

ABSTRACT. This assessment of the probability of liberal democracy draws from a method presented in an article by Richard Cincotta [[2008/09. “Half a Chance: Youth Bulges and Transitions to Liberal Democracy,” \*Environmental Change and Security Project Report\*, 13: 10-18](#)]. The method uses the young-adult proportion (a proportion of the working-age population) as its independent variable. Egypt’s early-2011 young-adult proportion is 0.46 (46%), yielding a probability of liberal democracy of 0.31 (one in three), compared to Tunisia’s young-adult proportion of 0.41, yielding a significantly higher probability of liberal democracy, 0.48 (one in two). Yemen, a very youthful country that has recently experienced anti-government demonstrations, comes in at a near-zero probability. On a scale of 7.0 (*not free*) to 1.0 (*free*), Freedom House currently rates Tunisia as a 6.0 (*not free*) and Egypt at 5.5 (*not free*). Even when liberal democracy looms in the future, states typically take three years (e.g., Chile) to eight years (e.g., Indonesia) to wend their way from *not free* (Freedom House score, 7.0 to 5.5) to *free* (2.5 to 1.0; assumed to be synonymous with *liberal democracy*). Extending beyond these model estimates, and gauging by prior cases, Egypt’s ascent—if it happens—could be “too early”; an ascent beginning after 2017 looks statistically more promising for an outcome of stable liberal democracy. If the demonstrations in Egypt succeed in ousting the Mubarak regime, the new regime is likely to fall short of liberal democracy, perhaps yielding a partial democracy (*partly free*), perhaps an autocracy (*not free*). If Egypt makes it to a liberal democracy, it has a low chance of staying there for a decade. Since 1970, only two states have ascended to liberal democracy having a large young-adult proportion, and then stabilized at liberal democracy: Costa Rica and Jamaica. Egypt’s ascent to stable liberal democracy is not impossible; it’s a low probability bet—low, but much higher than Iran in 1980, where chances were one in ten (0.11).

### **Egypt’s Chances for Stable Liberal Democracy**

Both Daniel Elton at “Left Foot Forward” and Geoffrey Dabelko at the Wilson Center’s Environmental Change and Security Project have asked me to use the age-structural model that I developed (and continue to develop) to produce a statistical prediction of Egypt’s chances for *liberal democracy*. Democracy researchers typically identify liberal democracies using [Freedom](#)

[House's annual assessment](#): a country assessed as in the *free* category, they assume, is a liberal democracy. Freedom House (FH) defines “*free*” as a category of states “where there is open political competition, a climate of respect for civil liberties, significant independent civic life, and independent media.” On a scale of one to seven, seven being the most autocratic, *free* countries range from 2.5 to 1.0. The recent published FH assessment for 2010 puts Egypt at 5.5 (*not free*). Tunisia was scored as 6.0 (*not free*); Yemen as 5.5 (*not free*). Turkey is currently the country in the Middle East-North Africa (MNA) region with the highest FH assessment, at 3.0 (*partly free*). The highest scored Muslim majority countries are Indonesia at 2.5 (*free*) and Mali (*free*), both qualifying as a liberal democracy.

Why focus only on liberal democracy, the highest category of democracy? A focus on liberal democracy eliminates the “Is it really a democracy?” question. Focusing on this single category also obviates a statistical problem encountered when using democracy scores: rather than being a gradient of uniformly continuous variables, democracy scores are categorical variables.

Why rely on Freedom House? From my perspective, FH assessments appear to be more consistent than other scoring systems, and their method gives equal weight to civil liberties and political rights. For my purposes, other indicators appear to be overly concerned with central government structure. FH researchers have, as well, been open to my methodological questions and have made it easier for me to understand their assessments. That said, John Dozes (Bucknell U.) and I have performed the same exercise using the Polity IV scores, with similar results.

Now, the method: The method that I will use for this prediction is explained in a paper published by the Environmental Change and Security Project in 2009. A brief version of this paper was published by *Foreign Policy* in 2008, and a lengthier, more statistically exploratory version is forthcoming in a book entitled: *Political Demography: Identity, Conflict and Institutions*, published by Palgrave-MacMillan and edited by Jack Goldstone, Monica Duffy Toft and Eric Kaufmann.

The model's independent variable, the young-adult proportion, is drawn from publicly available age-structural data: *population by 5-year age groups*. These data can be obtained online from the

UN Population Division or the US Census Bureau's International Program Center (variation exists between these sources; I prefer the UN Population Division data, in this case). The young adult proportion is defined as the proportion of young adults (aged 15 to 29 years) in the working-age population (aged 15 to 64), expressed as a percentage:

$$YA = (P_{(15-29)} / P_{(15-64)}) * 100.$$

The linear regression model (straight line;  $y=ax + b$ ) is a gross over-simplification of a more complex function, the shape of which I continue to wonder about (particularly as it applies to emerging post-mature age structures in Europe). I chose to keep this function linear so that analysts can employ it as the age structures of developing countries mature—a phenomenon that is occurring across North Africa, parts of South and Central America, and in scattered states in Asia. This linear function was developed by separating countries into 5 regions: the Americas, Europe, Middle East and North Africa, Sub-Saharan Africa, and other Asian and Oceanic states. In each region, I calculated the mean young-adult proportion (YA) and the number of liberal democracies (consult the paper for other fine points). I developed four regressions (1970, '80, '90, 2000), found them not to be statistically different in either slope or intercept, and then used all their data to produce a composite regression that crudely predicts the proportion of *free* countries in a region ( $R$ ), which I designate as  $R(\textit{free})$ .

$$R(\textit{free}) = (-0.033 * YA) + 1.83$$

Because so many non-demographic factors—leadership, history, outside intervention—impinge on the ascent to, and stability of, liberal democracy, I hesitate to apply this function to individual countries. However, if analysts keep in mind this caveat and ignore some other statistical issues, then I think extending it to individual countries can be useful. Thus, by ignoring the drawbacks,  $R(\textit{free})$  becomes  $p_i(\textit{free})$ , the probability of liberal democracy for a country,  $i$ , at some young-adult proportion ( $YA_i$ ).

$$p_i(\textit{free}) = (-0.033 * YA_i) + 1.83$$

When an analyst employs demographic projections, this simple formula can become a predictive tool. The United Nations Population Division (and US Census Bureau) projects age structure several decades into the future. Given the record of past projections, current projections are likely to be reasonably accurate over at least the next two decades—now to 2030 (this is a conservative assessment).

When reviewing the East and Southeast Asian experience with fertility decline and these countries' later ascent to liberal democracy, the *50-50 point*—when  $p(\text{free})=0.50$ —appears to be an important benchmark. South Korea, Taiwan, Indonesia, Thailand, Brazil, Chile, and Mexico wended their way to liberal democracy around that benchmark, some (Chile and Mexico) rather abruptly. Remember, it's the 50-50 point: half of all countries that were at that point over the past 40 years were not liberal democracies when they reached it; some of those that were, dropped back. Thailand and Mexico have recently dropped down a notch to a partial democracy (FH assessment of *partly free*). Some like Sri Lanka and Lebanon were, then lost it—and now are hobbled by ethnic conflict. Some like China, Singapore, Cuba and Russia seem to have endured the change in age structure with some relatively minor adjustments.

What chance does this method give Egypt for a stable liberal democracy? Egypt's early-2011 young-adult proportion is 0.46 (46%, an average of the mid-2010 and mid-2011 proportions). This yields a probability of liberal democracy of about 0.31 (a chance of one in three), compared to Tunisia's 0.48 (one in two). Yemen—a very youthful country that has recently felt the heat of anti-government demonstrations—comes in at a near-zero chance (because the linear model is overly simplistic estimate of a more complex function, Yemen actually registers just below zero, which is impossible).

As I've said, youth-led rebellions rarely, if ever, lead directly to liberal democracy. And even when liberal democracy looms in the future, countries typically take three years (Chile) to eight years (Indonesia) to wend their way from *not free* (FH score, 7.0 to 5.5) to *free* (2.5 to 1.0). From this modeling perspective, Egypt's ascent, if it happens, is too early; it risks electoral violence and the possibility of long-term stalling. If Egypt makes it to a liberal democracy, it has a low chance of staying at this assessed level for a decade. Since 1970, only two states have ascended

to liberal democracy having a large youth bulge, and then stabilized at liberal democracy: Costa Rica and Jamaica (Mali, if hangs on, could also go that route). It's not impossible; it's a low probability bet—low (one in three), but not as low as Iran in 1980. According to this age-structural model, Iran's chances for liberal democracy were around one-in-ten (0.11).

The demographic and political circumstances of Tunisia's ascent, to me, appear like Chile's—but not exactly. Under pressure from Pope John Paul II and elements of Chile's economic and military elite, Augusto Pinochet orchestrated his own departure by initiating a process that readied the country for liberal democracy (which took only 3 years). A similar timeline could evolve in Tunisia. Egypt, however, will be tougher for democrats to negotiate. If one accepts youth-bulge theory, Egypt's age-structural youthfulness is likely to depress the costs and difficulties of recruitment to extreme ideologies. In a regime that brings the Muslim Brotherhood to power, Egypt undergoes considerable risk of experiencing stalling on the path to democracy or the dismantling of any newly acquired democratic reforms. A coalition of opponents to the Muslim Brotherhood could also undermine attempts to rapidly reform political and civil liberties in order to deter the Muslim Brotherhood from electoral victory.