Conclusion: Two Ages of Discord

A central goal of this book (Chapter 1) has been to test the predictions of the Structural-Demographic Theory (SDT) using the history of the United States as an empirical case-study. Because SDT was developed, and first tested, on pre-industrial states, applying it to an industrializing (and post-industrial) society represents a major extension of the theory’s scope. This required a certain degree of reformulation, especially of SDT’s neo-Malthusian component (see Chapter 1: From Agrarian to Industrial Societies). Nevertheless, the comparisons between theoretical predictions and data in this book represent a true test of the theory, because data were not used when deriving predictions. In the statistical jargon, such a comparison represents an “out-of-sample” test.

Let’s begin the overview of empirical results with the observed dynamics of political instability. As I discussed in Chapter 1, all large-scale, state-level historical societies experience multicentennial waves of political instability—secular cycles. In many cases, there is an additional cycle of roughly 50 years in period superimposed on the longer secular cycles. My analysis (Chapter 6) found that a very similar pattern holds for the United States. There were two periods in American history that were remarkably free of political violence: the Era of Good Feelings (the 1820s) and the post-war prosperity of the 1950s, which I termed the Era of Good Feelings II. Between these two dates, the United States experienced a massive wave of sociopolitical instability (Figure 6.1). After the quiet 1950s, however, incidents of political violence again became more frequent and now we may be in the middle of another wave of sociopolitical instability.

The 50-year periodicity was also prominent in the data on American political violence. Instability spikes were observed around 1970, 1920, and 1870 (Figure 6.1a). Extending this sequence back, we would expect a spike at 1820, which is missing in the data. It is interesting that the American Revolutionary War (1775–83) fits the 50-year pattern quite well, especially if we note that the political upheavals, which eventually blew up into a full-scale revolt, started with resistance against the Stamp Act, passed by the British Parliament in 1765. Thus, we have the following progression (now going forward in time):
1770–80, (missing 1820 spike), c.1870, c.1920, c.1970, and—extending the sequence to the near future—c.2020?

The missing 1820 spike is not particularly bothersome because my analysis of structural-demographic pressures for instability showed that the 1820s were remarkable in having high and growing popular well-being, and absence of any signs of elite overproduction (Chapter 9). Thus, the 1820 spike was probably suppressed due to very favorable structural-demographic conditions obtaining at the time. The mathematical model that incorporated both secular and 50-year cycles shows that favorable structural-demographic conditions indeed suppress the 50-year cycle (Chapter 2: Fathers-and-Sons Cycles and Secular Waves: A Model with Multiple Feedbacks).

Secular movements of internal instability were generally paralleled by the waxing and waning of other structural-demographic variables (Figure 7.1). For easy reference, Figure 14.1 reproduces the overall secular trend, obtained by averaging all time-series in Figure 7.1. When the curve is above 0 (horizontal broken line), the social system is in the disintegrative phase (and vice versa, the integrative phases are when the curve is below 0). Note that the first (complete) disintegrative phase ends in c.1930. Following the convention that we used in Secular Cycles (Turchin and Nefedov 2009), I date the end of American Secular Cycle I to 1930. Part III of this book traced the structural-demographic during this complete secular cycle, Paying particular attention to the Jackson Era and Progressive Era trend reversals (the periods when the secular curve reversed its direction). Part IV, correspondingly, looked at the developments since 1930—the second, incomplete secular cycle in American history.

The duration of the first American cycle (1780–1930) at 150 years was somewhat shorter than periods typical for pre-industrial European societies (around two centuries, and sometimes longer). Models of demographic-structural dynamics, developed in Historical Dynamics (Turchin 2003b), suggest why. One general finding there was that the periods of secular cycles are mostly determined by population growth parameters. In the American case, growth of the native population has been supplemented by massive immigration waves. In the middle of the nineteenth century immigration essentially doubled population growth rates. The direct effect of such inflows was that the conditions of labor oversupply were achieved more rapidly than in typical agrarian societies, which relied on predominantly internal sources for population growth.

In summary, the empirical analysis of the overall structural-demographic trend (Part II) showed that the various indicators waxed and waned roughly
in agreement with the predictions of the SDT. Next, let’s consider more formally the three fundamental SDT predictions that explain the dynamics of instability (Table 1.2).

![Figure 14.1](image)

**Figure 14.1** Anatomy of American secular cycles. The solid curve traces out the average secular trend (it is the same as the thick gray curve in Figure 7.1).

**Labor oversupply principle.** Labor supply/demand ratio is affected by a complex interplay of factors. Because the combination of factors affecting this quantity changed over American history, I used two versions of the general model (developed in Chapter 2), one for the nineteenth century (the Antebellum Model, Chapter 9) and another for the twentieth century (the Contemporary Model, Chapter 12). Both models were successful in summarizing the empirical trends, and confirmed the key role of labor oversupply in depressing wages. However, whereas in the Antebellum model labor supply/demand ratio was the main factor determining relative wages, in the Contemporary Model there was an additional factor capturing the influence on non-market, “cultural” forces.

The conclusion, thus, is that the labor oversupply principle is empirically supported, although in contemporary societies this is not the only factor that influences wages. Unlike the laissez-faire capitalism of the nineteenth century, today social norms and institutions can play a major role in restraining the influence of the supply/demand ratio on the price of human labor.
Elite overproduction principle. Overall, we saw that the relative wage (typical wage divided by GDPpc) went through two cycles since 1780 (see Figure 3.4). The second general principle states that declining relative wages (thus, shifting the rewards of economic growth from commoners to the elites) should result in growing numbers of elites (and elite aspirants), as well as an increase in their consumption levels. This development, in turn, leads to the conditions of elite overproduction: growing wealth inequality, increased intraelite competition, and political fragmentation. The data reviewed in Chapters 3 and 4 strongly support such a relationship (see Figure 14.2).

![Figure 14.2](image)

**Figure 14.2** The effect of relative wage (typical wages scaled by GDPpc, from Figure 3.7) on elite overproduction (the average of three elite proxies in Figure 4.10a). Both variables were standardized to mean = 0 and variance = 1.

Instability principle. The final general principle connects sociopolitical instability to demographic-structural pressures. In order of importance, these pressures are (1) elite overproduction leading to intraelite competition and conflict, (2) popular immiseration, resulting from falling living standards, and (3) the fiscal crisis of the state (Table 1.2). Figure 14.3 shows that there is a strong positive relationship between instability and a measure that combines the first two pressures, elite overproduction and popular immiseration. I focus here on the first two factors because the fiscal crisis of the state is not always present as a factor contributing to sociopolitical instability, as discussed
in *Secular Cycles* (Turchin and Nefedov 2009: Section 10.4) and in Chapter 1 of this book (*Reformulating the Theory for Modern Societies*).

Finally, let us review the results of a more quantitative approach: using the Political Stress Index (PSI) as a predictor of mounting political violence. Because state-related pressures for instability were not important in the nineteenth century, the Antebellum Model (Chapter 9) only includes two components: Mass Mobilization Potential and Elite Mobilization Potential. The Contemporary Model (Chapters 12 and 13), on the other hand, includes all three components (adding State Fiscal Distress). The outputs of these two models are depicted in Figure 14.4 together with additional relevant data.

Figure 14.4 brings together several major strands developed in this book and, thus, can serve as a graphical summary of its main conclusions. First, it plots the long-term dynamics of a population wellbeing index, which averages economic, health, and social measures of wellbeing (Figure 3.7). Second, it traces the dynamics of the PSI calculated by the Antebellum and Contemporary Models. These two sets of curves focus on slowly developing structural variables—on the *longue durée*, to borrow the terminology use
by the French Annales School. The figure then maps a number of significant events and key periods of American history on these *longue durée* dynamics.

![Figure 14.4 Ages of Discord: mapping the *longue durée* dynamics of popular wellbeing index (solid curve) and the Political Stress Index (broken curve) onto American “event history”.

What we see is that the PSI was an accurate leading indicator of rising tide of political instability in the Antebellum America, which culminated in the American Civil War. As to the present, we live in times of intensifying structural-demographic pressures for instability. The PSI has not yet reached the same high level that triggered the Civil War of 1861–65. However, its explosive growth should be a matter of grave concern for all of us—our economic and political elites, as well as the general public. Will we be capable of taking collective action to avoid the worst of the impending demographic-structural crisis? I hope so. More, I hope that the theory and data explained in this book will contribute to finding solutions that will help us find a non-violent escape from the crisis.