

Democratization as the Growth of Freedom: The Human Development Perspective

CHRISTIAN WELZEL

International University Bremen (IUB)

c.welzel@iu-bremen.de

RONALD INGLEHART

University of Michigan

rfi@umich.edu

Abstract

This article examines democratization as an aspect of human development where: human development is meant to proceed as people attain greater autonomous choice in shaping their lives. Democratization promotes this process in so far as it institutionalizes freedom of choice based on civil and political liberties. This perspective allows one to integrate modernization-based explanations and civic culture-based explanations of democratization under a common theoretical umbrella. For both types of explanations reflect aspects of human development. Modernization provides human resources that increase people's capabilities to act in accordance with their autonomous choices; and the rise of a civic culture promotes liberty aspirations that increase people's emphasis on autonomous choices. Linked through their common focus on autonomous human choice, human resources and liberty aspirations provide overlapping sources of pressure for the growth of freedom. Within the limits set by the extent to which freedom is not yet present, human resources and liberty aspirations are conducive to the growth of political freedom in interchangeable ways. These hypotheses are tested against the massive wave of democratization processes that occurred from the 1980s to the 1990s, using data from 62 nations of the *World Values Surveys*. We find that democratization is driven by social forces that focus on the growth of autonomous human choice, reflecting human development. From this perspective, modernization-based and civic culture-based explanations of democratization are manifestations of the same theme: the expansion of autonomous human choice.

Introduction

With the 'Third Wave of Democratization' (Huntington 1991), the study of democratization has become one of the most flourishing fields in comparative politics

(for recent overviews of the literature see Geddes 1999; Bunce 2000; Vanhanen 2003). Surprisingly, however, considering the huge body of literature, not more than a handful of studies test general theories of democratization on a broad quantitative basis. Although an enormous number of large-*N* quantitative studies analyze static measures of democracy as the dependent variable, surprisingly few studies take a dynamic perspective, analyzing *changes* in levels of democracy. Among the few studies that take a dynamic perspective, modernization-based and civic culture-based explanations of democratization have never been integrated theoretically: the two explanations are usually treated as entirely separate. To overcome these deficiencies we propose 'human development' as a concept that can integrate modernization-based and civic culture-based explanations of democratization, moving toward a unified theory of democratization.

In this article, we will first discuss some shortcomings of the few large-*N* quantitative studies of democratization. Building on this critique, we will formulate a re-conceptualization of democratization based on the concept of 'human development', specifying the relevance of modernization and a civic culture within a common theoretical perspective. Third, we deduce some concrete hypotheses from this conceptualization. Finally, we will test these hypotheses empirically against data from the massive wave of democratization processes that occurred during the Third Wave.

Theoretical discussion

Shortcomings in quantitative studies

Building on the work of Lipset (1959) numerous quantitative studies have examined the effect of aggregate socioeconomic variables on *static* regime properties, such as levels of democracy or the number of years a country spent under democracy (more recent studies including: Bollen and Jackman, 1985; Hadenius, 1992; Helliwell, 1993; Lipset, Seong, and Torres, 1993; Gasiorowski and Power, 1998; Vanhanen, 2003). By contrast, apart from an early study by Hannan and Carrol (1981), only seven recent studies test the effect of socioeconomic variables on regime *changes* towards or away from democracy. However, we see five points in which these studies are inconclusive.

First, as the next section will show, the most massive wave of democratization processes in history occurred from the late 1980s to the mid 1990s. Yet none of the quantitative democratization studies has examined this wave of democratization: the most challenging test case for democratization theories has not yet been analyzed quantitatively.

Second, the study by Przeworski and Limongi (1997) and its recent refutation by Boix and Stokes (2003) and Boix (2003) classify regimes as either being democratic or non-democratic, using a purely 'electoral' definition of democracy. This approach is useful to analyze regime transitions as categorical switches from one distinct type of regime into another, but categorical classifications make it impossible to consider regime characteristics that span various gradations between two extremes (Elkins,

2000). An example is the institutionalization of freedom, which covers a considerable range of variance from the most repressive to the most liberal regimes (Bollen and Paxton, 2000; Rose, 2001). If one were interested in such graded regime characteristics, one would not only ask *whether* or not regimes change, but also *to what degree* they change (Collier and Adcock, 1999). To answer this question, one needs measures of graded regime characteristics that capture the 'gray zone' between pure types (Ottawa, 2003).

Two democratization studies have analyzed graded measures of freedom (Burkhart and Lewis-Beck, 1994; Barro, 1997) but they focus solely on socioeconomic factors, ignoring cultural factors reflected in mass attitudes. This could be an important deficiency because mass attitudes in all likelihood are the crucial intervening variable linking socioeconomic factors with democratization as already Lipset (1959) has argued. Socioeconomic factors alone do not cause democracy to arise: their impact requires actions by human beings. Thus, constricting one's focus solely to socioeconomic factors neglects the motivational dimension of democratization (Huntington, 1991: 9).

Two studies do examine graded measures of freedom and examine mass attitudes among the public (Muller and Seligson, 1994; Inglehart, 1997: chapter 6) but neither study focuses on attitudes that would motivate people to demand more freedom. Both Muller and Seligson and Inglehart use aggregate-level data from the *World Values Surveys* to measure people's life satisfaction, civic trust, and ideological moderation, using these measures as predictors of the direction and scope of changing freedom. They do not find that these mass attitudes promote the growth of political freedom. This is not surprising because both studies concentrate on the mass attitudes that theorists of civic culture and social capital (Almond and Verba, 1963; Putnam, 1993; Gibson, 2001) consider essential in sustaining democracy, but it has not been claimed that these attitudes would give rise to demands for democracy where it does not yet exist. There is no apparent reason why strong feelings of satisfaction, trust, and moderation among the public of an autocratic society would produce demands for a shift to democracy.

Thus, we lack a theory of the cultural factors that would be likely to produce demands for democracy, in societies where democracy is not yet in place. One's theoretical concept of the dependent variable can provide useful guidance in this respect. For example, if one operationalizes democratization as the growth of political freedom, one would look for attitudes that emphasize freedom of choice. Freedom of choice is a central aspect of liberty aspirations. But, although these aspirations are central in Inglehart's postmaterialism index, Inglehart (1997) did not analyze them as a cause of democratization because he was focusing on what gave rise to given *levels* of democracy – not what caused *changes* toward democracy.

Most of the studies that analyze transitions to democracy use the Freedom House indicators of political rights and civil liberties. It is reasonable to measure democracy using these freedom scores, since institutionalized freedom is a central element of many definitions of democracy (Dahl and Lindblom, 1953: 277–8; Rose, 1995: 458; Foweraker and Landman, 1997: 228–30; Sen, 1999: 156). But institutionalized freedom does not

rank equally high in every definition of democracy; some simply focus on the presence of competitive elections. Institutionalized freedom *is*, however, a central feature of 'liberal' democracy, which emphasizes people's freedom of choice (Bollen and Paxton, 2000). Since autonomous choice refers to the most distinctively 'human' ability, this leads to a 'human development' perspective.

Regime changes from a human development perspective

By institutionalizing civil and political rights, liberal democracy entitles people to act in accordance with their autonomous choices in their private and public lives (Rose, 1995: 458; Sen, 1999: 153–5). In this sense, liberal democracy is an emancipative achievement that allows for maximum choice. Yet, even though human choice necessarily presumes institutionalized freedom, its manifestation requires additional social conditions that are outlined in the concept of 'human development' developed by Welzel (2003) and Welzel, Inglehart, and Klingemann (2003), which argues that two additional social conditions are relevant to human choice: *resources* that enable people to choose from a broader range of options; and *aspirations* that lead people to give a high priority to free choice.

Resources are relevant to human choice because they provide people with the objective means of action (Verba, Schlozman, and Brady, 1995; Vanhanen, 2003). Economic wealth and formal education make people materially and intellectually more independent, widening the range of actions from which they can choose. As both modernization theorists (Lerner, 1958; Lipset, 1960) and human development theorists have argued (Sen, 1999), economic development increases human resources, broadening people's capabilities of choice.

Abundant human resources are conducive to mass orientations that reflect these diminished constraints on human choice, giving rise to liberty aspirations. Thus, as growing human resources increase the capabilities of choice, rising liberty aspirations make freedom of choice a higher priority (Inglehart and Welzel, 2005).

Thus, the theme of human choice links institutionalized freedom to human resources and to liberty aspirations. But how does this linkage manifest itself empirically in democratization – that is, in regime changes that widen the extent of institutionalized freedom? We argue as follows.

Model specification and hypotheses

In promoting the growth of institutionalized freedom, human resources are important because they determine a public's capability to sustain freedom campaigns. Likewise, liberty aspirations are important because they shape people's willingness to invest their resources in freedom campaigns.

Since human resources and liberty aspirations are linked through their common focus on human choice, they co-vary to a large extent: societies with greater human resources tend to show stronger liberty aspirations. In so far as they co-vary, human resources and liberty aspirations are interchangeable sources of pressure for the

growth of freedom. Human resources and liberty aspirations however do not co-vary perfectly; to some extent, they vary independently from each other. To this extent, these two sources of pressure should complement each other: a given level of liberty aspirations will be more powerfully translated into pressure for growing freedom, if people can invest more human resources; and a given level of human resources will be invested with greater determination, if people have stronger liberty aspirations.

But resources and aspirations can only bring the growth of freedom, if there still is room for growth: democratization cannot take place if a society is already fully democratic. The extent to which a society is not fully democratic constitutes a growth margin that limits the extent to which given resources and aspirations can bring more freedom.

This growth margin is determined by the previous lack of freedom. Consequently, the extent to which given resources and aspirations can bring more freedom depends on the extent to which institutional freedom is absent. Thus, pressure for the growth of freedom reflects the product of the *growth margin* multiplied by the *strength of the pressure sources*, based on human resources and liberty aspirations.

In keeping with these propositions, we specify the scale of ‘resource-rooted pressure’ for the growth of freedom (*RESPRESS*) as the amount of human resources (*HUMRES*), given during a transition period (t_0), multiplied by the lack of freedom (*LACKFREE*), given at an immediately prior time t_1 . Similarly, we define the scale of ‘aspiration-driven pressure’ for the growth of freedom (*ASPPRESS*) as a public’s level of liberty aspirations (*LIBASP*) multiplied by the existing lack of freedom. Formally, these definitions are written as follows:

[Extent of Pressure]	[Pressure Source]	[Pressure Margin]
$RESPRESS_{t_0}$	$= HUMECRES_{t_0}$	$* LACKFREE_{t-1}$
$ASPPRESS_{t_0}$	$= LIBASP_{t_0}$	$* LACKFREE_{t-1}$

It follows that the amount by which freedom grows (*FREEGROW*) will reflect the extent of resource-rooted or aspiration-driven pressures for such growth. These two pressures for democratization – resources and aspirations – should be largely interchangeable because of their extensive covariance, but they do not co-vary entirely. Hence, controlling for resource-rooted pressure, some independent variation in liberty aspirations will remain and add to the resource-rooted pressure. Similarly, controlling for aspiration-driven pressures for freedom, some independent variation in human resources will remain and add to the aspiration-driven pressure. This implies two equivalent models:

	[Interaction Term]	[Additional Term]
(1)	$FREEGROW_{t_0} = c + \beta_1 * RESPRESS_{t_0} + \beta_2 * LIBASP_{t_0} + \varepsilon,$	
(2)	$FREEGROW_{t_0} = c + \beta_1 * ASPPRESS_{t_0} + \beta_2 * HUMRES_{t_0} + \varepsilon,$	
	(c: constant; β_1, β_2 : regression coefficients; ε : error term).	

According to these models, the margin for the growth of political freedom (which is determined by the extent to which freedom was previously absent), becomes effective only in interaction with any of the two pressure sources, since the growth margin only provides room for whatever pressures these sources provide. Likewise, the two pressure sources – resources and aspirations – work in interaction with the margin for the growth of freedom, giving these factors more or less leverage. Moreover, in interaction with the growth margin, each pressure source matters in two alternative ways: (1) in terms of its *own* interaction with the growth margin, or (2) as an addition to the *other* source's interaction with the growth margin. Thus, if resources substitute aspirations in the interaction term, aspirations substitute resources in the additional term, and vice versa. These models are equivalent, using the same information in interchangeable combinations.

Taking international factors into account

International factors play a decisive role in initiating historical waves of democratization such as the Third Wave (Huntington, 1991; Markoff, 1996; Whitehead, 1996). Hence, theories of democratization that focus on internal factors alone, without clarifying their relationship with international factors, are inadequate. The impact of international factors is particularly obvious when international waves of democratization take place. Let us briefly discuss how internal factors interacted with international factors in producing the global democratization trend of recent decades.

A massive wave of democratization swept through South East Asia, Latin America and Africa, reaching its climax in the late 1980s/early 1990s. The fact that many countries suddenly democratized in a relatively short time was not an accident. A wave of regime changes took place in Eastern Europe in the late 1980s/early 1990s, only after the Soviet Union had ended its guarantee of military support for other communist regimes (Robinson, 1996). And the democratization of numerous non-communist dictatorships occurred after the Western powers ended their support of anti-communist authoritarian regimes, such as those of Marcos, Chun, and Pinochet and began to favor 'good governance' (Diamond, 1993). Thus, international conditions can block the impact of internal developments that would otherwise press for changes toward democracy. Huntington (1984: 211) was aware of this when he concluded that:

In terms of cultural tradition, economic development and social structure, Czechoslovakia would certainly be a democracy today (and probably Hungary and Poland) if it were not for the overriding veto of the Soviet presence.

This diagnosis was right on target. Once the threat of Soviet intervention was abandoned, these were the countries that moved farthest and most rapidly toward full-fledged democracy (Rose 2001). Favorable external conditions, such as the withdrawal of support for non-democratic regimes, can be decisive in unblocking the impact of internal developments that would otherwise give rise to pressures for democratization: regime changes reflect the interaction between internal conditions and external

conditions. Thus, during the Cold War, the Soviet Union provided military support for authoritarian communist regimes throughout Eastern Europe, despite growing internal pressures for liberalization; and the Western powers backed many dictatorships that claimed to be anti-communist. When the Cold War drew to a close, Gorbachev announced that the Soviet Union would no longer intervene to prop up East European regimes, and the Western alliance withdrew support from authoritarian regimes. This opened a window of opportunity that enabled domestic pressures for democratization to operate, bringing the collapse of authoritarian regimes, from East Asia to Eastern Europe to Latin America.

Thus, our analysis only applies when international conditions allow democratization. Our model does not attempt to explain such events as the end of the Cold War – but it does explain why democratization occurs, when external conditions permit it. The ‘Third Wave’ of democratization was made possible by a sudden change on the international scene, but it did not take place everywhere: it only occurred in countries in which domestic pressures for democratization had already developed.

Although Huntington dates the Third Wave to the mid 1970s when authoritarian regimes in Portugal, Spain, and Greece collapsed, there were actually about as many shifts toward authoritarian rule as away from it during the 1970s and early 1980s, as recent analyses have demonstrated (Kurzman, 1998). But a massive wave of democratization did occur from the late 1980s to the mid 1990s, establishing a global ‘explosion of democratization’, as Doorenspleet (2000) has shown.

This finding is reflected in Figure 1. For each two-year interval since 1973, the figure plots the worldwide number of nations that experienced substantial losses or gains in freedom.¹ The plot makes evident that regime changes bringing more freedom suddenly came to greatly outnumber regime changes bringing less freedom between 1987 and 1997. This brief period includes a massive accumulation of regime changes towards more freedom, providing a major challenge for theories of democratization, especially for theories focusing on internal factors – given the obvious international dimension of this transition wave. Our analysis of democratization (conceptualized as freedom changes) focuses on this wave.

Data and measurement

The growth of freedom

In keeping with our focus on human choice, we differentiate political regimes according to the extent to which they entitle people to free choices in their private and public actions. Institutionalized freedom in this sense represents a major dimension

¹ We reversed the polarity of the 1–7 scales for civil and political rights so that larger figures indicate higher levels of freedom. We added the two scales and subtracted the number 2 obtaining a 0–12 overall index for legal freedom. For each year we counted all states in the world that changed by at least 4 points, downwards or upwards, on this scale.

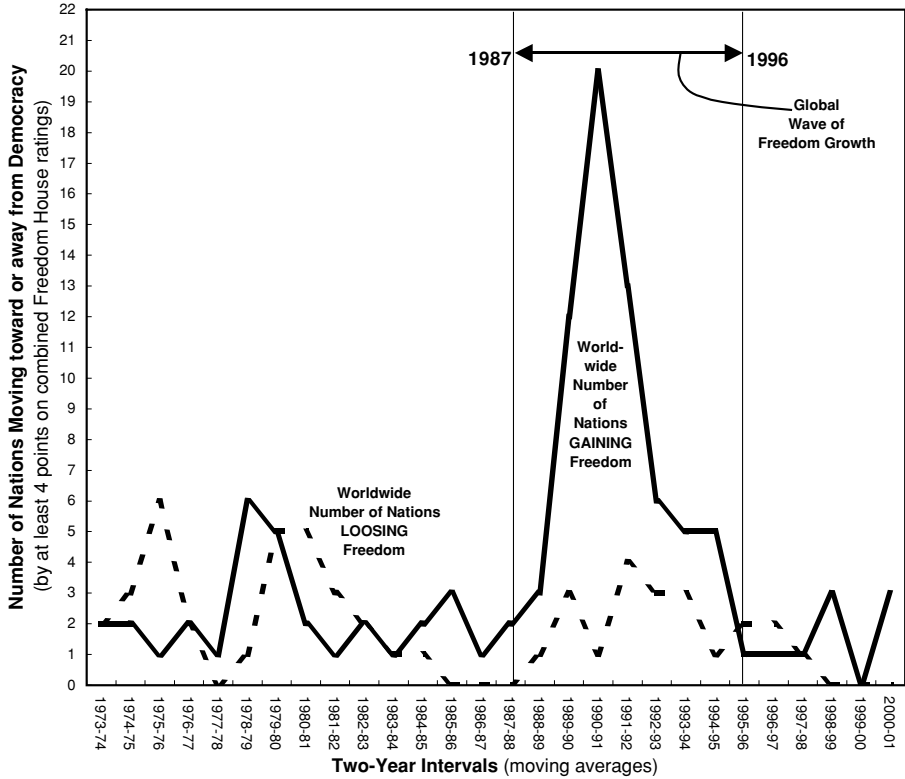


Figure 1 Identifying the global wave of freedom growth

of regime differentiation, reflecting various gradations between fully liberal and purely illiberal regimes. To measure a regime’s level of freedom (*FREELEV*), we use the scores for civil rights (*CIVRIGHT*) and political rights (*POLRIGHT*) provided annually by Freedom House (Freedom House, 2002):²

$$FREELEV_t = (CIVRIGHT_t + POLRIGHT_t) - 2$$

[0 to 12 scale] [1 to 7 scale] [1 to 7 scale]

Using this scale, we measure freedom changes as the extent to which a country’s level of freedom has grown (or shrunk). In order to apply this measure to the most massive accumulation of freedom changes, we calculate the growth of freedom by subtracting the levels of freedom that were present *before* this wave of changes, from the levels that were sustained *after* it. As Figure 1 indicates, the most massive wave

² For the quality of these measures and their relationship to other indices of democracy, see Bollen and Paxton (2000). We use the Freedom House measures instead of alternative measures because my theoretical focus on human choice is targeted at legal freedom.

of changes started around 1987 and ended around 1996. Hence, we could subtract freedom levels that were present before 1987 from levels that were present after 1996. But measures based on only two specific years before and after major changes can be unreliable, reflecting the uncertainty on how to rate a regime in the immediate aftermath of a major change. To avoid blurred snapshots of a still moving target, we average freedom levels over two six-year periods before and after the transition period from 1987 to 1996. Consequently, to obtain a more reliable measure, we subtract the average freedom levels that were present over the six-year period from 1981 to 1986, from the average levels that were sustained over the six-year period from 1997 to 2002:

$$\text{FREEGROW}_{t_0} = \text{FREELEV}_{t_{+1}} - \text{FREELEV}_{t_{-1}},$$

[t_0 : 1987 to 1996; t_{+1} : 1997–2002; t_{-1} : 1981–1986].

Since the freedom levels range from 0 to 12, the growth from one level to another could have values ranging from -12 to $+12$, where the *sign* indicates the *direction* of growth, which is negative with losses of freedom and positive with gains in freedom; while the *number* indicates the *scope* of growth.

Human resources and resource-rooted pressure for the growth of freedom

We measure a given society's richness of human resources using the 'Human Development Index' (United Nations Development Program, 2000). We prefer this measure to single indicators such as per capita GDP. The use of GDP has been criticized by Sen (1999) because it is an incomplete measure of people's resources. It only captures monetary resources, excluding other important resources, such as education (i.e., intellectual resources) and health (i.e., physical resources). For these reasons, the Human Development Index has been constructed to provide a more encompassing measure of human resources, covering life expectancy as an indicator of physical resources, per capita GDP as an indicator of monetary resources, and literacy rates as well as enrollment ratios as indicators of intellectual resources.³

A society's stock of resources grows with higher levels of economic development. Levels of economic development tend to change slowly over short periods of time, so that the temporal autocorrelation in measures of resource-stocks tends to be very high (Barro, 1997). Poor societies do not suddenly become rich societies within a few years, although a liberal regime can and often does replace an illiberal one almost overnight. Consequently, the relatively minor changes in resource stocks that occurred in the condensed period between 1987 and 1997 cannot account for the massive growth of freedom that happened in this short time. If human resources act on growing freedom, it is crucial which resources people command when these changes happen. Thus, we

³ Scores for per capita GDP, life expectancy, and literacy rate and enrollment ratios are standardized and combined additively to produce an index from 0 to 1. How this is done is described in the Human Development Report (2000: 158–64).

assume that given *levels* of human resources, not short-term *changes* in these levels, play a crucial role in shaping how much growth in freedom is attained – since the power that resources give to people lies in the *amount* of resources available at a given time. Accordingly, our analysis uses measures of resource stocks from the early 1990s or from the mid 1990s in the few cases for which the earlier measure was not available.⁴ Both measures are highly correlated ($r = 0.82$, $N = 170$), showing that human resources have not drastically changed from the early to the mid 1990s. In any case, these measures were taken before 1997–2002, the period in which the eventual amount of the growth of freedom has been settled.

Human resources provide a source of pressure for the growth of freedom. But the extent to which these resources can actually bring more freedom depends on the margin for growth, which reflects the lack of freedom prior to that growth. Thus, we calculate the scale of resource-rooted pressure for growing freedom by multiplying the amount of human resources with the previous lack of freedom. The multiplication has been conducted after mathematical transformations that yield a scale from zero to 100, with larger figures indicating a wider extent of resource-rooted pressure for growing freedom.⁵

Liberty aspirations and aspiration-driven pressure for the growth of freedom

Institutionalized freedom entitles people to autonomous choices in voicing their opinions and having a vote in affairs affecting their lives. The aspirations that emphasize these libertarian goals have been conceptualized as postmaterialism by Inglehart (1977, 1990, 1997). But because Inglehart's concept of postmaterialism covers several diverse aspects, we concentrate on the specifically libertarian aspects of postmaterialism, disregarding its ecological and aesthetical components (which are less relevant for democracy). The standard materialism/postmaterialism batteries include three items suited to measure the libertarian aspect of postmaterialism or liberty aspirations. The wording of these items is: 'protecting freedom of speech', 'giving people more say in important government decisions' and 'seeing that people have more say about how things are done at their jobs and in their communities'.⁶ Accordingly, we measure liberty aspirations as the sum of people's rank-ordered priorities for these items, using

⁴ We used measures from 1995 for Armenia, Azerbaijan, Estonia, Macedonia, Taiwan.

⁵ The previous lack of freedom is the inverse of the pre-transition level of freedom: $12 - \text{FREELEV}_{1981-1986}$, such that 12 indicates an absolute lack of freedom, while 0 indicates that there is no lack of freedom. Before multiplication we standardized this scale on a maximum of 10. Also, we standardized the scale measuring human resources on maximum 10, which corresponds to the amount of human resources that the Swedes possess. Accordingly, the product between human resources and lack of freedom ranges theoretically from 0 to 100.

⁶ These items are taken from two item batteries. In the first battery the items are: 'a high level of economic growth', 'making sure this country has strong defense forces', 'seeing that people have more say about how things are done at their jobs and in their communities', 'trying to make our cities and countryside more beautiful'. In the second battery the items are: 'maintaining order in the nation', 'giving people more say in important government decisions', 'fighting rising prices', and 'protecting freedom of speech'. The batteries are introduced by the wording: 'People sometimes talk about what the aims of this country should be for the next ten years. Some of the goals which different people would give top priority to are

the World Values Surveys, the data set with the widest cross-national coverage of mass attitudes.⁷

Depending on the priority that respondents assign to each of these items, namely first, second, or no priority, we arranged their answers on a six-point index, with zero indicating the weakest and five the highest priority on liberty:

<i>Response pattern</i>	<i>Label</i>	<i>Code</i>
No liberty item on 1st or 2nd rank	No Liberty Aspirations	0
One liberty item on 2nd rank	Weak Liberty Aspirations	1
Two liberty items on 2nd or one on 1st rank	Weak–moderate Liberty Aspirations	2
One liberty item on 1st, one on 2nd rank	Moderate–strong Liberty Aspirations	3
One liberty item on 1st, two on 2nd rank*	Strong Liberty Aspirations	4
Two liberty items on 1st, one on 2nd rank	Maximum Liberty Aspirations	5

Note: * Alternatively: Two liberty items on 1st rank, none on 2nd rank.

Calculating averages over national samples, this ordinal index becomes a continuous scale, yielding fractions between zero and five. We inspected the distributions of all national samples finding that all populations show single-peaked distributions, centered on the national means. There are no bimodal distributions on this liberty aspirations index. Hence, the national averages provide reasonable indicators of a public's central tendency in emphasizing liberty. As Welzel and Inglehart (2005) show, this index of liberty aspirations is significantly stronger related to democracy than Inglehart's original four-item index of liberty aspirations.

If liberty aspirations provide a source of social pressure for freedom, the degree to which these aspirations are widespread in a given society when international conditions become open to democratization, will play a crucial role. The *growth* of freedom that subsequently takes place, will correspond to the *level* of liberty aspirations that is present at this moment.

Accordingly, we use measures of liberty aspirations from the second and third *World Values Surveys* conducted around 1990 and around 1995, respectively. Whenever available, we used the earlier measure in order to have a measure of liberty aspirations as early in the transition period as possible; we were able to do so with 42 societies. With another 20 countries, we used the measure of liberty aspirations taken around 1995.⁸

listed on this scale. Would you please say which one of these you, yourself, consider the most important? And which would be the next most important?

⁷ *World Values Survey* data can be obtained from the International Consortium for Political Research (ICPSR) under study number 6160. Information on questionnaire, methods and fieldwork can be obtained from the World Values Association's homepage: <http://www.worldvaluessurvey.com>. For data provided by the European Values Study see <http://evs.kub.nl>.

⁸ For the following 42 societies, liberty aspirations were measured using the second World Values Surveys carried out from 1989–1991: Argentina, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, Chile,

These two measures correlate at $r = 0.91$ among the 30 countries for which measures are available at both time points, reflecting the fact that liberty aspirations changed relatively little from the early to the mid 1990s. For the average case, liberty aspirations are measured in 1992 and, in every case, they were measured before 1997–2002 – the period in which the resulting growth of freedom was measured. Thus, our independent variable (values) is measured at a time preceding the dependent variable (the growth of freedom, or democratization).

As with human resources, the pressure for freedom generated by liberty aspirations does not depend on the level of these values alone. Instead, the extent to which a given level of liberty aspirations can bring a growth of freedom depends on the extent to which there is *room* for growth: from the start, virtually all of the stable democracies were assigned the highest possible score on the Freedom House scales: they define the top of the scale, which makes it impossible for their scores to rise any higher. The way in which the Freedom House scores are constructed, allows no room for any subsequent growth of freedom among the stable democracies: if any change occurs, it can only move downward. Thus, we calculate the scale of aspiration-driven pressure for freedom by multiplying the absolute level of liberty aspirations by the previous lack of freedom. The product was then mathematically transformed to yield a scale from zero to 100.⁹

Empirical analyses

Regression results

The two diagrams in Figure 2 plot the growth of freedom against human resources and liberty aspirations. In keeping with earlier findings, neither the absolute amount of human resources (Przeworski and Limongi, 1997) nor the absolute strength of liberty aspirations (Inglehart, 1997) shows a uniformly positive effect on the growth of freedom. But this analysis ignores the fact that resources and aspirations can only bring higher levels of freedom within the given margin for growth. Hence, one should examine the impact of resources and aspirations within this margin.

China, Czech Republic, Denmark, Estonia, Finland, France, GB, Germany (East), Germany (West), Hungary, Iceland, India, Ireland, Italy, Japan, Latvia, Lithuania, Mexico, Netherlands, Nigeria, Norway, Poland, Portugal, Russia, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Turkey, Uruguay, USA. For the following 20 societies, liberty aspirations have been measured using the third World Values Surveys from 1995–97: Albania, Armenia, Australia, Azerbaijan, Bangladesh, Croatia, Dominican Republic, Georgia, Ghana, Macedonia, Moldova, New Zealand, Pakistan, Peru, Philippines, Romania, Taiwan, Ukraine, Venezuela, Yugoslavia.

⁹ Before multiplication we standardized lack of freedom on maximum 10 (see fn. 5). Also, we standardized liberty aspirations on maximum 10, setting the largest empirical value (3.42 for the Finnish sample) as the maximum. Accordingly, the product of liberty aspirations multiplied by the existing lack of freedom ranges theoretically from 0 to 100. A society with a complete lack of freedom and liberty aspirations as strong as those of the Finnish public would obtain a score of 100, while either a complete absence of liberty aspirations or a non-existent lack of freedom would both result in score of 0.

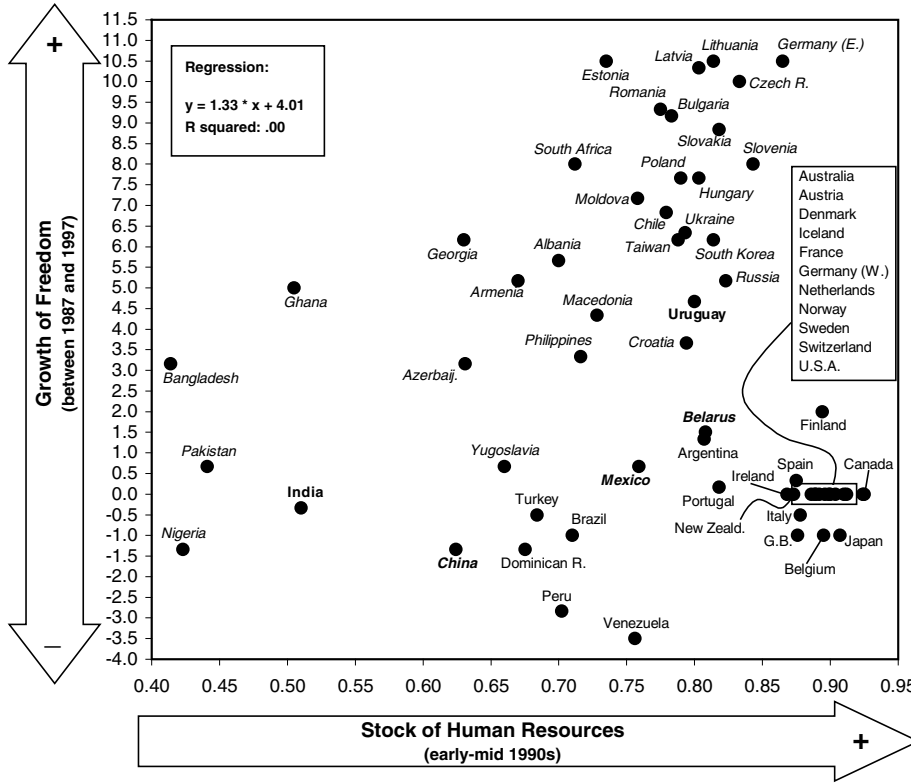


Figure 2(a) The raw effect of human resources on freedom growth
 Note: Countries in normal letters: small lack of freedom over 1981–1986 (i.e., less equal 6.5 on 0–12 scale). Countries in italic letters: large lack of freedom over 1981–1986 (i.e., above 6.5 on 0–12 scale). Countries in bold letters: outliers located outside the main area of other countries with small or large lack of freedom over 1981–1986.

One way to take the growth margin into account is to split the sample into one group of societies that had a relatively large lack of freedom, and another group that had a relatively small lack of freedom before the transition period. We took the midpoint on the lack of freedom scale to divide societies into a group with a large existing lack of freedom (countries written in italic letters) and a group with a small lack of freedom (written in normal letters). The group with a small lack of freedom includes long-established Western democracies, such as the US and Switzerland, plus more recently democratized societies such as Portugal, Spain, Brazil, and Argentina. The group with a large previous lack of freedom includes all post-communist societies and a number of countries from diverse parts of the world such as Nigeria, South Africa, South Korea, Taiwan, Chile, China, Pakistan, and Bangladesh.

Simply looking at Figure 2(a) and 2(b) makes it evident that these two groups of societies do indeed show contrasting patterns: among the societies that started out with

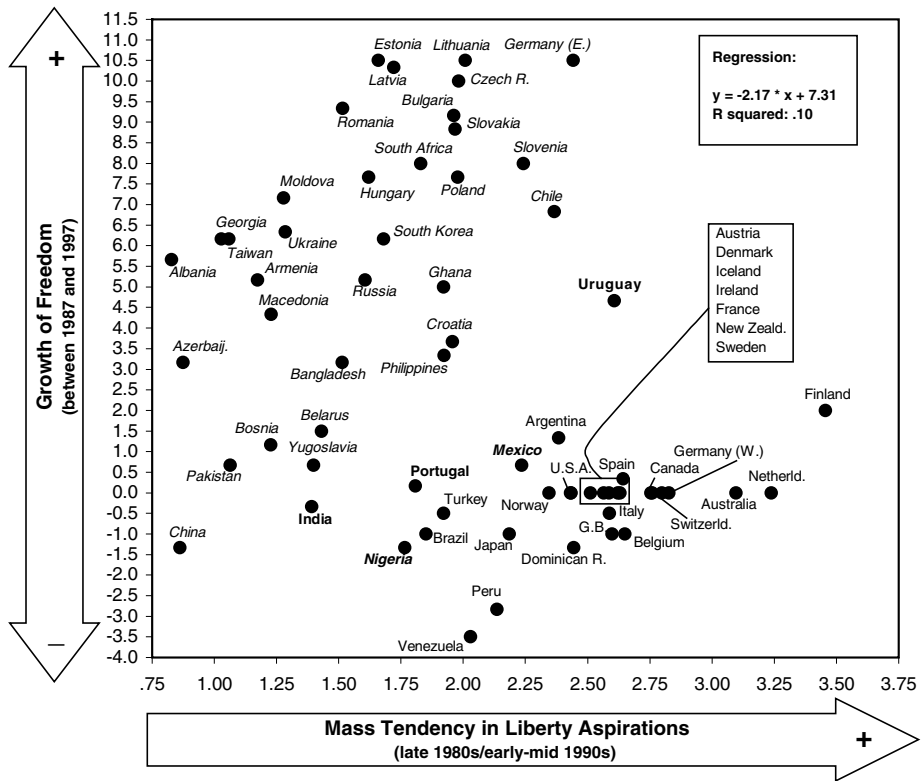


Figure 2(b) The raw effect of liberty aspirations on freedom growth
 Note: Countries in normal letters: small lack of freedom over 1981–1986 (i.e., less equal 6.5 on 0–12 scale). Countries in italic letters: large lack of freedom over 1981–1986 (i.e., above 6.5 on 0–12 scale). Countries in bold letters: outliers located outside the main area of other countries with small or large lack of freedom over 1981–1986.

high levels of freedom, increasing human resources and liberty aspirations are linked with decreasing *losses* of freedom – from considerable losses at the lower left end (in the case of Venezuela and Peru) to zero losses at the upper right end (in the case of Finland even a small gain). Thus, in already high-ranking societies both human resources and liberty aspirations values helped to reduce *losses* of freedom.

By contrast, among the societies that started with low levels of freedom, increasing human resources and liberty aspirations, are linked with increasing *gains* of freedom, from zero gains at the lower left end (in case of China and Nigeria even some losses) to large gains at the upper right end (in case of South Africa, Chile, the Baltic countries, the Czech Republic and East Germany). Thus, both human resources and liberty aspirations helped to increase gains in freedom among previously authoritarian societies.

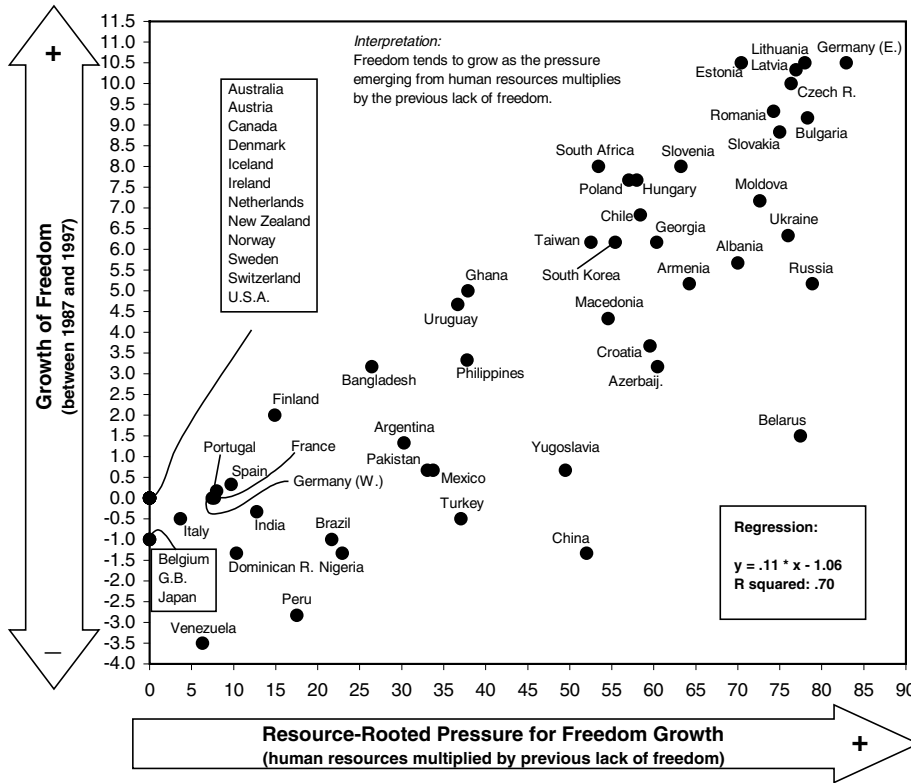


Figure 3(a) The effective size of resource-rooted pressure for freedom growth

Among both groups, human resources and liberty aspirations seem to work in favor of freedom – within the given margin of growth. This margin for the growth of freedom is determined by the previous lack of freedom. Hence, the effects of resources and aspirations must be examined in interaction with the previous level of freedom. A more systematic way of doing this is to multiply the impact of human resources and postmaterialism, by the previous lack of freedom. This is a more elegant approach than splitting the sample because it allows one to summarize all units under one model, providing a theoretically integrated explanation that explains both losses of freedom in initially liberal regimes and gains of freedom in initially illiberal regimes by variation in the same independent variables: resource-rooted and aspiration-driven pressures for freedom. Accordingly, the two diagrams in Figure 3 plot the growth of freedom against the resource-rooted and the aspiration-driven pressures for freedom, as they interact with the previous lack of freedom. What was not previously obvious now becomes clear: In interaction with the given margin for growth, human resources, and liberty aspirations show *uniformly* positive effects on the growth of freedom – and they explain fully 70 per cent of the cross-national variation.

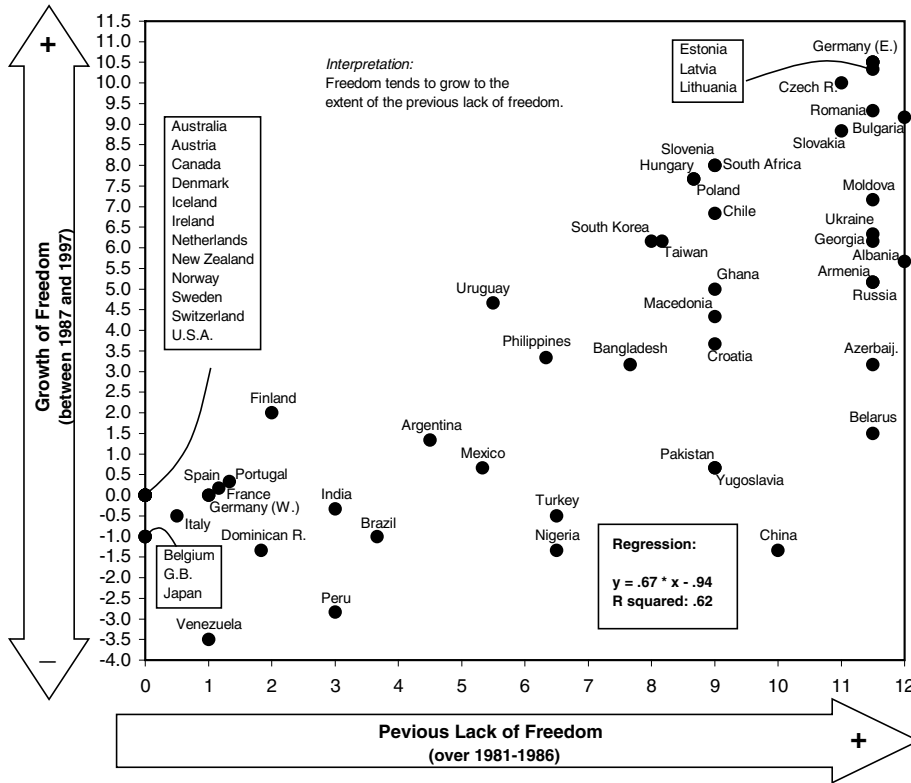


Figure 4(a) The raw effect of previous lack of freedom on freedom growth

societies experienced an immense lack of freedom, but they had relatively great human resources and strong liberty aspirations.

As Figure 4(a) indicates, the larger the previous lack of freedom, the greater the subsequent growth of freedom: by itself, the margin for growth seems to explain 62 per cent of the cross-national variation. But this estimate is inefficient because it involves highly heteroskedastic residuals, such that residuals increase drastically with a growing lack of freedom. With very large lacks of freedom, the prediction is almost arbitrary, leaving unexplained why, for example, Pakistan, China and Belarus did not experience growing freedom, while freedom grew decisively in Slovenia, South Africa, and the Baltic states – although all these societies had a large lack of freedom. Accordingly, Figure 4(b) demonstrates an important point: the previous lack of freedom has *no* effect on the subsequent growth of freedom, when one isolates the variance in lack of freedom that exists independently from its interaction with liberty aspirations. Controlling for its interaction with liberty aspirations, lack of freedom explains less than 1 per cent of the subsequent the growth of freedom. Lack of freedom per se has no impact; it only matters in interaction with liberty aspirations.

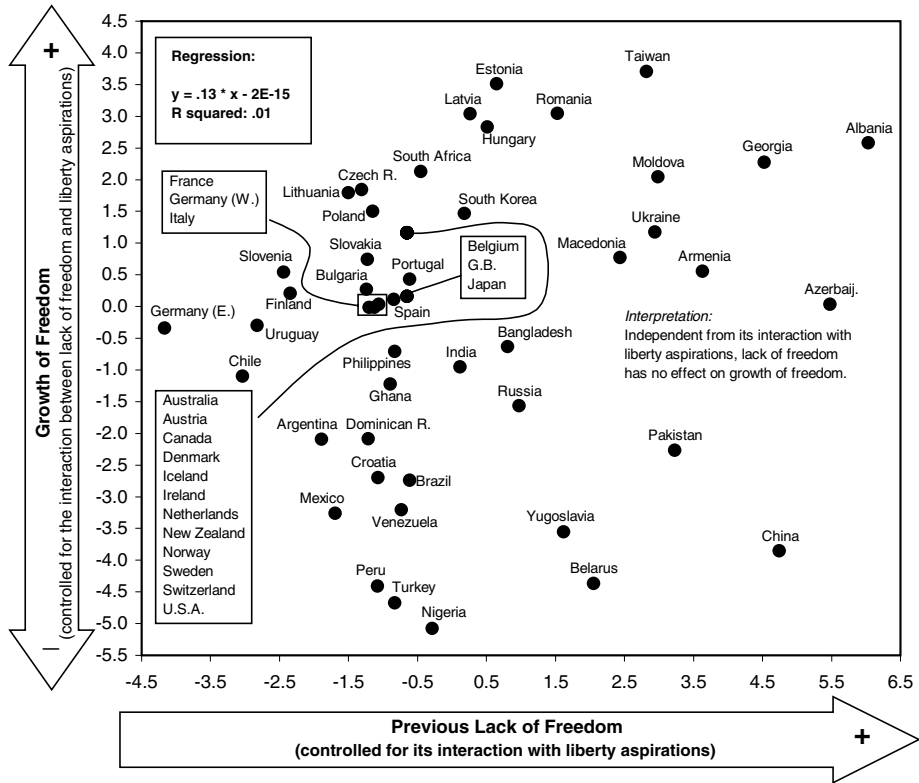


Figure 4(b) Lack of freedom controlled for its interaction with liberty aspirations

Table 1 shows the results of multiple regression analyses. Five findings should be noted. First, the conclusion drawn from Figure 4 is confirmed: the previous lack of freedom alone seems to explain a major proportion of the subsequent growth of freedom (Model 1-1); but when one analyzes the lack of freedom in its interaction with human resources or liberty aspirations (Models 1-6 to 1-11), its effect proves to be insignificant, making little or no contribution to the explained variance. Lack of freedom matters, but only in interaction with a source of social pressure. Second, Models 1-2 and 1-3 illustrate that none of the two pressure sources – neither resources nor aspirations – by itself has a uniformly positive effect on the growth of freedom. But, as Models 1-4 and 1-5 demonstrate, both pressure sources *do* have a uniformly positive effect on the growth of freedom in interaction with lack of freedom. Fourth, in addition to their *own* interaction with lack of freedom, human resources (Model 1-6 and 1-10) and liberty aspirations (Models 1-7 and 1-11) have little impact on the growth of freedom. But, human resources (Models 1-9 and 1-11) and liberty aspirations (Models 1-8 and 1-10) *do* have highly significant effects

Table 1. Explaining growth of freedom in the WVS III/III sample (OLS-models)

Dependent variable: Growth of freedom, from 1987 to 1997 (fractions from -12 to +12)

<i>Predictors</i>	Model 1-1	Model 1-2	Model 1-3	Model 1-4	Model 1-5	Model 1-6	Model 1-7	Model 1-8	Model 1-9	Model 1-10	Model 1-11
Previous lack of freedom, 1981-86 (inverse of freedom level, 0 to 12 scale)	0.67*** (0.07)					(a) -2.94 ^{n.s.} (1.45)	(a) 0.45 ^{n.s.} (0.57)	(a) -0.82* (0.38)	(a) 0.15 ^{n.s.} (0.14)	(a) -3.74* (1.43)	(a) 0.58 ^{n.s.} (0.54)
Human resources, early to mid 1990s (fractions from 0 to 1)		-1.33 ^{n.s.} (4.09)				(a) 34.39* (14.14)			(a) 9.00*** (2.4)	(a) 41.60** (13.50)	(a) 12.19*** (3.27)
Liberty aspirations, early to mid 1990s (fractions from 0 to 5)			-2.29** (0.78)				(a) 1.09 ^{n.s.} (2.08)	(a) 3.59*** (0.94)		(a) 4.00*** (0.95)	(a) 0.94 ^{n.s.} (2.52)
Resource-rooted pressure, early to mid 1990s (0 to 100 scale)				0.11*** (0.01)		0.09*** (0.01)		0.09*** (0.01)		0.11*** (0.01)	
Aspirations-driven pressure, early to mid 1990s (0 to 100 scale)					0.18*** (0.01)		0.18*** (0.01)		0.18*** (0.01)		0.19*** (0.01)
Constant	-0.94* (0.50)	4.01 ^{n.s.} (3.22)	7.61*** (1.65)	-1.06* (0.42)	-1.16** (0.43)	-1.79*** (0.45)	-1.13** (0.41)	-1.79*** (0.42)	-1.10** (0.36)	-1.01** (0.37)	-1.10** (0.37)
Adjusted R ²	0.62	0.01	0.11	0.71	0.71	0.75	0.75	0.78	0.80	0.78	0.79

Notes: Number (N) of observations (nations) is 62. Entries are unstandardized regression coefficients (standard errors in parentheses).

Significance levels: ^{n.s.} $p \geq 0.05$; * $p < 0.05$; ** $p < 0.005$; *** $p < 0.001$.

(a) To avoid inflation of collinearity, the residual (i.e., independent) part of a variable, which is unexplained by all other independents, is introduced.

on the growth of freedom when one adds them to the *other* source's interaction with lack of freedom.

Hence, both resources and aspirations have an impact either in terms of their *own* interaction with lack of freedom or in addition to the *other* source's interaction with lack of freedom. In any case, the growth margin and the pressure sources matter primarily in interaction.

Models 1–8 and 1–9 are optimal in the sense of yielding the largest explained variance with the smallest number of significant predictors. The two models are equivalent because they arrange the same information in interchangeable combinations: Model 1–8 specifies an interaction effect on the growth of freedom deriving from aspiration-driven pressure for freedom, and an additional effect deriving from the remaining variation in human resources. Conversely, Model 1–9 specifies an interaction effect deriving from the resource-rooted pressure for freedom, and an additional effect deriving from the remaining variation in liberty aspirations. Both models are sufficient. They cannot be improved by adding the single components included in the interaction terms. Doing this only inflates collinearity without improving the model fit.

It is difficult to decide whether resources or aspirations are more important for the growth of freedom: if resource-rooted pressure for the growth of freedom is taken into consideration, the remaining variation in liberty aspirations will be important; if aspiration-driven pressure is taken into consideration, the remaining variation in human resources will be important. Moreover, simultaneously taking resource-rooted and aspiration-driven pressures into consideration neither improves the model fit nor does it reveal a difference between the two effects: both pressures are significant at the 0.01-level and both have beta-coefficients of 0.44 (not documented here). Overall, these findings indicate that, as factors that give rise to social pressures for the growth of freedom, human resources and liberty aspirations are largely exchangeable *as well as* partly complementary. And, as the tests reported in the Appendix indicate, these results are quite robust.

Causality and temporal order

One might argue that resources and aspirations measured during regime changes reflect these changes instead of conditioning them. Given the temporal order of the variables, in which the independent variables were measured during the period over which the dependent is measured, this reading of the evidence cannot be completely ruled out. But this alternative seems less plausible in the face of the strong temporal inertia of human resources and liberty aspirations.

For example, human resources measured during the early to mid 1990s correlate with the same measures taken in 1980 at $r = 0.82$ ($N = 162$), implying that societies that were poor or rich in resources in the 1990s were already poor or rich in these resources in the 1980s. Likewise, liberty aspirations measured during the early to mid 1990s correlate with the same measures taken almost ten years earlier, in 1981, at $r = 0.74$ ($N = 20$), although the earlier measure is based on only two of the three

items. Moreover, the relative constancy in liberty aspirations is *not* a specialty of long-established democracies: The four societies that were not yet democratic in the early 1980s – South Korea, Hungary, South Africa, and Mexico – show no less stability in their liberty aspirations than stable democracies. Among the established democracies, liberty aspirations changed on average by 17 per cent of their accumulated level from 1981 to 1990. In Hungary, they changed by 20 per cent, in Mexico by 7 per cent, in South Africa by 6 per cent and in South Korea by 0.5 per cent. Since these changes account for a relatively minor proportion of the levels in liberty aspirations that had already accumulated, these changes affect a society's relative position very little: the societies with relatively strong liberty aspirations in 1981 still had relatively strong liberty aspirations ten years later.

The concept of Granger-causality implies that the impact of an independent variable on a temporally subsequent variable can only be considered as causal, if the effect holds up when one controls for prior measures of the dependent variable (see Burkhart and Lewis-Beck 1994). This can be tested if we examine the post-transition level of institutionalized freedom (during 1997–2002), estimating the effect of during-transition measures of resources and aspirations (during the early to mid 1990s), while controlling for the pre-transition level of freedom (during 1981–1986). If resources and aspirations during the transition period simply reflect the level of institutionalized freedom in the pre-transition period, they will have no independent effect on institutionalized freedom over the post-transition period, as long as we hold constant the pre-transition level of freedom.

As Table 2 demonstrates, this is not the case. On the contrary, resources and aspirations measured during the transition period show a significant independent impact on institutionalized freedom during the post-transition period, even when one controls for the level of institutionalized freedom during the pre-transition period. The pre-transition level of freedom, on the other hand, does *not* have a significant impact on post-transition freedom, controlling for liberty aspirations. Hence, prior freedom affects subsequent freedom only insofar as it is linked with stronger liberty aspirations; but strong liberty aspirations have a significant independent effect on subsequent freedom.

The relative temporal stability in resources and aspirations indicates that levels of these variables similar to those measured in the early to mid 1990s were already in place considerably earlier, implying that the rapid freedom changes occurring between 1987 and 1997 cannot have produced these resources and aspirations. This weakens the assumption that the causal arrow in the relation between growing freedom and levels of human resources and liberty aspirations runs from the growth of freedom to resources and aspirations alone. This raises the question, 'Why didn't human resources and liberty aspirations that were present earlier bring corresponding gains of freedom earlier?' The answer to this question was presented above: human resources and liberty aspirations could exert an impact on the growth of freedom, only after changes took place in international conditions that had previously blocked democratization. This happened

Table 2. Granger-causal effects of human resources and liberty aspirations on post-transition levels of institutionalized freedom*Dependent variable:* Post-transition level of institutionalized freedom, 1997–2002 (fractions from 0 to 12)

<i>Predictors</i>	Model 2–1	Model 2–2	Model 2–3	Model 2–4		Model 2–5		Model 2–6	
	B (S.E.)	B (S.E.)	B (S.E.)	B (S.E.)	VIF	B (S.E.)	VIF	B (S.E.)	VIF
Pre-transition level of freedom, 1981–1986 (fractions from 0 to 12)	1.66*** (0.33)			0.87** (0.31)	1.27	–0.47 ^{n.s.} (0.41)	2.27	0.42 ^{n.s.} (0.38)	2.25
Amid-transition human resources, early to mid 1990s (fractions from 0 to 1)		75.72*** (10.83)		60.81*** (11.57)	1.27			39.02** (12.64)	1.76
Amid-transition liberty aspirations, early to mid 1990s (fractions from 0 to 5)			16.91*** (2.02)			17.17*** (3.07)	2.27	11.11*** (3.41)	3.11
Constant	35.78*** (2.56)	–12.53 ^{n.s.} (8.53)	11.88** (4.27)	–6.28 ^{n.s.} (8.38)		11.64* (4.79)		–6.79 ^{n.s.} (7.77)	
Adjusted R ²	0.28	0.44	0.53	0.49		0.52		0.57	

Notes: Number (*N*) of observations (nations) is 62.Significance levels: ^{n.s.} $p \geq 0.05$; * $p < 0.05$; ** $p < 0.005$; *** $p < 0.001$.

in the late 1980s when the Soviet Union abandoned the Brezhnev doctrine, and the Western powers stopped supporting anti-communist dictatorships. These changes on the international scene made it possible for internal pressures for democracy to take effect, after a long era in which they had been blocked, by the alliance structures of the Cold War.

Conclusion

Our findings have a number of theoretical implications. First, if following Putnam (1993) one defines social capital as the means and orientations that make people able and willing to cooperate for collective goals, then it follows that human resources and liberty aspirations create social capital – indeed *democratic* social capital – because they make people able and willing to cooperate for a specific collective goal: institutionalized freedom. Similarly, if one follows Almond and Verba (1963) in defining a ‘civic culture’ as one that is supportive of democracy, liberty aspirations are a central component of the civic culture. Our findings also support some basic claims of modernization theory – in particular, the argument that richer countries are more likely to have democratic regimes, because their greater resources enable the public to exert democratizing pressures on elites (Vanhanen, 2003). Moreover, our findings confirm the ‘power–balance model’ proposed by Rueschemeyer, Stephens and Stephens (1992: 43) because human resources and liberty aspirations strengthen the power of pro-democratic forces against anti-democratic forces, and the power of civil society against coercive states. Finally, the finding that human resources and liberty aspirations are largely interchangeable is consistent with theories of value formation (Flanagan, 1987; Inglehart and Oyserman, 2003) arguing that emancipative orientations such as liberty aspirations arise in response to growing human resources.

But on one important point, our findings contradict previous findings. Contrary to the view that a public’s resources and aspirations only help existing democracies to survive but do not give rise to democratization (Przeworski and Limongi, 1997), our findings indicate that these attributes also act on the *process* of democratization – which reflects the growth of freedom.

Various theories have emphasized the importance of resources and aspirations for institutionalized freedom. Unlike most of these theories, however, we integrate these three elements, conceptualizing them as reflecting a common underlying theme: the development of autonomous human choice, or human development. Human resources reflect capabilities of choice, liberty aspirations reflect ambitions for choice, and legal freedom reflects entitlements to choice. The human choice theme linking these capabilities, ambitions and entitlements, becomes manifest in regime transitions: human resources and liberty aspirations go together in providing largely convergent sources of pressure for freedom. Certainly, these factors can only operate in so far as there is room for the growth of freedom, but as they interact with the growth margin, the pressures rooted in resources and aspirations translate into the actual growth of freedom – under suitable international conditions. When these conditions are present,

as they were at the end of the Cold War, resource-rooted and aspiration-driven pressures for freedom explain roughly 75 per cent of the actual growth of freedom.

These findings are perfectly compatible with process-oriented approaches that focus on elite pacts, social movements, and other forms of collective actions. Collective actions are intermediate factors that transmit the impact of a public's resources and aspirations into such outcomes as democratization. We did not model collective actions themselves because we were interested in the wider linkage within which they operate. As the evidence we have just seen indicates, such a wider linkage does exist. And it can only exist because a public's resources and aspirations help to engender the collective actions that eventually attain democratization, since such changes are always settled by collective actions. Our analysis leaves a considerable amount of variance to be attributed to the uncertainties inherent in collective actions. This variance is reflected in the residuals of our model, which amounts to about one quarter of the variance. This is not a small proportion of variance, but it is considerably less than is explained by the common theme underlying human resources, liberty aspirations, and legal freedom.

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Appendix

1. Robustness of results

The results of Models 1–8 and 1–9 would be inconclusive, if they violated the premises of ordinary least squares (OLS) regressions. We checked for such violations in three respects: collinearity among predictors, heteroskedasticity of residuals, and particular influential cases. None of these checks indicates that the OLS-estimates are unreliable. First, a measure to check collinearity, the 'variance inflation factor', yields

numbers of 1.1 (Model 1–8) and 1.7 (Model 1–9), which is far below the critical threshold of 4.0 (Pennings, Keman, and Kleinnijenhuis 1999: 199). Hence, collinearity does not seem to affect these models.

Second, the White-test of heteroskedasticity yields chi-square values of 5.4 (Model 1–8) and 5.7 (Model 1–9). Both numbers are clearly below 9.2, the critical threshold at the .01-significance level for two degrees of freedom. More intuitively, one can see from an inspection of Figure 3 that residuals are not systematically increasing or decreasing depending on the pressure-level. Hence, we conclude that Models 1–8 and 1–9 are not infected by heteroskedasticity.

Third, in order to identify ‘influential cases’ we inspect the DFFITs, a measure indicating for each observation how much its presence affects the model fit. Welsch (1980) provided a formula to calculate a threshold-DFFITs above which observations are considered to be influential. Applied to Models 1–8 and 1–9, this formula yields a threshold value of .45.¹⁰ Inspecting the DFFITs of Model 1–8, Belarus (.83) and China (.73) are identified as influential cases. In Model 1–9, this applies to Bangladesh (.51), Belarus (.49) and Nigeria (.58). In order to correct for influential cases, the procedure of ‘bounded influence estimation’ (Welsch 1980) runs a weighted least squares regression in which influential cases obtain weights that are calculated by dividing the threshold-value (here: 0.45) by an influential case’s DFFITs. Thus, influential cases are downweighed to the extent to which their influence exceeds the threshold. All other cases are weighed with 1.0. Applying this procedure to Models 1–8 and 1–9 does not alter the OLS results in any significant way, as Table 3 demonstrates (see the two middle columns). Hence, we conclude that Models 1–8 and 1–9 are not infected by influential cases.

Another possible deficiency of the previous analyses could follow from the fact that the *World Values Survey* is not a random sample from the universe of nations. Hence, it could be that the sample does not adequately represent the trajectory of the growth of freedom as it occurred in the universe. Indeed, the *World Values Survey* sample shows on average a constantly higher level of freedom than the average of all nations. This is shown in Figure 5. Yet, as this figure also demonstrates, the sample follows exactly the same trajectory of the growth of freedom as the global universe. Hence, the global trend in the growth of freedom is well reflected in the *World Values Survey* sample.

Moreover, we re-analyzed Models 1–8 and 1–9 by weighing the countries of the *World Values Survey* sample according to their initial lack of freedom, such that the representation of previously illiberal and liberal regimes in the sample is identical to their representation in the universe of all nations, correcting the sampling bias of the *World Values Survey*. The results of this analysis are almost identical to the OLS-results

¹⁰ The formula is: $2 * \sqrt{\frac{k+1}{n-k+1}}$, where n is the number of units and k the number of predictors. Models 1–8 and 1–9 have $n = 62$ units and $k = 2$ predictors. Inserting these figures into the formula yields a value of 0.45.

Table 3. Sensitivity tests of models 1–8 and 1–9 (from Table 1)*Dependent variable: Growth of freedom, from 1987 to 1997 (fractions from –12 to +12)*

<i>Predictors</i>	Ordinary least squares		Bounding influential cases (weighted least squares) ^(a)		Correcting WVS-sampling bias (weighted least squares) ^(b)	
	Model 1–8	Model 1–9	Model 1–8	Model 1–9	Model 1–8	Model 1–9
Human resources, early to mid 1990s (fractions from 0 to 1)		7.64*** (2.08)		7.55** (2.11)		7.39*** (2.10)
Liberty aspirations, early to mid 1990s (fractions from 0 to 5)	2.17*** (0.51)		2.04*** (0.49)		2.10*** (0.54)	
Resource-rooted pressure, early to mid 1990s (0 to 100 scale)	0.14*** (0.01)		0.14*** (0.01)		0.15*** (0.01)	
Aspirations-driven pressure, early to mid 1990s (0 to 100 scale)		0.19*** (0.01)		0.19*** (0.01)		0.19*** (0.01)
Constant	–6.48*** (1.34)	–7.46*** (1.76)	–6.20*** (1.27)	–7.38*** (1.74)	–6.45*** (1.40)	–7.69*** (1.70)
Adjusted R ²	0.78	0.77	0.78	0.77	0.73	0.72
<i>Sensitivity statistics</i>						
Variance inflation factor (critical threshold: 4.00)	1.73	1.10	1.72	1.11	1.50	1.03
Chi-square test for heteroskedasticity (critical threshold: 9.21 for 2 df)	5.70	5.39	5.67	5.28	5.72	5.43

Notes: Number (*N*) of observations (nations) is 62. Entries are unstandardized regression coefficients (standard errors in parentheses).

Significance levels: ^{n.s.} $p \geq 0.05$; * $p < 0.05$; ** $p < 0.005$; *** $p < 0.001$.

^(a) Weights, Model 1–8: Belarus (0.54), China (0.62). Model 1–9: Bangladesh (0.88), Belarus (0.92), Nigeria (0.78).

^(b) Weights: Freedom level 1981–86 from 0 to 3 (1.07), more than 3 to 6 (1.77), more than 6 to 9 (1.11), more than 9 to 12 (0.63).

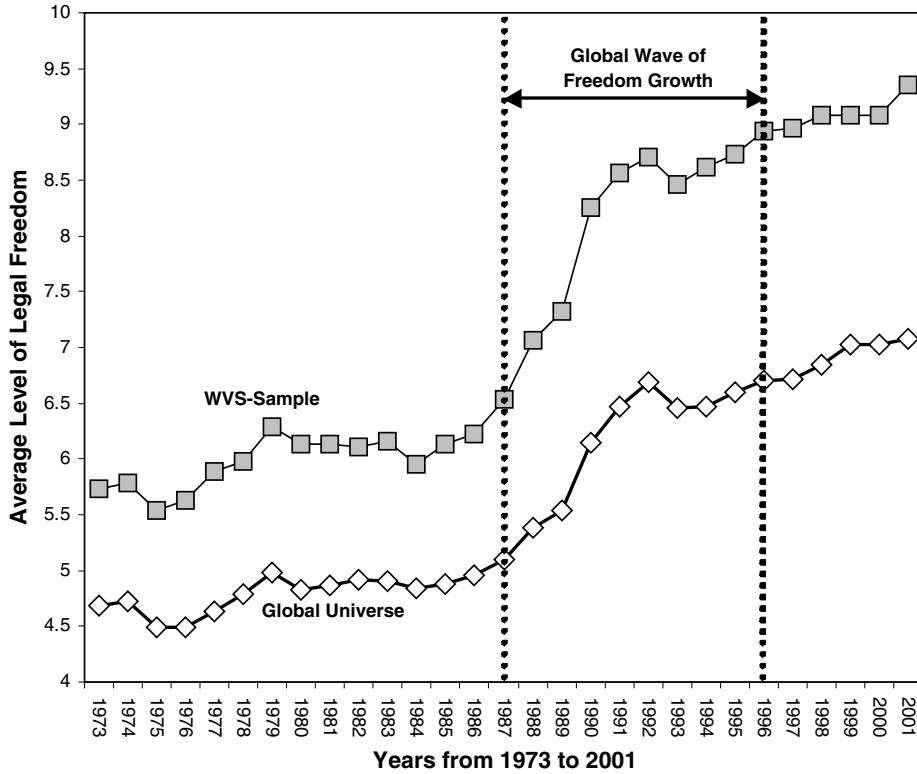


Figure 5 Levels of freedom in the global universe and the WVS-sample

for Models 1–8 and 1–9 (see Table 3, right-hand columns). Consequently, we conclude that our findings are not an artifact of sampling bias.

The most substantive deficiency of Models 1–8 and 1–9 is that they ignore important variables that have been discussed in the democratization literature (for an overview see Berg-Schlosser and de Meure, 1994; Gasiorowski and Power, 1998). These variables include international factors, such as a country’s position in the world economic system, as well as historical traditions, like the tradition of Western Christianity or past democratic experiences. These variables include internal cleavage-factors, such as ethno-linguistic fractionalization and income inequality. Moreover, additional political cultural variables have been discussed, including civic trust, ideological moderation, tolerance of outgroups, voluntary activity in associations and support for democracy (for an overview see Sullivan and Transue, 1999; Gibson, 2001). Table 4 illustrates what happens, if Model 1–9 is tested against each of these variables. Obviously, Model 1–9 does not break down against controls of important variables discussed in the democratization literature, and none of these variables contributes anything significant to the explanation of the growth of freedom (the same is true for Model 1–8

Table 4. Testing Model 1–9 (from Table 1) against control factors

Dependent variable: Growth of freedom, 1987 to 1997 (fractions from –12 to +12)

<i>Predictors (early to mid 1990s)</i>	Model 1–9A	Model 1–9B	Model 1–9C	Model 1–9D	Model 1–9E	Model 1–9F	Model 1–9G	Model 1–9H	Model 1–9I	Model 1–9J
Human resources (fractions from 0 to 1)	6.69** (2.19)	10.89** (4.08)	8.97*** (2.26)	7.50** (2.12)	9.73*** (2.25)	8.87** (2.53)	6.48** (2.24)	7.66** (2.11)	6.39* (2.62)	7.09** (2.95)
Aspirations-driven pressure (0 to 100 scale)	0.16*** (0.02)	0.18*** (0.01)	0.18*** (0.01)	0.19*** (0.01)	0.17*** (0.01)	0.17*** (0.01)	0.19*** (0.01)	0.18*** (0.01)	0.17*** (0.01)	0.18*** (0.02)
World system position (log p.c. value of exports)	0.42 ^{n.s.} (0.32)									
Western Christian tradition (% Protestants + Catholics)		–0.02* (0.76)								
Democratic tradition (years under democracy)			0.006 ^{n.s.} (0.009)							
Ethno-linguistic fractionalization (fractions from 0 to 1.0)				1.33 ^{n.s.} (1.13)						
Income inequality (GINI, fractions from 0 to 1.0)					–0.06* (0.03)					
Tolerance scale (% tolerating homosexual neighbor)						–0.48 ^{n.s.} (0.54)				
Trust in other people (% trusting other people)							0.03 ^{n.s.} (0.02)			
Ideological moderation (% supporting reforms)								–0.02 ^{n.s.} (0.02)		
Active membership in associations (% active members)									–0.01 ^{n.s.} (0.01)	
Support for democracy (fractions from –6 to +6)										0.01 ^{n.s.} (0.02)
Constant	–6.66** (1.85)	–8.23*** (1.82)	–8.91*** (2.02)	–5.69* (2.27)	–8.09*** (1.74)	–6.69** (2.12)	–7.61*** (1.75)	–7.37*** (2.01)	–6.04* (2.38)	–6.82** (2.43)
Adjusted R ² (N)	0.77 (62)	0.76 (60)	0.76 (61)	0.84 (45)	0.78 (62)	0.76 (60)	0.77 (62)	0.76 (62)	0.76 (58)	0.71 (46)

Note: For meaning of symbols see footer of Table 1. For operationalization of variables and data sources see Appendix.

but not documented here). Nonetheless, this does not mean that these variables are unimportant. Many authors argued that, for example, civic trust is important for the consolidation of freedom but is not necessarily for its growth. However, the scales of resource-rooted and aspiration-driven pressures for freedom do show a uniformly positive effect on the growth of freedom – under the suitable international conditions that allowed for the democratization examined here.

2. Additional variables in Table 3

World system position: logged US\$ of exports per capita 1994, Human Development Report 1998. *Western Christian Tradition*: percentage Protestants plus Catholics in late 1980s, Britannica Book of the Year 1995. *Democratic Tradition*: Number of years between 1850 and 1990 in which a country scored at least +6 on the –10 to +10 autocracy-democracy scale from Gurr and Jagers (1995). *Ethno-Linguistic Fractionalization*: Rae-index of fractionalization calculated from the number and proportion of a country's language groups, data taken from *Britannica Book of the Year 1995*. *Income Inequality*: Gini-index of income inequality 1995, taken from Human Development Report 2000.

The following variables are created from the *World Values Surveys*, using the earliest available survey from the second (late 1980s/early 1990s) and third (mid 1990s) wave.

Tolerance Scale: percentage respondents not mentioning homosexuals and HIV-infected people as disliked neighbors. *Trust in Other People*: percentage of respondents believing 'most people can be trusted'. *Ideological Moderation*: percentage of respondents opting for 'gradual reforms' when asked for their preferred mode of societal change. *Active Membership in Associations*: 'active membership' dichotomized; scores added for religious associations (v28), education, arts and music associations (v30), environmental associations (v33), and charitable associations (v35). *Support for Democracy*: Subtracts people's summary agreement with the statements with 'Having a strong leader who does not have to bother with parliament and elections' and 'Having the army rule' (both on 4-point scales) from their summary agreement with 'Having a democratic political system' and 'Democracy may have problems, but it's better than any other form of government' (both on 4-point scales), yielding a scale from –6 (maximum support for autocracy) to +6 (maximum support for democracy).