beyond 1990, 38 were democracies, and 63 were dictatorships. The former, by 1990, had lasted 13 years, and the latter 26.2 years. Dictatorships, thus, tended to last longer than democracies, regardless of when they were observed.

During the 1950–1990 period, most countries each lived under a single regime. Of the 141 countries we observed, only 41 experienced transitions between dictatorship and democracy. The remaining 100 countries never experienced regime transitions, and thus each ended the period with the same regime with which it was first observed (among these, 67 were dictatorships, and 33 were democracies). Seventeen countries had just one transition each, of which twelve were to democracy. The five countries where democracy gave way to dictatorships that lasted past 1990 are Laos, where democracy fell in 1959, Congo in 1963, Sierra Leone in 1967, Somalia in 1969, and Sri Lanka in 1977. Countries that started the period of observation as dictatorships and then established democracies that lasted beyond 1990 are Colombia in 1958, Venezuela in 1959, the Dominican Republic in 1966, Portugal in 1976, Spain in 1977, El Salvador and Nicaragua in 1984, Bangladesh in 1986, Poland in 1989, and Bulgaria, Czechoslovakia, and Hungary in 1990.²⁷

Two countries began the period of observation as dictatorships, experienced brief democratic interludes, and became dictatorships again: Uganda (where democracy lasted for five years, from 1980 to 1984) and Indonesia (where democracy lasted for only two years, from 1955 to 1956). More typically, seven countries were democracies when we first observed them, went through often long periods of dictatorship, and returned to democracy. These are Grenada, Brazil, Chile, Ecuador, Uruguay, the Philippines, and Greece. Eight countries experienced three regime transitions: Nigeria, Panama, Suriname, and

²⁷ We do not count East Germany, which we treat as having dropped from the sample in 1990.

Myanmar started the period as democracies, became dictatorships, returned to democracy, and ended as dictatorships, whereas Bolivia, South Korea, Thailand, and Turkey began as dictatorships, experimented with democracy, returned to dictatorships, and became democracies again. Two countries had four transitions: Ghana and Pakistan. Sudan and Honduras had five, Guatemala and Peru had six, and Argentina, by far the record holder, had eight transitions between democracy and dictatorship.²⁸

Thus, the regime histories of particular countries are highly heterogeneous. Most regimes, as we saw, lasted for a long time, with a majority of countries not experiencing any transition between democracy and dictatorship during the 1950–1990 period. Some countries alternated between dictatorship and democracy every few years: There would be a coup d'état, and a dictatorship would be established; then, often following another coup d'état, an election would be held and the democratically elected government would assume office, only to be overturned by yet another coup. In some countries this entire cycle occurred once during the period; in others it occurred twice, and in Argentina three times.

Moreover, systematic regional differences can be seen: Western Europe was predominantly democratic, and Eastern Europe was communist; in Africa, only Mauritius was democratic during its entire history; except for Israel, Middle Eastern countries were dictatorships; most of the Far Eastern countries, except Japan, were dictatorships; South Asian countries experienced some transitions; and many, but not all, Latin American regimes were highly unstable. Indeed, of the 97 transitions that occurred in the 141 countries between 1950 and 1990, 44 were in Latin America, which comprises eighteen countries²⁹ (Table 1.6).

The fact that most countries each lived under the same regime for most of the time between 1950 and 1990 does not mean that their rulers or their political orientations or even their institutional frameworks remained the same. The democratic regimes

²⁸ Appendix 1.3 lists countries by the number of transitions they have experienced between democracy and dictatorship.

²⁹ The rate of transitions per country was highest in Latin America: 2.4. Latin America was followed by Southeast Asia, where the rate was 1.57 transitions per country, and South Asia, where the rate was 1.2 transitions per country. In all other regions (including the countries of the Organization for Economic Cooperation and Development, the OECD), the rate of transitions per country was well below 1.

Table 1.6. Regimes and regime transitions by region

Region	Years of democracy	Transitions to democracy	Years of dictatorship	Transitions to dictatorship
Sub-Saharan Africa	69	6	1,170	11
South Asia	87	3	97	3
East Asia	4	2	160	1
Southeast Asia	46	5	215	6
Pacific Islands	40	0	50	0
Middle East and North Africa	68	2	513	2
Latin America	366	25	372	19
Caribbean	130	2	80	3
Eastern Europe and Soviet Union	5	4	290	0
Industrialized countries	908	3	60	1
Total	1,723	52	3,007	45

might be parliamentary, mixed, or presidential. Dictatorships, in turn, might be "bureaucracies," institutionalized regimes that promulgated laws, or "autocracies," regimes without any proclaimed rules. Using these distinctions, we observed 55 parliamentary, 9 mixed, and 44 presidential democracies, 146 bureaucracies, and 116 autocracies.

The staying power of democratic institutions was seen to be strong. During the entire period studied, democratic institutional frameworks were altered in only three instances: France in 1958, when the parliamentary system of the Fourth Republic gave way to the mixed system of the Fifth; Brazil in 1961, when presidentialism was replaced by a mixed system; and Brazil again in 1963, when presidentialism was restored after its overwhelming victory in a plebiscite held in January of that year. A few countries did change the institutional framework in their democracies after an authoritarian interregnum: Ghana, Nigeria, and South Korea replaced the parliamentary systems that had existed prior to their periods of dictatorship with presidential systems once democracy was restored. In Suriname the change was from parliamentarism to a mixed system. Pakistan was the only country that went back and forth: from parliamentarism in 1950–1955 to a mixed system in 1972–1976 and back to parliamentarism again after 1988. All of the other seventeen countries that experienced at least one authoritarian

interlude went back to the type of democratic institutions that had existed before the authoritarian regime.³⁰

Authoritarian institutions, on the other hand, proved highly unstable. When we classify dictatorships according to the presence or absence of legislatures, we count 262 regimes, as opposed to 133 when we do not make any distinctions among them. There are, thus, 129 instances of openings and closings of legislatures (65 cases of closing, and 64 cases of opening). Again, a few countries account for a large proportion of the transitions from one type of authoritarianism to the other. Of the sixty-seven countries that remained under authoritarian regimes from 1950 through 1990, thirty-two experienced only one type of dictatorship: twenty-seven as bureaucracies and five as autocracies. The remaining thirty-five countries experienced seventy-six transitions, an average of 2.2 changes per country, from one type of authoritarianism to the other.³¹

Autocracies often emerge when democracy is overthrown and the legislature is temporarily or permanently closed: Of the forty-five cases of democratic breakdown, thirty-one resulted in this type of dictatorship. But autocracies can also emerge as a result of abortive attempts to liberalize bureaucratic dictatorships. Indeed, the cases in which an autocracy followed a bureaucracy were most frequent, suggesting that attempts at liberalization often fail: Of the eighty-seven instances in which bureaucratic regimes died, twenty-two ended in democracy, but sixty-five in autocracy.

Autocracy is not an easily sustainable form of authoritarianism. Only the four Persian Gulf monarchies (Oman, Qatar, Saudi Arabia, and the United Arab Emirates) were autocracies during the entire period. In general, autocracies do not last very long: As Table 1.5 indicates, the average duration of autocratic spells completed by 1990 was 9.3 years, and of those still in course in 1990 the duration was 13.9 years, compared with 20.9 and 26 years, respectively, for bureaucracies. Moreover, of all the regimes, democratic and authoritarian, autocracies are the ones at highest risk: During any year, an autocracy has a 10.56 percent chance of experiencing a transition to a different regime, which compares with 5.12 percent for presidential democracies, 4.11 percent

³⁰ These countries are Sudan, Grenada, Guatemala, Honduras, Panama, Argentina, Bolivia, Brazil, Chile, Ecuador, Peru, Uruguay, Myanmar, the Philippines, Thailand, Greece, and Turkey.

³¹ Benin, Burkina Faso, Morocco, Kuwait, and Jordan were the most unstable authoritarian regimes according to this measure: They changed between bureaucracy and autocracy four, five, five, six, and six times, respectively.

Table 1.7. Transitions between political regimes: parliamentarism, mixed, presidentialism, bureaucracies, and autocracies

Transition from:	Transition to:					Total	Number of years	Probability
	Parl	Mix	Pres	Bur	Aut			
Parl	—	1	0	6	12	19	1,085	0.0175
Mix	0	—	1	1	2	4	150	0.0267
Pres	0	1	—	7	17	25	488	0.0513
Bur	8	4	10	—	65	87	2,117	0.0411
Aut	9	0	21	64	—	94	890	0.1056
Total	17	6	32	78	96	223	4,730	0.0471

for bureaucracies, 2.66 percent for mixed democracies, and 1.75 percent for parliamentary democracies (Table 1.7).

Stability and Change of Political Leadership

Rulers changed within each regime. By "rulers" we mean the chief executives, to whom we refer as "heads" of government, or simply "heads." These are presidents in presidential democracies, prime ministers in the parliamentary and mixed democracies, and whoever is the effective ruler in dictatorships. The latter sometimes can be designated explicitly as dictators, or they may opt for a variety of other titles: heads of military juntas, presidents, leaders of their ruling parties, executors of the state of emergency, or kings.

No changes of heads occurred during 3,927 years, one change occurred in 615 years, two changes in 101 years, three in 14, four in 3, and five in 2 years.³² Thus, altogether there were 881 changes of heads during the period we observed, once every 5.29 years (Table 1.8). Changes were more frequent in democracies than in dictatorships. Chief executives in democratic regimes were changed once every 3.48 years, with no significant difference between prime ministers (3.41 years when we combine parliamentary and mixed regimes)³³ and

³² This adds to 4,662 years. The difference from the total of 4,730 is due to the exclusion of Switzerland, Uruguay up to 1966, and Yugoslavia after 1980, each of which had a collective executive.

³³ Separately, the average is 3.77 for prime ministers in parliamentary regimes and 2.03 for prime ministers in mixed regimes.

Democracies and Dictatorships

Table 1.8. Distribution of changes of chief executives (HEADS) by regime^a

Number of changes of heads by year	Dem	Parl	Mix	Pres	Dict	Bur	Aut	Total
0	1,254	838	89	327	2,673	1,935	738	3,927
1	354	212	50	92	261	146	115	615
2	49	31	9	9	52	23	29	101
3	6	2	2	2	8	1	7	14
4	2	2	0	0	1	0	1	3
5	0	0	0	0	2	2	0	2
Total	1,665	1,085	150	430	2,997	2,107	890	4,662
No. of changes	478	288	74	116	403	205	198	881
Average duration	3.48	3.77	2.03	3.71	7.44	10.28	4.49	5.29

^a Excludes Switzerland, Uruguay until 1966, and Yugoslavia after 1981 because they had collective executives.

presidents (3.71 years). The difference, however, was large across types of dictatorships: Whereas in autocracies we observed one change of chief executive every 4.49 years, in bureaucracies we observed one change every 10.28 years, with an average for all dictatorships equal to 7.44 years.

Some incumbents experienced changes in their political regimes while in office. This happened during the tenure of sixty-eight chief executives; fifty-four of them survived one change of regime, nine survived two changes, three survived three changes, and one each survived five and six changes. Most of these changes were between different types of dictatorships and were due to the opening and closing of legislatures.³⁴ A few, however, were from democracy to dictatorship or vice versa: for example, from presidentialism to autocracy in Uruguay under Juan Bordaberry in 1973, and from autocracy to pres-

³⁴ The most extreme case is Jordan, where the legislature was closed for one year in 1966, as well as during 1974-1984 and again during 1985-1989, representing six regime changes from bureaucracy to autocracy. Other cases of frequent changes of regimes without a change of chief executive are as follows: Morocco, where the legislature was closed during 1963-1965, 1970-1972, and in 1978; Burkina Faso, where Sangoulé Lamizana allowed an elective legislature to convene in 1970 only to close it in 1974 and reopen it in 1978; Laos, where Souvanna Phouma closed the legislature two times, in 1966 and 1974; and Nepal, where King Mahendra experimented with legislative bodies in 1959 and 1963.

Stability and Change of Political Leadership

Table 1.9. Average duration (in years) of chief executives' spells^a by regime

Type of spell	Average	Maximum	N
All	5.8	44	858
Censored ^b	8.1	39	138
Not censored	5.4	44	720
Regime change ^c	13.3	39	68
No regime change	5.2	44	790
No regime change and not censored	4.9	44	671
Democracies	3.7	23	395
Parliamentary	3.9	23	242
Mixed	2.3	7	57
Parliamentary and mixed	3.6	23	295
Presidential	4.2	12	96
Dictatorships	6.6	44	276
Bureaucracies	8.0	36	167
Autocracies	4.5	44	109
Regime change and not censored	11.8	38	49
Regime change and censored	17.2	39	19
No regime change and censored	6.6	31	119

^a Continuous years of ruling by the same person.

^b Spells in course by 1990.

^c A spell with regime change is one during which the incumbent changed the type of political regime.

identialism in Nicaragua under Daniel Ortega Saavedra in 1984. Once we take those two facts into consideration, we find that prime ministers in both parliamentary and mixed regimes had the shortest average tenure (3.6 years), that the durations of democratic presidents and autocratic rulers were about the same (4.2 and 4.5 years, respectively), and that the chief executives in bureaucracies were the ones who lasted the longest (8 years) (Table 1.9).

A similar conclusion follows when we examine the rates of leadership turnover, defined as the annual number of changes in chief executive accumulated over the life span of a regime. As a benchmark, consider that the average turnover rate for all the countries we

Table 1.10. Leadership turnover rates by regime type^a

Regime	Turnover rate
Democracy	0.164
Parliamentary	0.140
Mixed	0.271
Presidential	0.186
Dictatorship	0.073
Bureaucracy	0.047
Autocracy	0.190
All	0.103

^a Excluding spells in course in 1990.

observed was 0.17, somewhat less frequently than once every five years. Because, on the average, we observed each country for about thirty-three years, this turnover rate corresponds to an average of about six changes of chief executive per country.³⁵ When we consider leadership turnover rates across political regimes, we find a similar rate only in democracies, where it is 0.16 (Table 1.10). The turnover rate is higher in autocracies and in mixed presidential democracies. These rates imply that an average democratic spell experiences about eighteen changes of leadership, whereas an average authoritarian spell experiences nine changes. Among democracies, the number of changes of heads is thirteen in the average parliamentary regime, and six in the average presidential regime.

Conclusion

These are, then, the basic facts about political regimes in the world between 1950 and 1990. Democracy is a system in which incumbents lose elections and leave office when the rules so dictate. Dictatorships are a residual category: If a political regime is not democratic, we consider it to be a dictatorship of one stripe or another. Moreover, we do not distinguish between dictatorships that succeed one another.

³⁵ In this case, changes in chief executives were accumulated over the entire period during which we observed each country, regardless of political regime.

In most cases it is simple to apply this conception of democracy to classify the regimes that existed in the particular countries at the particular moments. All one needs to do is to observe whether or not the chief executive was elected, whether or not the legislature was elected, and whether or not there was political opposition. In some cases, however, history did not provide the necessary evidence: There was an opposition, officials were elected, but the same party always won. All one can do in such instances is to decide which error to avoid.

The resulting classification of regimes is not idiosyncratic. Whereas we were concerned to justify our approach theoretically and to ground the classification on observations, rather than judgments, our classification is almost identical with those produced by several alternative scales of democracy (see Appendix 1.1). Indeed, it seems that in spite of all their conceptual and observational differences, the various approaches yield highly similar classifications of regimes. Hence, there is no reason to think that the results that follow depend on the particular way regimes were classified.

In the chapters that follow, we first explain some of the patterns described here and then explore their consequences for economic performance and material well-being.

Appendix 1.1: Alternative Approaches

Conceptually, our scale is close to that of Bollen (1980), as well as that of Coppedge and Reinicke (1990). Bollen used four indicators: (1) whether or not elections were fair, (2) whether or not the chief executive was elected, (3) whether or not the legislature was elected, and (4) whether or not the legislature was effective. Coppedge and Reinicke coded answers to three questions: (1) whether or not elections presented voters with a meaningful choice, (2) whether or not the outcome was affected by significant fraud, and (3) whether all or some or no political organizations were banned. We used Bollen's second and third dimensions and Coppedge and Reinicke's third dimension. We did experiment with Banks's measure of legislative effectiveness, but found his assessments too unreliable. It is clear that allegations of fraud are even more frequent than its actual occurrence, and by all indications some fraud is a ubiquitous phenomenon in democracies. Screaming "Fraud!" is just part of the standard repertoire of democratic competition. Indeed, there are cases in which the opposition has withdrawn from the competition, claiming that the elections would

not be conducted fairly. We conclude that there is no way to assess the validity of such allegations in a standardized way. For example, the opposition decided not to contest the 1984 Nicaraguan elections, but some of its leaders later expressed regret about 1984 once they discovered that they had won the subsequent elections in 1990. Hence, although our approach is theoretically akin to those of Bollen and Coppedge and Reinicke, we have tried to the extent possible to avoid subjective judgments by relying only on observables. The Gurr (1990) measure in *Polity II* is conceptually somewhat different, because it considers the limited character of the government by coding "constraints on the chief executive." His assessments, however, are not easy to reproduce.

Although we have been careful to specify our understanding of democracy and to distinguish it from some rival conceptions, it appears that from a practical point of view alternative measures of democracy generate highly similar results. The dimensions used to assess whether or not and to what extent a particular regime is democratic seem to make little difference.³⁶ To cite Inkeles (1990: 5–6), "the indicators most commonly selected to measure democratic systems generally form a notably coherent syndrome, achieving high reliability as measurement scales. . . . A testimonial to the robustness of the underlying common form and structure of the democratic systems is found in the high degree of agreement produced by the classification of nations as democratic or not, even when democracy is measured in somewhat different ways by different analysts. . . . Thus Coppedge and Reinicke, following a quite independent theoretical model, end up with a scale of polyarchy which correlates .94 with Gastil's civil liberties measure for some 170 countries in 1985. Gurr's measure performs similarly in relation to Bollen's [and] his ratings of 118 countries circa 1965 correlate .83 with Bollen's measure and .89 with a score combining Gastil's separate measures of political and civil liberties for 113 countries in 1985."

Our measure is no exception. The Coppedge-Reinicke scale for 1978 predicts 92 percent of our dichotomous regimes, the Bollen 1965 scale predicts 85 percent, and the Gurr scales of Autocracy and Democracy for 1950–1986 jointly predict 91 percent. The Gastil scale of political liberties, covering the period from 1972 to 1990, predicts 93.2 percent

³⁶ Note, however, that different measures appear to be biased in somewhat different directions. See Bollen (1993).

of our classification; his scale of civil liberties predicts 91.5 percent; and the two scales jointly predict 94.2 percent of our regimes.³⁷ Hence, our classification is by no means idiosyncratic. Different views of democracy, including those that entail highly subjective judgments, yield a robust classification.

The main difference between our approach and the alternatives is that we use a nominal classification, rather than a ratio scale. We believe that although some regimes are more democratic than others, unless the offices are contested, they should not be considered democratic. The analogy with the proverbial pregnancy is thus that whereas democracy can be more or less advanced, one cannot be half-democratic: There is a natural zero point. Note that Bollen and Jackman (1989) are confused: It is one thing to argue that some democracies are more democratic than others, but it is another to argue that democracy is a continuous feature over all regimes, that is, that one can distinguish the degrees of "democracy" for any pair of regimes.³⁸

Bollen and Jackman (1989: 612) argue that difficulties in classifying some cases speak in favor of using continuous scales: "Dichotomizing democracy," in their view, "blurs distinctions between borderline cases." Yet why are there "borderline cases"? Suppose that we have defined democracy and not-democracy, established operational rules, and found that some cases cannot be unambiguously classified by these rules. Does this mean that there are borderline cases and that democracy is thus "inherently continuous"? And should we stick the cases that cannot be unambiguously classified, given our rules, into an "intermediate" category, halfway between democracy and dictatorship? That view strikes us as ludicrous. If we cannot classify some cases given our rules, all this means is that we either have unclear rules or have insufficient information to apply them.

We have already seen that some "borderline cases" constitute sys-

³⁷ Because other scales are ordinal (and pretend to be cardinal), whereas ours is nominal, we use probit maximum likelihood to predict our classification on the basis of these scales.

³⁸ They also argue by assertion, referring to "the inherently continuous nature of the concept of political democracy" (1989: 612), claiming that "since democracy is conceptually continuous, it is best measured in continuous terms" (p. 612), and that "democracy is always a matter of degree" (p. 618). Hence, in their view, the "degrees of democracy" in Mexico, in Salazar's Portugal, and in Franco's Spain were different. How they decide that "democracy is conceptually continuous," whatever that means, remains mysterious, but we are admonished that "it is important that the measurement history of this construct not repeat itself" (p. 612).

tematic error, whereas others bring random error. Systematic errors can be treated by explicit rules, such as our "alternation" rule, and their consequences can be examined statistically. There are some regimes that cannot be unambiguously classified on the basis of all the evidence produced by history. Because history produces a biased sample of democracies – sampling is endogenous (Pudney 1989) – we must revert to counterfactual judgments. In such cases we must decide which error we prefer to avoid: classifying as democracies regimes that may not be democracies, or rejecting as democracies regimes that may in fact qualify. Yet, once this decision is made, the classification is unambiguous. Mexico is not a regime intermediate between democracy and dictatorship, not a "borderline case." It is a regime in which the ruling party allows some contestation but always wins: either a democracy or a dictatorship, depending in which direction one wants to err systematically.

In turn, some errors that are random with regard to the rules will remain, and we will have to live with them. But errors are errors, not "intermediate" categories. And there are no grounds to think that a finer classification would be more precise. A finer scale would generate smaller errors, but more of them, and a rougher scale would generate larger errors, but fewer of them. And if errors of larger magnitude are less likely, the dichotomous scale will have a lower expected error.

Suppose that the true nature of democracy lies on a J -point scale, $j = 1, \dots, J$, but its measurement is subject to error. Let the unobserved true score be D_T and the assigned value D , and let the probability of a j -point error be $P(j) = \Pr\{|D - D_T| = j\} = \alpha^j$. The reliability of the scale is then $\Pr\{|D - D_T| = 0\} = 1 - \sum_{j=1}^J \Pr(j)$. Assume that the distribution of the true observations is uniform. Then the expected value of the error will be

$$E(|D - D_T|) = \sum_{j=1}^J \Pr(j) * j * 2(J - j),$$

where the first factor is the probability of an error of a given magnitude, the second factor is the magnitude, and the third is the number of such errors. Assume, as an illustration, that the probability of making an error of magnitude 1 is $\alpha = 0.2$, so that $\Pr(j = 0) = 0.75$. Suppose that this is a Gastil scale, with seven points. Then the expected error for seven observations will be about 3.5.

Now dichotomize this seven-point scale in such a way that if $D \leq 4$,

then the assigned score is $D = 2.5$ (which is the midpoint value for one regime), and if $D > 4$, then the assigned score is $D = 5.5$ (midpoint for the other regime), so that each error costs three points on the seven-point scale. Let the probabilities of errors and the distributions of the true scores on the seven-point scale be the same. Then the expected value of the error is

$$E(|D - D_T|) = \sum_{j=1}^J \Pr(j) * 3 * 2[d * j + (1 - d)(J - j)],$$

where the last factor in each expression is the number of relevant errors (e.g., the only relevant one-point error is between 4 and 5, and there are two of them, misclassifying 4 as 5 or 5 as 4), and $d = 1$ if $j \leq 4$, and $d = 0$ otherwise. At $\alpha = 0.2$, the expected error for seven observations of a dichotomous scale will be about 2.

Hence, there is less measurement error when a dichotomous scale is used. If the distribution of true observations is unimodal and close to symmetric, a more refined classification will have a smaller error, but in fact observations on all the polychotomous scales tend to be U-shaped, which advantages a dichotomous classification even more than our example with the uniform distribution.

In sum, we think that our classification has some advantages. First, it is grounded in theory. Second, it is based exclusively on observed facts. Third, it separates cases subject to systematic error. Fourth, it contains less random error than polychotomous scales. Finally, it covers every year for 141 countries during forty-one years.

Appendix 1.2: Classification of Political Regimes, 1950–1990

At least some of the years for regimes marked with asterisks have been classified as bureaucracies on the basis of our "alternation" rule.

Country	Regime	Entry	Exit
1. Algeria	Bureaucracy	1962	1964
	Autocracy	1965	1976
	Bureaucracy	1977	1990
2. Angola	Autocracy	1975	1979
	Bureaucracy	1980	1990
3. Benin	Bureaucracy	1960	1964

(continued)

Country	Regime	Entry	Exit
	Autocracy	1965	1978
	Bureaucracy	1979	1989
	Autocracy	1990	1990
4. Botswana	Bureaucracy*	1966	1990
5. Burkina Faso	Bureaucracy	1960	1965
	Autocracy	1966	1969
	Bureaucracy	1970	1973
	Autocracy	1974	1977
	Bureaucracy*	1978	1979
	Autocracy	1980	1990
6. Burundi	Bureaucracy	1962	1965
	Autocracy	1966	1981
	Bureaucracy	1982	1986
	Autocracy	1987	1990
7. Cameroon	Bureaucracy	1960	1970
	Autocracy	1971	1972
	Bureaucracy	1973	1990
8. Cape Verde	Bureaucracy	1975	1990
9. Central African Republic	Bureaucracy	1960	1965
	Autocracy	1966	1986
	Bureaucracy	1987	1990
10. Chad	Bureaucracy	1960	1974
	Autocracy	1975	1990
11. Comoros	Autocracy	1975	1977
	Bureaucracy	1978	1990
12. Congo	Presidentialism	1960	1962
	Bureaucracy	1963	1976
	Autocracy	1977	1978
	Bureaucracy	1979	1990
13. Djibouti	Bureaucracy	1977	1990
14. Egypt	Bureaucracy*	1950	1990
15. Ethiopia	Autocracy	1950	1956
	Bureaucracy	1957	1973
	Autocracy	1974	1986
	Bureaucracy	1987	1990
16. Gabon	Bureaucracy*	1960	1990
17. Gambia	Bureaucracy*	1965	1990
18. Ghana	Bureaucracy	1957	1964
	Autocracy	1965	1969

(continued)

Country	Regime	Entry	Exit
	Parliamentarism	1970	1971
	Autocracy	1972	1978
	Presidentialism	1979	1980
	Autocracy	1981	1990
19. Guinea	Bureaucracy	1958	1983
	Autocracy	1984	1990
20. Guinea-Bissau	Bureaucracy	1974	1990
21. Ivory Coast	Bureaucracy*	1960	1990
22. Kenya	Bureaucracy	1963	1990
23. Lesotho	Bureaucracy	1966	1969
	Autocracy	1970	1990
24. Liberia	Bureaucracy	1950	1979
	Autocracy	1980	1984
	Bureaucracy	1985	1989
	Autocracy	1990	1990
25. Madagascar	Bureaucracy*	1960	1971
	Autocracy	1972	1976
	Bureaucracy	1977	1990
26. Malawi	Bureaucracy	1964	1990
27. Mali	Bureaucracy	1960	1967
	Autocracy	1968	1981
	Bureaucracy	1982	1990
28. Mauritania	Bureaucracy	1960	1977
	Autocracy	1978	1990
29. Mauritius	Parliamentarism	1968	1990
30. Morocco	Autocracy	1956	1962
	Bureaucracy	1963	1964
	Autocracy	1965	1969
	Bureaucracy	1970	1971
	Autocracy	1972	1976
	Bureaucracy	1977	1990
31. Mozambique	Bureaucracy	1975	1990
32. Niger	Bureaucracy	1960	1973
	Autocracy	1974	1990
33. Nigeria	Parliamentarism	1960	1965
	Autocracy	1966	1978
	Presidentialism	1979	1982
	Autocracy	1983	1990
34. Rwanda	Bureaucracy	1962	1972

(continued)

Democracies and Dictatorships

Country	Regime	Entry	Exit
	Autocracy	1973	1980
	Bureaucracy	1981	1990
35. Senegal	Bureaucracy*	1960	1990
36. Seychelles	Bureaucracy	1976	1990
37. Sierra Leone	Parliamentarism	1961	1966
	Autocracy	1967	1967
	Bureaucracy	1968	1990
38. Somalia	Mixed	1960	1968
	Autocracy	1969	1978
	Bureaucracy	1979	1990
39. South Africa	Bureaucracy*	1950	1990
40. Sudan	Parliamentarism	1956	1957
	Autocracy	1958	1964
	Parliamentarism	1965	1968
	Bureaucracy	1969	1984
	Autocracy	1985	1985
	Parliamentarism	1986	1988
	Autocracy	1989	1990
41. Swaziland	Bureaucracy	1968	1972
	Autocracy	1973	1977
	Bureaucracy	1978	1990
42. Tanzania	Bureaucracy	1961	1990
43. Togo	Bureaucracy	1960	1966
	Autocracy	1967	1978
	Bureaucracy	1979	1990
44. Tunisia	Bureaucracy	1956	1990
45. Uganda	Bureaucracy	1962	1970
	Autocracy	1971	1979
	Presidentialism	1980	1984
	Autocracy	1985	1990
46. Zaire	Autocracy	1960	1960
	Bureaucracy	1961	1962
	Autocracy	1963	1969
	Bureaucracy	1970	1990
47. Zambia	Bureaucracy	1964	1990
48. Zimbabwe	Bureaucracy	1965	1990
49. Bahamas	Parliamentarism	1973	1990
50. Barbados	Parliamentarism	1966	1990
51. Belize	Parliamentarism	1981	1990

(continued)

Appendix 1.2: Classification of Regimes

Country	Regime	Entry	Exit
52. Canada	Parliamentarism	1950	1990
53. Costa Rica	Presidentialism	1950	1990
54. Dominican Republic	Bureaucracy	1950	1961
	Autocracy	1962	1965
	Presidentialism	1966	1990
55. El Salvador	Bureaucracy	1950	1959
	Autocracy	1960	1960
	Bureaucracy*	1961	1983
	Presidentialism	1984	1990
56. Grenada	Parliamentarism	1974	1978
	Autocracy	1979	1983
	Parliamentarism	1984	1990
57. Guatemala	Presidentialism	1950	1953
	Bureaucracy	1954	1957
	Presidentialism	1958	1962
	Autocracy	1963	1965
	Presidentialism	1966	1981
	Bureaucracy	1982	1985
	Presidentialism	1986	1990
58. Haiti	Bureaucracy	1950	1985
	Autocracy	1986	1989
	Bureaucracy	1990	1990
59. Honduras	Bureaucracy	1950	1955
	Autocracy	1956	1956
	Presidentialism	1957	1962
	Autocracy	1963	1964
	Bureaucracy*	1965	1970
	Presidentialism	1971	1971
	Autocracy	1972	1981
	Presidentialism	1982	1990
60. Jamaica	Parliamentarism	1962	1990
61. Mexico	Bureaucracy*	1950	1990
62. Nicaragua	Bureaucracy*	1950	1970
	Autocracy	1971	1971
	Bureaucracy*	1972	1978
	Autocracy	1979	1983
	Presidentialism	1984	1990
63. Panama	Presidentialism	1950	1950
	Bureaucracy	1951	1951

(continued)

Democracies and Dictatorships

Country	Regime	Entry	Exit
	Presidentialism	1952	1967
	Autocracy	1968	1977
	Bureaucracy	1978	1990
64. Trinidad & Tobago	Parliamentarism	1962	1990
65. United States	Presidentialism	1950	1990
66. Argentina	Presidentialism	1950	1954
	Autocracy	1955	1957
	Presidentialism	1958	1961
	Autocracy	1962	1962
	Presidentialism	1963	1965
	Autocracy	1966	1972
	Presidentialism	1973	1975
	Autocracy	1976	1982
	Presidentialism	1983	1990
67. Bolivia	Bureaucracy	1950	1950
	Autocracy	1951	1955
	Bureaucracy*	1956	1963
	Autocracy	1964	1978
	Presidentialism	1979	1979
	Autocracy	1980	1981
	Presidentialism	1982	1990
68. Brazil	Presidentialism	1950	1960
	Mixed	1961	1962
	Presidentialism	1963	1963
	Bureaucracy	1964	1967
	Autocracy	1968	1969
	Bureaucracy	1970	1978
	Presidentialism	1979	1990
69. Chile	Presidentialism	1950	1972
	Autocracy	1973	1989
	Presidentialism	1990	1990
70. Colombia	Bureaucracy	1950	1953
	Autocracy	1954	1957
	Presidentialism	1958	1990
71. Ecuador	Presidentialism	1950	1962
	Autocracy	1963	1967
	Bureaucracy	1968	1969
	Autocracy	1970	1978
	Presidentialism	1979	1990

(continued)

Appendix 1.2: Classification of Regimes

Country	Regime	Entry	Exit
72. Guyana	Bureaucracy*	1966	1990
73. Paraguay	Bureaucracy*	1950	1990
74. Peru	Bureaucracy	1950	1955
	Presidentialism	1956	1961
	Autocracy	1962	1962
	Presidentialism	1963	1967
	Autocracy	1968	1979
	Presidentialism	1980	1989
	Bureaucracy	1990	1990
75. Suriname	Parliamentarism	1975	1979
	Autocracy	1980	1986
	Bureaucracy	1987	1987
	Mixed	1988	1989
	Bureaucracy	1990	1990
76. Uruguay	Presidentialism	1950	1972
	Autocracy	1973	1984
	Presidentialism	1985	1990
77. Venezuela	Autocracy	1950	1951
	Bureaucracy	1952	1958
	Presidentialism	1959	1990
78. Bangladesh	Autocracy	1971	1971
	Bureaucracy	1972	1974
	Autocracy	1975	1978
	Bureaucracy*	1979	1981
	Autocracy	1982	1985
	Presidentialism	1986	1990
79. China, People's Republic (PR)	Autocracy	1950	1953
	Bureaucracy	1954	1990
80. India	Parliamentarism	1950	1990
81. Indonesia	Autocracy	1950	1954
	Parliamentarism	1955	1956
	Bureaucracy	1957	1959
	Autocracy	1960	1970
	Bureaucracy	1971	1990
82. Iran	Bureaucracy	1950	1960
	Autocracy	1961	1962
	Bureaucracy	1963	1983
	Autocracy	1984	1990
83. Iraq	Autocracy	1950	1950

(continued)

Democracies and Dictatorships

Country	Regime	Entry	Exit
	Bureaucracy	1951	1957
	Autocracy	1958	1979
	Bureaucracy	1980	1990
84. Israel	Parliamentarism	1950	1990
85. Japan	Parliamentarism	1952	1990
86. Jordan	Bureaucracy	1950	1965
	Autocracy	1966	1966
	Bureaucracy	1967	1973
	Autocracy	1974	1983
	Bureaucracy	1984	1984
	Autocracy	1985	1988
	Bureaucracy	1989	1990
87. South Korea	Bureaucracy*	1950	1959
	Parliamentarism	1960	1960
	Bureaucracy	1961	1971
	Autocracy	1972	1972
	Bureaucracy	1973	1987
	Presidentialism	1988	1990
88. Laos	Parliamentarism	1954	1958
	Bureaucracy	1959	1965
	Autocracy	1966	1966
	Bureaucracy	1967	1973
	Autocracy	1974	1990
89. Malaysia	Bureaucracy	1957	1968
	Autocracy	1969	1970
	Bureaucracy	1971	1990
90. Mongolia	Bureaucracy*	1950	1990
91. Myanmar	Parliamentarism	1950	1957
	Autocracy	1958	1959
	Parliamentarism	1960	1961
	Autocracy	1962	1973
	Bureaucracy	1974	1987
	Autocracy	1988	1989
	Bureaucracy	1990	1990
92. Nepal	Autocracy	1950	1958
	Bureaucracy	1959	1959
	Autocracy	1960	1962
	Bureaucracy	1963	1990
93. Pakistan	Parliamentarism	1950	1955

(continued)

Appendix 1.2: Classification of Regimes

Country	Regime	Entry	Exit
	Bureaucracy	1956	1957
	Autocracy	1958	1961
	Bureaucracy*	1962	1971
	Mixed	1972	1976
	Autocracy	1977	1984
	Bureaucracy	1985	1987
	Parliamentarism	1988	1990
94. Philippines	Presidentialism	1950	1964
	Bureaucracy	1965	1971
	Autocracy	1972	1977
	Bureaucracy	1978	1985
	Presidentialism	1986	1990
95. Singapore	Bureaucracy*	1965	1990
96. Sri Lanka	Parliamentarism	1950	1976
	Bureaucracy*	1977	1990
97. Syria	Bureaucracy	1950	1960
	Autocracy	1961	1969
	Bureaucracy	1970	1990
98. Taiwan	Bureaucracy*	1950	1990
99. Thailand	Bureaucracy	1950	1956
	Autocracy	1957	1968
	Bureaucracy	1969	1970
	Autocracy	1971	1974
	Parliamentarism	1975	1975
	Autocracy	1976	1976
	Bureaucracy	1977	1982
	Parliamentarism	1983	1990
100. Yemen Arab Republic	Autocracy	1967	1977
	Bureaucracy	1978	1990
101. Austria	Parliamentarism	1950	1990
102. Belgium	Parliamentarism	1950	1990
103. Bulgaria	Bureaucracy	1950	1989
	Parliamentarism	1990	1990
104. Czechoslovakia	Bureaucracy	1950	1989
	Parliamentarism	1990	1990
105. Denmark	Parliamentarism	1950	1990
106. Finland	Mixed	1950	1990
107. France	Parliamentarism	1950	1957
	Mixed	1958	1990

(continued)

Democracies and Dictatorships

Country	Regime	Entry	Exit
108. East Germany	Bureaucracy	1950	1990
109. West Germany	Parliamentarism	1950	1990
110. Greece	Parliamentarism	1950	1966
	Autocracy	1967	1970
	Bureaucracy	1971	1973
	Parliamentarism	1974	1990
111. Hungary	Bureaucracy	1950	1989
	Parliamentarism	1990	1990
	Mixed	1950	1990
112. Iceland	Parliamentarism	1950	1990
113. Ireland	Parliamentarism	1950	1990
114. Italy	Parliamentarism	1950	1990
115. Luxembourg	Parliamentarism	1950	1990
116. Malta	Parliamentarism	1964	1990
117. Netherlands	Parliamentarism	1950	1990
118. Norway	Parliamentarism	1950	1990
119. Poland	Bureaucracy	1950	1988
	Mixed	1989	1990
120. Portugal	Bureaucracy	1950	1975
	Mixed	1976	1990
121. Romania	Bureaucracy	1950	1990
122. Spain	Autocracy	1950	1976
	Parliamentarism	1977	1990
123. Sweden	Parliamentarism	1950	1990
124. Switzerland	Presidentialism	1950	1990
125. Turkey	Bureaucracy*	1950	1960
	Parliamentarism	1961	1979
	Autocracy	1980	1982
	Parliamentarism	1983	1990
126. United Kingdom	Parliamentarism	1950	1990
127. Soviet Union	Bureaucracy	1950	1990
128. Yugoslavia	Bureaucracy	1950	1990
129. Australia	Parliamentarism	1950	1990
130. Fiji	Bureaucracy	1970	1986
	Autocracy	1987	1990
131. New Zealand	Parliamentarism	1950	1990
132. Papua New Guinea	Parliamentarism	1975	1990
133. Solomon Islands	Parliamentarism	1978	1990
134. Vanuatu	Parliamentarism	1980	1990

(continued)

Appendix 1.3: Basic Data about Regime Dynamics

Country	Regime	Entry	Exit
135. Western Samoa	Autocracy	1962	1978
	Bureaucracy*	1979	1990
136. Bahrain	Autocracy	1971	1972
	Bureaucracy	1973	1974
	Autocracy	1975	1990
137. Kuwait	Autocracy	1961	1962
	Bureaucracy	1963	1975
	Autocracy	1976	1980
	Bureaucracy	1981	1985
	Autocracy	1986	1990
138. Oman	Autocracy	1951	1990
139. Qatar	Autocracy	1971	1990
140. Saudi Arabia	Autocracy	1950	1990
141. United Arab Emirates	Autocracy	1971	1990

Appendix 1.3: Basic Data about Regime Dynamics

Asterisks indicate cases classified as regime transitions according to the regular coding rules.

(A) Transitions to Dictatorships by Incumbents

Country	Year
Cameroon	1963
Central African Republic	1962
Chad	1962
Djibouti	1982
Gabon	1967
Ghana	1972*
Kenya	1969
Lesotho	1970
Malawi	1966
Rwanda	1965
Sierra Leone	1967*
Uganda	1970
Zambia	1973

(continued)

Country	Year
Zimbabwe	1980
Ecuador	1970
Uruguay	1973*
Bangladesh	1975
South Korea	1972
Malaysia	1969
Pakistan	1956*
Philippines	1972
Turkey	1980*

(B) Countries by Regime Type and the Number of Transitions to Authoritarianism Experienced by 1950

Democracies in 1950 that had experienced no transition to authoritarianism by then:

- Canada
- Guatemala
- Panama
- United States
- Brazil
- Ecuador
- Uruguay
- India
- Israel
- Myanmar
- Pakistan
- Philippines
- Sri Lanka
- Belgium
- Denmark
- France
- Iceland
- Ireland
- Luxembourg
- Netherlands
- Norway
- Sweden
- Switzerland
- United Kingdom

- Australia
- New Zealand

Dictatorships in 1950 that had experienced no transition to authoritarianism by then:

- Egypt
- Ethiopia
- Liberia
- South Africa
- Dominican Republic
- El Salvador
- Haiti
- Honduras
- Mexico
- Nicaragua
- Bolivia
- Paraguay
- China (PR)
- Indonesia
- Iran
- Iraq
- Jordan
- South Korea
- Mongolia
- Nepal
- Syria
- Taiwan
- Thailand
- Hungary
- Romania
- Turkey
- Soviet Union
- Saudi Arabia

Democracies in 1950 that had experienced at least one transition to authoritarianism by then:

- Costa Rica
- Argentina
- Chile
- Austria
- Finland

West Germany
Greece
Italy

Dictatorships in 1950 that had experienced at least one transition to authoritarianism by then:

Colombia
Peru
Venezuela
Bulgaria
Czechoslovakia
East Germany
Poland
Portugal
Spain
Yugoslavia

(C) Regime Transitions, by Country

NO TRANSITIONS (100 cases)

Dictatorships (67 cases)

Algeria	1962-1990
Angola	1975-1990
Benin	1960-1990
Botswana	1966-1990
Burkina Faso	1960-1990
Burundi	1962-1990
Cameroon	1960-1990
Cape Verde	1975-1990
Central African Republic	1960-1990
Chad	1960-1990
Comoros	1975-1990
Djibouti	1977-1990
Egypt	1950-1990
Ethiopia	1950-1990
Gabon	1960-1990
Gambia	1965-1990
Guinea	1958-1990
Guinea-Bissau	1974-1990

(continued)

Dictatorships (67 cases, cont.)

Ivory Coast	1960-1990
Kenya	1963-1990
Lesotho	1966-1990
Liberia	1950-1990
Madagascar	1950-1990
Malawi	1964-1990
Mali	1960-1990
Mauritania	1960-1990
Morocco	1956-1990
Mozambique	1975-1990
Niger	1960-1990

Democracies (33 cases)

Rwanda	1962-1990
Senegal	1960-1990
Seychelles	1976-1990
South Africa	1950-1990
Swaziland	1968-1990
Tanzania	1961-1990
Togo	1960-1990
Tunisia	1956-1990
Zaire	1960-1990
Zambia	1964-1990
Zimbabwe	1965-1990
Haiti	1950-1990
Mexico	1950-1990
Guyana	1966-1990
Paraguay	1950-1990
Bahrain	1971-1990
China (PR)	1950-1990
Iran	1950-1990
Iraq	1950-1990
Jordan	1950-1990
Kuwait	1961-1990
Malaysia	1957-1990
Mongolia	1950-1990
Nepal	1950-1990
Oman	1951-1990

(continued)

Democracies (33 cases, cont.)

Qatar	1971-1990
Saudi Arabia	1950-1990
Singapore	1965-1990
Syria	1950-1990
Taiwan	1950-1990
United Arab Emirates	1971-1990
Yemen	1967-1990
East Germany	1970-1988
Romania	1961-1989
Soviet Union	1950-1990
Yugoslavia	1950-1990
Fiji	1970-1990
Western Samoa	1962-1990
Mauritius	1968-1990
Bahamas	1973-1990
Barbados	1966-1990
Belize	1980-1990
Canada	1950-1990
Costa Rica	1950-1990
Jamaica	1962-1990
Trinidad & Tobago	1962-1990
United States	1950-1990
India	1950-1990
Israel	1950-1990
Japan	1952-1990
Austria	1950-1990
Belgium	1950-1990
Denmark	1950-1990
Finland	1950-1990
France	1950-1990
West Germany	1950-1990
Iceland	1950-1990
Ireland	1950-1990
Italy	1950-1990
Luxembourg	1950-1990
Malta	1964-1990
Netherlands	1950-1990
Norway	1950-1990

(continued)

Democracies (33 cases, cont.)

Sweden	1950-1990
Switzerland	1950-1990
United Kingdom	1950-1990
Australia	1950-1990
New Zealand	1950-1990
Papua New Guinea	1975-1990
Solomon Islands	1978-1990
Vanuatu	1980-1990

ONE TRANSITION (17 cases)

To Dictatorship (5 cases)

Congo	1963
Sierra Leone	1967
Somalia	1968
Sri Lanka	1977

To Democracy (12 cases)

Laos	1958
Dominican Republic	1966
El Salvador	1984
Nicaragua	1984
Colombia	1958
Bangladesh	1985
Venezuela	1959
Bulgaria	1989
Czechoslovakia	1989
Hungary	1989
Poland	1989
Portugal	1975
Spain	1976

TWO TRANSITIONS (9 cases)

Dic → Dem → Dic (2 cases)

Uganda
Indonesia

Dem → Dic → Dem (7 cases)

Grenada
 Brazil
 Chile
 Ecuador
 Uruguay
 Philippines
 Greece

THREE TRANSITIONS (8 cases)**Dem → Dic → Dem → Dic (5 cases)**

Nigeria
 Panama
 Suriname
 Myanmar
 Thailand

Dic → Dem → Dic → Dem (3 cases)

Bolivia
 South Korea
 Turkey

FOUR TRANSITIONS (2 cases)

Ghana
 Pakistan

FIVE TRANSITIONS (2 cases)

Sudan
 Honduras

SIX TRANSITIONS (2 cases)

Guatemala
 Peru

EIGHT TRANSITIONS (1 case)

Argentina

Appendix 1.4: The "Short" Data Base

Because the economic data are not available for all the countries and years described earlier, we shall be working with a somewhat smaller data set. As the earliest year for which we have data on per capita income is 1950, our observations on the rate of economic growth begin in 1951. Moreover, because the patterns of economic development for countries that rely for most of their income on oil are *sui generis*, we excluded six countries in which the ratio of fuel exports to total exports in 1984–1986 exceeded 50 percent.³⁹ These limitations delineate what we call our "short" data base.

The basic patterns that have been described remain unchanged as we move to the smaller data set. Overall, we lose 604 observations, 171 in the six excluded oil-producing countries, and the rest where the economic data are not available. The most significant losses are concentrated in East Asia (31.7 percent), the Pacific islands (30 percent), and Eastern Europe (36.9 percent). Because of data unavailability, we lose 78 years of democracy (4.5 percent) and 355 years of dictatorship (11.8 percent).

In the end, thus, the data set with which we work in the rest of this book contains observations for 1,645 years of democracy (1,022 of parliamentary democracies, 147 of mixed democracies, and 476 of presidential democracies) and 2,481 years of dictatorship (1,812 of bureaucracies and 669 of autocracies), for a total of 4,126 observations. They compose 99 spells of democracies (or 50 of parliamentarism, 9 of mixed systems, and 43 of presidentialism) and 123 spells of dictatorships (or 133 of bureaucracy and 98 of autocracy). This yields thirty-nine transitions from democracy to dictatorship, and forty-nine from dictatorship, to democracy.

³⁹ These countries are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.