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LONG-TERM IMMIGRATION PROJECTION METHODS: CURRENT PRACTICE AND HOW TO IMPROVE IT

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In recent years, policy experts worldwide have come to understand the importance of demographic projections in their efforts to think strategically about long-term challenges, from national security to retirement security. Much progress has been made in improving the fertility and longevity modules of the demographic projection puzzle. Little progress, however, has been made in dealing with immigration.

This is a cause for concern. We are now entering a new demographic era in the developed countries in which immigration is likely to be the dominant component of the population projection puzzle for the foreseeable future. On a yearly basis, net immigration now accounts for roughly two-fifths of total population growth in the United States and nearly nine-tenths of total population growth in Western Europe. In this demographic environment, the wide range of uncertainty about future immigration levels can generate a similarly wide range of long-term population outcomes. The spread between the “low” and “high” immigration variants for the U.S. Census Bureau projection for the national population in 2100, for example, is 417 million—from a total of 438 million in the low variant to a total of 854 million in the high variant.

The purpose of the present report is threefold: to assess the state of immigration projection practice at projection-making agencies worldwide; to explore theoretical insights and empirical research about immigration; and to discuss how these insights and research could be used to create a superior projection model.

The first chapter (Inventory of Current Projection Practice) describes the current projection methods of leading national and international projection-making institutions, from the U.S. Census Bureau and the U.S. Social Security Administration to the United Nations and the World Bank. The inventory makes clear that official projections are largely ad hoc and judgmental. When describing how they make assumptions about future immigration, most agencies offer little more than a vague reference to “expert opinion,” or else they note that their assumptions reflect “historical experience.” Few if any official projections use immigration assumptions that are justified by any explicit reference to a theory of how or why immigration happens.

In the second chapter (An Overview of Immigration Theory), we outline the broad theoretical frameworks that could help improve projection practice. The poverty of explanatory models in the current practice of immigration projection contrasts sharply with the abundance of theories proposed and discussed by experts in a variety of social science and policy disciplines. We identify six theoretical frameworks, each having its own unique history and literature: the neoclassical, the world systems, the new economics, the social network, the dual labor market, and the policy frameworks. We also survey the growing body of empirical literature on efforts to statistically test the power of these theories in explaining historical trends in international migration.

The third chapter (Toward a Driver-Based Projection Model) describes our proposed framework for a long-term immigration projection model. The model is “driver-based,” meaning that immigration is projected based on observed associations between immigration behavior and other conditions. Examples include multinational trends in population, wages and living standards, trade and capital flows, age distribution, education, urbanization, and market orientation or “globalization.” The model is designed to project net migration flows into a large developed country like the United States.

The model includes the following driver modules:

(1) Built-in demographic drivers. The main built-in driver is the age-structure of the population in origin countries.

(2) Modeled demographic drivers. These include the rate of growth in the youth or prime immigration-age population in origin countries and the size of the foreign-born stock and the aged dependency ratio in destination countries.

(3) Modeled economic and development drivers. These include differentials in wages and living standards between origin and destination countries, differentials in educational and skill levels, and various development indicators, including absolute poverty levels, rates of urbanization, and trends in transportation and communication.

(4) Other modeled nonpolicy drivers. These include other factors that may influence incentives to migrate, such as trends in income inequality, trade, technology, and the environment.

(5) Modeled destination-country policy drivers. These include factors that may influence public opinion about immigration in destination countries—chiefly, the size and skill level of the immigrant stock relative to native-born workers and voters.

The driver modules are introduced in descending order of the presumed certainty of their future values. This order allows projection-making agencies to establish a threshold between more and less plausible conjectures about future changes in independent variables. An agency may want to incorporate demographic modeling into its forecasts without venturing further, in which case it would limit itself to modules (1) and (2). Or it may want to incorporate plausible or best-guess estimates for future economic and development trends, in which case it would include module (3). Or it may want to test and experiment with a full range of social and political drivers and include modules (4) and (5).

Developing a driver-based projection model could have enormous payoffs. Reliable projections of the size, age structure, and national origin of the population are crucial to understanding and preparing for many of tomorrow's most important policy challenges. Demographic trends are at the heart of the current debate over the sustainability of pay-as-you-go retirement and health-care systems in the developed countries. They also directly affect the long-term prospects for economic and living standard growth—and will help shape the geopolitical contours of the twenty-first century in ways that could prove even more fateful. In addition to its potential for improving long-term projections, the model's scenario-building capability could help policymakers better understand a wide array of consequential policy questions, from the long-run impact of trade liberalization on immigration from Mexico to the potential impact of political liberalization on immigration from China.

Although the driver-based model we outline could be constructed in stages, with new modules being added over time, building even a minimal functioning model would be a major undertaking that may require bringing together immigration theorists, empirical researchers, and projection experts for a multi-year project. In all likelihood, the project would need to be undertaken by some official agency that already has the responsibility for making long-term projections—or perhaps, as the cooperative effort of several such agencies. These organizations are in the best position to make productive use of the results. And it is their “clients”—namely the public and government policymakers—who have the most to gain from a successful outcome.

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