

Chapter 2

Evolving World Migrations Since Columbus

During the few decades between about 1820 and the mid-19th century, global migrations changed dramatically. Policies changed, restricting global migrations before, while adopting *laissez faire* thereafter. Magnitudes changed, long distance world migrations soaring to levels never seen before. Migrant composition changed. Most moved under contract or coercion before, while most moved unassisted and free thereafter. Most who moved free and unassisted moved in families and were relatively well to do before, while most moved as individuals who were poorer thereafter. And while return migration was very uncommon before, it became increasingly common thereafter. If ever there was a regime switch in world migrations, this was it.

Slavery and Indentured Servitude

The discovery of the Americas stimulated a steady stream of voluntary and involuntary migrants from Europe and Africa. But these streams were a mere trickle compared to what was to follow. High transport costs and big risks (both financial and to life itself) ensured that only the richest and the most intrepid would bear the costs and take those risks. While the flow of free (unassisted) migrants to the Americas almost doubled from 339,000 to 650,000 between the six-decade periods 1580-1640 and 1760-1820 (Table 2.1), their numbers were dwarfed by those who came under contract and coercion. Something like 11.3 million had journeyed to the New World by 1820, but most, about 8.7 million, were slaves from Africa. Another large group consisted of

indentured servants and convicts from Europe – those whose migration costs were financed by others. Coercion and contracts were the chief means by which the New World recruited its labor force before the 19th century. Over the full period from Columbus to 1820, slaves, servants and convicts accounted for more than 82 percent of the 11.3 million migrants to the Americas, while free migrants accounted for less than 18 percent. These figures switched thereafter: in the 60 years after 1820, free migrants accounted for 82 percent of the 16 million who moved to the Americas.

About 2.6 million Europeans – mostly an equal mix of Spaniards, Portuguese and British -- migrated to the Americas up to 1820, and about one-quarter of these came either under indentured contracts or as convicts (Table 2.1: and for the allocation by source see Eltis 2002b: 62). It appears that Spaniards and Portuguese going to South America were much less likely to move under contract since another source estimates that one half to two-thirds of all white immigrants to the British colonies in the Americas between the 1630s and 1776 came under indentured servitude contracts (Smith 1947: 336; Galenson 1984). In any case, a passage to America around 1650 would have cost about £6, or about five months wages for an agricultural laborer in southern England (Eltis 1983: 258). Five months wages was an immense amount for a poor laborer to accumulate, even for workers in the south of England where living standards were the highest in Europe (Allen 1991). Thus, indentured servitude evolved as the workingman's response to this overwhelming wealth constraint on long distance migration, a constraint involving a high ratio of costs to income, little or no accumulated working class wealth and weak capital markets. Under this system, individuals who signed multi-year contracts were given free passage to the colonies and then, upon arrival, their contracts were sold

(at an average price of about £8) to merchants or farmers who needed labor. Of course those with more assets and skills were more likely to make the trip unassisted, and these free migrants dominated the European totals, accounting for more than three-quarters of the non-slave migrants making the long distance move to the Americas before 1820. Since they were more well to do, these unassisted migrants were *positively selected*, that is, only the best, brightest, luckiest and well-connected made the move.

By the end of the 18th century, fixed period contract servitude was in decline, partly because of diminishing European supply, but, more importantly, because of the rapid expansion of another form of recruitment – African slavery. European contract or servant labor actually declined from a peak of 236,000 in 1640-1700 to 89,000 in 1760-1820 (Table 2.1). As time went on, African slaves became an increasingly cheaper source of labor compared with European indentured servants. Thus, the sharp rise in slave imports in the late 17th century (Figure 2.1) -- first to the Caribbean and then to the mainland colonies of the Chesapeake and South Carolina -- has been attributed to the rising price (falling contract length) of indentured servants (Galenson 1981: 150, 154; Souden 1984: 23). The slave trade continued to grow in the 18th century, partly involving the North American mainland, but mostly dominated by the sugar colonies of the Caribbean. The rise plotted in Figure 2.1 was really quite explosive going from 829,000 in 1640-1700, to 2,846,000 in 1700-1760, and to 4,325,000 in 1760-1820. Thus, the number of slaves transported to the Americas came to dwarf that of indentured servants, and black immigration came to exceed greatly white immigration. Of the 11.3 million migrants to the New World before 1820, about 77 percent were slaves transported from Africa.

The abolition of the slave trade in the early 19th century ended these forced migrations (although slavery itself lasted longer). It is also clear that collapse of the slave trade had everything to do with politics and ideology and nothing to do with economics:

In 1860, it was possible to buy a prime male slave for thirty dollars in the River Congo, and sell the same individual for over nine hundred in Cuba when the cost of ferrying a steerage passenger [always assigned more space than a slave anyway] across the Atlantic had fallen to less than thirty dollars. Scholars who argue that the plantation sector was in decline and therefore slavery died because it was no longer profitable have generally not examined the cost structure of the slave trade very closely. (Eltis 2002b: 47)

Many have argued that this policy-induced decline in the supply of slave labor helped contribute to a revival of contract labor -- this time primarily from China and India, and chiefly to sugar-producing and other tropical plantation areas. We shall return to this issue farther on in this chapter.

The Rise of Pioneer Free Settlers

The intercontinental flow of free settlers was very slow at first, but it gathered speed in the early 19th century (Canny 1994). Free immigrants into the United States outnumbered imported slaves by the end of the 18th century but elsewhere the transition came later (Table 2.1). Thus, it was not until the 1830s that the decadal flow of free migrants exceeded that of African slaves for the Americas as a whole. And it was not until the 1880s that the cumulative sum of European immigration matched that of coerced

labor from Africa (Eltis 1983: 255). But the transition from coerced to free migration was spectacular: in the Americas, the share free was only 20 percent in the 1820s, but 80 percent in the 1840s, only two decades later. In Australia, the coerced labor share also declined sharply as the inflow of free settlers began to outnumber that of convicts after the 1830s: the share free was 24 percent in the 1820s and 81 percent in the 1840s (Chiswick and Hatton 2003: 68).

With each new decade of the 19th century, free settlers entered the New World in ever larger numbers. Some fled wars and persecution, and some sought political rights and religious freedom, but the vast majority was attracted by the potential economic rewards. In that respect at least, their motives were much the same as those of the indentured servants that preceded them (Galenson 1981: 179). What differed was their improved ability to take advantage of those potential rewards. They traveled in family groups often with the intention of starting or joining new communities at the New World's frontier. Their numbers were dominated by skilled farmers, craftsmen and artisans, all with some wealth. The origins of the North American and Caribbean flow were overwhelmingly the more developed parts of northwest Europe, while Spain and Portugal supplied South America. Three-quarters of the English and Welsh, two-thirds of the Dutch, and two-thirds of the Germans who migrated to the United States in the 1830s were in family groups and a third of them were children under 15 (Erickson 1994: 143).

The onset of free migration to Australia was delayed since the transport costs were so much greater. The costs of transporting convicts fell from £45 in 1816-18 to £16 in 1834-6; early in the 19th century this was two years' wages for an agricultural laborer (Meredith 1988: 16; Nicholas and Shergold 1988: 58). Given that potential Australian

immigrants needed even greater incentives to make that long move, a policy of assisted emigration was introduced there as early as 1834. The long journey and arduous conditions prolonged the use of coerced and contract labor in South America too, delaying the onset of free migration. Thus, like Australia, Latin America had to use government incentives in the form of free passage and cheap land upon arrival to encourage the flow of free settlers. Assisted migration policies were less common in North America where the transport costs (including opportunity costs) facing potential European emigrants were much lower.

This rapid transition to free migration in the first part of the 19th century marks a decisive shift in the history of intercontinental migration, but the combination of incentives, constraints and policy that underlie it have not been given the attention they deserve. Thus, the next chapter will explore them at much greater length.

The Age of European Mass Migration

The white populations of the Americas were ... still small ... in the mid-eighteenth century despite two and a half centuries of migration, [and thus] they were overwhelmingly native born After 1820, by contrast, free migrants from Europe averaged 50,000 a year to the US alone. (Eltis 2002a: 9)

How did it happen? How and when did the Americas, and North America in particular, switch from a region with modest to huge numbers of foreign-born, from a region of native-born to a region of immigrants?

The figures for (gross) intercontinental emigration from Europe are plotted as five-year averages in Figure 2.2. In the first three decades after 1846 the numbers averaged about 300,000 per annum; in the next two decades they more than doubled; and after the turn of the century they rose to over a million per annum. European emigrant sources also changed dramatically. In the first half of the century, the dominant emigration stream was from the British Isles, followed by Germany. A rising tide of Scandinavian and other northwest European emigrants joined these streams by mid-century. Southern and eastern Europeans followed suit in the 1880s. This new emigrant stream from the south and east accounted for most of the rising emigrant totals in the late 19th century. It came first from Italy and parts of Austria-Hungary, but from the 1890s it swelled to include Poland, Russia, Spain and Portugal.

The overwhelming majority of the European emigrants had the Americas as their destination. Figure 2.3 plots this immigration from 1846 up to the US quotas in the 1920s; the pattern there closely replicates the total intercontinental European emigration plotted in Figure 2.2.¹ Migration to the Americas was dominated by the United States, but there were significant flows to South America after the mid 1880s, led by Argentina and Brazil, and to Canada after the turn of the century. A small but persistent stream also linked the United Kingdom to Australia, New Zealand and South Africa. Still, the US dominated: during 1846-1850 -- years of the great Irish famine, the US absorbed 81 percent of all emigration to the Americas; during 1906-1910 – years of peak migration before World War I, the US still absorbed 64 percent of all emigration to the Americas, the main competitor being Argentina, the latter taking 17 percent (Ferenczi and Willcox 1929: 236-7).

Although they can be measured with far less precision, very important across-border migrations also took place *within* Europe. The earliest example is offered by Irish migration into Britain between 1781 and 1851, at the end of which the Irish-born had become almost 9 percent of British city population (Williamson 1986: Table 3). The second example is offered by the fact that the overwhelming bulk of the migrants leaving Belgium went to neighboring France and the Netherlands. To take a third example, in the 1890s more than half of all Italian emigrants went to European destinations, chiefly to France and Germany. A final example is offered by the movement from Eastern Europe into Germany, a pattern repeated even today. Significant migrations also took place *within* the New World, especially those from Canada across the border to the United States. Indeed, up to 1900 Canadian gross emigration to the United States typically offset Canadian gross immigration from Europe, yielding only very small net flows (McInnis 1994).

These statistics almost always refer to gross rather than net migrations. The distinction is unimportant for most of the 19th century, and certainly for every century before, simply because the cost of return migration was much too high. However, the distinction between gross and net becomes increasingly important over time as the upward trend in gross emigration was partially offset by an even steeper rise in return migration. Thus, United States authorities estimated that between 1890 and 1914 return migration had risen to 30 percent of the gross inflow. It varied greatly by nationality; the ratio was nearly half among Italians and Spaniards, but only about 5 percent among Russians, Irish and Scandinavians. Similarly, the return migration rate was much higher for some New World countries than others. Between 1857 and 1924, return migration

from Argentina (Italians and Spaniards) was 47 percent of the gross inflow. The high return migration rate among Italians represented a growing trend towards temporary, often seasonal, migration, so much so that eventually they would be called ‘birds of passage.’ And what was true of European emigration was also true of across border migration within Europe.

Since large countries can send out and receive more migrants than small countries, we need some device to standardize the migration experience. What interests us most is the impact of the mass migrations, and thus we want to measure the number who emigrate relative to all those in the sending country and the number who immigrate relative to all those in the host country with whom the migrants live and work. The simplest approach is to divide the migrant flow by the sending or receiving country population or labor force. In Chapter 4, Table 4.1 reports European emigration rates per decade per thousand of population. They include intra European migrations where the data are available. These gross rates exaggerate the net rates since they understate return migration, but they establish the orders of magnitude well enough. Rates exceeding 50 per thousand per decade were common for Britain, Ireland and Norway throughout the late 19th century, and Italy, Portugal and Spain reached those levels by the end of the century. Sweden and Finland recorded 50 per thousand rates only in one decade (the former in the 1880s and the latter in the 1900s), but none of the other European countries ever reached such high emigration rates. It must be stressed, however, that even the 10-50 per thousand rates achieved by the rest are very high by modern standards.

Table 4.1 also reports some New World immigration rates. These are even larger than the Old World emigration rates, an inevitable arithmetic consequence of the fact that

the sending populations were bigger than the receiving populations. Every New World country but Brazil had immigration rates far in excess of 50 per thousand in the decade of the 1900s, while only half of the European countries had emigration rates above 50 per thousand, and most only barely above. The immigration rates were enormous for Argentina, and they were high everywhere shortly before World War I.

Migration rates of this size imply significant economic effects on sending and receiving labor markets. This is especially so when we recognize that migrations tended to self-select those who had most to gain from the move, namely young adult males. Thus, the migrants had far higher labor participation rates than either the populations they left or the ones they joined. It follows that the *labor* migration rates were even higher than the already-high population migration rates.

Undocumented return migration rates are not a problem when we look at the share of the population foreign-born reported in census documents. Table 2.2 offers foreign-born share data for late 19th century Europe and the New World. Just prior to World War I, the highest foreign-born shares of around 30 percent were for Argentina and New Zealand, while it was 14.7 percent for the biggest immigrant economy, the United States. These proportions are considerably higher than today. As the final column in Table 2.2 shows, migrant stocks are now much more evenly spread around the greater Atlantic economy. But the main feature of the table is the rise of Western Europe as an immigrant destination and the decline of Latin America. The combination of market evolution and policy change that generated this transition is further examined in Part II.

Who Were the European Emigrants?

Understanding the composition of the emigrant streams should help in any quest to explain late 19th century world mass migrations, and we shall explore the issue further in the next two chapters. But we need to introduce the topic here. After all, if labor market forces in sending and receiving countries were central to the move, those who moved were likely to have been those most responsive to economic incentives. Furthermore, economic explanations for the mass migrations are likely to look more promising if the composition of the emigrant streams were similar across countries, cultures and episodes. If instead the composition of the emigrant streams varied widely across countries, then culture, war, ethnic cleansing and other non-market shocks are likely to have dominated economics. So, who were the emigrants?

While the emigrants in 1900 were similar to those in 2000, they were *very* different from those in 1800. Early 19th century global migrant streams were often led by farmers and artisans from rural areas, traveling in family groups, intending to acquire land and settle permanently at the New World's frontier. While many still had rural roots in the late 19th century, the emigrants *from any given country* were increasingly drawn from urban areas and non-agricultural occupations. For example, emigrants from Britain in the 1830s, a country that had at that time already undergone a half century of industrialization, were mainly from non-farm occupations (Erickson 1990: 25; Cohn 1992: 385). This industrialization-induced trend *within* emigrant countries was overwhelmed by the shift *between* emigrant countries, from old emigrant areas -- the industrial leaders -- to new emigrant areas -- the industrial followers. Although emigrants were rarely the poorest in their sending countries, they were typically unskilled, no doubt partly because they were young but mainly because they had limited formal schooling

and training in skilled trades. Thus, the increasing importance of less industrial eastern and southern Europe as an emigrant source served to raise the immigrant proportions rural and to lower their average skills and literacy.

We will return frequently to the issue of positive selection in later chapters, but for the present note that late 19th century migrants were typically young adults.² Only 8 percent of the immigrants entering the United States between 1868 and 1910 were over 40 years old, another 16 percent were under 15, so that young adults 15-40 accounted for 76 percent, an enormous share compared with that of the total US population, about 42 percent. The mover-stayer differences were even more dramatic for the Old World: those 15-34 were only 35 percent of the Irish population but they were over 80 percent of the Irish emigrants. Thus, European emigrants carried very high labor participation rates with them to the New World. The migrants were also dominated by males: they accounted for 64 percent of all United States immigrants between 1851 and 1910, and for more than three-quarters of the emigrants from Spain and Italy.³ Emigrants tended to be single and moved as individuals rather than in family groups, although a significant minority was young couples with small children. In short, European emigrants also carried very low dependency burdens with them to the New World.

This evidence also suggests that those who emigrated had more to gain from the move and were likely, therefore, to be more responsive to labor market conditions. By emigrating as young adults, they were able to reap the gains over most of their working lives. By moving as single individuals, they were able to minimize the costs of the move including earnings foregone during passage and job search, as well as to forego the cost of moving a family (at least until they could afford to do so as an overseas resident).⁴

Furthermore, as young adults they had the highest probability of surviving the not-insignificant mortality and morbidity odds during passage.⁵ And since the emigrants were often unskilled, they also had little country-specific human capital invested and hence stood to lose few of the rents from such acquired skills (except for language). Finally, these young adults had the smallest commitment to family and assets at home.

This characterization reinforces the premise that labor market conditions at home and abroad were paramount to the migration decision and that most emigrants moved in the expectation of a more prosperous and secure life for themselves, their future children, and their future grandchildren. Many moved to escape religious or political persecution, of that there is no doubt, and others did so in convict chains (such as the early "migrants" to Australia). But most moved to escape European poverty, or at least to improve their economic status in the New World. As the technology of transport and communication improved, the costs and uncertainty of migration fell, and overseas migration came within reach of an increasing portion of the European population for whom the move offered the most gain. These forces accompanied by European famine and revolution gave rise to the first great surge of mass emigration in the 1840s, the topic of Chapter 3.

Macro Instability in the First Global Economy

Recurrent waves and sharp year to year fluctuations in 19th century migration were well known even to contemporary observers. And no wonder: the instability was very pronounced. International migration was a vulnerable margin that responded to labor market conditions with a powerful multiplier.

Did foreign conditions matter more in determining the ebb and flow of emigration than conditions at home? This question has long been at the heart of a very old debate on the determinants of emigration flows. But perhaps that debate can also be informed by the experience of the last 50 years, or even of the last decade. It seems pretty clear that the timing of global migrations today is primarily dictated by the state of the high-wage macro-economy that is doing the immigrant-absorbing. To the extent that the absorbing economy is subjected to periodic industrial crisis, financial melt-down, productivity slow-down and rising unemployment, immigration will reflect it, and with very high multipliers. This is true now, and it was true then.

The impact of macro instability on mass migration is illustrated by Figure 2.4 where the emigration rates are displayed as deviations from (linear) trend for the six European countries that are central to Part I of this book. Two features of Figure 2.4 are worth noting. First, since some country emigration rates in the first global economy were much more volatile than others, it seems plausible to infer that local conditions in the sending country must have mattered in accounting for the differences in volatility, e.g. high in Ireland and Scandinavia and low in Britain and Germany. Second, since the timing of these fluctuations in country emigration rates exhibit close correspondence, one is encouraged to infer that it was the ‘shared shock’ of conditions abroad that accounted for the common rhythm. Those movements in Figure 2.4 have come to be called long swings or Kuznets cycles (Kuznets 1958; Abramovitz 1961). Emigration rates record values well above trend in the late 1860s and early 1870s, again in the 1880s, and again in the 1900s, while they fall well below trend during the depressions of the late 1870s and the 1890s. The timing of these migration flows conforms perfectly to macroeconomic

boom and bust in the immigrant-absorbing New World. Furthermore, the volatility is big: sharp year to year fluctuations often halved or doubled the emigration rate over a single year or just a few years.

This instability was a central focus of the pioneering emigration studies of Harry Jerome (1926), Dorothy Thomas (1941), Simon Kuznets (1952), Brinley Thomas (1954, 1972) and Richard Easterlin (1968). Jerome concluded that the timing of United States immigration was determined chiefly by the American business cycle and that conditions in the countries of origin had only a minor influence. Easterlin argued that long swings reflected the uneven rate of development of the American economy and that immigration was an essential part of the process. In contrast, Dorothy Thomas argued that fluctuations in Swedish emigration were significantly and sometimes decisively influenced by domestic harvest conditions, industrial growth and demographic factors. Also drawing on Swedish evidence, Brinley Thomas emphasized the importance of lagged natural increase in the sending countries.

Whether assessed with low-tech description or high-tech econometrics, this literature has always been preoccupied with the relative strength of ‘pull’ from abroad and ‘push’ at home. Oddly enough, there has been little discussion of how these terms should be defined. Our strong preference, revealed in Chapter 4, will be to reserve these terms for describing underlying labor market fundamentals: the forces which served to shift labor demand and supply in the origin and destination countries. When defined in terms of the underlying fundamentals, push and pull take on new meaning. Malthusian pressure at home? Capital formation abroad? Collapse in farm prices at home? Export price boom abroad? Industrialization at home? These are the fundamentals that really

should matter in any push-pull debate. The older literature instead typically dwelt on whether the variables representing conditions abroad had larger and more significant coefficients than those representing conditions at home. Using these criteria, the older literature reached no consensus: pull from abroad was found to have mattered most in some studies, while push at home was found to have mattered most in others. It should be clear that we believe the previous push-pull debate posed the wrong question.

In the wake of John Gould's (1979) critical survey of this literature, interest (by economists, at least) in mass migration during the first global century waned and many issues were left unresolved. Some historians simply rejected these time series studies as too simplistic and inconsistent with more micro evidence. Grounds for skepticism were that proxies for labor market variables were too crude, that the variables rarely dealt with future expected gains to migration, and that persistence induced by the 'friends and relatives effect' (also called chain migration) was too often ignored. Perhaps the key *lacuna* has been the absence of a coherent theoretical framework within which the roles of different variables could be assessed and in which emigration is a forward-looking decision. Such a model is offered in Chapter 4.

The Other Half of the World: Mass Migration in the Periphery

Migration Magnitudes in the Periphery

Twenty-five years ago, Nobel laureate W. Arthur Lewis (1978a, 1978b) reminded us that the flows from labor surplus to labor scarce parts of the periphery were often comparable to those recorded by the European mass migrations. What we now call the Third World

was characterized by the migration of 50 million or more from labor abundant India and South China to labor scarce Burma, Ceylon, Southeast Asia, the Indian Ocean islands, East Africa, South Africa, the Pacific islands, Queensland, Manchuria, the Caribbean and South America. These migrants satisfied the booming labor force requirements in the tropical plantations and estates producing sugar, coffee, tea, guano, rubber and other primary products. They also worked on the docks, warehouses and rice mills engaged in overseas trade. The mass migrations involving the periphery imply three questions that will be pursued at length in Chapter 7: Were the causes underlying the mass migration in the periphery the same as those underlying European emigration before 1914? Did those migrations contribute to real wage, per capita income or relative factor price convergence within the periphery as they did in the Greater Atlantic economy? Was there powerful segmentation between labor markets in the periphery and labor markets in the Greater Atlantic economy?

In the wake of empirical work on the Third World after the 1950s, few economists continued to support the labor surplus and (perfectly) elastic labor supply hypothesis which was central to the Lewis model (Lewis 1954). However, an economy having *more* elastic labor supplies implies movement along a different growth path compared with one having *less* elastic labor supplies. What was the experience of the pre-industrial periphery? How much of the labor supply response was due to immigration (e.g., Indian and Chinese immigrants into Assam, the Punjab, Ceylon, Southeast Asia, the Caribbean) and how much to a local response to labor scarcity through earlier marriage, more births within marriage, and higher child survival rates? Chapter 6 will show how mass migrations had an impact on the immigrant-receiving New World and the emigrant-

sending Old World prior to World War I, but did they also have an important impact anywhere in the periphery during the pre-industrial years before 1940?

Perhaps it is unlikely to expect that these long distance migrations had the same impact on wage and relative factor price convergence in the periphery. After all, while the immigration rates for booming resource abundant regions in Southeast Asia, East and South Africa, and the tropical parts of Latin America seem large enough to have left a mark on labor scarcity, it seems far less likely for China and India, the huge labor surplus regions where the emigration rates were so small. True, over the century between 1834 and 1937, India supplied more than 30 million emigrants to the rest of the periphery (Davis 1951: 99). But about 24 million returned, leaving a net emigration of ‘only’ 6.3 million. Six million is a big number, but it was only a tenth of the European emigrations, and, furthermore, it was a very small share of India’s total population, or even as a share of its major sending regions, like Madras and Bengal. Indeed, while Chapter 7 reviews at length a useful comparative assessment taken from Kingsley Davis (1951: 98), it might prove useful to summarize it briefly here. The ratio of British emigrants 1846-1932 to the British 1900 population was 0.43, while the same ratio for India was only about 0.09, or one-fifth of the British ratio. Indeed, among the eight European emigrating countries listed by Davis, only Russia had a ratio lower than India. While we cannot make the same calculations for China, the consensus seems to be that the ratio was even lower there: “By the time [Chinese] overseas migration became significant, the size of the domestic population was so large that no amount of [external] migration made an impact” (Eltis 2002a: 24).

Migration Timing in the Periphery

Having made these descriptive assertions, securing the evidence to confirm the annual migrations that produced them is quite a bit harder. It is relatively easy to document emigrations out of India; it is far harder to do the same for China. And while it is relatively easy to document the long distance movements of indentured workers between labor abundant and labor scarce parts of the periphery, it is far harder to do the same for those moving unassisted and for those moving under informal and short-term work contracts. Yet, the gross migration of indentured workers plotted in Figure 2.5 gives a good sense of timing and magnitudes. Indians dominated the indentured migrant trade, but African and Chinese movements were similar. From very low levels in the 1820s, they, like the European mass emigrations, soared in the decades that followed. The gross migration of Indian workers reached a peak in the 1850s, recording about one-quarter of a million. It fell from that peak during the remainder of the 19th century, long before the abolition of contract and indentured migrant labor that occurred in the first third of the 20th century. While it recorded much smaller numbers, African indentured migration also reached a peak in the 1850s. Gross migration of Chinese indentured workers reached a peak in the 1860s, before undergoing a sharp fall thereafter. Figure 2.6 offers the same gross migration evidence for indentured workers, but this time by tropical estate and plantation destination. The flows to the Indian Ocean – Mauritius and Reunion – reached a peak in the 1850s, while those to Peru and the Caribbean – the British and French Caribbean, British and Dutch Guiana, and Cuba – reached a peak in the following decade, the 1860s. Gross migration to the Pacific – Fiji, Hawaii, other Pacific Islands and

Queensland -- and to Africa – Kenya, Natal and other regions -- reached peaks somewhat later, the former in the 1880s and 1890s and the latter in the 1900s.

As a share of total mass migration in the periphery, indentured or contract labor declined in importance as time went on.⁶ Thus, *total* net migrations, those indentured and those not, reach peaks later than do these for indentured labor only. Figure 2.7 documents trends for net immigration into labor scarce Ceylon, net immigration into labor scarce Burma, and net emigration from labor abundant India. The latter reaches a clear peak in the 1890s, after which it falls off continually until the 1920s, before collapsing in the 1930s. Census data also make it possible to document in Table 2.3 the movements of foreign-born shares in five receiving periphery regions. Foreign-born shares (mostly Chinese) were lowest in the Dutch East Indies, never much more than 1 percent on Java but almost 4 percent in the outer islands in 1900. The share in Burma rises to 6.5 percent in 1881 and stays around that level between 1911 and 1931. The share in Ceylon is even higher, reaching a peak of 12.4 percent in 1901. Only Malaya reached higher shares, Indian and Chinese foreign-born making up from 40 to 50 percent of the region 1911-1941. Foreign-born shares were also very high for Trinidad, the Guianas, Mauritius and Reunion. Indeed, Table 2.4 documents foreign-born shares throughout the British Empire in 1901. The shares for Hong Kong, the Orange River Colony (South Africa), and Trinidad-Tobago were the highest, the later almost 37 percent. Excluding India, a major emigrant region, the foreign-born shares around the Empire (Table 2.4) were pretty much equal to those in the New World (Table 2.2).

Where Did the Asian Emigrants Come From?

Most of the Chinese emigrants came from the South China provinces of Fukien (Fujian) and Kwangtung (Guangdong), and there was a long tradition of emigration to Southeast Asia from their coastal ports like Amoy, Canton, Chuanchow, Macao and Swatow centuries before the first global boom in the 19th century (Lai 2002: 239; McKeown 2004). Early destinations had been Java, the outer Indonesian Islands, Indochina, Penang (Malaya) and the Philippines. Most of the Indian emigrants came from Rajputana and Bombay in the west, from Hyderabad and Madras in the southeast, and from Bihar and the United Provinces in the north. Between 1842 and 1870, the Caribbean and the Indian Ocean sugar plantations received about 530,000 Indian contract workers, 64 percent emigrating through Calcutta, 30 percent through Madras and 6 percent through Bombay. By 1910, the Sanderson Commission estimated that 80 percent of emigrating Indians were from Bengal and the United Provinces (Lai 2002: 240-1). No doubt there are two explanations for this concentration by origin. India shares one explanation with China, namely closer location to the source of demand. The second explanation may be related to the impact of 19th century international trade forces since they seemed to have caused de-industrialization (a decline of textiles) in the regions of India that had historically been centers for manufacturing (Roy 2000; Clingingsmith and Williamson 2004). These de-industrializing regions not only sent labor abroad, but they also sent labor to Indian regions where estate and plantation production was booming, namely Assam and Mysore, as well as to the irrigation-expanded frontiers of the Punjab and the Sind.

Did the Decline in Slave Trade Crowd-In Contract Labor Migration?

The timing of events offers seductive support for the popular hypothesis that the demise of the African slave trade and of slavery crowded-in Asian contract labor. British abolitionists had been campaigning against the slave trade since the late 18th century, and Parliament voted to suppress the trade as early as 1792 (Northrup 1995: 17). While conflict with France made it impossible to implement the 1792 legislation, by 1807 Parliament passed a bill that outlawed British participation in the African slave trade. In the same year, the US outlawed all slave imports.⁷ While other European nations took up some of the slack, slave imports into the Caribbean and the Indian Ocean fell steeply from the 1830s. As Figures 2.5 and 2.6 confirm, the migration of indentured Indian and Chinese labor rose steeply in the wake of the anti-slavery legislation. It is also true that the indentured labor was sent to tropical regions where African slaves had previously been used so extensively, sugar plantations being the dominant source of demand.

Just as the rising cost of indentured servants from Europe helped crowd-in African slaves to the North American mainland and the Caribbean in the 17th and 18th centuries, the successful search for replacements of slave labor was also an important explanation for the rise of the indentured labor migrations in the 19th century. A good example is offered by Cuba where “the contract trade began prior to the end of slavery, but its inception coincided exactly with the first effective Cuban attempts to restrict the slave trade that sent Cuban slave prices soaring in the mid 1840s” (Eltis 2002a: 18). Still, product demand mattered too, and Chapter 7 will show exactly how the 19th century global boom created the derived demand for cheap tropical labor. W. Arthur Lewis has been a strong advocate of this demand-led view:

Several writers refer to this [Indian and Chinese labor migration] as a substitute for or successor to the slave trade, but this is a misconception. It is true that after the abolition of slavery the sugar colonies recruited Asian labour, but this was a very small part of the flow of Indian and Chinese labour, most of which ... went to other countries in Asia, working either on European plantations or in mining and construction work. (Lewis 1978a: 186; see also Lewis 1978b: Chp. 3)

Obviously, both labor demand and labor supply forces were contributing to mass migrations in the periphery, but we will argue later that demand forces were doing most of the work.

Chapter 7 will seek explanations for the cessation of the mass migrations in the periphery. The most debated question is whether policy or markets did it. Contract labor in the periphery had a 108-year life (1809-1917), and while it was subject to increasing regulation as time went on, it was not abolished until the First World War. But emigration from China and India had slowed down long before contract labor was abolished. Led by an early decline in the price of sugar, all tropical primary product (relative) prices started a secular decline in the 1890s (Clingingsmith and Williamson 2004), and this cut the pace of recruitment on the tropical estates and plantations. The political tide was certainly moving to choke off indentured labor before 1914, but the demand for *all* labor in tropical export sectors was ebbing. Market forces and political backlash combined to reduce the mass migrations in the poor periphery.

Two More Missing World Migration Parts: Europeans Move East and Chinese Move North

While many west Europeans were moving to the New World, many east Europeans were moving in the other direction. Free migration in late 19th century Russia was big enough to “make the numbers of inhabitants of the Russian Empire crossing the Urals the third largest long-distance migration in history after the transatlantic movement from Europe and the slave trade” (Eltis 2002a: 9). And it is clear that the underlying driving force behind the Siberian settlement was, like the forces pushing Europeans west to the Americas, land abundance and labor scarcity. In 1795, the labor-land ratios were from 140 to 180 times higher (sic!) in the Moscovy, the Ukraine and the Baltics than in Siberia (Hellie 2002: 294). Migration from west to east tried to redress that endowment imbalance over the subsequent century. By 1911, 87 percent of the Siberian population was of Russian origin (Eltis 2002a: 28).

The migrations eastward within the pre-revolutionary Russian Empire were certainly big (Burds 1998; Moon 2002), and so were the prewar and interwar migrations from China to Siberia and Manchuria (Gottschang 2000). However, they will not be part of this book. First, they are much delayed behind the experience of the rest of the global economy. The late 19th century Russian mass migrations to Siberia are largely a story about the two decades after the 1890s, 70 or 80 years after the big mass migrations took off in the rest of the world in the 1820s. After the 1890s, something like 13 million Russians moved in to Siberia and Central Asia (McKeown 2004: 159). The Chinese emigrations to Manchuria and Siberia were also delayed, again until after the 1890s. Second, until very late in the process, Russian migrations eastward were constrained by

the absence of the trans-Siberian railroad until Tsar Alexander III initiated the project in 1891. The migrations east were also constrained by Tsarist policy: after all, at the time of the serf emancipation in 1861, the Siberian migrations had barely started. While the disappearance of the last vestiges of feudalism helped trigger the mass emigrations from western Europe after 1820, workers in Russia and other parts of eastern Europe had to wait until the early 20th century to get the same options to move that English and Dutch workers had in the 17th century (Eltis 2002a: 21-22). Similarly for China. It took the Qing government's relaxation of migration restrictions after 1860, homesteading policies in the 1880s, and railroads in the 1890s to trigger the subsequent migration of 30 million Chinese into Manchuria and Siberia (McKoen 2004: 158-9).

The pre-conditions for European mass migration eastwards and Chinese mass migration northwards had not been set until the very end of the 19th century. As such, this book will not deal with them.

Agenda and Goals

This chapter had modest goals. We have sought only to show that the first global century had distinctly different experience with world migrations than was true of the centuries before. Magnitudes were much greater after the 1820s, and government attitudes were much more accommodating. Migrants moved mostly under coercion or contract before while they moved mostly voluntarily and unassisted after. Migrant flows carried higher dependency rates and lower labor participation rates before but just the opposite thereafter. Return migration was rare before and frequent thereafter. All of these

changes require a different way of thinking about these world migrations, and we offer one in Chapter 4 that will be useful throughout this book. Before we do, however, the next chapter will look in more detail at the characteristics of the transition that changed the world in which world migrations came to operate.

Endnotes: Chapter 2

¹ Immigration statistics tend to yield larger totals than emigration statistics. Hence, immigration totals recorded for the Americas are very similar to those for *all* European intercontinental emigration despite the fact that the latter include such destinations as Australia, New Zealand and South Africa.

² A number of studies have examined the composition of European emigrant flows by country. What follows in the text draws on: Carlsson (1976) for Sweden; Erickson (1972) for Great Britain; Fitzpatrick (1984) for Ireland; Hvidt (1975) for Denmark; and Swierenga (1976) for Holland.

³ Females were a higher share of emigrants from a few countries like Ireland, where they accounted for 48 percent between 1851 and 1913. These were, however, the exceptions to the rule.

⁴ This insight is often attributed to Sjaasted (1962) who was one of the first to suggest that migration could be analyzed using a human capital framework.

⁵ Cohn (1984: 297) estimates emigrant deaths on the passage to New York at 1.36 percent during 1836 to 1853, a large number for such a short trip and for a group dominated by adults. McDonald and Schlomowitz (1990: 90) estimate deaths on the longer passage to Australia at 1.45 percent between 1838 and 1892.

⁶ Less than 10 percent of the migration to South East Asia, the Indian Ocean and the South Pacific was indentured, although a very large share was under contract or what was called *kangani* labor recruitment (McKeown 2004: 157).

⁷ US slave imports had fallen off to low levels long before 1807, in part because slave mortality was far lower and slave fertility far higher on the mainland than in the Caribbean and other tropical areas in the Americas. However, and predictably, US slave traders anticipated the 1807 legislation by recording large slave imports in the months before the deadline.