

A POPULATION HISTORY OF NORTH AMERICA

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INTRODUCTION

MICHAEL R. HAINES AND RICHARD H. STECKEL

The population of North America has undergone enormous changes in size, geographic distribution, and ethnic composition over the past several centuries. It has grown from a few million, largely rural inhabitants on the eve of Columbus's arrival to approximately 420 million, substantially urban residents at the end of the twentieth century.¹ Once composed entirely of Native Americans, the population now includes most ethnic groups from around the globe.

These changes were instigated by substantial immigration from Europe, Africa, and Asia, and by significant shifts in fertility and mortality. Whereas families of 6 to 10 children were common in the eighteenth century, the average today in most countries of North America is two to three births per woman. Life expectancy at birth now exceeds 70 years in all but the very poorest regions, an increase of roughly 100% over the past 150 years.

Population growth and redistribution have had numerous implications for economic, political, and social history. For example, the aboriginal population was decimated by disease and warfare following the arrival of Europeans and their colonial empires in the sixteenth and seventeenth centuries. Conflict within the United States and between the United States and other countries accompanied westward expansion in the nineteenth century. And women took on new roles inside and outside the home during the transition from a high-fertility rural way of life in the nineteenth century to low-fertility urban living in the twentieth century.

¹ For the purposes of this discussion, North America includes the United States, Canada, Mexico, and the Caribbean.

The story of population change in the United States was surveyed two decades ago by Richard Easterlin, in a single article, but since then research on the United States, and on North America more broadly, has mushroomed.² Bolstered by the declining costs of collecting evidence, particularly at the individual or household level, and by newly mined data sources and new demographic techniques, the current state of information in the field could hardly be summarized in a single chapter. Important research has been published not only by economists, demographers, and historians, but also by anthropologists, geographers, and political scientists. Hence, there is broad interest in the history of population, and the proliferation of literature has challenged specialists in the area of historical demography, not to mention those in related fields, to remain informed. This geographic expansion and the current impetus for North American economic cooperation suggest that a survey volume on North America would be useful and timely.

Census manuscript schedules of population illustrate the growth in data availability. In recent years, the costs of collection have declined to the point where massive samples can now be processed and analyzed. Large public-use samples and numerous specialty samples from this source have been studied in recent years for insights into fertility and migration. Similarly, population or parish records in Quebec and Mexico have yielded a wealth of information. Heights, which give considerable information on health and nutrition, have emerged as a valuable data source since the mid-1970s, and bioarcheological evidence, important for the era before written records are available, has also accumulated. In addition, economic historians have examined genealogical records to shed light on trends in fertility, mortality, and migration.

Several new techniques have emerged to enrich the analysis of existing or new data. Own-children methods, for example, are being used to assign children to mothers from sources such as the manuscript schedules of population. The results make it possible to construct fertility measures for various subgroups of the population on the basis of nativity, occupation, literacy, geographic location, or wealth. Data on children ever born and children surviving can be used to estimate childhood mortality with the aid of systems of model life tables. These systems use the proportion of children who are dead for various groups of women, whose experience is

² Richard Easterlin, "Population Issues in American Economic History: A Survey and Critique," in *Recent Developments in the Study of Business and Economic History: Essays in Honor of Herman E. Kroos* (Greenwich, Conn.: JAI Press, 1977).

adjusted for fertility patterns, to estimate model life tables. New computer resources have made it possible to match various data sources, such as households in different census years or census manuscript schedules and immigrant lists, to study geographic mobility.

This volume brings together 13 essays by population specialists summarizing the state of knowledge in this rapidly expanding field. The appendix presents basic data series that are helpful in making comparisons. Each essay discusses a basic set of topics including materials and sources; methods of analysis; trends and patterns of fertility, mortality, and internal and international migration; possible explanations of trends and patterns; implications; and research opportunities. The balance of these topics may vary from essay to essay, depending on the availability of data and research output. Each chapter includes a brief bibliographical essay.

The volume is organized in loose chronological order, beginning with Native American populations. Chapter 2 by Russell Thornton draws on archeological evidence to discuss pre-Columbian patterns of health, life expectancy, and population growth. Thornton evaluates the considerable research devoted to questions of aboriginal population size and distribution. He also examines the effects of European expansion into North America on population size and the consequent adaptations to depopulation such as migration and attempted revitalizations. Removals and relocations, the development of the reservation system, and allotments are his major focus for the nineteenth century. The twentieth-century portion of the essay considers patterns of recovery and change, intermarriage, changing definitions and self-identifications, tribal membership requirements, and urbanization. The concluding section discusses population projections, fullblood/mixed-blood differences, and the possible decline of tribalism.

In Chapter 3, Douglas Ubelaker examines disease in pre-Columbian America. He notes the antiquity of specific disorders, temporal changes in the pattern of disease, and geographic variability in this pattern throughout the Americas. He also discusses factors contributing to disease, including population size, settlement pattern, diet, and cultural variables. The author looks at temporal changes in the pattern of disease not only in the pre-Columbian period but also in the early historic period. He surveys the general impact of European-introduced diseases and their relationship to preexisting disease conditions. Since the impact of disease on specific historic populations or on population numbers is covered in other essays,

Ubelaker concentrates on the relationship between disease, environment, and culture in early North American populations.

Hubert Charbonneau, Bertrand Desjardins, Jacques Légaré, and Hubert Denis begin Chapter 4 by reminding us that conditions are excellent for the study of the historical population of Quebec: substantially complete records exist from the outset of European settlement, immigration was fairly low (preventing the population from growing to incommensurable numbers quickly), and emigration did not become significant before the nineteenth century. Researchers at the University of Montreal have created a computerized data file covering demographic events of the entire population of European descent who lived in the present territory of the Province of Quebec. The authors' analysis of these data includes new estimates of population growth, taking into account the elusive male immigrants who remained single (an important segment of the population in the earlier period). They discuss measures of fertility, nuptiality, and mortality, as well as internal migration. They compare the first wave of French settlers and their descendants, making special note of settlement patterns and the importance of fur trading to demographic behavior.

In Chapter 5, Henry Gemery examines white population change in the pre-census period of the colonial United States. In the absence of any systematic and regularized census data, population totals as well as mortality, fertility, and migration figures must be estimated from militia, tax, and emigration records and from individual colonial censuses that appeared sporadically. Beginning with a survey of these sources and the feasibility of deriving a demographic record from them, Gemery outlines the problems in analyzing trends and patterns from imperfect and fragmentary data and reviews what is known of patterns and trends based on the research undertaken to date regarding total population change; trends in sex ratios, fertility, and mortality; and patterns of immigration and internal migration. He then turns to the causal mechanisms at work in defining the observed demographic patterns and proposes directions for further research.

Colonial African American demography is the subject of Chapter 6, by Lorena Walsh, who observes that the literature in this area relies to a great degree on inference and ingenuity owing to the lack of evidence. Nevertheless, a relatively consistent overview of basic demographic patterns among early African Americans is beginning to emerge. Until roughly the mid-eighteenth century the majority of the colonial black population was both immigrant and enslaved. Walsh reviews Philip Curtin's migration

estimates and subsequent refinements and additions to those estimates. Next she examines the geographic distribution over time of the African and African American populations in the continental United States. Estimates of fertility and mortality are generally derived from analyses of sex ratios, child/woman ratios, and age structures of groups of slaves in various geographic subregions. Population densities, size and sex distribution of slaveholdings, and immigrant/Creole differences are employed to explain differing patterns. Most disputes, Walsh notes, revolve around the nature and severity of constraints on reproductive unions in the context of particular population densities and the distribution of slaves among holdings of various sizes. Other topics covered include the influence of African social behaviors retained in the New World, the likely effects of cultural alienation on fertility and morbidity, and differing experiences of immigrant and Creole slaves (paralleling the white population with a time lag). Walsh also considers similarities and differences in basic demographic rates between slaves and free blacks; urban/rural differentials; the influence of climate, staple crop regimes, and differing labor systems on demographic behavior; distinctive seasonal patterns of births and deaths among blacks and the differing susceptibility or resistance of blacks to particular New World disease environments; and sex-related mortality differentials.

Robert McCaa begins his discussion of Mexico in Chapter 7 with the peopling of ancient Mesoamerica. The greatest demographic success was attained in the Central Mexican Basin, where the population probably exceeded one million as long as two millennia ago. Despite the success suggested by the numbers alone, the population experienced very high mortality rates and suffered from numerous degenerative diseases. McCaa then discusses colonial Mexico and what is known about population size at the time of the European invasion in 1519. He considers the size of the ensuing demographic disaster, its principal causes, and the effects of the Spanish conquest and colonization. The nineteenth century was disappointing for many Mexicans, in part because numerous wars and conflicts followed independence in 1821. Population growth slowed in the mid-1800s but rebounded to an annual rate of 1.5% in the last quarter of the century.

Michael Haines organizes his essay on the white population of the United States in Chapter 8 around the topics of data sources, techniques of population analysis, and results on fertility, mortality, migration, and emigration. The federal censuses beginning in 1790 were the major sources

for the study of population growth, structure, redistribution, and fertility prior to the twentieth century. Unfortunately, the system of vital registration (conducted by states) was not well under way until the turn of the twentieth century, but official emigration statistics were maintained from 1819 on. The United States clearly ranked high among nations in total population growth. Haines discusses various estimation techniques and results for crude birth and death rates, child-woman ratios, total fertility, rates of total and natural increase, and rates of net migration. Possible explanations for the fertility transition, which began in the early nineteenth century, and cycles in health as depicted by life expectancy and stature occupy the central portion of the essay. The influence of geographic patterns, such as rural-urban areas, on demographic behavior are carefully articulated. Theories of migration are brought to bear on the westward movement, urbanization, and international migration flows.

Chapter 9 by Marvin McNinn is about nineteenth-century Canada. The author concentrates on the second half of the period, when data resources were fairly abundant. McNinn sketches early immigration and settlement, providing population totals for several years prior to the comprehensive census of 1851. He shows that declines in marital fertility must have begun earlier in some districts of Canada. Birth rates were already lower in cities and towns than in rural areas, and the characteristic North American pattern of a relationship between fertility rates and duration of settlement was already evident in Ontario and the anglophone districts of Quebec. Francophone fertility rates were almost uniformly high – close to Hutterite levels. The remainder of the chapter focuses on two topics: (a) the early stages of the fertility transition and the extent of reduction achieved by the end of the century, and (b) Canada's transition to a country of emigration. Although little information is available on change in mortality, McNinn attempts to establish the likely level of mortality rates; he finds little evidence of significant change before the very end of the century.

Richard Steckel's essay on the African American population in Chapter 10 covers slavery, the experience of free blacks up to 1860, and the postemancipation black population. The federal population census furnishes much of the evidence for Steckel's study, but important sources such as plantation records, slave manifests (which contain stature), and probate records are important sources on the demographic behavior of slaves. Central questions addressed for slaves include the decision-making environment for fertility and mortality (the relationship between planters and

slaves); the decline of birth rates before 1860; and the unusual age pattern of slave health (children were remarkably unhealthy, but adults were in reasonably good health). Since relatively little research has been done on the demographic behavior of free blacks before 1860, the author assembles evidence readily at hand to describe and analyze fertility, mortality, migration, and emancipations. Demographic behavior after the Civil War is compared with that under slavery, and overall patterns are discussed in relation to those of whites. The essay concludes by discussing the dimensions and determinants of population redistribution from the South to northern cities that began in the early part of the twentieth century.

In Chapter 11 Stanley Engerman documents several phases of demographic change in the Caribbean. Although techniques, data sources, and results vary, scholars estimate that the population of Amerindians, which includes the Ciboney, the Arawak, and the Carib, may have been 750,000 when Columbus arrived in the late 1400s. During the years of colonization and slavery, immigration was high and the West Indies became predominantly black. After slavery was abolished in the 1800s, immigrant contract workers replaced forced labor. During the twentieth century, the Caribbean, much like the rest of the developing world, experienced a demographic transition characterized by mortality decline followed by falling fertility. After World War II, there was substantial outmigration to North America and Western Europe.

Marvin McNinnis divides his discussion of Canada's population in the twentieth century in Chapter 12 into two main parts beginning with the period up to 1931, which marks the completion of the fertility transition and resumption of large-scale immigration into the country. The settlement of the Canadian West and the great urban growth in eastern Canada that accompanied it involved very large inflows of immigrants. The composition of immigration also changed, with the United States and Central and Eastern Europe emerging as large sources of inflow. Interestingly, Canada also sent large numbers of emigrants to the United States during this period. By 1931 the fertility decline had bottomed out among the anglophone population. Although births remained high in the francophone population, the rates were coming down and there was considerable geographic diversity. Turning to the period after 1931, McNinnis first discusses population change during the period of the Great Depression, assessing the fertility and mortality regimes attained at that time. He then moves on to the changes in immigration and fertility during the post-World War II years. The baby boom was essentially an urban

phenomenon and the subsequent fertility decline was shorter, sharper, and deeper in Canada than in the United States. After the war immigration resumed on a large scale, primarily from countries of the Third World. The chapter concludes with a short examination of the recent, relatively stable situation in a regime of below-replacement natural population change, modified by continuing immigration at a moderately high level.

Unlike the population of Canada or the United States, that of Mexico continued to grow rapidly up to the 1970s by an excess of births over deaths, as Zadia Feliciano notes in Chapter 13, which sketches the major components of Mexico's population change from the late nineteenth century to the present. Until the recent promotion of family planning, birth rates generally exceeded 5% in an environment in which mortality rates had been trending downward since the early twentieth century, a phenomenon assisted by economic growth and improved availability of health services such as vaccinations. The crude death rate declined from 34.4 per thousand in 1895–1899 to 15.1 per thousand in 1950–1954. The resulting rapid population growth and its consequences form the core of the remainder of the essay. Accelerating population growth led to rapid urbanization, and Mexico City emerged as one of the largest and fastest-growing cities in the world. The share of Mexico's total population living in that city increased from 12% in 1900 to more than 23% in 1970. Emigration to the United States also accelerated, increasing from 0.2% of the population in 1900 to 2.2% in 1980. Immigration was a minor factor in overall population growth of Mexico, which differed in this respect from Canada and the United States.

As Richard Easterlin shows in Chapter 14, the U.S. experience in the twentieth century featured striking new developments in all the traditional areas of demographic study: fertility, mortality, internal migration, and international migration. In fertility, after seemingly reaching the final stage of the fertility transition in the 1930s, the country had a post–World War II baby boom followed by an equally surprising baby bust. Mortality decline, which some thought had reached an unbreachable low in the late 1950s, resumed in the 1960s as new breakthroughs in heart disease led to unprecedented improvements in life at older ages. The historic pattern of rural-to-urban internal migration slowed and reversed, as a new movement emerged into nonmetropolitan areas not linked to major population centers. Here, Easterlin notes, the composition of immigration shifted from traditional European to non-European sources.