5. The big pattern of democracy: a study of the Gastil Index

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INTRODUCTION

The Gastil Index, which measures the degree of democracy, is now available for 171 countries from 1972 till 2003. These data are crude, and they have often been criticized, but at present they are taken as given. They are given as two integers for each country and year, measuring democratic rights and civil liberties on a scale from 1 to 7. This chapter uses the average of the two data. They are scaled so that 1 is pure democracy, while 7 is pure dictatorship. This scaling may confuse, but the index is used as posted.

The chapter shows that democracy has increased – the index has fallen – in the average country from 4.6 to 3.2, but the underlying pattern is much more complex. Explaining the development of democracy for 171 countries over 32 years is potentially an endless job. However, the chapter only aims to study the big pattern in the index by considering three theories:

2. The Reverse Lipset: Countries become rich because they are democracies.
3. The family of theories claiming that democracy is determined by culture.

All three theories can be true at the same time. 1 and 2 deal with the relation between the Gastil Index and the standard of living, while 3 considers various ‘cultural’ classifications of the countries. The appendix lists the 171 countries and the classifications used. The three theories are discussed only at the operational level as explanations of the data at hand. Evidence will be presented that 1 and 3 are both true, and it is further demonstrated that 3 is still true when controlled for 1, while little support is found for 2.

Democracy is sometimes seen as a ‘Western’ concept, and it has been claimed that other concepts of democracy exist which are more relevant
elsewhere. The author disagrees with this line of argument. There are, of course, other ideals than democracy such as obedience to God or the Party, service of the Nation, equality, a high standard of living, and so on, but to term them ‘democracy’ is to confuse issues.

The next section gives a few basic observations on the data. The following section looks at the three theories, while the third section turns to the main pattern in the data. The fourth section considers the rich countries, while the fifth section looks at the Muslim exception. The sixth section deals with the historical experiment of the 33 countries that are either still Communist or in transition from socialism. The final section concludes the chapter.

A FIRST LOOK AT THE DATA: TREND AND STABILITY

The average path of the Gastil Index for all 171 countries is shown in Figure 5.1. The regression line shown (reg 6 in Table 5.3) has a significantly negative slope corresponding to the rise of about 67 percent in income (real GDP per capita) that has happened during the period. However, there was no trend before 1987 when the rule of Gorbachev in the Soviet Union started to affect the control of the center over the empire, so the graph can be alternatively interpreted as reflecting the victory of the West in the Cold War, and the resulting expansion of Western values in the world.

The standard deviations – as defined in Table 5.1 – of the Gastil Index are measures of political system stability. $S_t$ (Figure 5.2a) shows the stability over time, while $S_i$ looks at the stability across countries (Figure 5.2b). Not surprisingly, we note that the average $A(S_t) > A(S_i)$.

The stability over time $S_t$ has no trend. However, the values for the 1980s are relatively high, pointing to the period as one of unusual political turmoil. It is interesting that the instability starts already in the early 1980s before it takes a systematic direction.

The cross-country stability has a characteristic parabolic shape:

$$S_i = -0.953 + 1.112 A_i - 0.138 A_i^2$$

$$R^2 = 0.49, n = 171$$

(5.1) (2.2) (12.6) (12.1)

numbers in parentheses are $t$-ratios.

Stability is only present at the two extremes, especially at the high democracy end. Political systems at average Gastil Scores of 3–5 are rather unstable. This corresponds to well-known observations, namely that sufficiently tough dictatorships tend to last for some time, but the most permanent
The big pattern of democracy

The system appears to be democracy once it has survived the first couple of decades. It has even been termed the ‘end of history’ in Fukuyama (1992). Systems of partial or steered democracy are always under pressure to change either way.⁴

THREE THEORIES

Two of the three theories listed in the introduction deal with the relation between democracy and economic development, \( y_D \).⁵ The third theory relates democracy to culture: it will be operationalized as a set of six ‘folk’ theories and ideas. Finally, some statistical problems are discussed, and the estimating equation is presented.

The Grand Transition normally lasts one to two centuries when a country starts as poor LDC, goes through low Mic (middle income) and high Mic to become a DC. The process is far more than growth⁶ as it changes society profoundly: the structure of production changes, and urbanization increases. The level of education rises dramatically. Children

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Note: Soviet power in the East Bloc loosened gradually from 1988 to 1991 when USSR was dissolved.

Figure 5.1 The average Gastil Index, \( A_t \), for the 171 countries 1972–2003
Table 5.1  Averages and standard deviations over time and across countries

<table>
<thead>
<tr>
<th>Over</th>
<th>Running average</th>
<th>Average: $A = 4.21$</th>
<th>Running standard deviation</th>
<th>Average standard deviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>$A_t = \sum_{i=1,171} \gamma_{it}/171$</td>
<td>$A = \sum_{i=1,32} A_i/32$</td>
<td>$S_t = \left(\sum_{i=1,171} (A_i - \gamma_{it})^2\right)/170$</td>
<td>$A(S_t) = \sum_{i=1,32} S_i/32 = 1.99$</td>
</tr>
<tr>
<td>Country</td>
<td>$A_t = \sum_{i=1,32} \gamma_{it}/32$</td>
<td>$A = \sum_{i=1,171} A_i/171$</td>
<td>$S_t = \left(\sum_{i=1,32} (A_i - \gamma_{it})^2\right)/31$</td>
<td>$A(S_t) = \sum_{i=1,171} S_i/171 = 0.89$</td>
</tr>
</tbody>
</table>
cease to be an economic necessity and become an expensive consumption good, and people’s concept of family changes from extended to core. The income distribution becomes more equal, and so on. The process is complex, and the variables interact in a highly simultaneous way as sketched in panel A of Figure 5.3. Hence, it is very easy to present a model giving any causal structure, or the reverse one. We are looking for signs of the main direction. Our arguments and findings support the causal structure depicted on Figure 5.3.

Part of the process is the improvement of a certain group of non-material externality goods. They are social capital and honesty, civil liberties and democratic rights, security in the streets and homes, and even happiness – they appear in panel B of Figure 5.3. It is strong evidence for the Lipset Law that the Grand Transition is associated with a large improvement in a whole class of similar externality goods.

The structure of causality depicted in Figure 5.3 takes the development process to be highly simultaneous, while the improvement of the various externality goods is considered to be mainly an outcome. We thus distinguish between main causality from the transition to the externality goods and the virtue-rewarded loop the other way, of which the Reverse Lipset is one member. The name given to the reverse causality indicates that it would be nice indeed if honesty, trust, low crime rates and democracy were causal factors in economic development, and not the other way round. We look for signs that this is the case. A recent meta study, Docouliagos and

Note: The curve on Figure 5.2b is reg 1 in text. While ten countries (all Western) have perfect democracy, 1.0, for all 32 years, only one country (North Korea) has perfect dictatorship, 7.0, for all years.

Figure 5.2 Political system stability over time and across countries: (a) Over time: \( S_i \) as a function of \( t \); (b) Across countries: \( S_i \) as a function of \( A_i \).
Ulubasoglu (2005), covers 81 studies of the reverse Lipset effect and concludes that it is small but positive.8

The group of externality goods is indeed virtuous ‘goods’. They are also fully or partly public goods (except happiness), and they are not supplied via the normal market and not even deliberately produced: they could hence be seen as positive externalities that follow from the development process. However, we know from polls as well as from much casual evidence that people value and demand these goods. Anyone who visits a corrupt society is likely to have noticed that people do not like it. Also, even in countries with no democracy, governments often take great care ‘enacting’ the outward shells of democracy as a way to obtain legitimacy and perhaps as homage to virtue.

The causal link from income to democracy may operate in a narrow or a broad way. The narrow version has income as the key variable: $\gamma = \gamma(y)$. The broad version has as a function of the entire transition: $\gamma = \gamma(\text{education, family structure, } y)$.

The narrow theory sees the generation of these goods as purely demand driven, and the economist will explain the process of their improvement as the production of a demand driven luxury good – that is, a good with an income elasticity above 1. Studies of the pattern of consumption (since the classical study by Houthakker, 1957) find that elasticities generalize when goods are aggregated into groups. This result suggests that if the level of these goods in society is demand driven, then the elasticities are general too. This line of thought thus explains Lipset’s Law by a deep parameter in human behavior, and rejects the idea that culture is the key explanation.

Figure 5.3 The causal structure discussed

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Panel A

- Development, grand transition:
  - Production
  - Production structure
  - Family structure
  - Human capital

Panel B

- Externality good:
  - Lipset
  - Democracy
  - Civil liberties
  - Honesty
  - Mutual trust
  - Crime rates
  - ... Happiness

Panel C

- Exogenous culture:
  - Democratic values
  - Propensity to accept democracy

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8 Is legitimate coercion really legitimate?

Panel A

Panel B

Panel C

Figure 5.3 The causal structure discussed
The broad theory sees the generation of these goods as a consequence of
the whole of the Grand Transition, and thus it is closer to the externality
view. It is because society changes that people come to demand more
honesty and democracy. This version of the theory suffers from wooliness:
the explanation should be further developed so that it becomes clear which
parts of the Grand Transition explain what.

The data contains a group of oil countries that are rich due to resource
rent and has not gone through the Grand Transition. They are much less
democratic than other rich countries. This supports the broad theory rather
than the narrow one.

A culture may be seen as a set of weights given to the values that
are common to all people. A cultural theory is thus a theory that the
weights differ systematically between cultures. One value is the preference
for democracy. If one culture values democracy more than another, one
should observe that the average Gastil Score is lower in the countries of
the first group, also when the analysis is controlled for other relevant
variables.

Cultural theories are empirically difficult because it is hard to find ade-
quate measures for ‘culture’ to use in a formal test. This chapter therefore
uses various country classifications and binary dummy variables to account
for these classifications. Thus, a classification is a box in which some coun-
tries are placed, and the corresponding dummy variable is set to one. If they
are outside the box, the dummy is zero. The theory that the said culture
matters is tested by examining if its dummy generates significant and robust
coefficients in a set of regressions using different controls.

The level of analysis pursued demands cultural theories that are at the
same time very general and easy to operationalize statistically. Such the-
ories inevitably become rather like stereotypical ‘folk’ theories, even though
books have been written about each of them. The following cultural
hypotheses have been included:

1. Democracy originated in the West, and some claim it is a particularly
Western value, which means that Western countries should have an
unusually high propensity for accepting democracy. It is tested by
including a Western dummy variable of the type described. Due to the
scaling of the Gastil Index, the coefficient to the Western dummy
should be negative if Western countries are more democratic. It
appears that a broad agreement exists about the countries that should
be termed Western. We have subdivided the West into (a) a group of
Old West, and (b) a group of Convergers like Greece and Spain, which
were Mic countries in the first half of the twentieth century, but have
converged to become rich Western countries.
The Latin American countries are a distinct group of Mic countries with a culture related to the Western one. For a long time the Latin American countries pursued a special policy mix that involved economic isolation. Hence one would expect these countries to have a coefficient that deviates to the same side from the general pattern as does the West, though perhaps less so.

Another well-known hypothesis is that the countries in the Orient (Far East) have Asian values, which give democracy a low weight relative to economic growth and political stability. This should give the Orient dummy a positive sign. A special group of Oriental countries are the Asian Tigers, which already have a Western standard of living.

A popular cultural theory claims that the Muslim world is adverse to such Western values as democracy. Muslim countries are defined as countries that have a large Muslim majority and a Muslim government. Hence, Sudan, Lebanon and Indonesia are classified as Muslim, while Nigeria, Tanzania and Kenya are not. In addition, a variable for the Arab countries has been included as the original core group where Muslim culture is likely to be particularly strong.

A special case is the countries that were ruled by a Communist party before 1990. Of these, a few are still Communist, while the rest are the Transition countries, which have chosen new economic and political systems since 1990. They provide a fine historical experiment.

As already mentioned, it is important to single out the oil countries. Consequently, an oil dummy is included for countries with oil as the dominating export good.

Many countries belong to several groups: Libya is thus Muslim, Arab and an oil country, while Norway is a Western oil country, and so on. One hundred and seventy-one countries provide a fair amount of observations for tests. Appendix Table 5A.1 shows how the countries are classified for the statistical test.

Within the time span of 32 years considered, the average country has had a growth per capita of about 1.6 percent per annum or 67 percent. This is substantial, but still small compared to the Grand Transition – to analyse this, we have to use the cross-country variation. Also, 32 years is too short for major cultural change, so we take cultures to be exogenous. So, for a study of the Gastil Index it is important to sort out the variation over time from the large cross-country variation. Consequently, the following cross-country model is used for the regressions in Tables 5.3 to 5.5.

\[ y_{it}^{32} = \alpha_0^{32} + \alpha_1^{32}\log y_i + \beta_1^{32}D_{1,i} + \ldots + \beta_n^{32}D_{n,i} + u_i \]  

(5.2)
\[ \gamma_{it}^{10} = \alpha_0^{10} + \alpha_1^{10}\ln y_{it} + \beta_1^{10}D_{1i} + \ldots + \beta_n^{10}D_{ni} + u_{it} \]  

(5.3)

\[ \gamma_{i1}^{32}, \gamma_{i1}^{10}, \] are averages of the Gastil Index, \( i \), for either all 32 years or for the last ten years. Income, \( y_{i1} \), is \( \text{GDP} \), that is GDP per capita. Each \( D \) is a binary dummy for a culture or some other country characteristic as will be explained, and \( u_{it} \) is residuals. The \( \alpha \)s and \( \beta \)s are the coefficients estimated. Theory 2 is the claim that there is a counter causality bias in \( \alpha_1 \). We take it for granted that there is no such bias in the \( \beta \)s.

The present chapter thus uses a pure cross-country approach, which assumes that all adjustments to the changes in the variables take place within the time period studied. Panel approaches are used both in Borooah and Paldam (2007) and Jensen and Paldam (2007), where the following two models are explored:

\[ \gamma_{it}^{1} = \alpha_0^{1} + \alpha_1^{1}\ln y_{it} + \beta_1^{1}D_{1i} + \ldots + \beta_n^{1}D_{ni} + u_{it}, \quad \text{for each } t \]  

(5.4)

\[ \gamma_{it}^{N} = \alpha_0^{N} + \alpha_1^{N}\ln y_{it-1}^{N} + \phi^N \gamma_{it-1}^{N} + \beta_1^{N}D_{1i} + \ldots + \beta_n^{N}D_{ni} + v_{it} \]  

(5.5)

Where Equation 5.4 is estimated for every year available to study the dynamics in the coefficients, and Equation 5.5 is estimated for different \( N \)s to catch the adjustment over time, and then the fully adjusted (steady state) coefficients \( z^\omega = z^N/(1 - \phi^N) \) can be calculated for \( z = \alpha_1, \beta_1, \ldots, \beta_n \). The different approaches give rather similar results: \( \alpha_1^{1} \approx \alpha_1^{10} \approx \alpha_1^{12} \approx \alpha_1^{2}, \beta_1^{1} \approx \beta_1^{10} \approx \beta_1^{12} \approx \beta_1^{2}, \) and so on.\(^{10} \) However, the present chapter concentrates on the cross-country pattern.

THE BIG PATTERN IN THE DATA

First, the average scores for 1972–2003 will be considered, and then the path of the average \( \alpha \)s over time is discussed. The \( y \)-data have the structure given in Table 5.A2 (of the Appendix). The proper year to use for the \( y \)-data is initial \( \text{gdp} \), but as the transition countries are an important case, and their data make little sense before 1998, I use final \( \text{gdp} \) instead of initial.\(^{11} \)

Figure 5.4 presents the basic support for Lipset’s Law. It shows the average \( \gamma \)-score for 1972–2003 for all 171 countries explained by the logarithm to \( y \), in 2001. The figure and the averages in Table 5.2 show four points:

1. A significant downward trend appears in the observations.
2. All countries with ‘full’ democracy are in the rich group.
3. Lipset’s Law explains \( \frac{1}{3} \) of the variation in the data.

4. It is easy to suggest additional factors explaining more of the variation.

A first additional factor is suggested in the figure: seven points are extreme in being both rich and undemocratic. Six out of the seven outliers are the six richest oil countries (marked in black): Saudi Arabia, Bahrain, Brunei, Qatar, Kuwait and United Arab Emirates. The last rich outlier is Singapore. This is the first indication that the resource rent point is important. It should also be mentioned that the most extreme outlier to the other side is India, which has an unusually high level of democracy for its income level.

Table 5.2 shows various averages of the variables analysed. For now, we consider the four last columns showing averages for the Gastil Index, and how they deviate from the grand average.

5. The average score is 4.21 for all 32 years, and 3.72 for the last ten years. It is close to the middle of the scale (4 points) from no to full democracy.

6. Western countries are relatively democratic as expected. Also the Latin American group and the Asian Tigers appear relatively democratic.
Two groups of countries have low scores: Communist and Muslim countries, where the core group of Arab countries is (even) less democratic than the average.

Communist countries have Gastil scores of 6–7. The Small Transition – the one from socialism since 1990 – provides a fine historical experiment demonstrating what political system countries prefer, given their history and income, when they have to make a new choice.

The development from 1972 to 2003 of the Gastil Index for the four income groups of countries in the World Bank classification (see Appendix) are shown in Figure 5.5. The trendless part of the aggregate curve from 1972 to 1986 is due to a small rise in the two poorest groups and a steady fall in the two richest groups. However, all four curves have a (significant) negative slope indicating that democracy increases. The increase for the average country is about 0.03 points a year or one full point on the scale over the 32 years. This corresponds to the average raise of 67 percent in real per capita income in the period.

The relative position of the four curves also supports Lipset’s Law as the level of democracy for the four income groups differs precisely as predicted. The only deviation from the picture is the development of the Mic h(igh)
group that intersects with the Mic l(ow) group before 1990. This is due to
the high number (ten) of ex-Communist countries in the high Mic group
now in transition. The ‘Ep Com’ line shows how much the high Mic curve
changes when the ten Communist countries are excluded.

Some researchers – for example Przeworski et al. (2000) – explain the
observations presented by the reverse causal structure: democracies are
countries that develop particularly well and hence become rich. Here, the
causality is from democracy to development. It surely would be great to see
virtue rewarded, and a large number of studies have analysed the matter. The
conclusion is that it has fared rather poorly as a variable explaining growth;
see for example Barro and Sala-i-Martin (2003: 528–9) and Brunetti (1997).

Model 5.3 is used for the regressions of Table 5.3.12 Lipset’s Law predicts
that log $y_i$ gets a negative coefficient. It is indeed negative, always
significant, and it obtains an $R^2 = 0.34$ if it is the only variable in the regres-
sion (reg. 6). The country groups included add almost as much explanatory
power as Lipset’s Slope, but the bulk of the extra explanation is from just
two variables: Muslim and West.

Africa, Orient and Transition get insignificant coefficients. That is also
the case in other combinations where these three variables are included
either together or one at a time. Consequently, the countries in these groups

Figure 5.5  The development over time for the four main income groups of
countries

![Graph showing the development over time for the four main income groups of countries](image)
have the average level of democracy when controlled for their level of development. It is also the case for the Transition countries as will be discussed in the sixth section. The ‘Asian Values’ hypotheses find no support in these data; nor are African countries exceptional as regards democracy, but they are exceptionally poor.

Communist countries are three points less democratic relative to the Lipset Path, but the group consists of five countries only, so it does not add much to the $R^2$. Western countries are more than one point too democratic, and it is reflected in the Latin American group as well. Muslim countries are almost two points less democratic than they should be given their income level. This will be further analysed in the fifth section.

Table 5.4 adds the oil variable. It is significant, and the sign is always positive. Oil countries are less democratic. This once again supports the resource rent point. Clearly, it is not income alone, but also the transformation during the Grand Transition that causes democracy to rise. In Table 5.4, the Arab group is also singled out, and it appears to be less democratic than other Muslim countries even when controlled for oil and income.

THE 38 RICH COUNTRIES: IS THE WEST SPECIAL?

The data contain 38 rich countries: two are Caribbean ‘tourist states’, two are Transition countries discussed on pp. 119–21, five are Muslim Oil
countries discussed in the next section. The remaining 30 countries are divided as listed in Table 5.A1 into: five Asian Tigers, ten Convergers and 15 Old West which are countries that were DCs already in the first half of the twentieth century – all countries in this group have been democracies for at least 50 years – most much longer.

The ideas of democracy and civil rights originally developed in the West. It is therefore arguable that they are relatively strong in the Western system of values. Figure 5.6 shows that the Old West is actually very democratic and has been so throughout the period. The Convergers are becoming more democratic as they become richer, and precisely the same applies to the Asian Tigers. This is, of course, a clear confirmation of Lipset’s Law, and contrary to the Reverse Lipset idea.

We know from Table 5.2 that the Oriental countries do not deviate from the general trend, and it is interesting that the Asian Tigers, who made the Grand Transition exceptionally fast, have also had a quick transition to democracy. The regressions above suggest that they will not converge fully to the Western level, but may stop 1.25 from it as they do indeed seem to do in Figure 5.6. A closer inspection shows that the oldest Tiger – Japan – is now close to the Western level. It suggests that the transition from a ‘reasonable’ to a ‘full’ democracy takes considerable time, so perhaps the other Tigers will gradually become (even) more democratic just as the Convergers. In fact, the curve for the Tigers looks as the one for the Convergers with a delay of 15 years.

The exception to the general picture is the five rich Muslim oil countries, which have few democratic and civil rights and are moving even further away from democracy. They are all ruled by absolute monarchs, as was Europe before the French Revolution. We analyse the effect of Muslim culture on democracy in the next section.

### Table 5.4 Cross-country regressions on the effect of oil on democracy

<table>
<thead>
<tr>
<th>Reg 7</th>
<th>Const.</th>
<th>Log y</th>
<th>Oil</th>
<th>West</th>
<th>Muslim</th>
<th>Arab</th>
<th>Com</th>
<th>R²</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9.50</td>
<td>-1.74</td>
<td>0.88</td>
<td>-0.77</td>
<td>1.35</td>
<td>1.09</td>
<td>3.04</td>
<td>0.68</td>
<td>171</td>
</tr>
<tr>
<td></td>
<td>(11.7)</td>
<td>(7.6)</td>
<td>(2.9)</td>
<td>(2.4)</td>
<td>(5.4)</td>
<td>(2.8)</td>
<td>(5.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reg 8</td>
<td>8.97</td>
<td>-1.59</td>
<td>1.11</td>
<td>-0.89</td>
<td>1.71</td>
<td>3.08</td>
<td>0.66</td>
<td>171</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(11.1)</td>
<td>(7.0)</td>
<td>(3.7)</td>
<td>(2.76)</td>
<td>(7.66)</td>
<td>(5.9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reg 9</td>
<td>9.02</td>
<td>-1.58</td>
<td>-0.92</td>
<td>1.47</td>
<td>1.38</td>
<td>3.02</td>
<td>0.66</td>
<td>171</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(11.1)</td>
<td>(6.9)</td>
<td>(2.9)</td>
<td>(5.8)</td>
<td>(3.6)</td>
<td>(5.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reg 10</td>
<td>12.34</td>
<td>-2.44</td>
<td>2.10</td>
<td></td>
<td></td>
<td></td>
<td>0.46</td>
<td>171</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(15.6)</td>
<td>(11.2)</td>
<td>(6.1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** See Table 5.3.
THE MUSLIM EXCEPTION:¹³ AN AVERSION TO DEMOCRACY?

The data are complete for 44 Muslim countries, with an average Gastil Score of 5.5. Table 5.2 shows that the average Arab country is 3.2 times richer than the average non-Arab Muslim country; nevertheless the average Gastil Score for the Arab group is 5.7. The Lipset Graph corresponding to Figure 5.4 is shown in Figure 5.7 for the Muslim countries separately. The average only covers the years 1994–2003 in order to allow the data to include the seven Ex-Communist countries that are (now) Muslim.

The picture in Figure 5.7 is constructed as Figure 5.4, but looks very different as there is no sign of a downward slope. The slope through the points is positive, but insignificant. Also, the average is high – there is little demand for democracy in this group of countries.

Figure 5.8 shows the development over time for the 16 Arab countries, the seven Transition countries that used to be Communist, and the remaining 21 Muslim countries. When the data for the 44 countries are examined for trends over the 32 years, only the Arab group of countries has a significant trend, and it is upwards. Table 5.5 gives five regressions to explain this sub-set of data, using model 5.1 above. The main impression
from the table is a low level of significance throughout. Only the constant is significant.

While the facts thus tell a clear story, the explanation is less obvious. The two largest religions – Christianity and Islam – are rather similar, and both emerged in the Middle East, so it is strange that one has developed cultures which are easy to combine with democracy while the other has developed cultures that are not.

Maybe it goes back to the founders of the two religions. A poor itinerant preacher founded Christianity. He never sought either wealth or power, but he was nevertheless executed. The (final) Prophet of Islam became both wealthy and powerful. He and a small circle of his early followers ruled in Mecca from about 630 and for the next half century when a major Arab/Muslim state was forged through conquest and conversion. Few more amazing success stories can be told. This period is a Muslim ideal, and the political system in this ideal state was certainly not democracy. The wave of fundamentalism that is now so prominent in the Muslim world is a reaction to modernization including democracy and other ‘Western’ ideas, and it expresses a wish to return to the ideal and re-establish the Caliphate, that is, to return to a medieval society. Hence, it is likely that democratic values carry relatively little weight in the Muslim culture.14

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Figure 5.7  The average democracy score in 44 Muslim countries, 1994–2003
The data include 33 countries with a Communist government before 1990. Five still have a Communist regime. The remaining 28 countries form the

![Figure 5.8 The development over time for three groups of Muslim countries](image)

**Table 5.5 Regressions for the 44 Muslim countries, 1994–2003**

<table>
<thead>
<tr>
<th>Reg</th>
<th>Const.</th>
<th>log y</th>
<th>Arab</th>
<th>Oil</th>
<th>Trans</th>
<th>African</th>
<th>Orient</th>
<th>$R^2$</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>5.82</td>
<td>0.23</td>
<td>0.55</td>
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**THE SMALL TRANSITION: A HISTORICAL EXPERIMENT**

The data include 33 countries with a Communist government before 1990. Five still have a Communist regime. The remaining 28 countries form the
Transition group, which is further divided into three groups: Muslim countries, ex-Soviet non-Muslim countries and the rest, which are all – except Mongolia – East and Central European countries.

For the countries in the Transition group, the political change in 1988–91 came in the form of a sudden collapse of the old political system and the central control. In the cases of the Soviet Union and Yugoslavia, even the state as such disintegrated. The development of the new political order in these countries thus provides a fine historical experiment.

Figure 5.9 shows what has happened. It is as could be expected from the analysis till now. The five remaining Communist countries even tighten their dictatorships – probably due to the dramatic collapse of Communism in the 28 Transition countries. The Muslim Transition countries had a short ‘democratic spring’ in 1990–92, and then they moved to the typical Muslim level of democracy (around 5.5). Finally, the non-Muslim transition countries moved toward the other countries in that group. The group of non-Muslim transition countries has made great strides toward democracy. The most Western countries in the group are also the richest in the group. They

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*Note:* $nT$ means non-Transition, $T$ is Transition, *others* are neither Communist nor Muslim. Finally, *Com* is Communist. To simplify all Communist countries are shown as an average from 1972 to 1987.

**Figure 5.9  The small transition**

Transition group, which is further divided into three groups: Muslim countries, ex-Soviet non-Muslim countries and the rest, which are all – except Mongolia – East and Central European countries.

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are already at an almost Western level of democracy as seen in Figure 5.6. Consequently, the countries quickly converged to the position in the big pattern where they would have been without the previous Communist regimes.

The models from Tables 5.3 and 5.4 are reestimated on the data for the 33 countries in Table 5.6. The group contains only one Latin American and three Oriental countries so some of the regressions in Tables 5.3 and 5.4 make little sense to replicate for the 33 countries. However, the regressions that can be replicated look precisely as expected from Tables 5.3 and 5.4.

The degree of socialism, $\sigma$, can be defined as the share of GDP produced by publicly owned real capital. The Communist countries were very socialist, as $\sigma$ was in the range from 0.7 to 0.95 in all these countries. We know that other countries are/have been socialist as well, with $\sigma$-scores well above 0.5. However, no systematic cross-country data exists for $\sigma$. The Gastil data show that the least democratic group is the Communist group, but the author is convinced that the result generalizes to socialism in general. It is very difficult to combine socialism and democracy. The main reason is that in any system somebody has to do the nasty job of preventing the agents from maximizing costs. In a capitalist country, it is the job of the owners and the market. This leaves the state with the nice and popular job of taking care of the losers and in general of making the system milder. However, in a socialist country the state has to do the nasty job itself. This makes the state unpopular. Thus, control is needed, and this is easy to establish when the state owns everything. The result hereof is dictatorship.

CONCLUSION

The analysis above is based on the Gastil Index from the NGO Freedom House. These data are known to contain measurement errors, but they
nevertheless have a very significant pattern. Three basic conclusions emerge from the above analysis of data for 171 countries over the last 32 years:

1. Lipset’s Law is consistent with the data. It explains about one third of the variation in the data. There is no doubt that a democratic transition occurs as countries go through the Grand Transition.
2. Little indicates that causality may be from democracy to income. It is difficult to reject that some causality occurs from democracy to development, but the main direction of causality is surely from income to democracy.
3. Three cultural hypotheses are confirmed by the data for 1972–2003:
   (a) Communist countries are the least democratic, and it appears to be a general trait that public ownership of the means of production is difficult to combine with democracy. Fortunately, it appears that Communism is disappearing.
   (b) Muslim countries are rather undemocratic too, and they show no tendency to become more democratic when income grows. This is a worrying fact as it is an important part of the present divergence between the West and the Muslim World.
   (c) Western countries are relatively democratic, but this may be due to the simple fact that they have been relatively wealthy for a longer time than anybody else.

The reader may wonder if the findings will generalize to a longer period. In particular, we want to know if the Muslim Gap is permanent or transitory. All we can see from the data (Figure 5.9) is that the gap is large and increasing, so it is not likely to go away soon. However, in the studies of the dynamics referred to, it appears that the Muslim Gap is non-stationary. If it can grow, as it has done for the last 50 years, this would appear to suggest that it can fall too.

Several other cultural hypotheses find no support in the data: the Asian Values hypothesis is rejected, and African countries are only undemocratic because they are poor. Also, signs have been found that the Western exception may be due to history only, as democracy slowly improves once it is established, and many Western countries have been democratic for more than a century.

ACKNOWLEDGEMENTS

This chapter was presented at a workshop at Deakin University, Melbourne and at the University of Iceland, Reykjavik, as well as at the European
Public Choice Meeting in Durham, UK. It has generated many inspiring comments and proposals for further research, which is already in progress, see Jensen and Paldam (2007) and Borooah and Paldam (2007). I am especially grateful to Christian Bjørnskov, Nils Petter Gleditsch, Thorvaldur Gylfason, and Virginie Pignon.

NOTES

1. The index is published by *Freedom House*. It was developed by Raymond Gastil. He is no more in charge, but the name is still in common use. Two alternative democracy indices exist, but they build on less primary data. For the period covered, they are so correlated as to give almost the same results, see Jensen and Paldam (2006).

2. After S.M. Lipset (1959), who first suggested the connection and discussed both directions of causality.

3. The *Grand Transition* is from a poor LDC (less developed), via Mic (middle income), to a rich DC (developed). The *Small Transition* is from a socialist to a market economy.

4. The reader may wonder if the parabolic form is an artifact due to the definitions of the index and the censoring at the two ends. However, since we can give a substantial explanation, it is preferable.

5. GDP per capita measured at PPP prices, gdp. The data are for 2001 from WDI (2003) supplemented with CIA World Factbook (net) to get one observation for each country.

6. The classical study of the Grand Transition is Chenery and Syrquin (1975). It has been a hot research field in the last decade under the name of ‘cross-country regressions’, see Barro and Sala-i-Martin (2003). The classification of countries in four groups: Poor LDC, low Mic, high Mic, rich DC, follows the World Bank. Mic is the abbreviation for *middle income country*. See Table 5.A2 for the statistics defining the groups.


8. A large body of literature discusses Lipset’s Law (since Lipset, 1959) and the problems of causality. Surveys are found in Lipset (1994) and Przeworski *et al.* (2000), which is also is a prominent advocate for the virtue-rewarded idea, and so is Lambsdorff (2002).

9. This method is also used in Paldam (2002), where the argument in its favor is more detailed.

10. The one-year estimates: \( z^1 \) varies a great deal more than the long run estimates \( z^{32} \) and \( z^g \), but the variation of \( z^1 \) tends to vary around the long run estimates, so the average \( z^1 \) for the 32 years of \( z^{32} \) are typically very similar.

11. The results are very robust to the choice of year for income.

12. The same analysis has also been made using Model 5.1 – the results are virtually the same.

13. I am not, of course, the first one who has discovered the exceptional poor showing of the Muslim countries in these data, and it is also found when other attempts to measure democracy are used, see for example Weiffen (2005) for a survey of this literature, including the many attempts to explain the fact.

14. Many Muslims have other political ideals as well. A battery of questions in the World Value Surveys (see Inglehart *et al.*, 2004) analyse the values and beliefs relating to religion and politics in about 80 countries of which ten are Muslim by our classification. Muslims do express a clear preference for democracy (see E110–124), but at the same time, they also express strong preferences for having a religious factor in politics (see F63–66 and F102–105).

15. This definition goes back to Karl Marx. By the definition both China and Vietnam are now rapidly moving out of socialism.
REFERENCES


Netsources

Gastil Index, available from the NGO Freedom House: <http://www.freedom-house.org/>
### APPENDIX

**Table 5.A1 Countries included and the classification used**

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<td></td>
<td></td>
<td>Venezuela</td>
</tr>
<tr>
<td>Fiji</td>
<td>ml</td>
<td></td>
<td>Nepal</td>
<td>p</td>
<td></td>
<td></td>
<td>Vietnam</td>
</tr>
<tr>
<td>Finland</td>
<td>r</td>
<td>Wc</td>
<td>Netherlands</td>
<td>r</td>
<td>Wo</td>
<td></td>
<td>Yemen</td>
</tr>
<tr>
<td>France</td>
<td>r</td>
<td>Wo</td>
<td>New Zealand</td>
<td>r</td>
<td>Wo</td>
<td></td>
<td>Zambia</td>
</tr>
<tr>
<td>Gabon</td>
<td>ml</td>
<td>Af, oil</td>
<td>Nicaragua</td>
<td>p</td>
<td>LA</td>
<td></td>
<td>Zimbabwe</td>
</tr>
</tbody>
</table>
Abbreviations to Table 5.A1

Typ(es):

Af, south of Sahara Africa. Ar, Arab. O, Oriental or East Asia. Ot, are Tiger Countries. LA, Latin American. Wo, Old Western. Wc, Western converger. Tu, is used for Barbados and Bahamas, that are rich from tourism. oil, main export oil. T, in transition from a communist to a market economy since 1989.

Re(ligion or ideology):

M, Muslim. Co, Communist.

W(ealth):

p(oor), m(ic) l(ow), m(ic) h(igh), r(ich). Classification from World Bank (2003), but the limits between groups are changed from using the official exchange rate to the PPP-rate.
Table 5.A2  Main economic structure in the world 2001

<table>
<thead>
<tr>
<th>Country group</th>
<th>Population Millions</th>
<th>GDP-exc (exchange rate)</th>
<th>GDP-PPP (purchasing power)</th>
<th>PPP-ratio (6)/(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>Rich</td>
<td>957</td>
<td>25'372</td>
<td>26'510</td>
<td>9'206</td>
</tr>
<tr>
<td>High Mic</td>
<td>504</td>
<td>2'672</td>
<td>4'550</td>
<td>2'975</td>
</tr>
<tr>
<td>Low Mic</td>
<td>2'164</td>
<td>4'957</td>
<td>1'230</td>
<td>745</td>
</tr>
<tr>
<td>Poor</td>
<td>2'506</td>
<td>1'069</td>
<td>430</td>
<td></td>
</tr>
<tr>
<td>World</td>
<td>6'130</td>
<td>34'100</td>
<td>5'560</td>
<td></td>
</tr>
</tbody>
</table>

Note: While GDP is the macro aggregate, gdp is per capita. The PPP-limits between the groups are calculated as the same fraction of the gap as in the exchange rate case.