Chapter 9

The Demise of Mass Migration and Its Impact

World War I brought an end to mass migration and closed the door on the first global century. The combined effects of two world wars, a great depression, and the introduction of restrictive immigration policy served to choke off emigration to the New World, and thus those mass migrations never regained their pre-1914 levels in the half century that followed. What was true of absolute levels was even more true, of course, of emigration and immigration rates.

The magnitude of the collapse in the global mass migrations is apparent in Figures 9.1 and 9.2, both based on the impressive work of Dudley Kirk (1946) alone and that involving the famous collaboration between Imre Ferenczi and Walter Willcox (1929), scholars who lived through the global implosion between 1914 and 1950. Three central facts leap out at us from those two figures. First, the migrations of the 1920s were never able to recover the migrations of the 1880s, let alone those of 1895-1914, and they fell to much lower levels after the 1920s. By the 1950s, the United States was no longer a melting pot or a nation of immigrants, but rather a closed economy whose youth were mostly native born, a characteristic which fit awkwardly on the shoulders of this new 20th century world leader. Second, most of the collapse was due to the sharp decline in emigration from the new source countries located in southern and Eastern Europe – the Austro-Hungarian Empire, the Russian Empire, Iberia, Italy and the Balkans. Emigration from the old sources in northwestern Europe – the British Isles, Scandinavia, the Lowlands, Germany, France and Switzerland -- hardly fell at all. Third, the United States underwent the biggest fall in immigration, far exceeding that of the other top three overseas destinations – Argentina, Brazil and Canada.

The US immigration data plotted in Figure 9.2 offer the story line. When the guns of August started thundering in 1914, European immigration to the New World began to dry up: overseas immigration to the US fell from 1.1 million annually in both 1913 and 1914, to 60 and 54 thousand in 1918 and 1919. Potential immigrants in the European interior found it difficult or even impossible to make their way to the traditional ports of departure, and even had they arrived at those ports, they would have found steerage space extremely scarce and expensive. To make matters worse, as the war in the trenches dragged on, economic hardship made it increasingly difficult for potential emigrants in source countries to find the resources to finance the move. Postwar recession and unemployment kept the figures low in 1919 and 1920. With economic recovery in 1921, the US recorded an overseas immigration rate of 702,000, as high as anything achieved over the fifteen years between 1885 and 1900, but that brief spurt was it. The average between 1922 and 1929 was 232,000, a figure about one-third of the 1881-1914 average. During the great depression decade, the flood dried up to a trickle, averaging about 50,000 each year.

The great mass migration was over.

What Form Did Immigration Restriction Take?

How much of this collapse in European emigration was due to policy and how much to war and great depression?

It seems quite clear that in the short run, much of the collapse in global migration can be attributed to world wars and the great depression. The clearest evidence of this fact is that none of the country-quotas were binding from the early 1930s to the mid 1940s, even for the "excluded" new source countries located in southern and Eastern Europe. Although the country quotas were set far below pre-1914 immigration levels, the new regions of emigration were only able to fill small shares of their quotas between 1932 and 1937: southern and eastern Europe were able to fill less than 40 percent of their quotas; Asia, less than 30 percent; and Africa, less than 10 percent (Gemery 1994: Figure 9.1). However, Chapter 8 taught us two lessons that apply here. First, changes in immigration policy usually come in very big, discrete steps, and only after long, acrimonious and time-intensive debates. The fact that the policy steps are big when implemented serves to maximize their impact at the destination. Second, when the underlying fundamentals favor immigration restrictions, they are usually not imposed until an industrial crisis occurs, and thus when short run labor market problems are most apparent and affected citizens are most verbal. These are precisely the episodes when labor demand slumps, labor markets go slack, emigrants postpone their move, and immigration totals fall to low levels, the latter even in the absence of policy restriction. Thus, the impact of immigration restrictions must be assessed over the long run when capacity rather aggregate demand determines output, employment and productivity, and when peacetime normalcy rather than wartime scarcities dominate.

Four pieces of US immigration legislation were enacted over the decade 1917-1927, and all were restrictive in intent and impact.ⁱ

The 1917 Immigration Act imposed a literacy test that, if the reader will recall from the previous chapter, was precisely the mode of restriction which had been debated by Congress from 1895 onwards. By the end of the Great War, the literacy test (in English "or some other language ... including Hebrew or Yiddish" Hutchinson 1947: 85) proved ineffective in stemming the inflow, mainly because a revolution in the provision of free and public elementary education had spread east and south to backward and illiterate Europe from the 1880s onwards (Easterlin 1981; Lindert 2003). Italy certainly illustrates this schooling diffusion. Between 1881 and 1931, Italian regional literacy rates soared: from less than 20 percent to more than 60 percent in southern Italy, Sicily and Sardinia; from less than 35 percent to almost 80 percent in central Italy; from about 40 percent to about 85 percent in Venice and Emilia; and from almost 60 percent to more than 95 percent in the northern industrial triangle (Kirk 1946: 183-5). The literacy rate for Italy as a whole was about 80 percent by 1931. Is Italy really a relevant example of the European literacy revolution? After all, while it was certainly a major supplier of emigrants from the new European region, one could also argue that it was more economically advanced than the others. In any case, the rate for young adults is much more relevant evidence for any prediction regarding the effectiveness of the 1917 Literacy Act, since these were the individuals most responsive to labor market signals. Repairing the evidence to respond to these two critiques fails to damage the point: the literacy rate in poor European source countries (including Italy) for those aged 15 to 29 ranged from 80 to 83 percent in 1931.ⁱⁱ No wonder the literacy criteria failed to offer an effective US bar to immigrants from poor European countries. However, the 1917

legislation *did* include an "Asian Barred Zone" provision that was *very* effective in keeping out almost all potential immigrants from that part of the world.

The second piece of restrictive legislation was the Quota Act of 1921 (the Johnson Act) that set limits to immigration from Eastern Hemisphere countries. This second act was implemented in a congressional rush when the 700,000 arrived from Europe that year (passing over the literacy bar), and with the election of President Warren Harding, who was much more comfortable with anti-immigration interests than was his predecessor, Woodrow Wilson. The annual number of immigrants of a given nationality was limited to no more than 3 percent of that nationality as recorded in the 1910 Census (Bernard 1982: 94-5). Under the 1921 Act, quotas for immigrants from northern and western Europe were set at about 198,000, and from all other source countries, mainly southern and eastern Europe, at about 158,000, or about 356,000 in all. The legislation was clearly targeted to limit new immigrants who, the pre-war Dillingham Immigration Commission had argued, were harder to assimilate, were a source of poverty and a potential welfare burden on the state, became poor citizens, or failed to become citizens at all. The targets worked: annual quotas for southern and eastern European countries were in all cases less than a quarter of the numbers admitted before the Great War. The Asian Barred Zone remained in place, a racial restriction that applied everywhere in overseas destination countries including Australia, Brazil, Canada and Natal (Daniels 1995: 39-40; Davis 1947). This Asian restriction embedded in the US acts had its source in the increasingly strong lobbying interests on the West Coast who managed to get Congress to accept a Chinese exclusion act as early as 1882. Had British Colombia, California, Nevada, Oregon and Washington formed an independent nation in 1870, the

New World would have seen an Asian exclusion act even sooner. Furthermore, US Asian restrictions stayed in place for almost a century, until the reforms of 1965.

The 1921 Act also had a pro-Western Hemisphere bias since such immigration was not subject to quotas. After all, there appeared to be no reason to set quotas since South America would have seemed to be too poor and too distant to become a viable pool of emigrants, at least not yet. Furthermore, Canada was viewed as a member of the British family with old European origins. Finally, farm interests in the southwest were lobbying for cheap Mexican unskilled labor to work their fields, the products of which were now supplying national and international markets. These aspects had one important, but perhaps unpredictable, implication. Illegal immigrants poured over the border from Canada and Mexico, trying to side-step the European quotas and the Asian restrictions by passing through contiguous neighbors and over porous borders. One estimate has it that "hundreds of thousands (perhaps millions) of illegal immigrants" entered the US in the 1920s via Canada and Mexico (Briggs 1984: 48). In any case, the share of US immigrants coming from Canada and Mexico rose from 12.9 percent in 1910-1919 to 45.4 percent in 1920-1929. Mexican immigration by itself rose by about 320,000 over the decade (Table 9.1), a harbinger of things to come later in the 20^{th} century.

Finally, the 1921 Act also introduced a non-quota category. This category was based on individual characteristics (rather than nationality) and would come to represent the "family reunification" part of US immigration.

The 1921 Act was not restrictive enough for some anti-immigration interests, and their power in Congress was on the rise. Thus, the 1924 (Johnson-Reid) Act lowered the quota from 356,000 to 165,000, mostly be reducing the new source country quota from 158,000 to 21,000 (Bernard 1982: Table 3.1, 96). The more restrictive quotas were now set at 2 percent of the foreign-born by nationality in the 1890 Census. The 1927 Act completed a decade of US experimentation with immigration restriction, ending with what has been called a national origins act which set the overall quota at about 150,000, and it was now based on national origins of the US 1920 population.

Recall that there were quota and non-quota categories, and the 1924 Act made it far easier for relatives to enter as non-quota immigrants. Since wives and children were now exempted from the numerical quota, the number admitted each year from a given country in the late 1920s was much higher than that set by the quota. Thus, while actual gross immigration into the US from southern and eastern Europe was 101.5 percent of the quota in 1924, the figure was 316.1 percent in 1929 (Gemery 1994: Table 9.4, 182).

Family reunification had become an important part of US immigration policy by the late 1920s, and it was reinforced in the 1965 reforms. It has stayed that way ever since.

Who Did the US Quotas Keep Out and What Did It Do to Positive Selection?

As Table 9.1 shows, net immigration to the United States fell dramatically from 4.2 million in 1910-1919 to 210,000 in 1930-1939. But the composition by source also changed dramatically, reflecting the intent of the legislation. The share coming from "new" sources in Europe fell from almost 60 percent in the 1910s to 18 percent in the 1920s, and the share from "other" (mainly Asia) fell from 6.4 to 3.6 percent over the same period. In short, "undesirable" sources dropped from 65.9 to 21.6 percent of the

total immigration. In contrast, the European and Canadian share rose from 30.9 to 63.2 percent.

These national-origins policies clearly served to increase positive selection to the extent that a larger share of US immigrants were coming from developed regions. Indeed, Table 9.2 documents that the share of immigrants entering with skilled, professional or commercial occupations rose from 17.9 percent in 1911-16, to 24.1 percent in 1926-30 and 30.6 percent 1936-40. Among those in the labor force and thus reporting occupations, the rise is even more dramatic, from 24.6, to 40.4 and to 69.1 percent. But note the impact of family reunification. The share female rose from 35.1 to 54.8 percent over the two decades – almost a 20 percentage point rise, and the share of individuals not in the labor force (mainly women and children) rose from 27.2 to 55.7 percent – a 28.5 percentage point rise.

The quotas changed the immigrant mix by source, from "new" back to "old" origins. On those grounds alone, they raised the quality of the immigrants. At the same time, however, family reunification also sharply lowered the high labor participation rates and low dependency rates US immigrants had been bringing with them since 1820. If the latter dominated the former, a century of positive selection of young adult males might have been completely overturned by the US policies introduced during the quota decade, a result which was certainly not the intent of the policy.

It should be added that as "new" emigrants from the east, southeast and south of Europe were deterred from first best options by restrictive immigration policy overseas, many of them explored second best options *within Europe*. For example, aliens were only 2.9 percent of the French population in 1911, but were 6.2 percent in 1926 and in that

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later year they came mainly from Italy (31.7 percent), Russia and Poland (15.7 percent), and Spain (13.5 percent) (Cross 1981: Chp. 3). Germany was much less friendly to immigrants, but where interwar European countries allowed it, potential European emigrants were deflected by restrictive immigration policy from first best labor markets overseas to second best labor markets in the European west.

Population and Labor Force Impact

Did the collapse in world migration have an impact on sending and receiving countries? The US was the biggest immigrant labor market and it also underwent the biggest decline in immigration after 1914, so our focus is there. Whether due to a switch to restrictive immigration policy, war, great depression, or all three in concert, did the rate of labor force and population growth slow down in the three decades after the Great War? If so, how much of the decline can be attributed to declining immigration? Only if we can show that the switch in immigration policy contributed to a labor force slow down, can we then ask whether it had an impact on economic events within the US economy.

There are three studies that have explored the impact of immigration on US population and labor supply in the interwar years, but we believe that all three asked the wrong question. Simon Kuznets and Ernest Rubin (1954) adopted a foreign-born measure and counted net migrants of labor force age but also immigrant children born abroad as they reached employment age. Richard Easterlin's (1968) measure was narrower, and excluded the impact of immigrant children. More recently, Henry Gemery (1994)

extended the analysis also using the Easterlin measure, the narrow definition that we will use in what follows. However, all three of these scholars only measured the share of the *observed* or *actual* labor force or population increase accounted for by immigrants. While such accounting decompositions are useful, they do not assess the impact of the demise of mass migration on labor force or population growth. What we want instead are estimates of a counterfactual world where the mass migrations continued. Only then can we identify the role of the demise of mass migration.

First, what was the extent of the labor force slow down? Table 9.3 documents a dramatic fall in the rate of labor force growth in the United States from 2.29 percent per annum over the three pre-war decades 1880-1910 to 1.14 percent per annum over the three war and interwar decades 1910-1940. This slow down in the rate of labor supply growth amounted to 1.15 percentage points – a massive regime switch in which the growth rate was cut in half. Would we find similar large numbers for other immigrant countries? The answer depends on two factors. First, which economies were most dependent on immigration prior to the Great War? We have already reported the answer to that question in Table 6.2 for both sending and receiving countries: immigration between 1870 and 1910 served to raise the 1910 labor force of Argentina by 86 percent, Canada by 44 percent, Australia by 42 percent and the US by 24 percent; and emigration between 1870 and 1910 served to lower the 1910 labor force in Ireland 45 percent, Italy by 39 percent, Norway by 24 percent and Sweden by 20 percent. Second, which economies underwent the biggest fall in mass migration? With that evidence in hand, we would then predict that the biggest labor force slow down occurred in those economies where net migration had the biggest impact on pre-war labor force totals and where

across-border net migration underwent the biggest decline after 1914. Australia would be one such candidate; indeed, the rate of labor force growth in Australia fell by 1.41 percentage points between 1870-1913 and 1913-1938 (Maddison 1991: 266). The other immigrant countries are harder to document, but similar magnitudes are likely.

Next, does the demise of mass migration explain the slow down? Table 9.3 poses the following counterfactual: What would have been the rate of labor force growth between 1910 and 1940 had the 1880-1910 immigration experience persisted? Our expectations are, of course, that the demise in the mass migrations accounted for a very large share of the slow down in labor force growth. The counterfactuals are calculated to take account of two forces. First, immigration into the US fell after 1910. So, what would have been the impact 1910-1940 if, on the one hand, the immigration rate had maintained the 1880-1910 average thereafter, and if, on the other hand, the *absolute level* of immigration had maintained the 1880-1910 average thereafter? The pre-1910 rate sets an upper bound while the pre-1910 *level* sets a lower bound on the counterfactual impact. These counterfactuals are reported in the second panel of Table 9.3. Second, the age and sex distribution of the immigrants changed dramatically – partly induced by immigration policy -- thereby serving to lower the labor participation rate (and to raise the dependency rate) of the interwar immigrants. So, what would have been the impact on pre-1910 labor force growth if, in addition, the immigrant labor participation rate had maintained its pre-1910 average thereafter? These counterfactuals are reported in the third panel of Table 9.3.

The bottom line in Table 9.3 is this. The observed decline in the rate of labor force growth 1880-1910 to 1910-1940 was 1.15 percentage points, but the no-mass-

migration-demise counterfactual decline would have been only 0.47 (2.29 - 1.82); panel 3) or 0.63 (2.29 - 1.66); panel 2) percentage points. The demise in mass migration accounted for 45 to 59 percent of the massive slow down in US labor force growth around World War I, or about half. Since the immigrants were more unskilled than the native-born, it seems likely that the demise of mass migration contributed even more than half to any unskilled labor force growth slow down.

The demise in mass migration wasn't the only force at work, of course, since the crude birth rate in the US also fell, from about 37 per thousand in the 1880s to about 18 per thousand in the 1930s. But the demise in immigration accounted for about half of the changing demographic and labor supply growth events during the interwar years when the world went anti-global.

Did the Absence of Immigrants Contribute to the Great Leveling in America?

Does immigration foster inequality and does its absence foster equality? The Reverend Thomas Malthus thought so. When appearing before a Parliamentary committee on the state of Britain's poor in the 1820s and 1830s, he argued that Irish immigration into industrial England reduced real wages of the working class (Williamson 1986: 694). When Paul Samuelson published the 6th edition of his famous *Economics* textbook a century and a half later, he joined Malthus with the statement:

After World War I, laws were passed severely limiting immigration. Only a trickle of immigrants has been admitted since then By keeping labor supply

down, immigration policy tends to keep wages high. (Samuelson 1964, cited in Borjas 2003: 2)

Also in 1964, and while writing his *Manpower in Economic Growth*, Stanley Lebergott joined Malthus and Samuelson with this statement about the impact of the immigration quotas:

It [is] most unlikely that the rate of productivity advance or the nature of productivity advance changed so [much in the 1920s] as to explain [the spurt in real wage growth]. Instead we find that halting the flow of millions of migrants ... offers a much more reasonable explanation. (Lebergott 1964: 27)

This question has a very old empirical tradition in the United States that goes back into the late 19th century and to the appearance of the Dillingham Commission reports. But the tradition was alive and well even a half-century earlier:

[T]he 1850s witnessed the highest immigration rates in U.S. history ... The pressures immigration placed on labor markets, particularly in the urban Northeast, produced a remarkable backlash in the 1850s The popular press took up the anti-immigrant cry with [an editorial stating that] 'the enormous influx of foreigners will in the end prove ruinous to American workingmen.' (Ferrie 1999: 161-3)

The economics underlying all of these statements is straight forward. A glut in the labor supply lowers the wage relative to the returns to capital and rents on land. Since capital and land are held by those at the top of the distribution pyramid, immigration-induced labor supply growth should create more inequality and the demise of immigration should create less, *ceteris paribus*. If, in addition, immigrants tend to be

more unskilled than the native-born, then immigration should also raise the premium on skills as they get scarce relative to unskilled labor, and the demise of immigration should reduce the premium on skills as they get relatively abundant, *ceteris paribus*.

Not everyone has agreed with this traditional argument, mostly because of the *ceteris paribus*: many other dynamic forces were driving the American economy, thus offering potential offsets to any measured immigrant glut or scarcity. Potential offsets invite debate. For example, Vernon Briggs (1984: 50) thought that the premise of the traditional argument was false, since he believed that immigration was still substantial in the 1920s and that productivity advance was very different in rate and bias. Others have argued that immigration generates accumulation responses, forces that would mute the immigration impact. Chapter 14 will grapple with this issue at length in the context of the more recent late 20th century evidence. Thus, we will not try to resolve this debate here, but only to pose the arguments and present an impressive and suggestive correlation in the historical time series.

Chapter 6 explored the correlation between migration rates and inequality trends, where countries were the unit of observation. During the mass migrations between 1870 and 1913, rich labor-scarce countries with big immigration rates underwent rising inequality and poor labor-abundant countries with big emigration rates underwent falling inequality (Figure 6.5). During the anti-global and immigrant-restricted interwar years 1921-1938, the correlation disappeared. Indeed, some previously emigrating countries like Italy now underwent rising inequality, while some previously-immigrating countries like Australia, Canada and the United States underwent falling inequality (Figure 6.6). This is only a correlation, of course: immigration policy may have been correlated with some omitted variables and the omitted variables may have been doing all the work. Still, at least the correlation cannot be used to reject the immigration-breeds-inequality hypothesis out of hand.

Now consider Figure 9.3, where we plot the correlation for the US only, but over 150 years. Figure 9.3 is taken from a book by Jeffrey Williamson and Peter Lindert (1980) that was published some time ago, and the underlying data have been revised since. Still, the correlation has not been overturned by those revisions, namely: rapid rates of labor force growth in the United States took place during episodes when earnings inequality was on the rise and the skill premia was increasing, while slow rates of labor force growth took place during episodes when earnings inequality was decreasing and the skill premia was falling. And note the observations that are the focus of this chapter: 1909-1929 and 1929-1948 in the lower left-hand quadrant, where the skill premia was falling and the growth rates of the labor force were slow; and 1879-1899 and 1899-1909 in the upper right-hand quadrant, where the skill premia was rising and the growth rates in the labor force were fast. Correlation is not causation, but Figure 9.3 is certainly consistent with the immigration-breeds-inequality hypothesis.

The 20th century evidence on the evolution of US inequality has improved over the past decade or so, and it confirms a great egalitarian leveling in American incomes between the first and second thirds of the century. The ratio of wages among the top to the bottom 10 percent in manufacturing fell by almost a third between 1890 and 1940, a period of labor force slow down as we have seen, half of which we have attributed to the demise of mass migration. Pay ratios of skilled to unskilled fell by two-thirds between 1907 and 1952. The ratio of college professors' incomes to that of unskilled workers was cut in half between 1908 and 1960. Weekly wage dispersion measures among white men fell by more than a quarter between 1940 and 1965, as did the share of the top 10 percent of income earners. And the gap between male and female wages also fell from 1900 to 1935 (Goldin 1990: 60).

Among the authors contributing to the evidence in Figure 9.4, Claudia Goldin and Lawrence Katz have made the greatest effort to explain the great leveling (Goldin and Margo 1992; Goldin and Katz 1998, 1999a, 1999b, forthcoming), and the relative demand and supply of skills is central to their story:

[The] long-run change in the distribution of earnings is shaped by a race between the demand for skill, driven largely by industrial shifts and technological advances, and the supply of skill, altered by changes in educational investments, demographics and immigration. (Goldin and Katz forthcoming: 68)

While Goldin and Katz are cautious, they appear to favor the view that an exogenous and revolutionary change in the supply of secondary and tertiary schooling must have overwhelmed the skill-using bias that has characterized 20th century economic progress. Such schooling forces would, of course, help erase the skill premium, compress the wage structure and level incomes. But what about exogenous and revolutionary changes in unskilled labor supplies associated in part with the demise of mass migration? These exogenous policy-induced immigration forces would reinforce the exogenous policy-induced immigration forces would reinforce the exogenous policy-induced down, unskilled labor would have gotten scarcer relative to skilled labor.

If mass migration before the First World War contributed to high and rising inequality and skill scarcity in New World host countries, while its absence there after the

quotas contributed to the decline in skill scarcity and less inequality, then we should see somewhat different trends in the European sending countries. While both sides of the Atlantic may have shared the same technological events and perhaps even the same schooling events (Europe was undergoing a schooling revolution too, although at the elementary school level: see Chapter 8), the boom and bust in mass migration must have left different inequality marks on labor markets on either side of the Atlantic. Much more work remains to be done on this issue, but what evidence we have at hand seems to be consistent with our hypothesis. Two recent papers have documented comparative skilled versus unskilled wage gap trends for Europe and North America between 1870 and 1960, and they show the following: first, the UK skilled wage premium started falling thirtyfive years before it did in the US and Canada (1880 vs 1915, Anderson 2001: 96; Betrán and Pons 2004: 39); second, while the skilled wage premium declined very dramatically after 1915 in the US and Canada, it declined only very modestly in the UK (Anderson 2001: 96; Betrán and Pons 2004: 39); and third, what is true for the Anglo-American comparison was also true for those involving Denmark, France, Germany, Italy, Spain and Sweden (Anderson 2001: 94; Betrán and Pons 2004: 39). The mass migration secular boom and bust appears to be a good candidate to help explain the asymmetric inequality trends between Europe and the New World before and after the quotas.

So, is the schooling-oriented literature on 20th century American inequality only half right?

A good illustration of how policy-induced immigration forces created greater unskilled labor scarcity and lower inequality in United States is not hard to find, and it involves disadvantaged black Americans. Did European immigrants crowd out southern blacks from northern jobs that offered much better earnings and living standards than did share cropping in the south? This is a very old question that was, until recently, illustrated only by compelling correlations. Thus, more than thirty years ago Brinley Thomas (1972: 130-34, chp. 18) noted the striking inverse correlation between black migration out of the south and European migration into northern cities. The problem left unanswered by these correlations, however, was causation:

The exit rate out of the south was high in the 1870s, high in the 1890s, high during World War I, and high after the quotas, all of which were years of low European immigration. Is this evidence of unskilled European immigrants crowding out unskilled (black, male, southern) Americans? Or is this evidence that during a slump, when unemployment was high in eastern cities and immigration low, things were even worse for southern agriculture, thus pushing farm labor north in spite of the high unemployment incidence there? (Hatton and Williamson 1998: 165)

William Collins (1997) has now unraveled the issues of causation and supplied the answers. While only about a half million southern blacks left for the urban north in the four decades before 1910, *seven times* that -- about 3.5 million -- left in the four decades after 1910. By 1950, about 20 percent of all the blacks born in the south lived in the north, while the figure was only a little more than 4 percent at the turn of the century (Collins 1997: 607), or only a fifth of the 1950 figure. Not only did those who moved improve their economic lives, but those that stayed behind gained too since the wage gap between north and south declined sharply as the Great Black Migration served to better integrate what had been regionally segmented labor markets (Wright 1986). Collins

concludes that the mass migrations from Europe did indeed crowd out southern blacks from better jobs in the urban north, and, symmetrically, the demise of the mass migrations crowded them in. A very large share of the Great Black Migration can be explained by the disappearance of new European immigrants in northern US cities after 1914. Since the Great Black Migration greatly improved the relative income position of blacks between 1910 and 1950, it helps account for the great leveling of incomes in the middle third of the 20th century, and offers one important channel through which exogenous changes in European mass migration contributed to the leveling.

Did the Presence of Immigrants Contribute to the Schooling Revolution in America?

Consistent with the evidence of the great leveling in the United States in the middle third of the 20th century, Goldin and Katz (1999a: Tables 6 and 7) have documented a decline in the returns to schooling from World War I to the 1960s. For young men, the return to a high school degree fell from 11-12 percent in 1914 to 7 percent in 1959, while the return to a college degree fell from about 15 to 9 percent over the same period (Goldin and Katz forthcoming: Table 2.4). How much of this was due to a policy-induced scarcity of unskilled and unschooled immigrants that lowered the rate of return to schooling by raising the opportunity costs of staying in school and out of the labor market? How much of it was due instead to a schooling glut that lowered those rates? If it was schooling glut, how much of that glut was triggered by exogenous policy changes, and how much of it was instead an endogenous response to the observed skill scarcity created, at least in part, by the open immigration policy before 1914?

It is important to stress that the immigrant-scarcity and the schooling-glut hypotheses are not competing: instead, they are mutually supporting. The exogenous and endogenous schooling hypotheses also need not be competing, since both forces might have been operating. Still, we would like to know which was doing most of the work.

Goldin and Katz clearly favor the exogenous-schooling hypothesis. There is no doubt about the fact that secondary school enrollment soared in the United States from 1910 to 1940, rising from about 14 to 71 percent (Goldin 1998; Goldin and Katz forthcoming: 59-60, Figure 2.5), and an increasing number of the graduates took whitecollar office and factory jobs. That is, more and more high school students were using their diplomas in the market place, rather than using them only as a way to gain entrance to college, and secondary schools increased the number of terminal degrees granted:

The increase in high school enrollments and graduation served to flood the market with literate and numerate workers whose skills enabled them to move into whitecollar office jobs. It also increased the supply of those capable of filling bluecollar positions that required the reading of manuals, deciphering of blue-prints, computing of formulae, and use of elementary science. (Goldin and Katz forthcoming: 61)

Moreover,

'mass' secondary school education was unique to the United States at that time. Most European countries did not have mass non-vocational, non-industrial secondary school education that was fully publicly funded until the post-World War II era. (Goldin and Katz 1999a: 15)

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But why did the schooling movement begin around 1900 or 1910? Why not later, as was true of Europe? We may agree that the schooling supply response helped erase schooling scarcity and inequality in America, but surely previous schooling scarcity played a role in triggering that supply response. Goldin and Katz think not, and believe instead that it was the relative cultural and wealth homogeneity of the early 20th century that explains the timing and location of the schooling boom. For them the key was social and economic egalitarianism in America that supported the belief in externalities especially in New England and the west where the high school movement led the nation. Perhaps, but some part of the schooling boom could have been an endogenous response to the large skill premium, schooling scarcity and a high return to education in the late 19th century when mass migration reached its crescendo. The issue has not yet been resolved but Rodney Ramcharan (2001, 2003) has offered some evidence in support of the schooling endogeneity hypothesis, although his evidence also offers some support for the alternative offered by Goldin and Katz. Ramcharan's results are reassuring for those who, like us, believe that schooling endogeneity and exogeneity forces were *both* at work.

Needless to say, the pay off to future research on the schooling-endogeneity hypothesis will be great since it speaks to modern brain drain debates and whether and how human capital formation responds to mass migration in host and source country, a topic we discuss at length in Chapter 15.

Would European Emigration Have Dried Up Without Restrictions?

The demise of mass migration accounts for about half of the great labor force growth slow down after World War I, and that slow down appears to have had an important impact on the performance of the 20th century US economy. In the short and medium run, war and great depression explain a good share of the decline, but in the long run it was policy that mattered. Or did it?

In the absence of war, great depression and even the quotas, would emigration from Europe have dried up of its own accord over the half century following 1914? The answer is a definite yes, if 19th century experience is any guide. Chapter 4 showed how countries pass through emigration life cycles, rising from low levels to peak emigration rates, and then falling from those peaks. Furthermore, we know why they pass through those life cycles: spreading industrial revolutions make it possible for lagging countries to catch up with the leaders, unfolding demographic transitions generate a surge then a collapse in the growth rate of young adults, and rising outflows allow each emigrant country to exploit more efficient networks and to develop stronger friends and relatives effects, at least up to some optimal rate. Thus, there is every reason to believe that countries in eastern and southern Europe would have undergone the same life cycle after 1914 that the countries in northwest Europe did before to 1914 – in the absence of war, depression and policy.

The only uncertain issue is when Latin America, Africa and Asia would have joined the mass migrations – in the absence of war, depression and policy. But that brings us to 1950 and Part III of this book.

- ⁱⁱ Kirk's poor Europe sample includes Bulgaria, Estonia, Greece, Hungary, Italy, Latvia,
- Lithuania, Poland, Portugal, Yugoslavia and, oddly, Belgium (Kirk 1946: Table 12, 189).

ⁱ This section on US quotas relies heavily on Gemery (1994: 179-83) who offers the best survey of what is a large literature.